

SEAL BAY REGIONAL NATURE PARK
AND
FOREST MASTER PLAN



JULY 1998

SEAL BAY FOREST

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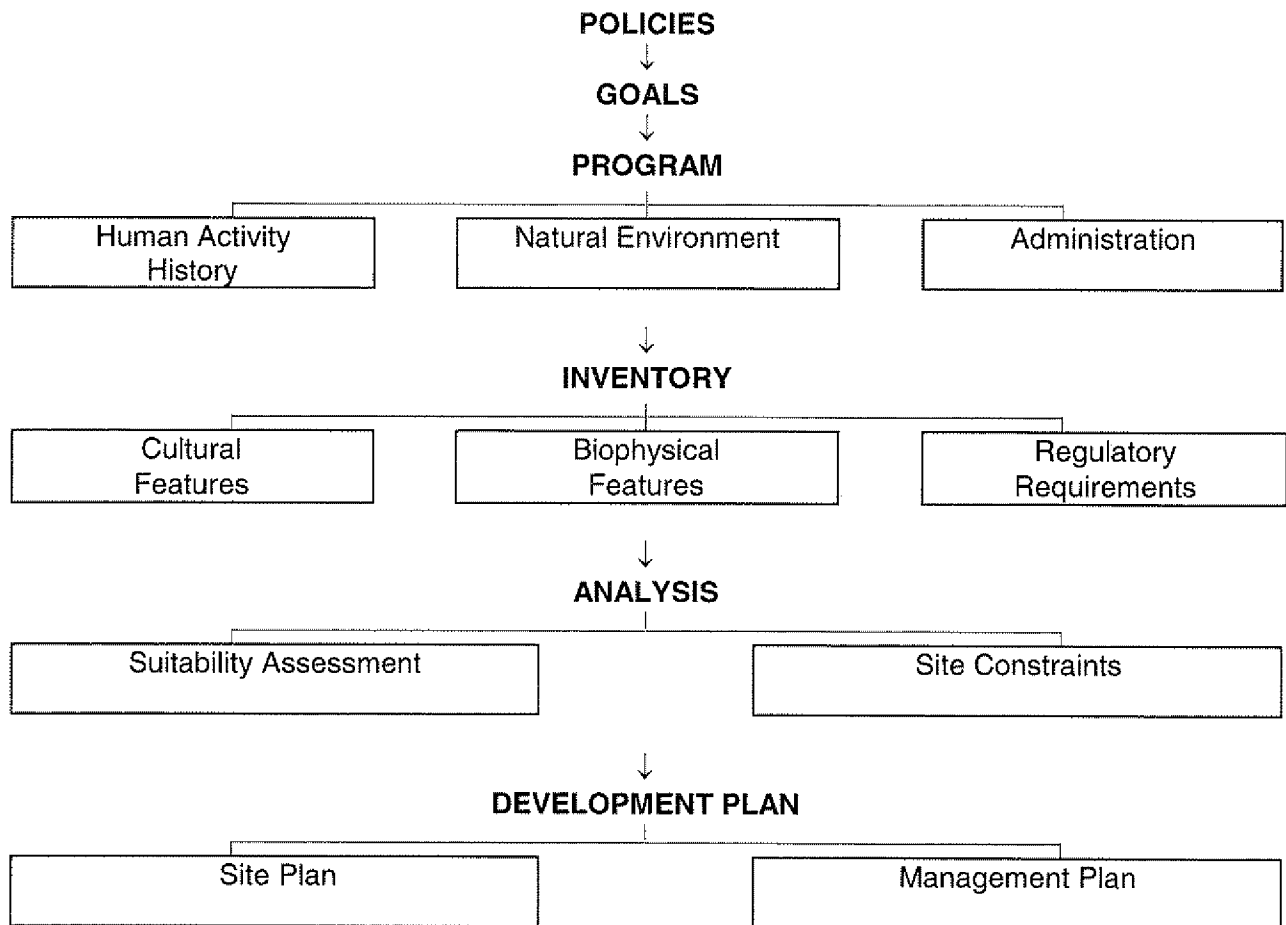
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SEAL BAY FOREST

The Regional District attempts to balance the use of popular recreational settings containing rare and unique natural features and landscapes through the development of a Master Plan.

The Seal Bay Master Plan includes the following elements:



SEAL BAY FOREST**1. POLICIES**

Development of the Master Plan for Seal Bay Forest is governed by the policies of the Regional District park system as outlined in the "Comox Valley Area Parks Plan" in which Seal Bay Forest lies and the policies of the Goal Two, Protected Area Strategy as outlined by the Vancouver Island Land-Use Plan under which the Seal Bay Forest was protected and made available as a regional park.

The policies of the Regional Park System are in part:

- To preserve landscapes of regional significance
- To serve the recreational needs of the local population
- To reflect present and future shifts in recreational needs and environmental requirements
- To further formal and informal public education
- To contribute to tourism

The policies of the Protected Area Strategy, Goal Two are:

- To protect special natural features

In Seal Bay Forest this includes:

- a) protecting unique botanical phenomena;
- b) protecting a high quality contiguous stand of mixed second growth forest from the under-represented Coastal Western Hemlock biogeoclimatic zone; and
- c) protecting three hardhack wetlands (presently an Ecological Reserve Proposal) which are limited in distribution, restricted to the southeastern lowlands of Vancouver Island and the Gulf Islands and are (now) rare.

- To protect special cultural heritage features

In Seal Bay Forest this includes:

- a) protecting the remnants of logging practices from the early 1900's.

- To protect special recreation features

In Seal Bay Forest this includes:

- a) protecting a popular recreation area that is both close to a population center and yet provides a 'remote' wilderness experience ;
- b) protecting an area with a high capacity for fostering an appreciation and understanding of the natural and cultural diversity of the Forest.

SEAL BAY FOREST**2. GOALS**

The goals provide the framework for the plan by outlining why and how the site is to be managed and operated as a park. The goals for Seal Bay Forest are:

Conservation Goals -

- To ensure the resources of the Seal Bay Forest provide a sustainable benefit to the people of the Comox Valley for present and future generations.
- To preserve the resources in Seal Bay Forest in as close to a natural state as possible, and in particular maintain the naturally occurring plant communities and protect the habitat of resident wildlife.
- To provide permanent protection to the hardhack wetlands.

Recreation Goals -

- To provide the appropriate level of access to the various natural features of the forest.
- To provide for a variety of non-consumptive, non-motorized, nature-oriented recreational experiences within a diverse forest environment.
- To reduce the conflict of recreation activities and sensitive natural environments.

Visitor Services Goals -

- To provide facilities for the comfort of the user and protection of the forest.
- To provide a variety of options in terms of access to features, duration of activity, and type of activity.
- To accommodate the various recreation uses of the Forest.

Education Goals -

- To enable the formal and informal study of the natural diversity and cultural heritage within the Forest.
- To make available, or highlight, the visible evidence of previous logging practices; e.g. railway grades and lines, springboard cuts in trees.
- To provide the opportunity for studies of the ecosystem.
- To provide the opportunity to observe the process of natural regeneration and succession and to predict evolutionary patterns.
- To provide the opportunity to study the community concept of forest competition and interdependence.
- To provide the opportunity to understand the stable nature of a complex ecosystem compared to the fragile nature of those that lack such biodiversity.
- To provide the opportunity to compare natural regeneration with managed forests.

Agriculture Goals -

- To respect existing adjacent farm operations as well as possible future need for agricultural lands.

SEAL BAY FOREST

3. PROGRAM

Based on the overall goal/s the program outlines the desired 'activities' or uses within the park. These include the following three components:

- a) Human Activity** – *outlines the public expression of the desired activities and improvement for the site.*

Seal Bay Forest is categorized as a Nature Park in the Comox Valley Area Parks Plan. This implies opportunities for passive recreational activities with a dominant interest in preserving the natural environment.

Over the last ten years there has been a substantial growth, at a higher than average rate, in the Comox Valley which puts greater demand on readily accessible 'wilderness' experiences close to the major population centers.

The residents of the Comox Valley have demonstrated a high level of support for the protection and conservation of Seal Bay Forest with the provision for non-consumptive, non-motorized recreational use. The main facilities desired are trails for hiking, mountain biking and horse-back riding.

An extensive trail system has been developed which takes advantage of game trails and old logging grades. Current use includes hiking, 'commuting', biking, motorcycling and horse-back riding on any and all trails. The result has been, in various locations, damage to the environment, destruction of trail sections and some user conflict. The majority of users are on foot. For them motorcycle use of the trails is considered incompatible with the park setting and indeed motorcycle use is not permitted on trails in any Regional District park. Horse and bike use is both desired and 'tolerated'. Horse and bike use on some trails is very damaging and does cause some conflict with pedestrians. A segregated trail system would help reduce user conflict and help ensure protection of the environment. This will require closing, opening, upgrading and/or limiting access to various trails.

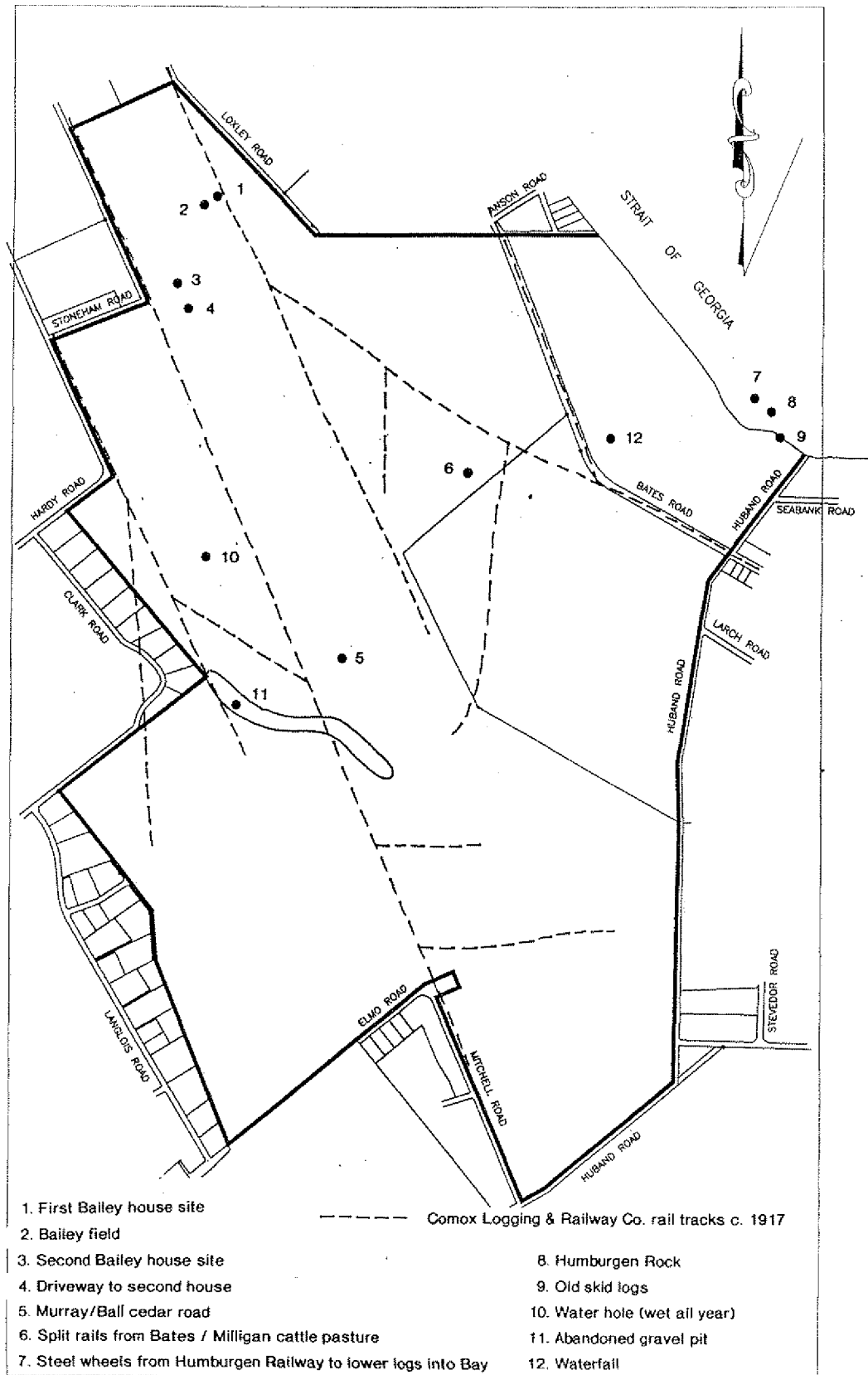
As the use of the Forest increases it will be necessary to regularly review the need for other facilities, particularly at each trail head. At this time no further facilities are required in terms of parking areas, signage, hitching posts, washrooms and benches.

Finally there is a desire to provide increased opportunities for environmental study within the forest for both formal and informal education. One possible solution may be the development of a self-guided walking trail highlighting cultural and environmental features along the route.

- b) History (see Map: History/Features, page 5) -**

Seal Bay Forest was first logged around 1913 and then again in the 1920's. During these two times all the old growth fir and cedar was cut and removed or cut and left lying on the ground. Many stumps are still visible with spring board cuts in the side. In 1917 much of the forest was offered, as part of the Soldier Settlement lands, to returning WWI soldiers. At the time the land was a smoldering clear cut and although some of the area was homesteaded (e.g. the Bailey family) and later abandoned most of the land was never claimed.

