SAVARY ISLAND OFFICIAL COMMUNITY PLAN

BYLAW NO. 403, 2006

Adopted February 22, 2007

Consolidated for Convenience Only September 12, 2012



Powell River Regional District

AMENDMENTS MADE TO SAVARY ISLAND OCP, BYLAW NO. 403, 2006

Amendment Bylaw No.	Adoption Date	Applicant	Purpose
403.1, 2010	July 30, 2010	Powell River Regional District	Institute development permit provisions over District Lot 1375, amend text related to heritage resources, add new section for the protection of heritage conservation areas within District Lot 1375.
403.2, 2011	Aug. 23, 2012	Powell River Regional District	Include targets for the reduction of greenhouse gas emissions, and policies and actions with respect to achieving those targets.

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SCHEDULE "A"

BYLAW NO. 403, 2006

This is Schedule "A" of the "Savary Island Official Community Plan, Bylaw No. 403, 2006".

Schedule "A" consists of:

SECTION 1	Introduction and Community Goals	
SECTION 2	Environmental, Marine and Heritage Resources	
SECTION 3	Residential Use	
SECTION 4	Economic Activity	
SECTION 5	Institutional Uses and Island Open Space	
SECTION 6	Transportation Planning	
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All other material included on these pages is not part of Schedule "A" of Bylaw No. 403, 2006.

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SAVARY ISLAND OFFICIAL COMMUNITY PLAN

PREAMBLE

Savary is a crescent-shaped Island located in the northern reaches of the Strait of Georgia approximately 14 kilometres northwest of the City of Powell River. The Island is a narrow remnant of Quadra sands and outwash sediments characterized by steep, unstable cliffs dropping down to wide, expansive, sandy beaches. The localized and limited tidal action accounts for the warm water the Island is known for.

Continued coastal erosion since deglaciation (approximately 10,000 years ago), under the general influence of the prevailing south eastern storm waves, has caused the disappearance of much of the original Island. With no exterior sources of sediment, the Island will continue to cannibalize its south coast. (*Coastal Sedimentary Processes, Savary Island, British Columbia – A Preliminary Assessment*, Bornhold and Conway, Geological Survey of Canada, October 1996.)

The sandy soil of Savary and the moderate climate of warm dry air flowing across the Strait from Vancouver Island have bestowed a flora and fauna quite different from other rocky islands in the Strait of Georgia including a number of red-listed species. These warm waters, expansive sandy beaches and abundant flora and fauna have made the Island a unique recreational paradise.

Human settlement on Savary Island dates back approximately 4,500 years. Savary, also known as "Ahyus", made up a part of the seasonal round for local First Nations who harvested deer, clams, cedar bark, berries and medicines. The Island has 12 documented archaeological sites including a recently recorded village site at Duck Bay.

The first Europeans to visit Savary were British naval explorers charting the coast with Captain George Vancouver in the summer of 1792. A boat party headed by Lieutenant Peter Puget and Mr. Joseph Whitbey over-nighted on the north shore of the Island while conducting their survey of the Strait from the mother ships anchored in Teakerne Arm.

During the 1870's, the Colonial government subdivided the Island into five district lots for homesteading purposes.

Savary has a recreationally oriented island community whose philosophy towards the future is keyed to minimizing the adverse environmental and social impact of increased development on the Island and surrounding waters. The Savary Island community is made up of about 70 permanent residents and approximately 800 landowners who visit the Island on a seasonal basis. Both groups identify very strongly with the rustic character and laid-back island lifestyle and are extremely concerned that additional development will erode those social and environmental qualities that make Savary Island special.

Past development on Savary is characterised by small, rustic cabins on small lots served by narrow, poorly maintained roads. BC Hydro does not serve the Island and is

generally not desired, as it may stimulate more year-round development. Except for lots serviced by the Savary Shores Improvement District, most land is serviced by individual wells and septic disposal systems. These systems may represent a problem for future water quality.

The land use pattern of Savary dates back to 1910 when approximately two-thirds of the Island was subdivided into 1441 small lots. Since 1910, many more lots have been created, bringing the total number of lots on the Island to over 1700, of which 1500 are less than 0.2 ha (0.5 ac) in area.

The Island has a lot density much higher than any other island in the Strait of Georgia and there is a belief that the Island has been over subdivided.

At present, only 647 lots have been developed, which belies the level of potential development associated with the existing subdivision pattern. As a result of extensive subdivision and the lack of publicly held open space, Islanders believe Savary is reaching a critical development threshold.

Proposals to subdivide the largest, unsubdivided block of land on the Island, combined with rapid development and increased traffic, have acted as a catalyst to focus Islanders' concerns and highlight the wide range of planning issues facing the Island.

While numerous water studies have been undertaken over the years, none satisfies the Islanders' concern that the quality and quantity of Savary Island's finite groundwater resource is at risk.

There is a sense of urgency that actions must be taken to protect groundwater supplies, the steep unstable banks and sensitive dune areas and to ensure adequate public open space is acquired to retain the Island's character. Therefore, land use is addressed in a manner that encourages lot reduction and the preservation of the environment. Consequently, it is the aim of this document to relieve the pressures of over-subdivision and over-development while maintaining the community's rustic spirit.

SECTION 1 - INTRODUCTION AND COMMUNITY GOALS

1.1 INTRODUCTION

The Official Community Plan (OCP/Plan) sets out a vision as to how the Savary Island community wishes to evolve in the future. The Plan sets out the community's goals, objectives and policies regarding land use and future development, as well as social and environmental considerations applicable in the planning area. The purpose of the Plan is to provide direction to government agencies, businesses and private landowners concerning future land use and the provision of services. Figure 1 on the next page shows in map form the extent of the Savary Island planning area.