HISTORY / FEATURES



SEALBAY PARK

SCALE 1:15,000

SEAL BAY FOREST

Following the last logging natural regeneration began. In the 1940's Christmas trees were cut from the site at a price of \$0.01 per tree. In 1942 beavers created 'Horseshoe Swamp'. A dam was rebuilt in 1985 and it again regulates the volume of water over the waterfall. Over the ensuing years the Forest was used, primarily by local residents, for hunting and small scale timber/firewood removal.

Starting in the early 1970's members of the Comox Strathcona Natural History Society recognized the Forest as both a beautiful place and a unique opportunity worthy of long term preservation and started lobbying the Regional District and the Provincial Government to set aside the entire area as a park. The following is a quote of that experience as written by Phil Capes in 1988:

"The park got its start one summer evening in 1970 when some members of the Comox-Strathcona Natural History Society "discovered" the area. They wandered along overgrown railway grades, pushed their way through tangled underbrush, they zig-zagged through the woods along a ravine to the edge of the bluffs, saw brown creepers spiralling up trees, were scolded by winter wrens and chattered to be inquisitive squirrels. They found the swamp with fresh evidence of beaver and they saw a 'nature park'.

From that summer evening the struggle to preserve the area in its natural state has been ongoing. The perseverance of the Society has been partly rewarded, as thanks to the support of the Regional Board, about 325 acres has been given park status. In 1983 a further 100 acres was set aside as an ecological reserve. Efforts to persuade the Ministry of Forests to release its hold on the remaining acreage, that surrounds the swamp and reserve, are still being made.

To go back to 1970 - the Society was given permission, by the then Minister of Lands, to make trails throughout the whole area which covers about 1500 acres. The original trails were mapped out by two members, a grant was received and six men were employed to construct them. Over the years three other grants have been received and Society members have spent hundreds of hours upgrading and maintaining the trails on a volunteer basis.

The area, formerly under the jurisdiction of the Land Settlement Board, became Crown lands in April 1968. From records available it is probable that it was first logged in 1913 when Canadian Western Lumber Co. Ltd. of Vancouver was issued a permit. It seems logging ceased in the early twenties and since that time natural regeneration has taken place resulting in a lush and varied growth of plant life."

Due to the efforts of the Society and considerable support within the Comox Valley two parcels of land, between Georgia Strait and Bates Road and around Horseshoe Swamp, were leased to the Regional District in 1975 as a Regional Park. In 1985 the leased area was Crown granted to the Regional District with an additional small parcel added in 1988 totalling approximately 150ha/370 acre. The Comox Indian Band have named the Park "Xwee Xwhyua Luq" (pronounced Zway Why Luck) which is a Salish name meaning "place with an atmosphere of peace and serenity."

Agreement about the status of the remaining crown land (Seal Bay Forest) was difficult to reach. In 1984 a "Multi Use" Plan was prepared by the Ministry of Forests (Campbell River) which included logging as well as recreation uses. The overwhelming response during the public meeting and in correspondence that followed was that the plan was unacceptable, being vague in its description of forestry techniques, failing to recognize all land uses and overemphasizing forestry above all other land uses. In any case the

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remainder of the Forest (approximately 564 ha/1394 acre) become a Provincial Forest in 1985.

In 1989 the Regional District and School District #71 jointly completed a Conceptual Plan for the Forest. The plan included small scale, selective forestry wherein any resources harvested would be manufactured on site into materials required for the development of facilities within the Forest and Seal Bay Nature Park. The implementation of the plan required that the Forest be removed from the Provincial Forest and crown granted to the Regional District.

In 1990 the Provincial Government began the Protected Area Strategy (PAS) with a goal of protecting 13% of each biogeoclimatic zone within the Province. Over 3,000 letters were sent from Comox Valley residents in support of the remainder of the Forest being protected by being added to Seal Bay Park. In 1996 this was realized when the Forest was offered to the Regional District as a regional park under the Goal 2 Protected Area Strategy.

c) Natural Environment - *establishes the desired level of, or perceived need for, protection of the natural environment.*

There is a need to protect the natural environment of the Park for four reasons: it represents a highly threatened biogeoclimatic zone within British Columbia; it contains plant communities that are rare; it has been identified in the Sensitive Ecosystem Inventory as a sensitive environment and it provides an invaluable, readily accessible, low impact, 'wilderness', recreation experience.

Seal Bay Forest is within the dry maritime subzone/variant (CWHxm1) of the Coastal Western Hemlock biogeoclimatic zone in the Nanaimo Lowland Ecosection of Vancouver Island. This zone is very limited in size and experiences some of the greatest pressure from urbanization in British Columbia. The Provincial government has attempted to protect a minimum of 13% of each biogeoclimatic zone with British Columbia. Protection of this Forest is part of that goal to preserve the bank of genetic diversity of this zone.

In the late 1980's approximately 49 ha (121 acres) of the forest was proposed for permanent protection through the ecological reserve program. This section of the forest contains hardhack wetlands of provincial significance. These wetland types are of limited distribution, being restricted to the southeastern lowlands of Vancouver Island and the Gulf Islands. Such vegetation is now quite rare as other similar sites have been committed to agricultural or other use. No other such site is included in the system of ecological reserves. **See Map: Sensitive Ecosystem Inventory, page 23.**

Seal Bay Forest's primary value is that it is a large contiguous stand of regenerated second growth forest. It offers biodiversity and significant wildlife habitat. In order to maintain this value it is important that the land area is not fragmented (e.g. by the development of roads) and that the area is disturbed as little as possible.

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The Forest provides a readily accessible opportunity for a near wilderness experience within close proximity to the major population base of the Comox Valley. This is an invaluable recreation resource for the local residents as well as a significant draw to encourage tourists to stay longer in the area. It is important that any site development does not destroy the environment. Thus, for example, heavily used trails should be located in areas where the soil can withstand greater compaction and where the trail will not alter existing drainage patterns.

- d) Administration** – *establishes the desired level, or need for, site administration and established the groups which are anticipated to participate.*

The need for site administration includes protecting the natural features from over or mis-use (e.g. traffic barriers at trail heads), providing ongoing assessment (e.g. trail monitoring and repairs), providing maintenance (e.g. w/c pump/clean-out, garbage pick-up, trail brushing), and creating interpretive programs to develop understanding and respect for the natural environment (e.g. signs and/or brochures).

Site administration also includes enforcement of the rules and regulations of the Forest. Enforcement may include tracking violators, liaison with Ministry of Forests and/or RCMP, witnessing, ticketing and/or taking violators to court.

Formation of a volunteer group is proposed to work with the Regional District in the development and maintenance of Seal Bay Forest. Representation from the following organizations is recommended - environmental group/s, horse group/s, hiking group/s, running group/s, bike club/s, SD #71, local residents and others as appropriate.

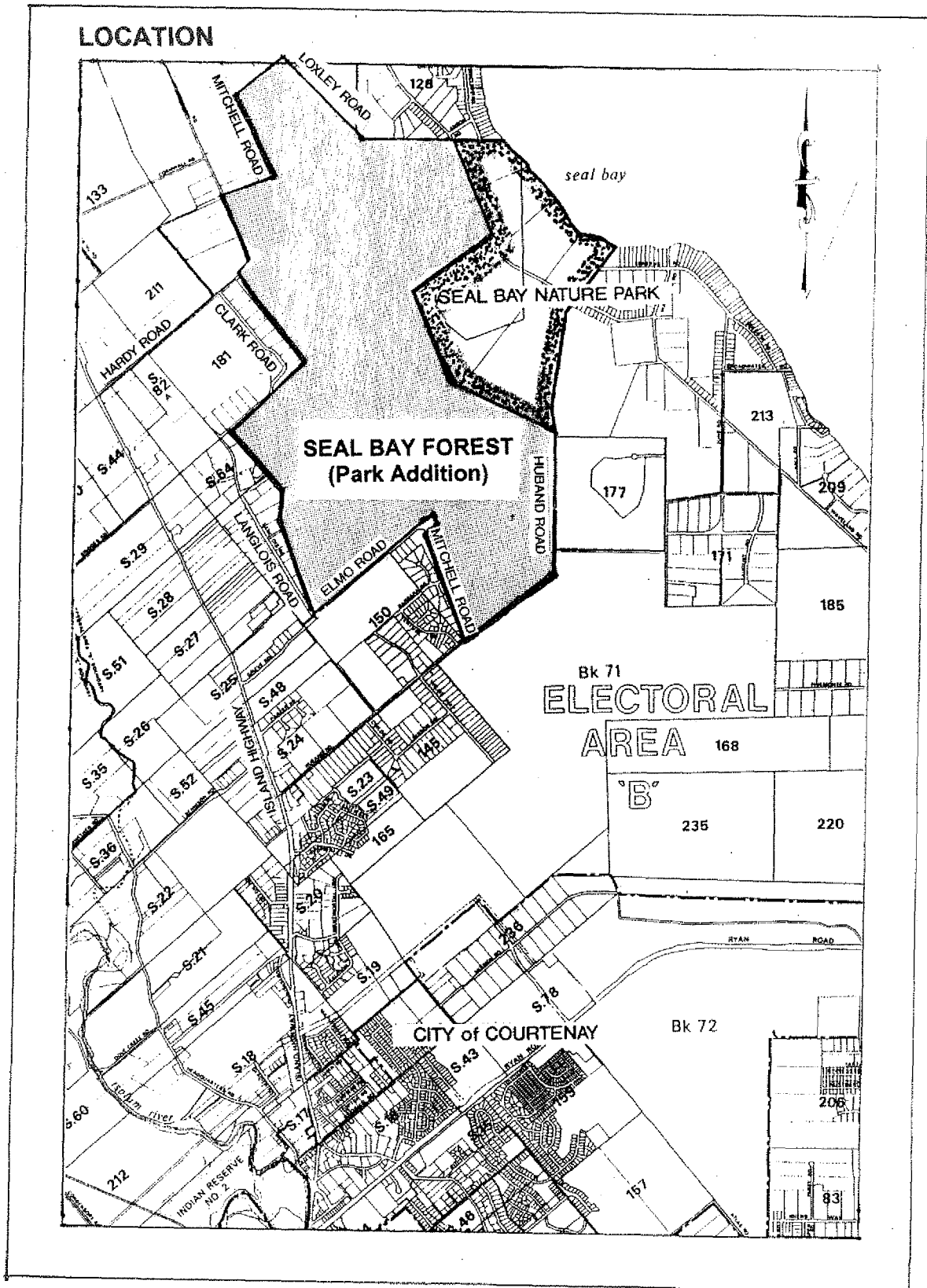
4. INVENTORY

The inventory is the collection of relevant information to determine the ease or difficulty with which the site can sustain the desired program. It includes the following three components:

- a) Cultural Features** – *includes the location, extent and quality of the following components:*

Context (see Map: Location, page 9) - Seal Bay Forest is a 564 ha (1394 acre) site located within the Comox Valley on the east coast of Vancouver Island. The Comox Valley is bounded by Deep Bay to the south, the Oyster River to the north, the Beaufort Mountains to the west and the Strait of Georgia to the east. The Forest is located approximately 3 km, as the crow flies, or 12 km, by car, north of the City of Courtenay. It is readily accessible from the Island Highway via Coleman Road.

Immediately adjacent to the Forest and with interconnecting trails is Seal Bay Regional Nature Park (approximately 150 ha / 370 acre). The Park has three parking entrances, at Bates, Seabank and Seacliffe roads. The Forest trails are accessible through the Park from the Bates Road entrance as well as from trailheads on Loxley, Hardy, Fitzell, Elmo and Huband roads.



SEAL BAY FOREST

The Forest is surrounded to the north and west by rural lots/acreages ranging from 1 to 4 hectares in size as well as larger farms/hobby farms ranging in size from 5 to 30 hectares in size. To the south is a large block (Block 71) of undeveloped, logged land.

Over the last 20 years the Comox Valley has almost doubled in size with the City of Courtenay being the fastest growing community in British Columbia for the last 5 years. Continued fast growth will result in increasing demand for use of the Forest for recreation. Additionally the urbanized area of Courtenay-Comox may well expand to the southern boundary of the Forest in the foreseeable future which will also create a greater demand on the Forest.

The "Comox Valley Greenways Plan Report" (1997) identified Seal Bay Forest as an important biodiversity and recreation corridor. From this perspective the Forest's connectivity to other 'large' forested areas is important to provide a north-south wildlife migration corridor as well as a north-south recreation greenway.

Value - The settlement of the Comox Valley and the economic activities which the valley has supported have been dependent upon the natural resources of the landscape. Historically agriculture and forestry have been the predominant land uses supporting the economy and social welfare of this area. The timber resources of the forest industry are harvested from a land base of 53,000 ha (130,960 acres) which represents more than 47% of the Comox Valley. However there is a lack of forest recreation opportunities within the Comox Valley.

Agriculture has also been an historically significant activity within the Comox Valley. Much of the agricultural land base is designated Agricultural Land Reserve and totals an area of approximately 22,000 ha (54,360 acres). Approximately 375 ha (927 acres) representing 66% of the Forest is designated under the Agricultural Land Reserve.

The landscape of the Comox Valley now supports more than just agriculture and forestry. Tourism, recreation and retirement developments are economic activities which have created new demands for the areas natural resources. And while greater values are being placed on the natural resources they are declining in availability as a result of development.

Seal Bay Forest is presently conserved as a forest in the early stages of evolution. After being logged in the early 1900's the natural regeneration of vegetation has increased the volume and diversity of structure and species. Any land use that has occurred within the forest has not affected this natural process.

The value of the natural features of Seal Bay Forest have been recognized for its aesthetic, spiritual, educational and recreational uses.

SEAL BAY FOREST

The citizens of the Comox Valley have put forth a strong position over the last twenty-five years for the preservation of Seal Bay Forest based on their perceived need for natural areas conducive to non-consumptive recreational purposes. Present recreational use consists mainly of single day outings for various purposes. The area is easily accessible to users of all age groups, not only because of its topographic features but also because it is bounded on all sides by roads.

Features (see Map: Existing Trails and Facilities, page 12) - Seal Bay Regional Nature Park is immediately adjacent to the forest and has well groomed trails (including a wheelchair trail) which surround a swamp and follow a ravine down to Georgia Strait. There are also three parking areas at Bates, Seacliffe and Seabank roads, and four outhouses located throughout the park. Several of the trails connect with Seal Bay Forest.

The proposed Ecological Reserve identifies an area of biological significance. There are no facilities here other than trails through a portion of the site.

There are approximately 20 kms of existing trails within the Forest which are currently used for hiking, running, biking, motor (dirt) biking, horse-back riding and hunting. Trails have been created using old logging grades, wildlife trails and determination and hard work. Some of the trails are well placed, using higher and drier ground, however some are in areas which are low and wet even in the summer.

Most of the recreation use is in the form of single day outings by residents of the Comox Valley. A greater number of tourists can be expected with increased exposure. Users are from a wide range of age groups.

Access by car is available off Bates, Loxley, Hardy, and Huband roads. Pedestrian access (with limited or no parking) is also available off Elmo, Mitchell, Clark, Loxley and Huband roads.

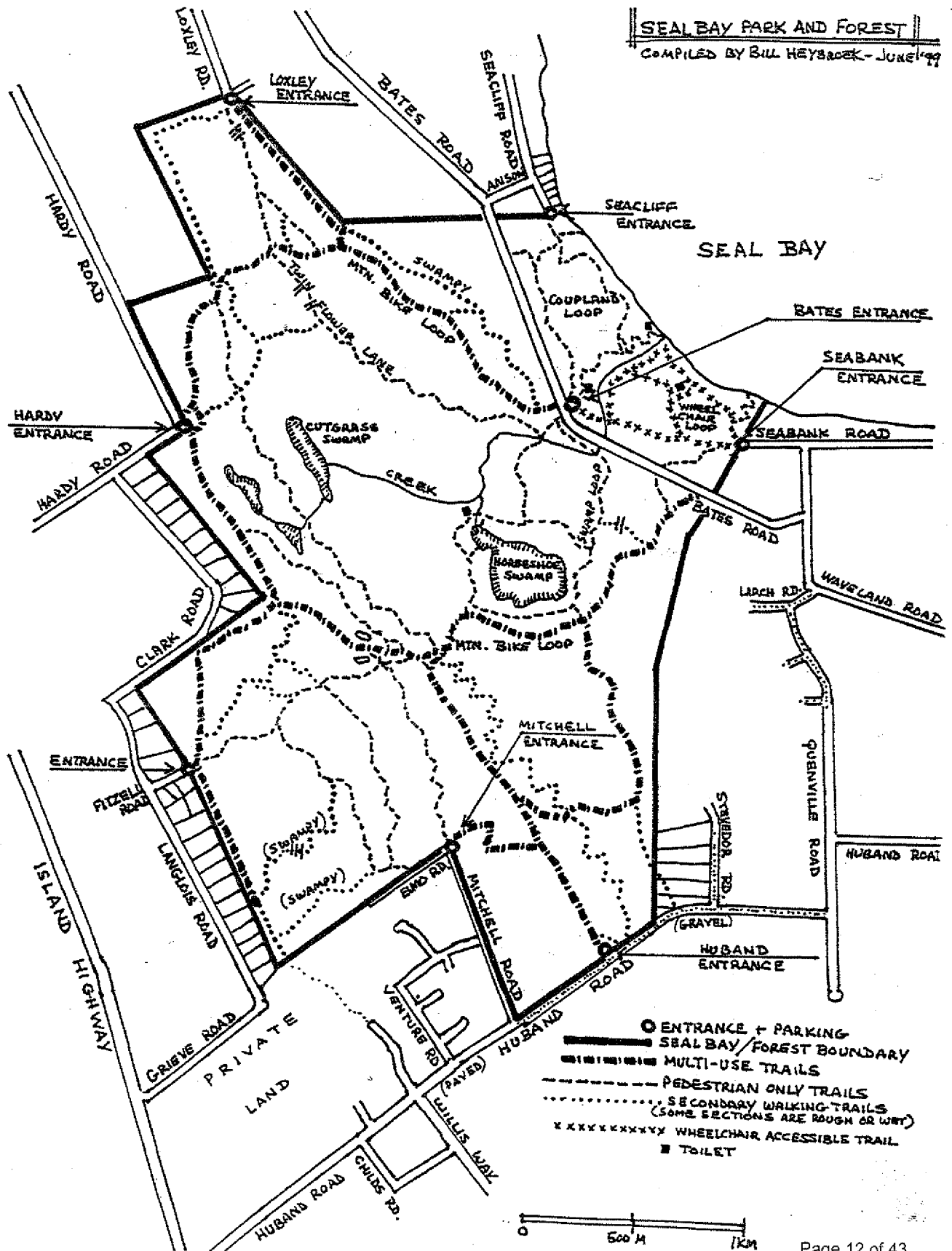
Within School District 71 a variety of programs at all levels utilize the Forest and Park as a forum for learning. The Comox Valley Naturalist Society also use the area for nature study outings. The occurrence of wildlife species provides the opportunity for viewing and photography. Other current users include mushroom and salal pickers.

Views - Seal Bay Forest is a diverse area with mostly enclosed views.

- b) **Biophysical Features** - *includes the location, extent and quality of the following components:*

Geology - The bedrock geology of Vancouver Island is made up of heavily faulted, unmetamorphosed volcanic and sedimentary rocks ranging in age from Tertiary to Paleozoic. The east coast lowland sedimentaries include sandstones, shales, coal deposits and conglomerates of the Cretaceous age.

EXISTING TRAILS & FACILITIES



SEAL BAY FOREST

Topography (see Map: Topography, page 14) - The terrain of Seal Bay Forest is gently sloping and characterized by a micro relief consisting of knolls, hummocks, broad depressions and a gravel ridge all of which generally run in a north-west - south-east direction.

The Forest has little variation in elevation ranging from 60 metres (150 feet) to 94 metres (225 feet) above sea level.

This landscape form was created by glacial action. These processes deposited and modified the materials which are below the soil surface. Following glaciation parts of the coastal lowlands, including most of the Comox Valley were flooded by the sea. These areas have since rebounded to their current elevation.

Soils (see Map: Soils, page 15) - Overlying the materials of the glacial deposits are the soils of Seal Bay Forest. These soils are classed as being Humo-ferric Podzols ranging from sandy to gravelly loam .75 m and over in depth, over the entire area. Edaphic (soils) conditions are used to describe relationships between plant communities and two major soil properties; available soil water (hygrotope) and nutrients (trophotope). The soil moisture regime for the area is classed as being well drained (submesic) to imperfectly drained (subhygric). The soil nutrient regime is classed as being medium (mesotrophic) to very rich (eutrophic).

Generally the soils are coarse textured and well drained or are of finer texture and imperfectly drained. Further qualities characteristic of the soil include variation in the quantity of coarse fragments, variation in acidity, the presence of a strongly cemented under layer and the presence of seepage.

Based on the Canada Land Inventory of the capability for agriculture the lands in Seal Bay Forest are Class 4 or 5. Their limitations include stoniness, excess water and in some cases water deficiency, which if overcome may improve the capability to a Class 2 or 3.

Hydrology (see Map: Hydrology, page 16) - Due to the topography much of the land is imperfectly drained with water trapped between the ridges and hummocks. This is particularly evident during the wet winter months. A number of subtle water features exist including swampy depressions having water for the majority of the year and small ephemeral streams which dry up during the summer.

The Forest is the headwaters for several tributaries and thus is the junction of several watersheds. These include Kitty Coleman Creek/watershed, Portuguese Creek (Tsolum River watershed) and Findlay Creek and Little River (Little River watershed), which are all known salmon habitat, as well as three or four unnamed creeks which are not salmon bearing. The wetlands in the Forest perform the important function of holding water for a slower release into these systems.

Microclimate - The Comox Valley is within the Western Hemlock biogeoclimatic zone. This zone lies in the rainshadow of the Olympic Peninsula and Vancouver Island mountains and is the driest mesothermal zone of B.C. The Comox Valley is characterized by west coast maritime (mesothermal) conditions with cool, wet winters and warm, dry summers.