Legislative Authority

The Powell River Regional District, like all other local governments in BC, receives its legislative authority to prepare community plans through the provisions of Section 876 of the *Local Government Act*. Section 882 of the *Act* states that a community plan, in a rural area (such as Savary Island), becomes an "official" community plan once it has been adopted as a bylaw of the Regional District. Section 877 of the *Act* stipulates what a community plan may contain. An OCP provides a series of statements and map designations respecting:

- residential development requirements over a period of at least five years;
- the requirements for commercial, industrial, institutional, agricultural, recreational, and public utility land uses;
- restrictions on development in hazard lands or in environmentally sensitive areas;
- the requirements for roads and other services;
- the need for parks and other public facilities;
- the approximate location and area of sand and gravel deposits suitable for future sand and gravel extraction; and
- the policies of local government respecting affordable housing, rental housing, and special needs housing.
- Note: Persons wishing more specific details as to the requirements of a community plan and the items it is permitted to cover should refer to the appropriate sections of the Local Government Act.



Map Schedules

The Plan contains the following map schedules, which form an integral part of the OCP Bylaw:

- Schedule B Land Use Designations
- Schedule C Transportation Plan
- Schedule D Development Assessment and Development Permit Areas
- Schedule E Heritage Conservation Area

Background Information

A background report (*Savary Island OCP Background Report*, D. Pratt, Planistics Management Inc., November 1997) has been prepared which provides the foundation for this Plan. Although not part of the Bylaw, it contains important information that directly relates to the community plan provisions. The background report provides details on the Island's environment, historical land use, transportation systems and sewer and water requirements. The presentation approach in this report is to provide a general description and discussion of issues pertaining to each of the various topics. The report is available at the Regional District office.

Amendment Procedure

The OCP may be amended by the Powell River Regional District at its initiative, in response to a request by the Savary Island Committee or an application by a landowner. Individuals seeking amendments shall submit applications in accordance with the Development Services Procedures Bylaw of the Powell River Regional District. All applications for Plan amendment will be referred to the Savary Island Committee before being considered by the Powell River Regional District Board. Although a public hearing could take place at any time of the year, all reasonable effort shall be made to ensure that any public hearing takes place on Savary Island during July or August.

Interpretation

The final interpretation as to the precise location of boundaries of any designation or symbol contained in the map schedules shall be legally defined by the appropriate land use bylaws enacted over time by the Powell River Regional District or by site survey, as required.

Symbols or designations used in the map schedules indicate approximate locations of existing or proposed activities, uses or features. The exact extent of such an activity or the overall size is to be determined through more detailed studies, policy decisions or local bylaws.

In interpreting the objectives and policies of the Plan, the term "shall" is used to denote that the indicated measure "must" be taken or applied. The terms "should" or "may" indicate that the suggestion is intended as a guideline that is deemed advantageous to apply or implement by the authority having jurisdiction.

Savary Island Committee

The Savary Island Committee is elected from amongst landowners on Savary Island. The Committee's mandate is to play an advocacy and advisory role for the Island to the Powell River Regional District concerning planning and land use matters.

1.2 PRINCIPAL AIM AND MAJOR GOALS

The OCP is intended to serve as a strategy for the development of Savary Island. The Plan begins with an expression of the desired outcome for the community in the form of a statement of a principal aim. This aim is in turn qualified by a series of goals. The principal aim and major goals create a framework for the Plan objectives and policies. Outlined below are the principal aim and major goals for Savary Island.

Principal Aim

TO MAINTAIN SAVARY ISLAND'S UNIQUE CHARACTER AND RUSTIC ISLAND LIFESTYLE WHILE PROTECTING THE ISLAND'S GROUNDWATER RESOURCES, ITS SENSITIVE ECOSYSTEMS AND ITS UNIQUE BIOPHYSICAL CHARACTERISTICS.

Major Goals

- 1. To protect natural areas and the Island's ecological integrity by:
 - (a) striving for a high degree of individual and community environmental consciousness and stewardship;
 - (b) maintaining representative areas of the Island's unique natural environment for open space, greenbelt or environmental reserve; and
 - (c) establishing development assessment provisions or in the case of District Lot 1375, development permit provisions for the use of those lands that are subject to hazardous conditions and/or that may be environmentally sensitive or at risk as determined by the BC Conservation Data Centre.
- 2. To safeguard the Island's ground water supply.

- 3. To strive for a balance between land use regulations and the desire of local residents for a rural island lifestyle.
- 4. To provide for a level of residential development which maintains the Island's rural character and is mindful of the Island's carrying capacity.
- 5. To encourage lot consolidation in order to reduce the total number of small lots on the Island.
- 6. To limit commercial development to small-scale, non-polluting endeavours compatible with the Island's rural character and natural environment.
- 7. To provide a level of community services at a scale appropriate for a rustic rural island community.
- 8. To encourage a system of transportation which meets but does not exceed the Island's needs and maintains and complements the Island's rural character.

1.3 COMMUNITY PLAN OBJECTIVES AND POLICIES

An OCP's primary function is to guide future land use development. To a large degree, planning alternatives for Savary Island are dictated by the Island's existing subdivision pattern, the carrying capacity of the Island's environment and the quality of life local residents wish to see. The optimal land use pattern is one that maximizes the net benefits to Islanders, while minimizing the negative impacts.

The following sections of this plan provide the objectives and policies that will guide land use development on the Island over the next five to twenty years:

- Environmental, Marine and Heritage Resources
- Residential Use
- Economic Activity
- Institutional Uses and Public Open Space
- Transportation Planning
- Servicing Provisions
- Development Assessment Areas
- Development Permit Areas
- Heritage Conservation Area
- Climate Change Adaptation and Mitigation

SECTION 2 - ENVIRONMENTAL, MARINE AND HERITAGE

Savary Island Official Community Plan, Bylaw No. 403, 2006 Schedule A Consolidated for Convenience Only September 12, 2012

RESOURCES

The natural environment is a major contributing factor to the quality of life and visual attractiveness of Savary Island to residents and visitors alike. It provides habitat for plants, animals and marine life and is the foundation for the Island's recreational activities. As development and human activity intensifies on Savary, the risk to permanently alter or destroy valuable environmental features, environmentally sensitive areas and resource areas increases. It is important that these environmentally sensitive areas be understood prior to accommodating future development so as not to irreversibly alter the Island's aesthetically pleasing upland, its biodiversity or marine-based natural areas.