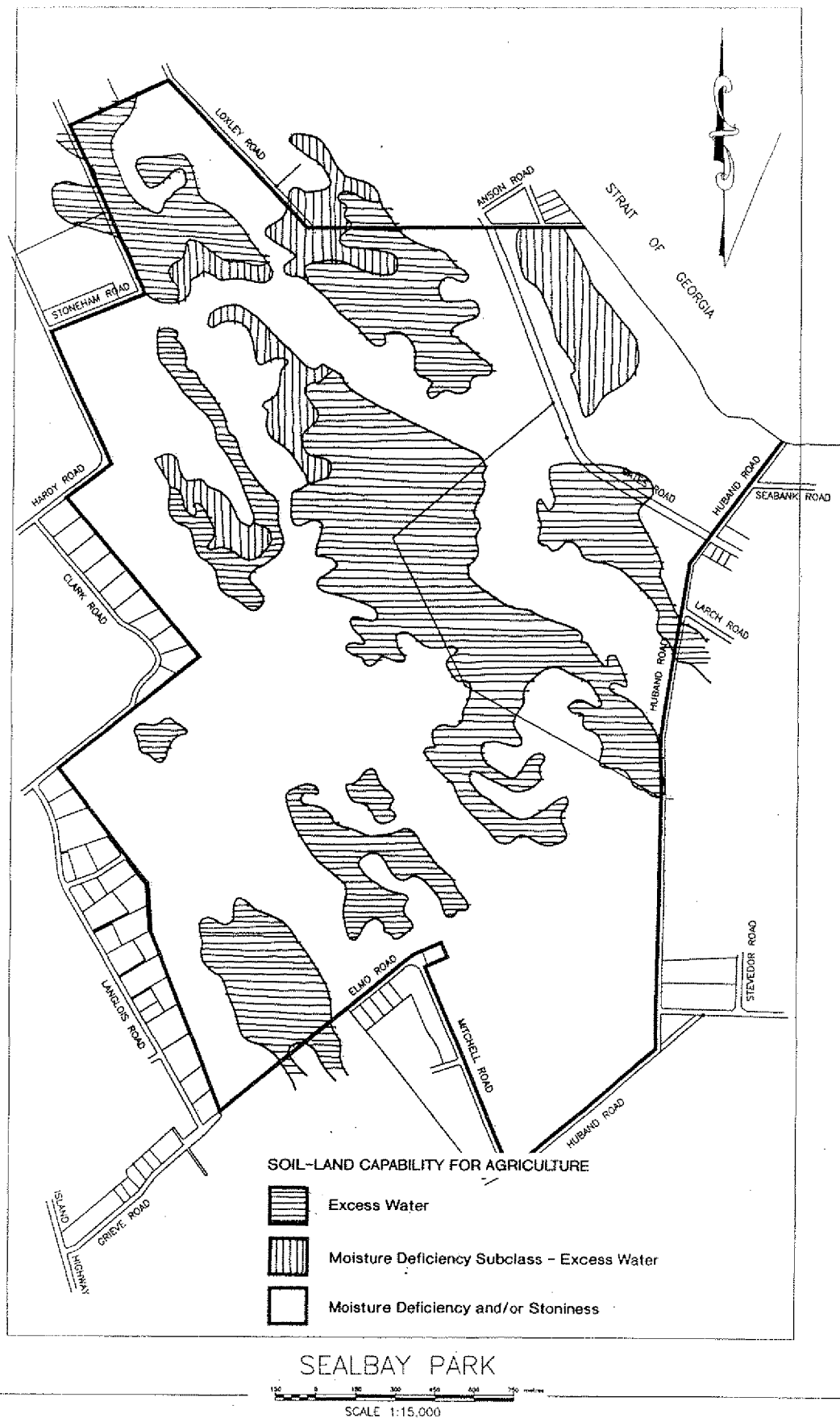
TOPOGRAPHY



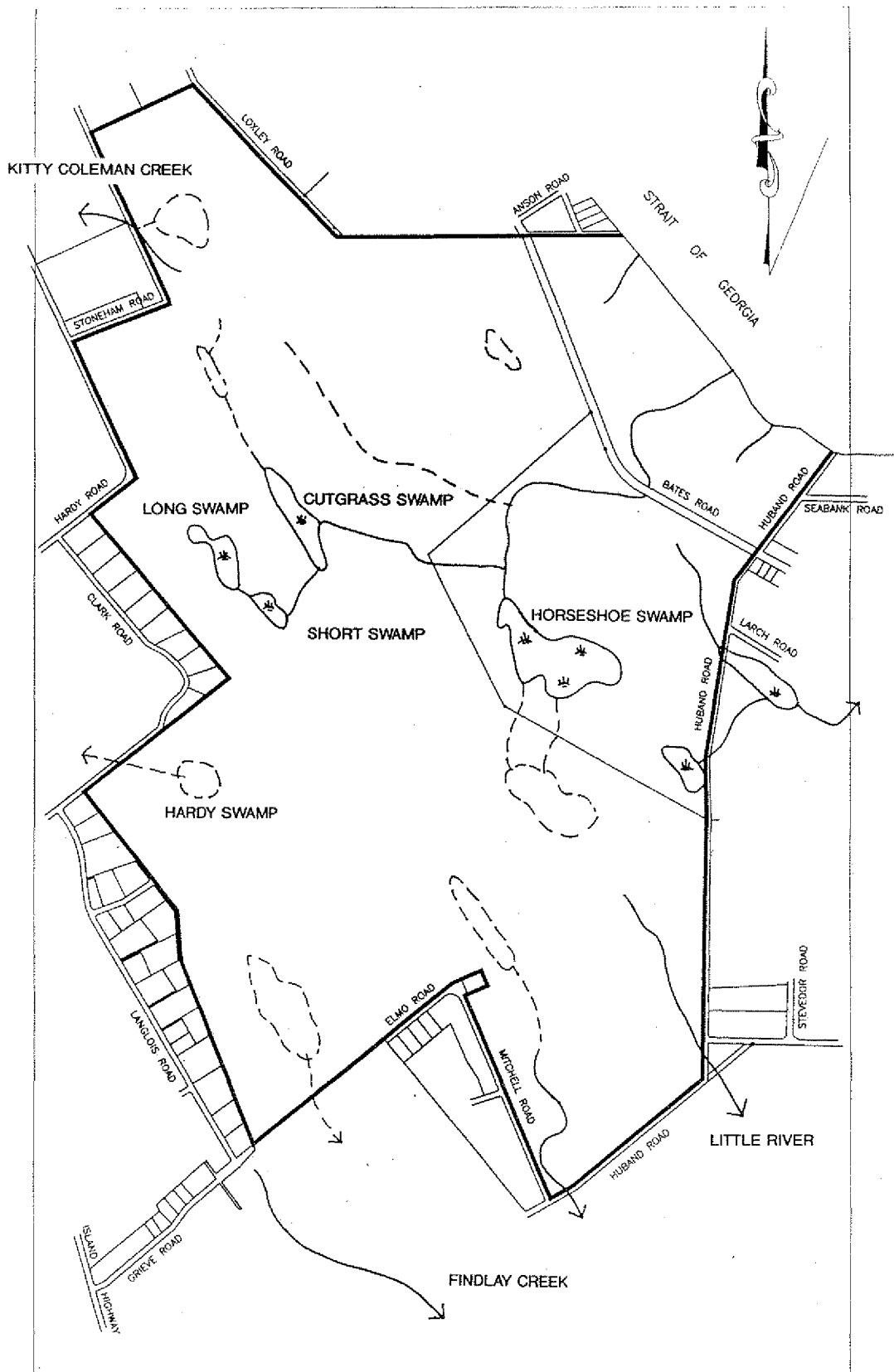
SEALBAY PARK

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SOILS (SOIL-LAND CAPABILITY)



HYDROLOGY



SEALBAY PARK

SCALE 1:15,000

SEAL BAY FOREST

Vegetation (see Map: Vegetation, page 18) - Seal Bay Forest contains a variety of forest types which are a result primarily of the localized soil type and water availability.

Generally speaking Seal Bay Forest contains vegetation associated with the coastal Western Hemlock biogeoclimatic zone. Although the forest has been modified by logging, forest community succession has since displayed the characteristics of a natural system.

Douglas fir dominates the tree stratum and species composition. Much of the forest is comprised of second growth Douglas fir 60-70 years in age. These are most vigorous in areas that are well spaced and in the well drained hummocks running the length of the forest. Salal, huckleberry and oregon grape are also found in these drier areas.

In the hollows between hummocks are swampy areas which support an alder-fir-spruce species mixture. Also found here is hemlock, sword fern and huckleberry.

Broadleaf maple is distributed in areas having base rich soils. This species as well as red alder promotes soil forming through rapid cycling of nutrients.

The understory throughout is comprised of balsam, white pine, spruce and fir with some cedar and hemlock. In general the understory is suppressed due to a fairly heavy canopy.

Three undisturbed wetlands, which are included in the proposed Ecological Reserve, contain an unusual species combination of trembling aspen, crabapple, hardhack, and slough sedge, surrounded by second growth Douglas fir and some Grand Fir.

Some evidence of root rot (*Phellinus weireli*) exists in a few localized spots, however it does not appear to be prevalent throughout the area.

The Forest District identified 14 management units based on vegetation type.

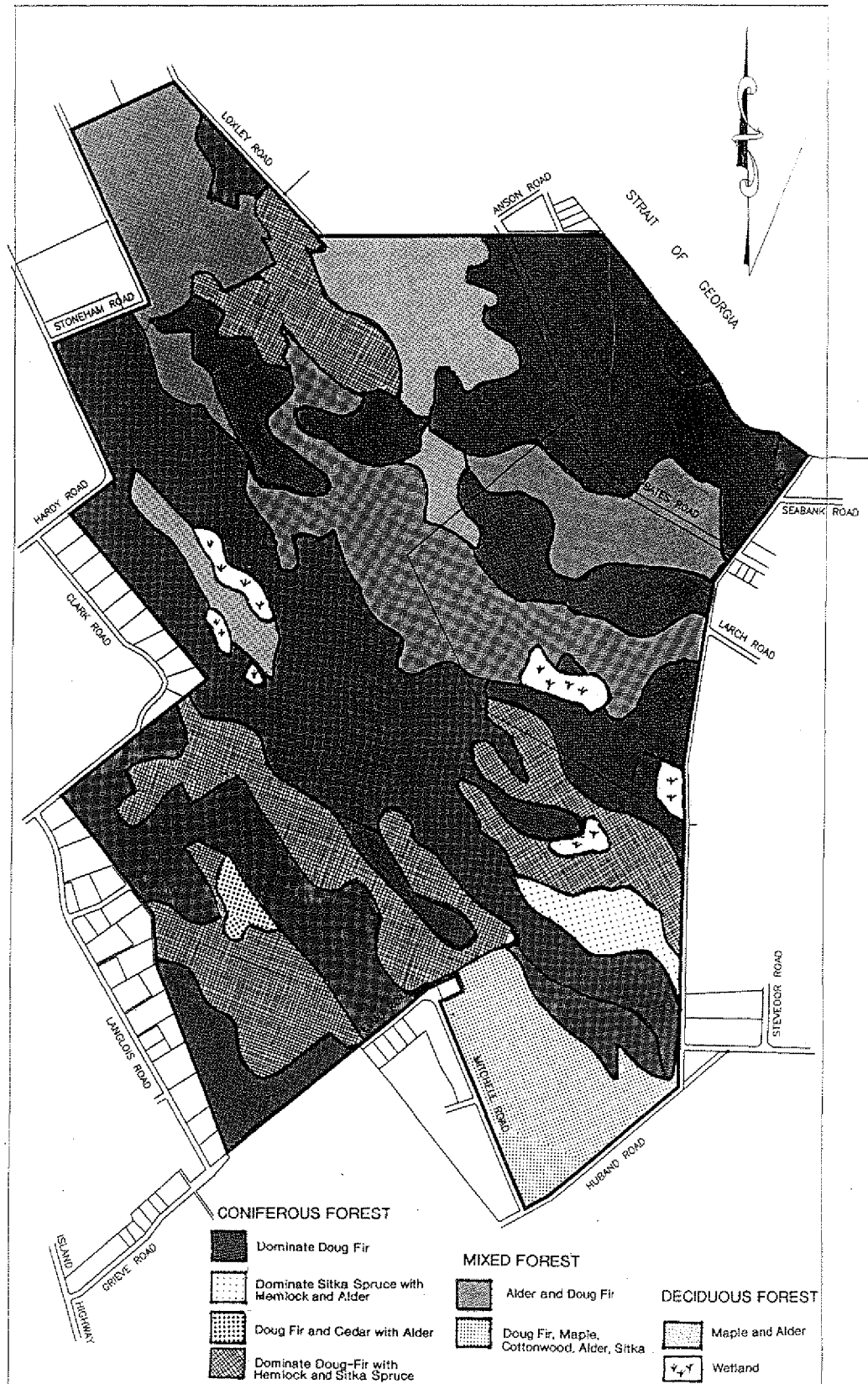
See 'Appendix 1: Flora of Seal Bay Park and Forest' for a list of documented vegetation.

Wildlife (see Map: Wildlife, page 19) - Blacktail deer and a variety of small mammals and birdlife inhabit the forest. There is one resident Black bear family which has been seen consistently over many years. In addition to common bird species are several species of birds which require habitats such as those found within the forest, including the Pileated woodpecker, Screech owl, Hutton's vireo and the Bald eagle.

The bear and deer both seem to favour the swamps. There are two documented eagle nest trees and it is likely that there are perch trees closer to Georgia Strait.

See 'Appendix 2: Mammals seen in or from Seal Bay Park and Forest' and 'Appendix 3: Birds of Seal Bay Park and Forest' for a list of documented wildlife and birds.

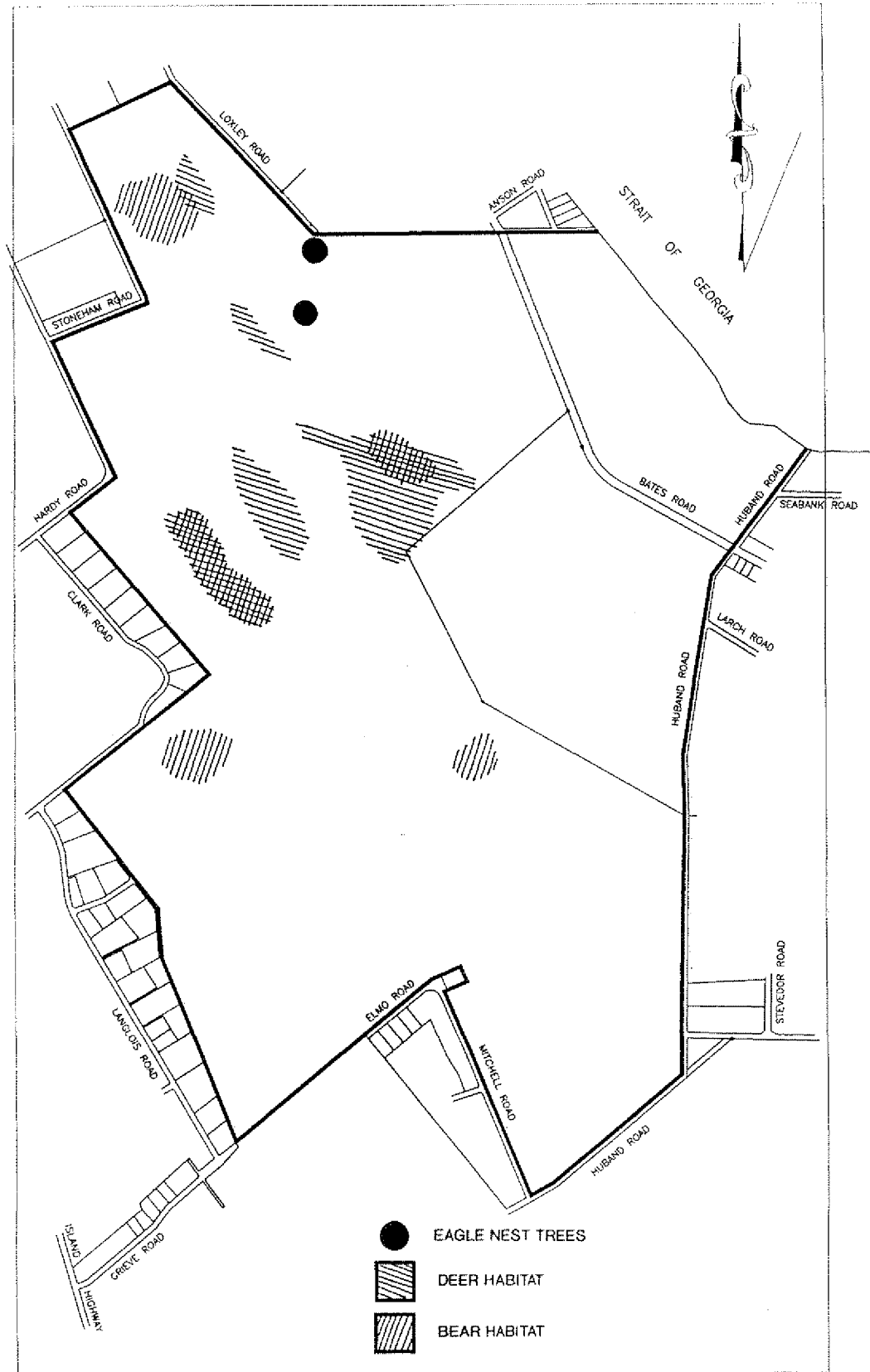
VEGETATION



SEALBAY PARK

SCALE 1:15,000

WILDLIFE



SEALBAY PARK

SCALE 1:15,000

SEAL BAY FOREST

- c) **Regulatory Requirements** - *includes any of the following regulations established by other Government agencies which affect the park's development and operation:*

Regulations -Agricultural Land Commission (see Map: Agricultural Land Reserve, page 21)

- Within Seal Bay Forest approx. 375 ha are designated Agricultural Land Reserve. The ALR is administered by the Agricultural Land Commission. Their principle objectives are to preserve these lands for farm use and encourage the establishment and maintenance of family farms. This document recognizes that it is important to maintain the viability of the land for farming and to prevent land use conflict with any adjacent ALR land.

Ministry of Transportation and Highways - There are several unopened road r/w's along the boundaries of the Seal Bay Forest (i.e. Loxley, Stoneham, Attree, Elmo and Huband Roads). There are also three unopened road r/w's which bisect the forest. MOTM may be willing to proceed with the permanent 'closure' of those road r/w's which are wholly surrounded by the Forest (i.e. Stoneham, Apollo and Mitchell Roads).

BC Lands - The proposed Crown licence/grant will likely include the following provisos:

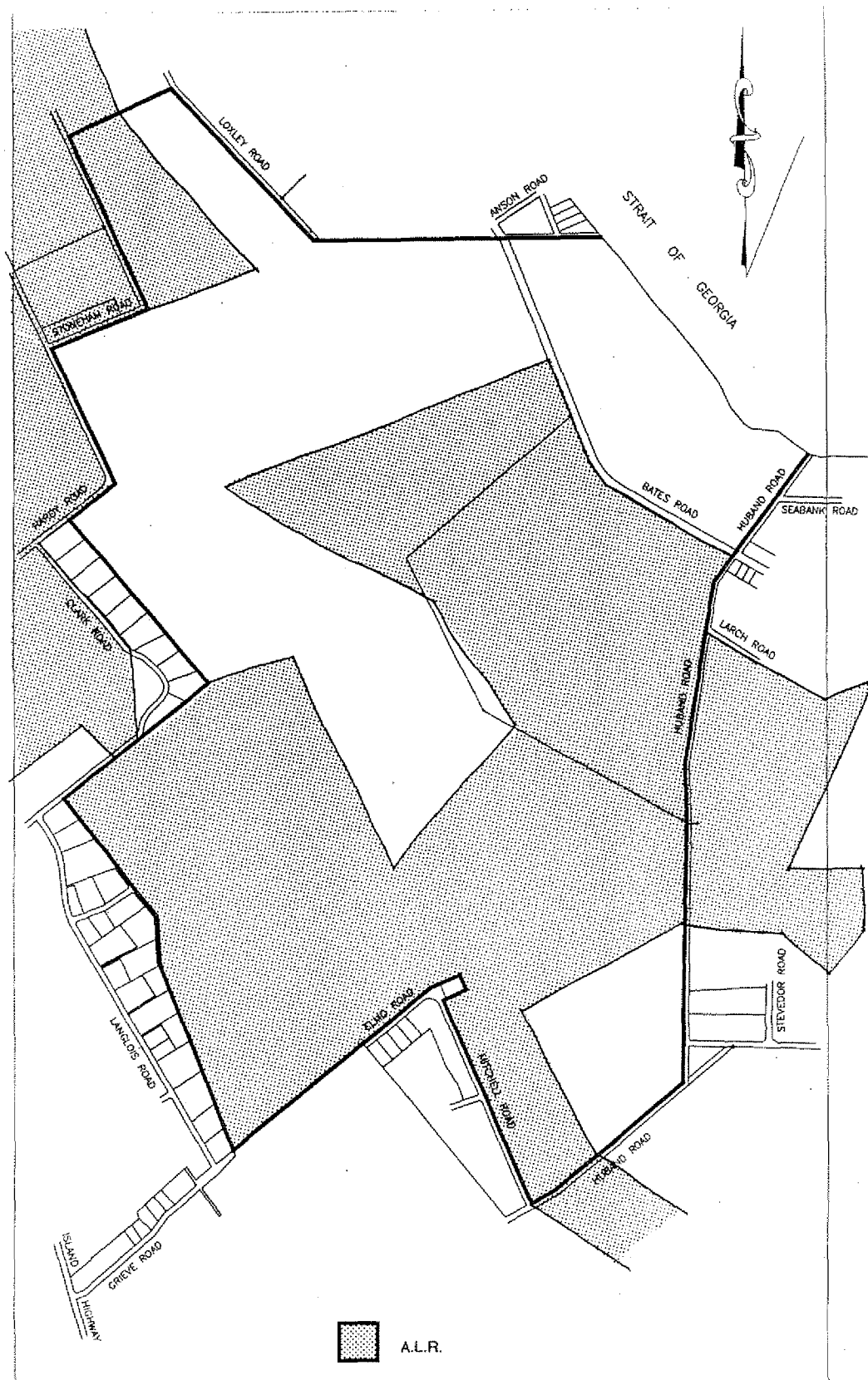
- any conditional or final water licence or substituted water licence issued or given under the Water Act, or any prior or subsequent enactment of the Province of British Columbia of like effect, and to the rights of the holder of it to enter on the land and to maintain, repair and operate any works permitted on the land under the licence at the date of the Crown Grant;
- all subsisting grants to or subsisting rights of any person made or acquired under the Mineral Act, Mining (Placer) Act, Coal Act or Petroleum and Natural Gas Act or under any prior or subsequent enactment of the Province of British Columbia of like effect;

Additionally the Crown licence/grant will likely include the following exceptions and reservations:

- in favour of Esquimalt and Nanaimo Railway Company, registered as a charge in the Land title Office M763000;
- to the Province, its successors and assigns, the interest, rights, privileges and titles referred to in Section 47 of the Land Act;
- to the Province or any person authorized by the Province, all timber which may be in or upon the Land.

Ministry of Forests - The timber rights will be administered through BC Forests Campbell River District. Any timber cutting must be approved through this office.

AGRICULTURAL LAND RESERVE



SEALBAY PARK

SCALE 1:15,000

SEAL BAY FOREST

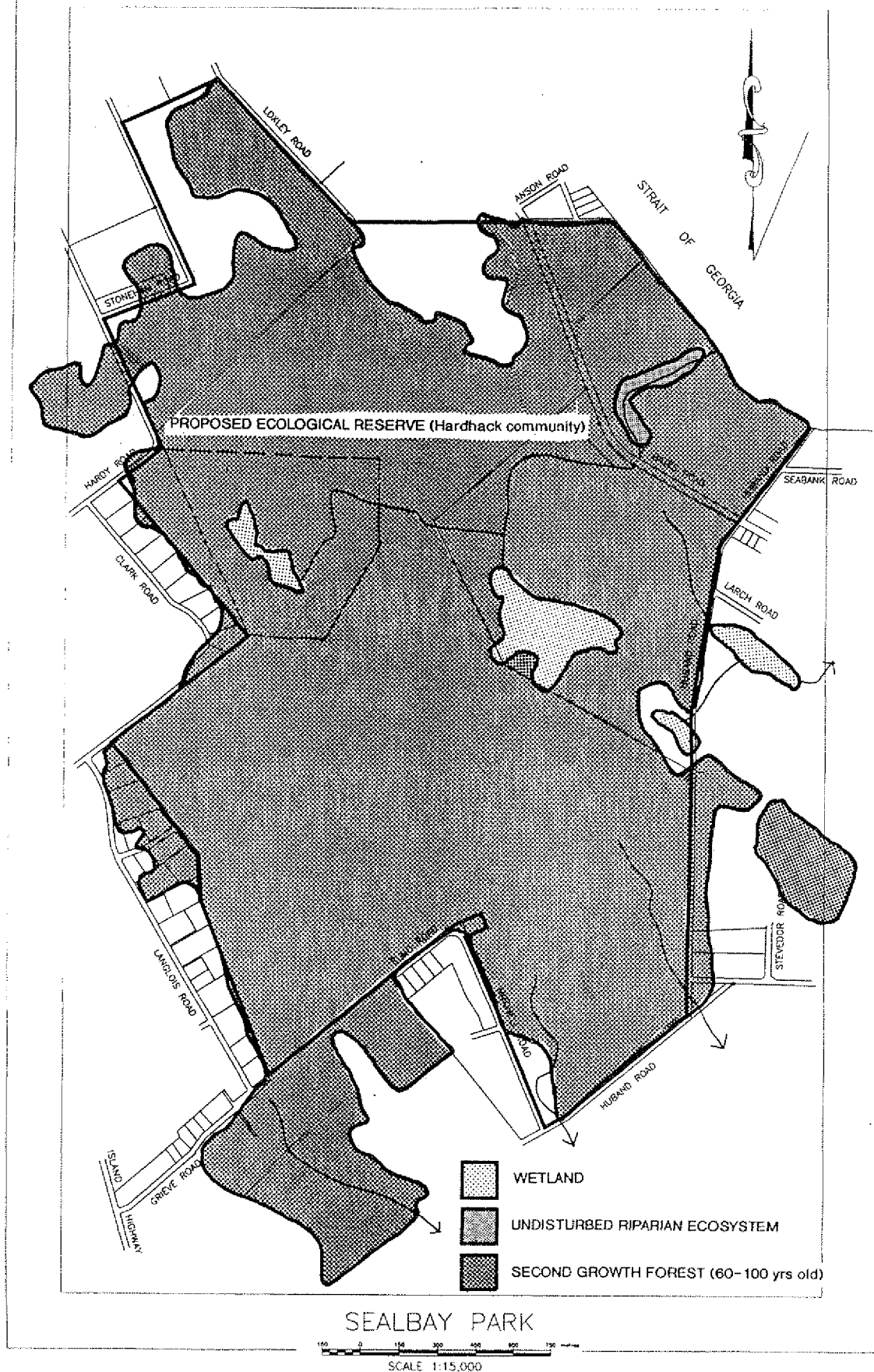
Ecological Reserves Unit, MELP (see Map: Sensitive Ecosystem Inventory, page 23) – Starting in the early 1980's MELP expressed an interest in establishing a 49 ha (121 acre) Ecological Reserve within the Seal Bay Forest. The wetlands included in this proposed reserve have an unusual combination of species and although similar groups exist elsewhere on the eastern coast of Vancouver Island most of these sites are now developed and otherwise alienated. Preservation of these wetlands will provide an unaltered, permanent benchmark of this ecosystem for future scientific research, and an outdoor laboratory and teaching area of natural sciences for all levels and institutions of education. Preservation will also protect the genetic resources and diversity contained in the present species, varieties, etc. needed in the future in stock improvements in forestry, agriculture, horticulture, or for ecosystem rehabilitation. Although these wetlands are protected within the Seal Bay Forest it may be beneficial to also create an Ecological Reserve, under Section 2(e) of the Ecological Reserves Act, as a means of making more public to the scientific community the existence of this resource for educational purposes.

Canadian Wildlife Service / MELP (see Map: Sensitive Ecosystem Inventory, page 23) - Most of Seal Bay Forest is identified as a sensitive ecosystem in the SEI (Sensitive Ecosystem Inventory) of the Sensitive Habitat Atlas. The SEI identifies remnant natural ecosystems in the Nanaimo Lowlands Ecoregion. Within Seal Bay Forest the SEI maps wetlands and a large, natural upland community of second growth forest that is included for its genetic biodiversity value.

Zoning - Seal Bay Forest is zoned RU-1 and is surrounded primarily by RU-1 with some Country Residential zones. The Country Residential zoning permits residential, public utility, park and agricultural uses with minimum lot sizes of XX ha. Rural Use zoning additionally permits garden nurseries, vets, kennels, riding academies, silviculture, model aircraft flying, gravel, mineral and peat extraction, sawmills, feedlots and horse riding events with a minimum lot size of XX ha.

Standards - Regional District development standards are similar to B.C. Parks standards.

SENSITIVE ECOSYSTEM INVENTORY



SEAL BAY FOREST

5. **ANALYSIS** (see Map: Composite Analysis, page 25) – *The analysis is a review of the site inventory in relation to its suitability assessment (i.e its ability to support the desired program) and in relation to the inherent constraints of the site.*

- a) **Suitability Assessment** - The existing trail system is fairly extensive and for infrequent visitors it is easy to get 'lost'. There are many anecdotal stories about residents living on the edge of the Forest driving lost hikers back to their vehicles on Bates Road. Although it is nice for those who know the Forest well to have many trail choices it is also desirable to have a clearly marked, looped system of main trails for the infrequent visitors.

The Forest is used for 'commuting' as well as recreation. Although the recreational walker requires a looped system that will take them back to their starting point (often where they have left a car which brought them to the Forest / Park) the commuter requires a reasonably direct route through the Forest for both it's length and breadth. On top of this is the need to create a segregated system of looped and through trails for pedestrians (only) and for multi-use (hikers, bikers, horseback riders). Although this will require changing the existing trails to some degree it is preferable to create as few 'new' trails as possible.