Maintaining the Island's vegetation is essential as it provides habitat for birds and wildlife, minimizes soil erosion, has beneficial effects on groundwater storage and offers aesthetic value. Implementing an objective to protect the Island's vegetation will be challenging, given the wide range of species and rare plant associations on the Island and given the apparently conflicting notions of development and selective preservation.

The Island's marine environment, including its abundant shellfish stocks, is an important local resource that adds to the unique character of Savary. Through Plan policies and other means, effort must be directed towards protecting Savary's marine environment.

Equally important is the need to identify and conserve sites and features that recall the past. Archaeological and heritage sites provide a valuable record of past human activity on Savary and a record of the Island's history. Where possible, development should avoid archaeological or heritage sites.

2.1 Environmentally Sensitive Areas and Hazard Lands

Environmentally sensitive areas include all marine shorelands and foreshores, bluffs and dunes and some upland meadow and forested areas. Some of these areas, which do include provincial red-listed plant communities, are noted for their high biotic capability for flora and fauna and in most cases are also vulnerable to the impacts of development. The background report describes the Island's geology, plant characteristics and environmental features. In 2003 the *Savary Island Dune and Shoreline Study* was conducted by Thurber Engineering Ltd. and Strix Environmental Consulting that provides a detailed geotechnical and environmental assessment of Savary Island. This report provided recommendations designed to safeguard landowners from potential geotechnical hazards and to protect sensitive dune areas from existing and future development activities. The Plan includes a number of policies based on the recommendations contained in this report. Due to significant coastal erosion hazards on the Island, identified by this report, and the associated safety risks to existing and future development, this Plan includes development assessment provisions and development permit provisions and makes recommendation for the implementation of a siting permit system for buildings and structures.

Based on the results of previous studies, reducing the rate of erosion by constructing coastal protective devices does not appear to be a viable solution for Savary Island. It is anticipated that site specific coastal protection will inevitably lead to an increase in erosion and loss of beaches elsewhere along the Island's coastline.

Objectives and policies intended to protect the Island's natural environmental features, safeguard landowners from geotechnical hazards and protect the coastline from inappropriate development activities are presented below.

Objectives – Environmentally Sensitive Areas and Hazard Lands

- 2.1.1 To undertake development in a manner that allows maximum retention of the Island's vegetation cover and protects important habitat and water resources.
- 2.1.2 To identify and protect environmentally sensitive features and areas on Savary and to foster a sense of community awareness and stewardship which encourages the protection and maintenance of the Island's natural environment and ecological integrity.
- 2.1.3 To preserve the Island's sand dunes by minimizing land development and maximizing retention of their protective vegetative covering.
- 2.1.4 To maintain bank stability where geotechnical hazards exist and to limit development in such locations.
- 2.1.5 To protect coastal areas from activities that may accelerate or alter coastal erosion processes.

Policies – Environmentally Sensitive Areas and Hazard Lands

- 2.1.a Development assessment guidelines located in Section 8 and development permit requirements located in Section 9 have been established to protect environmentally sensitive areas and hazard lands from development.
- 2.1.b Owners of environmentally sensitive property (as depicted on Map Schedule D) are encouraged to work co-operatively with conservation-based groups such as the Nature Conservancy of Canada, Savary Island Land Trust, BC Nature Trust and others, in defining means of protecting important sites through the establishment of voluntary covenants or easements; or the donation or sale of sensitive areas to a preservation agency. The registration of a natural state or environmental covenant to protect in perpetuity environmentally sensitive areas may be required as a condition of re-zoning, subdivision or other change of status (as permitted by bylaw).

- 2.1.c Where environmentally sensitive areas are located on Crown land, the Integrated Land Management Bureau is strongly encouraged to ensure these areas are placed in protective reserve, ecological reserve or natural state park, or dedicated to the Savary Island Land Trust for protection.
- 2.1.d The construction of roads and trails for beach access in areas of eroding cliffs is not supported. Instead, public beach access should be limited to existing points of beach access and/or sections of shoreline that are low profile.
- 2.1.e So as not to unnecessarily promote bank erosion, support the retention of shoreline vegetation and discourage the commercial removal of driftwood from beaches.
- 2.1.f Regionally unique or red-listed plant species, significant stands of trees and heritage trees should be protected against development and in accordance with the provisions of the Wildlife Act, trees bearing the nests of Great Blue Heron, Bald Eagle, Osprey and other raptors shall not be cut. Where such nest sites are located on private property, the property owners are encouraged to protect the site through a voluntary conservation covenant.
- 2.1.g Effort should be made as early as possible to complete a hydro-geological survey of the Indian Springs Watershed and its surrounding catchment area. Work conducted by a qualified professional hydrologist is required to conduct a survey and present recommendations for septic field use in the area.

2.2 MARINE RESOURCES

Protecting the natural resources of the coastal area is important to Savary Island. For purposes of this Plan the marine waters within the planning area include the surface of water extending 1,000 metres from the shore of Savary Island, except where such boundary overlaps with another jurisdiction or land mass (such as Hernando Island to the northwest), in which case the boundary becomes the mid-point between the two land bodies.

Jurisdiction in the marine waters off Savary Island is a shared responsibility. The Department of Fisheries and Oceans is responsible for all Canadian marine fish habitat and therefore has approval authority over any works or undertakings in the marine or foreshore waters. The Integrated Land Management Bureau under the Ministry of Agriculture and Lands oversees the issuance of Crown foreshore leases. The Powell River Regional District, in turn, has the ability to adopt community plan objectives and policies and zone the surface of the water. Although the Integrated Land Management Bureau is not bound by local bylaws, it will respect a zoning bylaw; however the occupier of a foreshore lease lot is subject to local bylaws. In the case of a use such as the harvesting of native shellfish stocks, harvesters are not subject to local bylaws.

The waters off Savary are primarily used for recreational and mariculture purposes. With the exception of the public wharf and the barge landing site fronting on Keefer Bay, operated by the Regional District, there are no docks or piers on Savary. Recreational shellfish reserve areas are located along much of the north foreshore of Savary Island, from approximately First Point to Indian Point.

Savary Island is the most productive clam area in the region. Clam production annually adds over \$1 million to the local economy. Commercial shellfish harvesting is typically conducted in the spring and fall. Even with a commercial harvest, shellfish stocks on Savary Island are estimated by the Department of Fisheries and Oceans to be sustainable without creating a shortage of recreational clams. However, in the long term, the production and survival of shellfish in the area could be at risk due to potential contamination caused by seepage from faulty (or non-existent) effluent disposal systems and physical impacts due to increased foot and boat traffic.

The marine foreshore is fragile and highly vulnerable to the effects of inappropriate upland development and foreshore intrusions. Nearshore habitat may be physically impacted or disrupted by increased boat use and moorage. In the future, the existing government wharf may no longer be able to accommodate the anticipated increased demand placed on it for boat moorage and loading/unloading of passengers and supplies. Should this lead to more boats being tethered to buoys and anchors in Keefer Bay, the shellfish, eelgrass and marine benthos could be adversely affected.

Objectives – Marine Resources

- 2.2.1 To recognize the importance of the marine and foreshore environment to the quality of life on Savary Island and to protect these features from detrimental use and the negative impacts of development.
- 2.2.2 To protect the natural and scenic values of the coastline which provide the Island with its rural marine character.
- 2.2.3 To minimize the impact of foreshore uses on upland property owners and vice versa.
- 2.2.4 To limit human interference with the drift sector movement of sediment along the foreshore.

Policies – Marine Resources

2.2.a The Ministry of Environment will be requested to protect marine life by preventing the extraction of sand, gravel or other natural deposits from the foreshore.

- 2.2.b The construction of shoreline protection features such as seawalls or groynes shall be discouraged. Natural coastal processes shall be left undisturbed to the maximum extent possible and there shall be no deposition of material below the natural boundary of the sea unless a permit is issued by the Integrated Land Management Bureau authorising a breakwater, seawall or alternate barge landing site.
- 2.2.c The Savary wharf and, if appropriate, the barge site located on Keefer Bay, will be zoned marine transportation. No buildings or structures except for those facilities required to facilitate marine transportation shall be permitted.
- 2.2.d The Regional District, should evaluate the range of options available to accommodate increased boat presence and use in the foreshore waters off Savary.

2.3 HERITAGE RESOURCES

Sliammon First Nation & Regional District Relations

Savary Island lies within Sliammon First Nation (Tla'amin) traditional territory. In December of 2004 the Powell River Regional District and Sliammon entered into a protocol agreement for communications and cooperation which reflects the growing relationship between the two parties. The protocol is a formal arrangement between Sliammon and the Regional District to establish and maintain a long-term cooperative government to government relationship through effective and adequate communications. The agreement provides venues designed to encourage discussions related to common areas of interest and responsibility. It establishes principles of cooperation to foster open and constructive dialogue based on mutual trust, honesty and respect. Under the agreement both parties agree to work together and explore, among other things, the following key areas of interest which pertain directly to Savary Island:

- Culture and heritage protection
- Environmental protection
- Land use planning and management

Subsequently in 2007, the Regional District and Sliammon initiated a strategic planning process which identified opportunities for coordinating land use planning between both governments. This harmonization project made two recommendations pertaining directly to Savary Island. The first was to incorporate a brief summary of Sliammon's historic and current use of Savary Island into this OCP. The second was to initiate, if feasible, the protection of Sliammon's cultural and archaeological sites through land

swaps or exchanges between the Regional District, Sliammon First Nation and the Province of British Columbia.

Sliammon First Nation's Traditional Use of Savary Island

First Nation peoples have used Savary Island for thousands of years. Sites containing physical evidence of First Nation's activity on Savary Island have been documented by the Archaeology Branch of the Ministry of Tourism, Culture and the Arts. The Island contains remains of an ancient village and other areas used for gathering and processing food and materials. These can be seen today as shell middens, house depressions and culturally modified trees. These remains are valued by the community and the Sliammon First Nation and are protected by the *Heritage Conservation Act*. Protection means that the sites may not be altered without a permit from the Archaeology Branch.

European Settlement

Members of Captain Vancouver's expedition in 1792 were the first Europeans that came to Savary. Yet the first non-aboriginal permanent resident (Jack Green) did not arrive until 1886. It is unknown whether any artefacts or evidence of Savary's earliest European exploration and settlement exist. However, there is merit in identifying and cataloguing the oldest buildings and structures on Savary. A further step is to consider whether, in some cases, heritage designation or other means should be considered as ways of protecting these sites.

Objectives – Heritage Resources

- 2.3.1 To identify and conserve the Island's archaeological resources and heritage places and to minimize the damage or disturbance to these sites.
- 2.3.2 To maintain a record of the heritage resources of Savary.
- 2.3.3 To recognise the importance of involving the local First Nation in heritage conservation.

Policies – Heritage Resources

- 2.3.a The Regional District will establish Heritage Conservation Areas over D.L. 1375 which contains five known archaeological sites protected under the *Heritage Conservation Act*.
- 2.3.b The Regional District will assist persons considering land altering activities within D.L. 1375 to determine if these activities fall within an archaeological site. The location of known, protected archaeological sites is also available to Savary

Island property owners for individual properties by making a data request to the Archaeology Branch at <u>http://www.archdatarequest.tsa.gov.bc.ca/</u>.