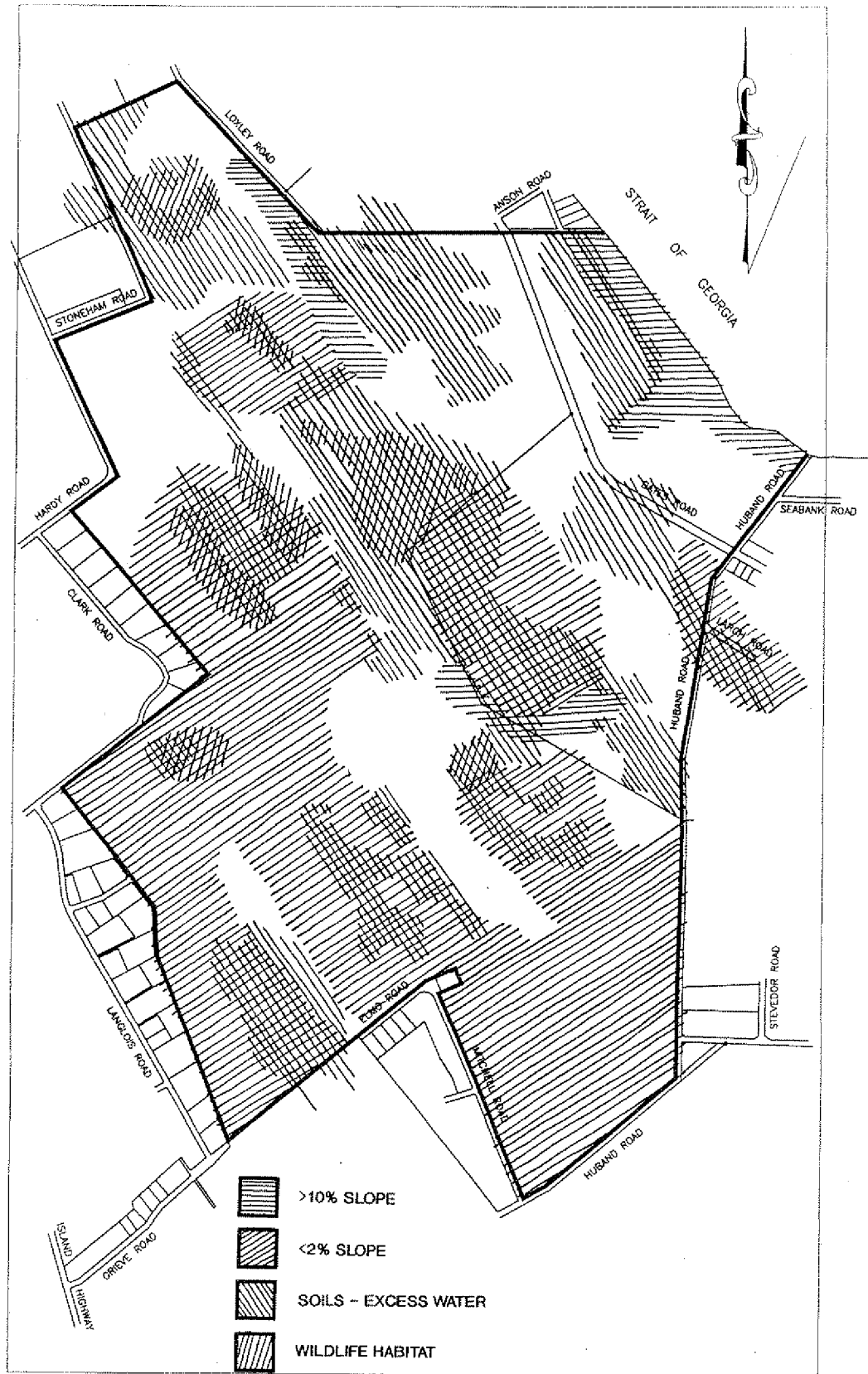
Current demand for the park does not warrant additional facilities. However in the future it will be desirable as well as necessary to encourage entrance to the Forest from many directions, both to serve the adjacent residents but also to spread the use of the trails out to help avoid over-use in any particular area. Facilities required may include adequate and safe parking areas, vehicle barriers/gates, outhouses at the trailhead and hitching posts for horses.

- b) **Site Constraints** – The Composite Analysis map identifies those areas least suitable for trail development. This includes steep slopes, poorly drained areas, wet areas and wildlife bedding or denning areas. It is desirable to avoid these areas as much as possible to avoid safety hazards, protect the environment from degradation, reduce the expense of developing and maintaining trails and help avoid human-wildlife conflict.

Generally the existing trails have avoided the swamps. This has the benefit of limiting human contact with the resident wildlife (deer and bear in particular). The Mitchell logging grade is an exception bisecting the proposed Ecological Reserve as it runs between Long and Cutgrass swamps. It is desirable to discourage heavy pedestrian use of this section of the grade and to eliminate horse and bike traffic entirely.

The other sections of trail which are undesirable for bike and/or horse traffic are due primarily to wet soils. In general bike and horse use should be located on trails located on the gravel ridges or old logging grades and which can withstand heavier traffic. It is also desirable to divert horse and bike traffic away from the heavily used pedestrian trails in Seal Bay Park.

COMPOSITE ANALYSIS



SEALBAY PARK

SCALE 1:15,000

SEAL BAY FOREST

Zones - The following three Management Zones have been developed by B.C. Parks and are used here as a framework for Seal Bay Forest development and management (**see Map: Management Zones, page 27**):

Wilderness Zone -

- activities do not jeopardize or interfere with the natural environment
- solitude, few encounters with other users
- management emphasis on sustaining ecosystems
- uses may include hiking (narrow track) and nature observation

This is a conservation zone which includes those areas where access is viewed as damaging (e.g. areas with unsuitable terrain; known wildlife habitat; areas with rare endangered or fragile vegetation). Trails will be for foot traffic only with fixed gates as required to restrict access. Trails will have no facilities other than discreet signage to mark trail heads and/or signs to restrict horse and bike entry. Trails will typically be constructed on native soil with a narrow track (1.0 – 1.5 m) and connecting to the pedestrian only trails.

Natural Environment Zone -

- mostly unmodified natural environment, some impact on the environment but only at specific locations, natural processes minimally affected
- infrequent encounters with others, longer trips
- uses may include less rugged hiking, photography and enjoyment of wildlife, education and interpretive programs

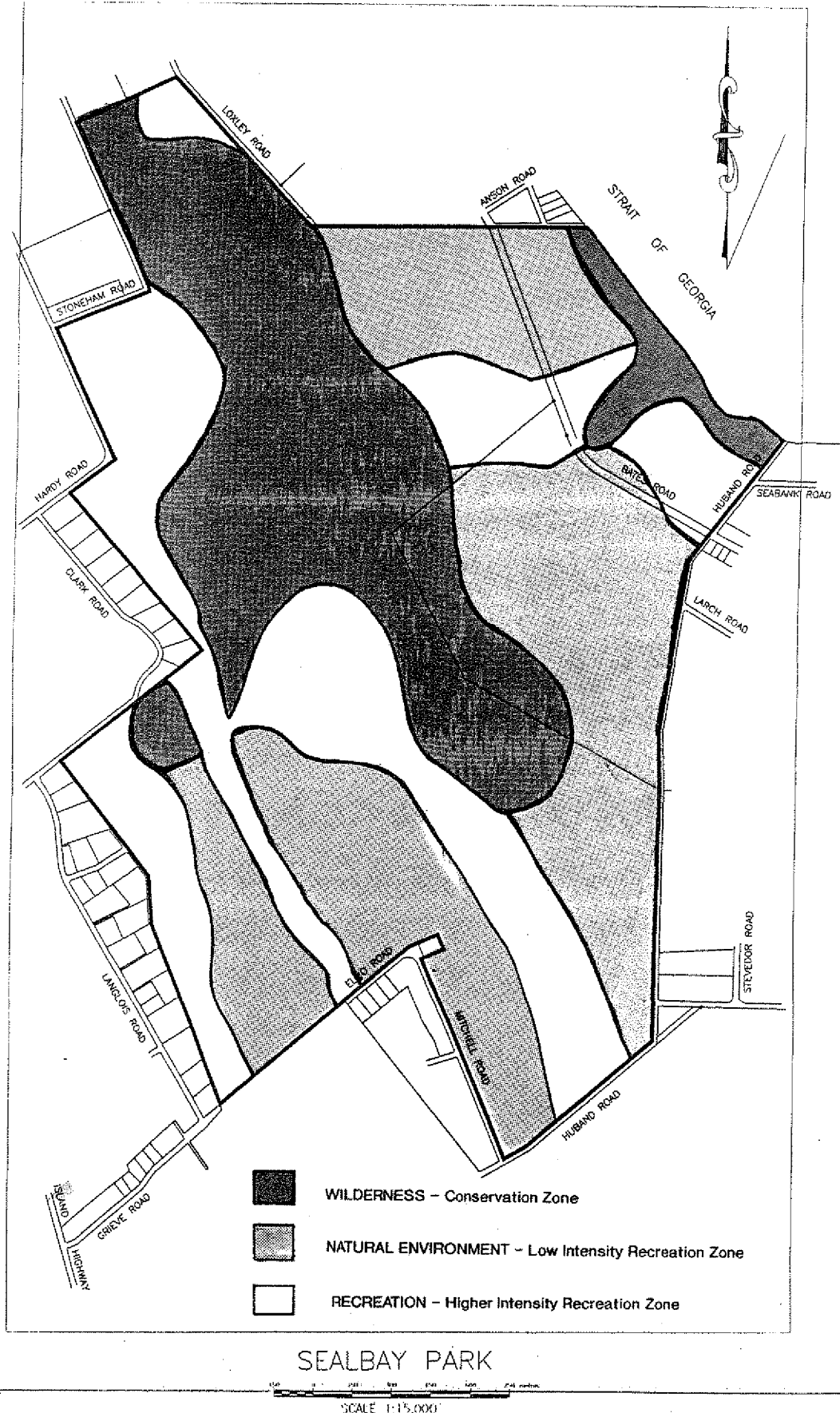
This is a low intensity recreation zone which can tolerate more use than the Wilderness Zone. Trails will be for foot traffic only with fixed gates and signage to restrict access as required. Trails will typically be constructed on native soil with a gravel base provided where necessary. These trails are most suitable for any self-guided nature interpretation. Viewing platforms, small bridges and culverts are provided as required. These trails will provide looped routes as well as direct through routes.

Intensive Recreation Zone -

- natural environment most suited to heavier recreational use with well drained soils and appropriate gradient
- natural appearing environment
- environment modified but not apparent to most people
- more contact with other users
- greatest use, opportunity for shorter trips
- management emphasis on sustaining natural environment and preventing conflicts between users

This is a recreation zone which can withstand more intensive recreational use (i.e. greater volume, heavier traffic). Trails will be multi-use to include bike and horse traffic as well as foot with fixed gates to restrict vehicle access as required. This zone includes visitor service facilities such as parking. Trails will typically be constructed on native soil (this tends to be a gravel base) with gravel provided where necessary. These trails will provide looped routes as well as direct through routes.

PROPOSED MANAGEMENT ZONES



SEAL BAY FOREST

6. DEVELOPMENT PLAN

- a) **Development Policies** - Each land use will occur in a manner and to an extent that will enhance and not deter the other uses/users for which the forest is valued, nor jeopardize the natural state of the existing environment.

Conservation - The conservation of the forests natural processes and integrity is to continue as an ethic for all land use decisions throughout the forest. At no time is the forest resource to be liquidated for any particular land use. The forest is to be conserved as a representative sample of the educational, recreational, forestry, agricultural, natural and scientific resources of the Comox Valley.

An area with particular need for conservation due, for example, to its unique vegetation, unstable soil, wildlife habitat etc. shall be placed in the 'Wilderness Zone' to be specifically protected against any input and minimal disturbance.

The Park will serve to maintain and enhance existing numbers and diversity of wildlife species, protect important habitats, and to minimize disturbance to wildlife.

Insect and disease will be recognized as natural occurrences in the Park.

Soil disturbance will be minimized and drainage disruption (e.g. culvert installation) will be limited where ever possible.

Recreation - In order to provide a natural experience within the forest motorized vehicles shall be prohibited from using the park trails. This excludes motorized wheelchairs and vehicles which may be necessary for park maintenance from time to time.

Those activities which are incompatible shall be provided separate facilities to reduce user conflict. Trail standards shall be adopted to meet the desired use/user.

An organized, loop trail system shall be developed which takes advantage of the quantity of natural features and size of the site to provide a variety of opportunities for different lengths of stay and experiences within the forest. Additionally a trail system shall be developed which allows 'through' traffic from east-west and north-south. Trails will avoid entry onto private land.

Further trail development will integrate the objectives for the area with those of the adjacent Seal Bay Regional Nature Park.

Recreation facilities which will be high use (i.e. high level of traffic, or intensive use by bikes and horses) will be located in the Intensive Recreation Zone where ever possible.

Visitor Services - The present and proposed use of the Seal Bay Forest requires improved access to the natural features and activities of the site as well as improved comfort of all users. Visitor services shall be provided based on the projected need at each trail head for such things as parking, toilets, shelters, tables, benches and hitching posts.

SEAL BAY FOREST

Visitors to Seal Bay Forest shall be supplied with information regarding basic management policy, facilities available, restricted activities and known hazards through system of signs and printed brochure. Signs shall be prepared based on Regional District sign standards (based on BC Parks standards) for construction, wording, lettering etc.

Barriers shall be installed where appropriate to protect visitors from known hazards.

Education - A self-guided interpretive program highlighting the scientific, environmental and aesthetic values of a natural forest ecosystem and which promote stewardship and respect of the forest resource should be located appropriately within the trail system. This can be supplemented with both general brochures and more detailed booklets on the flora, fauna and history of the forest. This program should be geared for schools, residents and tourists alike.