- 2.3.c A permit to authorise land altering activities within a Heritage Conservation Area will only be issued once the proponent has secured a Site Alteration Permit from the Archaeology Branch or a letter from the Archaeology Branch stating that a Site Alteration Permit is not necessary.
- 2.3.d A community heritage registry should be established to inventory sites considered to have heritage significance. The creation of a heritage conservation registry for non-archaeological sites will require the adoption of a resolution for the implementation of Part 27 of the *Local Government Act*.
- 2.3.e The identification and preservation of heritage property shall be encouraged through the use of voluntary covenants, heritage revitalization agreements and other means intended to encourage the owners of a heritage place to support its heritage status and conservation.
- 2.3.f In order to protect and preserve Sliammon's cultural and archaeological sites on Savary Island, where practical and feasible, land swaps or exchanges between the Regional District, Sliammon First Nation and the Province of British Columbia will be considered.

2.4 CLIMATE CHANGE ADAPTATION AND MITIGATION

Climate change refers to the increasing concentration of heat-trapping greenhouse gases (GHGs) in our atmosphere and resulting changes to the Earth's climate, most notably increasing air and water temperatures. A 2007 report from the Intergovernmental Panel on Climate Change reveals that between 1970 and 2004, GHG emissions increased by 70%.

Climate change is caused by the release of carbon dioxide and other GHG emissions into the atmosphere, primarily the burning of fossil fuels and large scale deforestation. This human cause of climate change has been endorsed by more than 40 scientific societies and academies of science, including all of the national academies of science of the major developed countries.

Climate change scientists predict that BC will experience (and in some cases is already experiencing) the following impacts due to climate change:

- Increasing temperatures will disturb land and aquatic ecosystems.
- Coastal storm activity will increase in intensity and frequency, exposing coastal housing and infrastructure to greater risk.

• Sea levels may rise significantly by 2100, causing permanent flooding in lowlying areas and increasing the impacts of flood and storm events.

In response to climate change issues, the provincial government gave Royal Assent to Bill 27, the Local Government (Green Communities) Statutes Amendment Act. This provincial legislation requires local governments to include GHG emission reduction targets, and policies and actions to achieve those targets in official community plans.

In collaboration with Savary Island residents, the following targets, policies and actions are proposed to ensure that the reduction of GHG emissions specifically, and the impact of climate change in general become part of the planning process for Savary Island.

Objectives – Climate Change Adaptation and Mitigation

- 2.4.1 To reduce greenhouse gas emissions through reduced fossil fuel consumption and shifts to alternative forms of energy.
- 2.4.2 To promote the use of renewable energy and the development of renewable energy sources.
- 2.4.3 To reduce greenhouse gas emissions by 33% by the year 2020.
- 2.4.4 To consider the impacts of climate change in all land use decisions.

Policies – Climate Change Adaptation and Mitigation

- 2.4.a The Regional District will seek guidance and financial assistance from other levels of government in implementing its climate change adaption and mitigation policies.
- 2.4.b Islanders are encouraged to work with the Regional District and other levels of government to record and measure the current use of fossil fuels and greenhouse gas emissions. The resulting baseline data will allow us to measure progress towards reducing fossil fuel consumption and achieving GHG emissions reduction targets.
- 2.4.c Education can contribute to reducing fossil fuel consumption and promoting the use of alternative energy, and the Regional District will work with islanders and other levels of government to share knowledge and meet the objectives of this plan.

- 2.4.d Energy efficiency and energy substitution are critical for reducing greenhouse gas emissions in rural and remote communities like Savary Island, and the Regional District will work with islanders and other levels of government to promote energy efficiency and energy substitution (switching from gasoline, diesel and propane to wood, sun, wind and biofuels) in home renovations and building.
- 2.4.e The Regional District and islanders will encourage the retention and enhancement of natural trees and vegetation to offset greenhouse emissions through the implementation of environmental policies in section 2.1 and island open space policies in section 5.2 of this plan.
- 2.4.f The Regional District will work with islanders to encourage alternative land transportation through implementation of transportation policies in section 6.1 and 6.2 of this plan.
- 2.4.g The Regional District will work with islanders to prepare for sea level rise by encouraging Development Guidelines for shoreline areas in section 9.1 and 9.2 of this plan.

SECTION 3 - RESIDENTIAL USE

Savary Island, despite its relatively small size (450 ha/1111 ac), and remote location, has been subdivided into 1700 legal parcels. This works out to a gross density for the Island of 3.8 dwellings per ha (1.5 dwellings per ac). The average lot size is between 700 and 1400 sq. metres (7500 to 15000 sq. feet) in area. In most cases, a 50-foot parcel width is the norm. There are only two parcels on the Island greater than 10.1 ha (25 ac). District Lot 1375 remains the only one of the five district lots on Savary that has not undergone subdivision. Based on the currently applicable 4.0 ha (10 ac) minimum parcel size (from the *Community Planning Area 24 Gulf Islands Subdivision Regulation*), only two of the remaining large parcels can undergo further subdivision and, if developed to the maximum density possible under that provision, would be able to create approximately 35 additional parcels.

A survey of developed parcels on Savary Island, undertaken as part of the Tupper Report (*A Preliminary Assessment of the Groundwater Resources of Savary Island, British Columbia*, David Tupper in association with Pottinger Gaherty Environmental Consultants Ltd., January 1996) revealed that only 471 lots had been developed and a further 20 dwellings were under construction. The 2006 assessment roll indicates that there are 647 developed properties on Savary. This suggests that 16 lots per year are being developed for residential use. The roll also indicates that there are currently 764 vacant parcels on the Island that may have development potential. This suggests that less than half the lots on Savary are currently

developed. Based on current development trends, Savary has a 50 year land supply of vacant land.

The subdivision plan approved in 1910 shows no apparent regard for the Islands land form characteristics. The subdivision created a functional grid network of streets with regular shaped city-sized lots. Most of the dedicated public roads have never been constructed and no community sewer or water utilities were provided despite the small parcel sizes. In addition these old subdivisions allowed a number of parcels to be created which have no dedicated public road access. Despite the presence of bluff conditions along parts of the foreshore, these parcels were created with water access only.

Based on the current subdivision pattern and the lack of community services, there is no doubt that the Island has been over subdivided and that the creation of additional parcels may aggravate the situation and negatively impact the present quality of life on Savary.

3.1 **Residential**

To support the Principal Aim of the OCP, the following Residential objectives and policies are provided.

Objectives – Residential

- 3.1.1 To reduce the number of lots on Savary Island and limit the density of residential development in order to maintain the Island's rustic rural character and reflect the Island's limited servicing capabilities.
- 3.1.2 To permit Island residents the freedom to determine on their own the quality of residential construction they wish to reside in.
- 3.1.3 To allow residents to carry out limited businesses from their homes, providing the activity does not result in environmental degradation.

Policies – Residential

- 3.1.a Limit the density of residential development on Savary Island by zoning and by encouraging lot consolidation and/or the dedication of land to a community land stewardship program.
- 3.1.b Permit lands designated Residential to be used for one family residential dwelling and a home occupation which includes a professional practice and/or a home craft/hobby activity.

A bed and breakfast use shall be permitted subject to compliance with the following conditions:

- no more than three bedrooms, able to accommodate a maximum of six guests, shall be permitted; and
- the method of sewage disposal and source of water supply on the parcel have been approved by the Vancouver Coastal Health Authority and/or qualified installer as adequate to support the level of use.
- 3.1.c One family residential dwelling is permitted on any parcel less than or equal to 2 ha. in area. An additional dwelling is permitted for each additional 2 ha. of land.
- 3.1.d Camping is permitted on lands designated Residential, subject to adequate sewage disposal, however, establishment of a commercial campground is prohibited.
- 3.1.e In consultation with Islanders, consideration may be given to allowing detached sleeping units (no kitchen facilities). Consideration may also be given to the regulation of the total amount of lot coverage permitted by buildings and structures.
- 3.1.f The Powell River Regional District must establish a siting permit system in order to ensure all buildings and structures are sited wholly within the legal parcel in a manner which minimizes servicing conflicts. Siting permits may be conditional on:
 - proof of installation of a sewage disposal system by a qualified installer; and
 - a survey plan showing the location of the proposed building(s), the source of water supply and the sewage disposal system in relation to the property lines.
- 3.1.g Lands designated Residential are restricted to a minimum parcel size of not less than 4.047 ha (10 ac) in accordance with the *Community Planning Area 24 Gulf Islands Subdivision Regulation*.

SECTION 4 – ECONOMIC ACTIVITY

Until the early 1990's, Savary Island's commercial activity included a hotel, a restaurant, bed and breakfast operations, a portable mill and a backhoe service.

To support the Principal Aim of the OCP, the following commercial objectives and policies are provided. Also discussed in this section are industrial uses and Temporary Commercial and Industrial Use Permits.

4.1 COMMERCIAL

The Plan's Commercial designation recognizes the existing commercial operations on the Island. As Savary's seasonal and/or permanent population increases, opportunities for additional commercial uses will emerge on the Island.

The Plan does not endeavour to specify a location where future commercial uses should be located. Due to the Island's linear nature, rustic character, and the Islander's desire to limit vehicular transportation, this Plan supports the dispersion of small scale commercial endeavours throughout the Island. The Plan shall remain flexible in considering applications for commercial use in all parts of the Island. However, commercial operations should not be located within ecologically sensitive areas, on hazard lands or within the Savary Shores Improvement District where bylaws prevent the use of the water supply to service commercial uses.

The accommodation of visitors is an area of great concern to Islanders, due to the fragility of the environment including the marine foreshore, the effects of increased sewage disposal on limited water supply and the effects large numbers of visitors will have on Island services such as fire prevention, water taxis, land taxis and roads. Therefore, only small-scale forms of tourist accommodation and associated commercial activities that cater to the Island's needs is desired. Currently, bed and breakfasts and private rentals meet the needs of the visiting public.

The following objectives and policies apply to lands designated Commercial.

Objectives – Commercial

- 4.1.1 To make provision for a limited number of commercial establishments of a type and scale which are complementary to the Island's way of life. Priority will be given to operations serving Island needs.
- 4.1.2 To ensure a commercial development is in keeping with the rural environment and blends in with the aesthetic qualities of the natural surroundings.
- 4.1.3 To protect the character and integrity of the quiet neighbourhoods.
- 4.1.4 To encourage commercial development in dispersed locations.

Policies – Commercial

4.1.a The existing Commercial sites and operations, including seasonal operations shall have their use recognised at the time of adoption of a zoning bylaw. Lands designated Commercial are identified on Map Schedule B.

- 4.1.b Commercial establishments shall provide ample stalls for bicycles and nonmotorized forms of transportation.
- 4.1.c Bulk storage of fuel shall not be permitted on or in the vicinity of the public wharf.
- 4.1.d All potential contaminants associated with commercial activity shall be contained so as to ensure they will not enter the environment.
- 4.1.e Commercial campgrounds and trailer parks shall not be permitted on Savary Island.
- 4.1.f The minimum parcel size in any Commercial designation shall be adequate to safely dispose of effluent and provide for an on-site water supply.
- 4.1.g The creation of additional Commercial sites in the Savary Shores Improvement District to conduct a business requiring a commercial water hook-up shall be discouraged as the Improvement District's bylaws currently prevent the provision of commercial water hook-ups.
- 4.1.h In order to allow some expansion of commercial activity to parts of the Island community removed from the existing Commercial sites, an application to designate a new site for commercial use shall be considered, based on satisfactory compliance with the following criteria:
 - (i) The proposed use is small-scale in nature and primarily provides a local convenience for residents;
 - (ii) The parcel has adequate off-street parking and sewage disposal and water supply can be provided on the parcel;
 - (iii) The proposed commercial use will not substantially detract from the residential character of the surrounding area or cause excessive traffic to be routed along a local road;
 - (iv) The proposal receives the general support of neighbouring property owners; and
 - (v) The proposed commercial use is not located in an environmentally sensitive area.
- 4.1.i The Commercial designation shall be used to identify sites for restaurants, auto repair and storage, fuel handling and sales, building supply storage and sales, marine supplies and related uses.