The following outlines five possible educational themes:

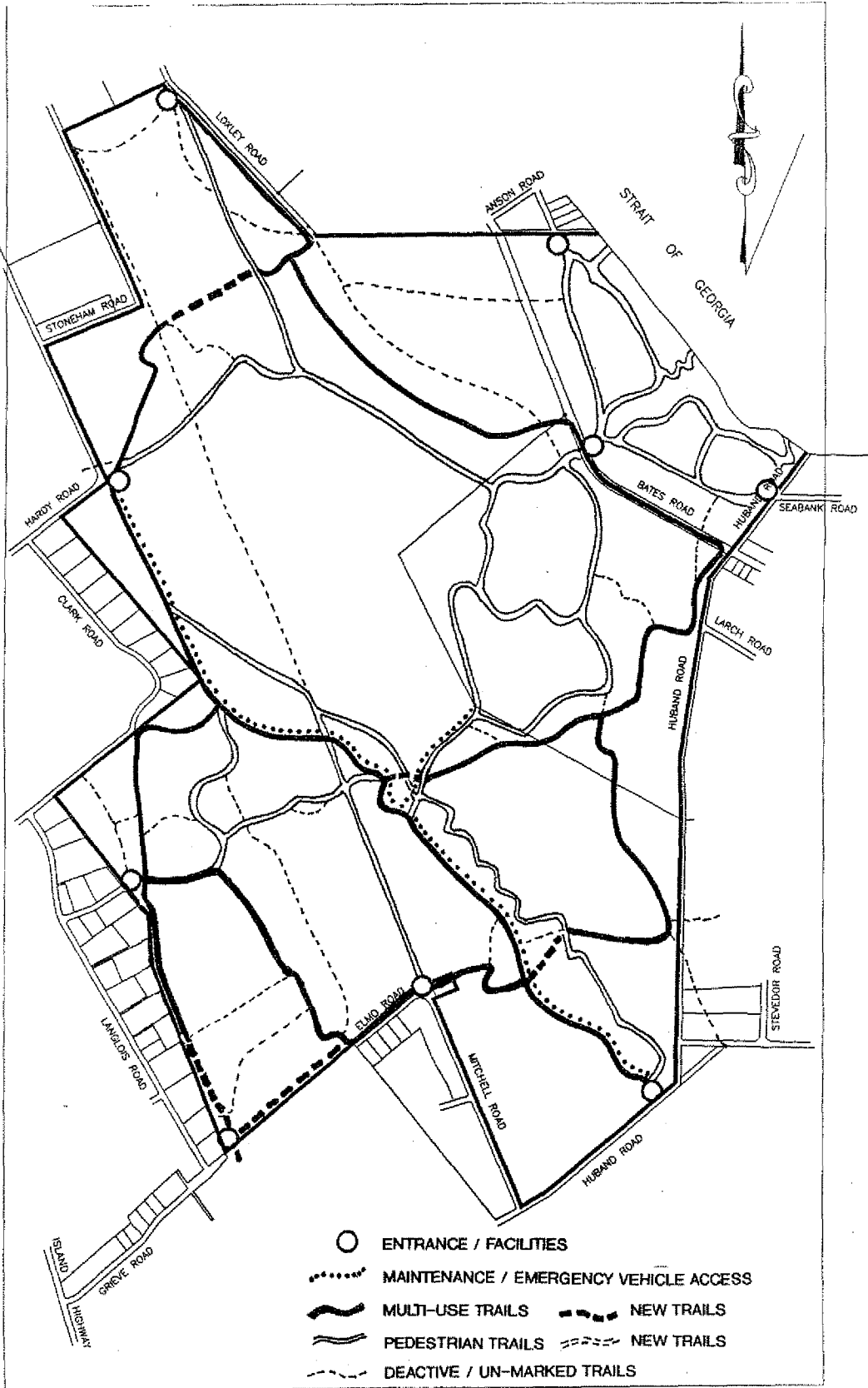
- Outdoor Forestry Museum - to highlight previous logging technology including the social and geographic factors involved;
- Natural History - to classify all species of flora and fauna in their natural habitats;
- Natural Regeneration - to understand natural regeneration and succession;
- Biodiversity - to study the benefits of biodiversity; and
- Forest Management - to study forest management practices with Seal Bay Forest as a control site.

Agriculture - Lands designated as Agricultural Land Reserve within the Seal Bay Forest have not received demand for agricultural use. However, in keeping with the Official Community Plan policies applying to Agricultural Lands, the Regional District shall manage the forest such that it's potential agricultural use is not sacrificed. Furthermore no land use activity of the forest that would conflict with nearby farm operations will be permitted.

- b) **Site Plan (see Map: Proposed Site Plan, page 30)** - outlines the location, arrangement and standard for all proposed site improvements and amenities.

Entrances - Trailheads are proposed at Bates Road (existing parking lot), Loxley, Hardy, Fitzell, Grieve, Mitchell/Elmo and Huband roads. Parking at Bates Road is contained in a parking lot, the remainder of the entrances provided limited road parking. Improved parking may be required in the future at one or all of the entrances. Each entrance connects to both a pedestrian (only) trail system as well as a multi-use trail system (permitting bike and horse use as well).

PROPOSED SITE PLAN



SEALBAY PARK

SCALE 1:15,000

SEAL BAY FOREST

Gates - Loxley, Hardy and Huband entrances lead directly onto old logging grades. Hardy and Huband entrances have been gated to prevent motorized access and to allow emergency and maintenance access. The Loxley grade runs behind residential property. Currently the grade is blocked by fallen trees however in the future it may be useful to open the grade to the adjacent residents, emergency and maintenance vehicles and gate the entrance.

Pedestrian Trails - Pedestrian only trails are located in the more sensitive areas i.e. the Conservation and Low Intensity Recreation zones. A looped system (no, or little, travelling on the same trail twice) exists from the Bates entrance and the Hardy entrance. There are also through routes from virtually any entrance to another exclusively on pedestrian only trails. In particular it is possible to walk north-south from Loxley to Huband in either one of two reasonably direct routes. It is also possible to walk east-west from either Fitzell or Hardy to Bates in a reasonably direct route.

In order to streamline the routes some trails are proposed to be either de-activated or at the least are unmarked (either on trail maps or by trail signs). Similarly some existing trails through Conservation zones are either de-activated or at the least are unmarked to discourage heavy use.

Multi-Use Trails - Multi-use trails accommodate bike and horse use as well as pedestrian. These are located primarily in the Higher Intensity Recreation zone. Two looped systems are proposed from the Bates and Hardy entrances. The smaller of the two will hopefully attract the current, prohibited, bike and horse use around Horseshoe Swamp. The larger of the two essentially circumnavigate the entire forest. There are also through routes proposed north-south from Loxley to Huband and east-west from either Fitzell to Bates in a reasonably direct route.

In order to help prevent inadvertently directing non-pedestrian use onto pedestrian trails some trails are proposed to be de-activated. Trail markers on multi-use trails are necessary to encourage bike and horse users to act responsibly and stay on the multi-use trails.

- c) **Management Plan** - *outlines the methods whereby the park will be managed. These include the following four elements:*

Schedule - *outlines proposed schedule of implementation.*

Unknown at this time.

Management - *outlines roles and responsibilities of the volunteer groups assisting with the park's operation.*

The 'Seal Bay Forest Society' will assist the RDCS with the ongoing design and preparation of work projects and the maintenance of the Forest. Under the supervision of the RDCS the 'Seal Bay Forest Society' is responsible for administering the development and maintenance of the Park.

Funding for the Park will be provided through the Parks Function in Electoral Area B. Funding will be available based on the current Parks Policy for the development and maintenance of parks.

Guidelines - *an outline of general management guidelines.*

Terrain and Soil Management - Trails shall be monitored for soil disturbance and drainage disruption regularly with remedial action taken (i.e. modification or trail closure).

Vegetation Management - Use of pesticides, herbicides and fertilizers shall be prohibited. Trails shall be brushed only where required to maintain trail clearances. Public and facilities shall be protected from hazard trees per "Tree Hazards in Recreation Sites in British Columbia, 1992". Cut and fallen trees shall be cleared from trails and left on site to rot. Removal of any vegetation or other natural materials shall be prohibited.

Wildlife Management - Taming or feeding wildlife shall be discouraged. Capture of wildlife, hunting, removal of dead wildlife or skeletons shall be prohibited. Dogs should be kept on a leash while in the forest. Snags shall be left whenever possible as habitat.

Ecological Reserve Management - Routine fire protection is desirable. A local volunteer warden should be recruited to monitor this reserve.

Maintenance - *outlines the required provisions of a routine and remedial maintenance program.*

Inspections - inspections shall be undertaken on a regular basis to monitor the condition of the park. Deficiencies will be corrected based on whether it is a routine or remedial maintenance. Deficiencies shall be rated and responded to as follows (within the confines of the budget):

- Immediate - Conditions which endanger park users and are a liability to the Regional District, which are damaging the sensitive environment or a unique feature, and/or which are an eyesore, illustrating a lack of care on the part of the Regional District require an immediate response and correction.
- Important - Conditions which threaten the health or quality of a sensitive environment or unique feature, which are inconvenient to park users, and/or which tarnish the image of the park system require action as soon as possible and/or convenient.
- Moderate - Conditions which effect the enjoyment of public use, and/or where facilities show signs of depreciation if left unattended require action within the year.
- Low - Conditions which need to be improved to meet future park use requirements and/or to improve the enjoyment of park users may be left for review in subsequent years.

SEAL BAY FOREST

Routine maintenance - shall be provided according to an approved Maintenance Plan, outlining tasks, frequency and costs. The following are examples of routine maintenance:

- litter pick up throughout
- garbage collection

Remedial maintenance - shall be provided on an as-required basis in accordance with a prepared Work Project, outlining tasks and costs. The following are examples of remedial maintenance:

- repair and/or replace site facilities
- renewal of trail surfaces
- renewal of parking surfaces
- repair signs of vandalism

Rules and Regulations - *outlines the rules and regulations which will govern the park operation.*

Attached as Appendix 4 is a copy of the relevant sections of Bylaw 2027 which governs Seal Bay Regional Nature Park. It is anticipated that this Bylaw will apply to Seal Bay Forest.

PTERIDOPHYTA

<u>Equisetaceae</u>	(Horsetail family)
Equisetum arvense	Common horsetail
Equisetum hyemale	Fall scoring rush
<u>Lycopodiaceae</u>	(Club-moss family)
Lycopodium clavatum	Running club-moss
<u>Aspleniaceae</u>	(Spleenwort family)
Athyrium felix-femina	Lady fern
Polystichum munitum	Sword fern
<u>Blechnaceae</u>	(Deer Fern family)
Blechnum spicant	Deer fern
<u>Polypodiaceae</u>	(Polypody family)
Polypodium vulgare	Licorice fern
<u>Dennstaedtiaceae</u>	(Hay-scented fern family)
Pteridium aquilinum	Bracken

SPERMATOPHYTA

Gymnospermae

<u>Pinaceae</u>	(Pine family)
Abies grandis	Grand fir
Picea sitchensis	Sitka spruce
Pinus contorta latifolia	Lodgepole pine
Pinus monticola	Western white pine
Pseudotsuga mensiesii	Douglas fir
Tsuga heterophylla	Western hemlock
<u>Cupressaceae</u>	(Cypress family)
Thuja plicata	Western red cedar

Angiospermae

Monocotyledons

<u>Najadaceae</u>	(Pondweed Family)
Zostera marina	Eel grass
<u>Poaceae</u>	(Grass family)
Dactylis glomerata	Orchard grass
Elymus mollis	Wild rye
<u>Cyperaceae</u>	(Sedge family)
Carex sitchensis	Sitka sedge
<u>Araceae</u>	(Arum family)
Lysichiton americanum	Skunk-cabbage

Liliaceae

(Lily family)

Disporum oreganum	Oregon Fairy Bells
Lilium columbianum	Tiger lily
Maianthemum dilatatum	Wild lily-of-the-valley
Streptopus amplexifolius	Clasping twistedstalk
Trillium ovatum	Western trillium

Orchidaceae

(Orchid family)

Calyypso bulbosa	Fairy-slipper
Corollorhiza maculata	Spotted coral-root
Goodyera oblongifolia	Rattlesnake-plantain

Typhaceae

Typha latifolia	Common Cattail
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Diacotyledons

Salicaceae

(Willow family)

Populus balsamifera trichocarpa	Black cottonwood
Populus tremuloides	Trembling aspen
Salix scouleriana	Scouler's willow
Salix sitchensis	Sitka willow

Betulaceae

(Birch family)

Alnus rubra	Red alder
Betula papyrifera	Paper birch

Urticaceae

(Nettle family)

Urtica lyallii	Stinging nettle
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Chenopodiaceae

Chenopodium album	Lamb's quarters
Slicornia virginica	Glasswort

Portulacaceae

(Purslane family)

Claytonia sibirica	Siberian miner's-lettuce
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Nymphaeaceae

(Waterlily family)

Nupher polysepalum	Yellow waterlily
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Ranunculaceae

(Buttercup family)

Aquilegia formosa	Western columbine
Ranunculus occidentalis	Western buttercup
Ranunculus uncinatus	Little buttercup

Berberidaceae

(Barberry family)

Achyls triphylla	Vanillaleaf
Mahonia aquifolium	Tall oregon-grape
Mahonia nervosa	Dull oregon-grape

Fumariaceae

(Fumitory family)

Dicentra formosa	Bleeding heart
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<u>Brassicaceae</u>	(Mustard family)
Cardamine nuttallii	Nuttall's bitter-cress
<u>Saxifregaceae</u>	(Saxifrage family)
Tiarella trifoliata	Three-leaved foam-flower
<u>Grossulariaceae</u>	(Currant family)
Ribes bracteosum	Skink currant
Ribes sanguineum	Red-flowering currant
<u>Fabaceae</u>	(Pea family)
Lathyrus japonicus	Beach pea
<u>Aceraceae</u>	(Maple family)
Acer glabrum	Douglas Maple
Acer macrophyllum	Broadleaf Maple
<u>Rosaceae</u>	(Rose family)
Amelanchier alnifolia	Saskatoon
Holodiscua discolor	Ocean Spray
Malus fusca	Pacific crabapple
Potentilla anserina	Silver-wood
Physocarpus capitatus	Pacific ninebark
Prunus emarginata	Wild Cherry (Bitter Cherry)
Rosa gymnocarpa	Little Wild Rose
Rosa nutkana	Nootka rose
Rubus parviflorus	Thimbleberry
Rubus spectabilis	Salmonberry
Spiraea douglasii	Hardhack
<u>Rhamnaceae</u>	(Buckthorn family)
Rhamnus purshianus	Cascara
<u>Violaceae</u>	(Violet family)
Viola glabell	Stream violet
<u>Onagraceae</u>	(Evening-primrose family)
Epilobium angustifolium	Fireweed
<u>Umbellifereae</u>	(Parsnip family)
Circuta douglasii	Water Hemlock
<u>Cornaceae</u>	(Dogwood family)
Cornus canadensis	Bunchberry
Cornus nuttallii	Western flowering dogwood
Cornus sericea	Red-osier dogwood
<u>Ericaceae</u>	(Heath family)
Gaultheria shallon	Salal
Vaccinium parvifolium	Red huckleberry
<u>Pyrolaceae</u>	(Wintergreen family)
Chimaphila menziesii	Menzie's pipsissewa
Chimaphila umbellata	Prince's pine