4.2 INDUSTRIAL

Unlike Texada Island, its neighbour to the south, Savary at present has no industrial activity. In addition, due to the planning area's rural setting, remote location, recreational character and Island residents' concern for protection of the environment, the Plan makes no provision for any industrial uses or sites on Savary Island.

Objectives – Industrial

4.2.1 To not support industrial activity locating to Savary Island.

Policies – Industrial

4.2.a Currently there are no industrial uses on Savary. The Plan makes no provision for industrial uses in the planning area (including the foreshore) and does not designate any site for future industrial use.

4.3 TEMPORARY COMMERCIAL AND INDUSTRIAL USE PERMITS

Section 920.2 of the *Local Government Act* permits the designation of sites in an official community plan where Temporary Commercial and Industrial Uses may be approved on a temporary basis by permit, without requiring the affected land to be zoned for the intended temporary use.

Where a permit area under this section is designated, the Regional District may issue a permit by resolution that allows commercial or industrial activities to take place under the conditions specified in the permit, including the posting of a security to ensure compliance with the terms of the permit. Notice of the intent to consider the issuance of a permit must be given. Under a Temporary Use Permit the specified uses may be carried out for a period of up to two years and the permit may be renewed for up to a further two years.

Objectives – Temporary Commercial and Industrial Use

4.3.1 To make no provision for Temporary Use Permits in the planning area.

Policies – Temporary Commercial and Industrial Use

4.3.a No provision shall be made for the issuance of Temporary Use Permits on Savary Island. A change of use shall necessitate rezoning.

SECTION 5 – INSTITUTIONAL USES AND ISLAND OPEN SPACE

5.1 INSTITUTIONAL USES

Institutional refers to the provision of public community service functions intended to serve the needs of the overall community. Owing to its small permanent population and the rural level of services, residents have come to accept that there are few institutional uses provided on Savary Island.

Objectives – Institutional

5.1.1 To enable institutions to provide services to the community which are consistent with the aims and level of services desired by the community.

Policies – Institutional

The following policies apply to institutional uses on Savary Island:

5.1.a Institutional uses may be located in any land use designation in the planning area. Lands currently used for institutional purposes are designated Institutional on Map Schedule B.

5.2 ISLAND OPEN SPACE¹

Savary Island has long been a favourite recreational and spiritual area for both residents and visitors alike. Those who summered on Savary as children will remember the magic the Island exuded — fishing, birds, woodland, swimming, and beaches filled with an incredible variety of life. This childhood innocence is being intruded upon by the knowledge that what seemed like a large playground was, in fact, subdivided into hundreds of small lots. Evidence of this subdivision is ever present and growing with each passing year.

Protected Island Open Space may serve a variety of purposes and the provision of such is an essential ingredient in any official community plan. In this respect, Savary Island's need has been great, due to the Island's high lot density and lack of protected greenspace. Recently, some of this need has been alleviated through the efforts of The Nature Trust of British Columbia, the provincial and federal governments and the generosity of an anonymous donor. As a result, the Nature Trust now owns a 50% interest in Lots 35 and 36, Plan 14028, DL 1376 and DL 1375; and the Province of British Columbia (BC Parks) owns Lots 1-11, Blk 1, Plan 5205, DL 1373 and Lot 224, Plan 14149, DL 1372.

¹ Island Open Space is a comprehensive term for a variety of open areas on which nothing is built. It may include conservation areas, greenspace and parks.

The objectives and policies which follow are intended to ensure that the community is able to retain Island Open Space for the continued existence of native flora and fauna and provide for the spiritual enjoyment of the public while protecting these sites from overuse.

Objectives – Island Open Space

5.2.1 To secure available lands for the preservation of the flora and fauna in order to provide residents and visitors with the experience of the natural state of the Island while protecting these sites from overuse.

Policies – Island Open Space

- 5.2.a Island Open Space may be located in any land use designation in the community plan area without requiring a Plan amendment.
- 5.2.b It is recommended that the Savary Island Land Trust Society, Powell River Regional District, and the provincial government place high priority on securing greenspace for biological diversity, natural state greenbelt, wilderness reserves and recreational use. Emphasis should be placed on dedicating sites for Island Open Space which provide good access to the area's coastal shoreline and encompasses existing nature trails, significant natural landmarks and scenic upland viewpoints.

In order to address a broad cross-section of issues pertaining to the use, need for, location, and types of open space on Savary Island, preparation of a Parks and Open Space Network Plan should be a priority.

- 5.2.c In supporting the establishment of additional sites for Island Open Space with protected area status, the following different classifications of open space are recognized (in order of priority):
 - wilderness areas, to be preserved in their natural state, without public facilities and only limited access (i.e. wildlife breeding and nesting sites, unique or important plant assemblages or geological features, etc.);
 - maintained trail systems; and
 - water access only areas, without facilities.
- 5.2.d The Integrated Land Management Bureau is requested to make all Crown parcels on Savary Island that are not required for Institutional purposes, available to the Powell River Regional District for park or land conservancy purposes.