<u>Lamiaceae</u>	(Mint family)
<i>Mentha canadensis</i>	Wild Mint
<i>Prunella vulgaris</i>	Self-heal
<i>Stachys colleyae</i>	Cooley's hedge-nettle
<u>Monotropaceae</u>	(Indian-pipe family)
<i>Monotropa uniflora</i>	Indian-pipe
<u>Primulaceae</u>	(Primrose family)
<i>Trientalis latifolia</i>	Broad-leaved starflower
<u>Scrophulariaceae</u>	(Figwort family)
<i>Digitalis purpurea</i>	Foxglove
<i>Minulus guttatus</i>	Common Monkey Flower
<u>Rubiaceae</u>	
<i>Galium triflorum</i>	Sweet-scented bedstraw
<u>Caprifoliaceae</u>	(Honeysuckle family)
<i>Lonicera ciliosa</i>	Orange honeysuckle
<i>Linnaea borealis</i>	Twinflower
<i>Symphoricarpus albus</i>	Common snowberry
<u>Campanulaceae</u>	(Harebell family)
<i>Campanula scouleri</i>	Scouler's bluebell
<u>Asteraceae</u>	(Aster family)
<i>Achillea millefolium</i>	Yarrow
<i>Adenocaulon bicolor</i>	Pathfinder
<i>Anaphalis margaritacea</i>	Pearly-everlasting
<i>Aster douglasii</i>	Douglas Aster
<i>Mycelis muralis</i>	Wall-lettuce
<u>Compositae</u>	(Composite family)
<i>Arctium minus</i>	Burdock
<i>Cirsium arvensis</i>	Canada Thistle
<i>Cirsium vulgare</i>	Bull Thistle
<i>Grindelia integrifolia</i>	Gumweed
<i>Taraxacum officinale</i>	Dandelion
 INTERTIDAL SEED PLANTS	
<i>Zostera marina</i>	Eel grass

Compiled by Cy Morehen, 1973
updated by Phil Capes

INSECTIVORE

Wandering shrew
Townsend's vole
White-footed or Deer Mouse
Red squirrel (Tamiasciurus budsonicus)
Little-brown bat

OMNIVORE

Mink
Muskrat
Marten
Raccoon (Procyon lotor)
Black bear (Ursus americanus)

HERBIVORE

Beaver
Blacktail Deer (Odocoileus hemionus)

AQUATIC MAMMALS

Fin-back Whale
Harbour porpoise
Hair seal
Pacific Killer whale

LOONS

Pacific Loon
Common Loon
Arctic Loon

GREBES

Pied-billed Grebe
Red-necked Grebe
Horned Grebe

CORMORANTS

Pelagic Cormorant

HERONS

Great Blue Heron

SWANS, GEESE, DUCKS

Black Brant
Mallard
Green-winged Teal
Cinnamon Teal
American Wigeon
Greater Scaup
Common Goldeneye
Harlequin Duck
Bufflehead
Oldsquaw
White-winged Scoter
Surf Scoter
Hooded Merganser
Red-breasted Merganser
Common Merganser

VULTURES, HAWKS, FALCONS

Turkey Vulture
Sharp-shinned Hawk
Cooper's Hawk
Red-tailed Hawk
Bald Eagle
Sparrow Hawk

PLOVERS and SANDPIPERS

Killdeer
Black-bellied Plover
Black Turnstone
Common Snipe
Spotted Sandpiper
Greater Yellowlegs
Lesser Yellowlegs
Least Sandpiper
Dunlin
Dowitcher
Western Sandpiper

GROUSE

Blue Grouse
Ruffed Grouse

JAEGERS and GULLS

Parasitic Jaeger
Glaucous-winged Gull
California Gull
Mew Gull
Bonaparte's Gull

TERNs

Common Tern

AUKS and MURRES

Common Murre
Pigeon Guillemot
Marbled Murrelet
Rhionceros Auklet

PIGEONS

Band-tailed Pigeon
Mourning Dove

OWLS

Screech Owl

GOATSUCKERS

Common Nighthawk

SWIFTS

Black Swift

HUMMINGBIRDS

Rufous Hummingbird

KINGFISHERS

Belted Kingfisher

WOODPECKERS

Northern Flicker
Red-shafted Flicker
Pileated Woodpecker
Hairy Woodpecker
Downy Woodpecker

FLYCATCHERS

Eastern Kingbird
Traill's Flycatcher
Western Flycatcher
Olive-sided Flycatcher
Willow Flycatcher
Pacific-slope Flycatcher

SWALLOWS

Violet-green Swallow
Tree Swallow
Rough-winged Swallow
Barn Swallow

JAYS and CROWS

Stellar's Jay
Common Raven
Northwestern Crow

TITMICE

Chestnut-backed Chickadee

NUTHATCHERS

Red-breasted Nuthatcher

THRUSHES

American Robin
Varied Thrush
Hermit Thrush
Swainson's Thrush

KINGLETS

Golden-crowned Kinglet

PIPITS

Water Pipit

WAXWING

Cedar Waxwing

STARLINGS

Starling

VIREOS

Hutton's Vireo
Red-eyed Vireo
Warbling Vireo

WOODWARBLERS

Orange-crowned Warbler
Yellow Warbler
Audobon's Warbler
Black-throated Gray Warbler
Townsend's Warbler
MacGillivray's Warbler
Common Yellowthroat
Wilson's Warbler
Myrtle Warbler

BLACKBIRDS

Redwing Blackbird
Brewer's Blackbird
Brown-headed Cowbird

TANAGERS

Western Tanager

FINCHES

Black-headed Grosbeak
Evening Grosbeak
Purple Finch
House Finch
Pine Siskin
American Goldfinch
Red Crossbill
Rufous-sided Towhee
Savannah Sparrow
Golden-crowned Sparrow
Oregon Junco
White-crowned Sparrow
Fox Sparrow
Song Sparrow
Dark-eyed Junco

WRENS

Winter Wren
Bewick's Wren
Brown Creeper

Compiled by Phil Capes, 1980-81

DEFINITIONS

1. In this Schedule the following words have the following meaning:

<i>BOARD</i>	means the Board of the Regional District.
<i>COMMERCIAL ACTIVITY</i>	means the sale or rental of goods or services.
<i>CYCLE</i>	means any self-propelled wheeled vehicle including a bicycle, mountain bike and tricycle; but excluding a wheelchair.
<i>NATURAL MATERIALS</i>	means vegetation of any kind, soil, gravel, rock, mineral, wood, driftwood, fallen timber, or any other material occurring naturally in the Park, whether animate or inanimate.
<i>REGIONAL DISTRICT</i>	means the Regional District of Comox-Strathcona.
<i>PARKING or PARKED</i>	means to station any vehicle.
<i>PARK TRAIL</i>	means any trail designated recreation throughout the park.
<i>PEDESTRIAN</i>	means a person traveling on foot, in a wheel chair, or an infant or young child in a stroller or perambulator.
<i>SPECIAL USE</i>	means any commercial or non commercial service, activity or event which attracts or requires participants or spectators, and includes, but is not restricted to, a festival, sport competition, tournament, group training or group lesson, regatta, animal show, fishing derby, orienteering, operation of a model airplane, model boat or model car and television or motion picture filming.

ADMINISTRATION

2. The Director of Planning, Administration Officer and Parks Coordinator of the Regional District are authorized to administer this Bylaw.
3. The Director of Planning, Administration Officer and Parks Coordinator of the Regional District and members of the Royal Canadian Mounted Police are authorized to enforce the provisions of this bylaw.

DAMAGE

4. No person shall remove, destroy, cut or damage any natural material from a park or on a trail except authorized persons engaged in maintenance of the park.

GARBAGE

5. No person shall deposit in a park any garbage, sewage refuse, empty or broken bottles, tin cans, cartons, paper or other waste or obnoxious material other than in a receptacle provided for that purpose.
6. No person shall carry or transport into a park garbage, sewage, refuse or other waste of any kind.

STORAGE

7. No person, including an owner of property adjacent to a park or trail, shall use a park or trail for storage of any materials of any kind except authorized persons storing construction materials for use in the park.

ANIMALS

8. No person shall ride, lead, or have charge of, any horse or other riding animal in a park except on equestrian trails as designated by a posted sign and/or by Schedule "C".
9. No person shall cause or permit any animal owned by him or in his control to be or remain at large in a park.
10. Pursuant to Regional District Animal Control bylaw/s all dogs shall be restrained by leash and/or under the control of a competent accompanying person in all parks.
11. Pursuant to Regional District Animal Control bylaw/s all persons shall remove from a park the feces deposited by the dog owned by or in the care of that person.

FIRES

12. No person shall kindle, build, light, maintain, or use any fire at any location in a park other than a fire in a fire pit provided or barbecue pit provided for the purpose by the Regional District, except by permission of the Regional District.
13. The prohibition under 12. does not include the use of a portable hibachi, barbecue, or propane stove.

FIREARMS and HUNTING

14. Unless authorized by the Regional Board no person shall discharge any firearm, bow or crossbow in a park at any time.
15. No person shall hunt in a park.

CAMPING

16. No person shall use a park for the purpose of camping, tenting, or overnight accommodation except by permission of the Regional District.

PARKING

17. No person shall park or station any vehicle on any public right-of-way in a park in such a manner as to impede proper use of the road or in such a place or manner as to damage vegetation or landform, or to restrict or inhibit public recreational use of a park.

VEHICLE CONTROL

18. No person shall operate a vehicle or cycle below the natural boundary or high tide mark in a park.
19. No person shall operate a vehicle or cycle off the designated road ways or in such a manner as to disturb the natural features of a park.
20. No person shall ride any cycle in a park or on a trail except on public roads or trails designated for such use except authorized personnel patrolling on a cycle in a park or on a trail.
21. No person shall operate or cause to be operated a motorcycle, dirt bike or other motorized vehicle, other than a wheelchair, on or along a park trail except authorized personnel engaged in the development or maintenance of the park.

PARK CURFEW

22. All Level 1 and Level 2 parks to which this Bylaw applies may be closed to recreational use between the hours of 11 p.m. and 6:30 a.m. the following morning at the discretion of those authorized to administer this bylaw.

PARK USE PERMIT

23. No person shall, in a park or on a trail, conduct or carry out any special use except where authorized by a Park Use Permit as outlined in Schedule "E".
24. A Park Use Permit may require the following:
 - a) that the activity be confined to a specific location;
 - b) that the activity be restricted to certain days and hours; and/or
 - c) that the activity be restricted to those specified by permit.
25. A Park Use Permit may additionally require the Permittee to make one or more of the following provisions for removal of garbage generated by issuance of the Permit:
 - a) supply, install and service additional garbage receptacles; and/or
 - b) pay for additional service call/s as supplied by contract to the Regional District for garbage removal during the duration of the Permit.
26. A Park Use Permit may additionally require the Permittee to make the following provisions for toilet facilities during the period of the Permit:
 - a) supply, install, service and remove portable toilets; and/or
 - b) pay for additional service call/s as supplied by contract to the Regional District for sanitary pump-out of existing on-site toilets.
27. The holder of a park use permit must maintain the area used under the permit in a neat and clean condition.
28. The Parks Coordinator or Director of Planning may issue a Park Use Permit for special use if all of the following criteria are met:
 - a) the special use conforms with the policies of the Master Plan for that park;
 - b) the location used is selected with a sensitivity to the park or trail resources and the experience of other park visitors;
 - c) the carrying on of a special use will result in minimum negative environmental impact;
 - d) a Park Use Permit applicant has completed a park use permit application;
 - e) the permit fee and damage deposit has been paid in advance in accordance with Schedule "D";
 - f) the Park Use Permit applicant has been notified that site cleanup costs, if applicable, are due 30 days from the last date of special use on the Park Use Permit and if payment is not received then the damage deposit will be forfeited;
 - g) proof of comprehensive general liability insurance is provided in accordance with Schedule "D";
 - h) a release and indemnification form is signed by the park use permit applicant in accordance with Schedule "E".
29. The Parks Coordinator or Director of Planning may:
 - a) refuse to issue a Park Use Permit to any persons or group who has previously contravened this bylaw;
 - b) revoke a Park Use Permit if the special use is conducted in a manner which contravenes this Bylaw.
30. Issuance of a Park Use Permit does not exempt the applicant from obtaining a Regional District Special Event Permit where required.
31. All special uses sponsored by an incorporated non-profit society, a local recreation commission or a youth-oriented group, including, but not restricted to, school groups, cubs, scouts, guides and other groups which primarily cater to young people under the age of 18 years, are exempted from paying a permit fee or a damage deposit.