SECTION 6 - TRANSPORTATION PLANNING

Background

Savary is an Island-based community dependent on water transport to connect it with the rest of the Province. This single factor has had a dramatic impact on the environment, population density, the scale of development and, in some cases, the types of activities carried out on the Island.

The availability of a poorly maintained, though passable, road system extending the full length of Savary Island has permitted development to be dispersed to all parts of the Island. The narrow and winding roads serving the Island have kept vehicular speeds to safe levels. It is the desire of the community to have a road system that reflects the Island's rustic rural character.

A recent increase in the number of vehicles on the Island during summer months has put a strain on the road system. The Island community believes that the number of vehicles on the Island and an individual's right to own a car must not supersede the health or aesthetics of the Island and its rural ways. Methods of public transportation and vehicle permitting need to be explored to minimize the proliferation of vehicles.

Note: Powell River Regional District Bylaw 347 created a service area for marine transportation facilities service encompassing the entire foreshore perimeter of Savary Island. The Savary Island Dock Advisory Committee (SIDAC) was constituted by the Powell River Regional District to assist it with the management and future development of the wharf. SIDAC is comprised of members of the Regional District, full time Savary Island residents and the wharf manager.

6.1 TRANSPORTATION GENERAL

Objectives – Transportation

- 6.1.1 To promote the use of cooperative vehicular use programs, the use of land taxis, the establishment of a public transportation network, utilizing regularly scheduled vehicles or an established loop commencing and terminating at the wharf.
- 6.1.2 To support appropriate modes of water, land and air transport to and on Savary Island which ensures public safety, minimizes the environmental impact and do not detract from the peaceful enjoyment of the Island while

taking into account the dramatic increase in people arriving and staying on the Island during the summer months.

- 6.1.3 To manage new road development and continuing road maintenance to ensure aesthetic and environmental impacts are minimized.
- 6.1.4 To maintain the Island's network of main roads in reasonable repair to adequately meet the transportation needs of Island residents and to allow access for emergency vehicles, while encouraging low impact transportation alternatives.
- 6.1.5 To ensure good channels of communication exist to keep appropriate government bodies including Ministry of Transportation and Powell River Regional District officials well informed regarding the transportation priorities and concerns of Island residents and property owners.
- 6.1.6 To accommodate goods and equipment shipped to the Island by barge and to attempt to limit the number and types of vehicles permitted to gain access to the Island. However, the Ministry of Transportation cannot limit licensed vehicles on the roads.
- 6.1.7 To support a water taxi connection between Savary Island and Lund at adequate frequency at all times of the year.

6.2 LAND TRANSPORTATION

Policies – Land Transportation

Developing New Roads and Road Maintenance

Note: The construction of works on existing roads or the development of new roads on established road allowances requires the permission of the Ministry of Transportation. Application for a permit can be made by any member of the public.

- 6.2.a The highest priority for new road construction or major road upgrades using public funds are roads which significantly improve fire control access and increase public safety.
- 6.2.b To relieve traffic pressures on Savary Island Road Hill and to address serious safety concerns, an alternate route between the wharf and the main road should be considered.

Supporting Low Impact Transportation Options

- 6.2.c Development of a dedicated pedestrian and bicycle trail running the length of the Island is a high priority for Island residents.
- 6.2.d It is desirable to use undeveloped road rights of way for bicycle and pedestrian access, provided doing so does not create an environmentally hazardous situation.

Road Network Standards

- 6.2.e In keeping with Savary's rural character, road standards should be limited to maintaining serviced Island roads to the minimum standard required to permit safe traffic on main rural roads at low speeds and limit the amount of roadside brushing to that needing to be undertaken for reasons of improved road safety and fire safety.
- 6.2.f The Ministry of Transportation is encouraged to ensure routine road maintenance is consistent with the objective of preserving mature trees and attractive visual corridors. However, some trees may have to be removed for safety reasons. All necessary brushing should be by hand or mechanical means only, not by use of herbicides.
- 6.2.g In order to assist the Ministry of Transportation with the setting of capital and maintenance budgets, three levels of rural roads have been identified on Map Schedule C. These three levels of roads have been established for Savary Island only and do not correspond to the maintenance levels established by the Ministry of Transportation.

Level 1 Roads

The network of main rural roads identified on Map Schedule C should be maintained at a standard suitable for reasonable all-weather access to all parts of the Island, taking into account the low level of traffic occurring on the Island.

Level 2 Roads

The network of secondary rural roads identified on Map Schedule C should be maintained as roads which experience only a limited volume of licensed vehicular traffic and which are intended to primarily be used by pedestrians, bicycles, licensed utility vehicles and public transit vehicles.

Level 3 Roads

Level 3 roads include roads which experience only a very limited volume of vehicular traffic and which are intended to be used primarily by pedestrians,

bicycles, licensed utility vehicles, licensed service vehicles and public transit vehicles.

- 6.2.h Speed limits should be established in order to encourage the use of licensed utility vehicles.
- 6.2.i The utilization of undeveloped road right of ways for purposes of a trail or for access to the foreshore shall be encouraged, provided that such use does not create an environmentally hazardous situation.
- 6.2.j In cases where a public road right of way is to be dedicated at the time of subdivision to provide access to the shoreline, the Approving Officer is encouraged if possible, to dedicate existing historical access corridors so as to permit reasonable access down to the water's edge.

6.3 WATER TRANSPORTATION

Policies – Water Transportation

- 6.3.a The Regional District is encouraged to ensure the Savary wharf is properly maintained due to its importance to the community.
- 6.3.b As the vast majority of Islanders access the Island by water taxi, it is recommended that SIDAC assign priority for loading and unloading to the water taxis.
- 6.3.c In order to limit the impact of barge landings on residences in the vicinity of the designated barge landing site and to restrict excessive vehicle traffic on the Island, the Powell River Regional District is encouraged to use its authority to regulate the months, days and hours of operation and impose a landing fee on all barge landings.
- 6.3.d The Powell River Regional District should work in conjunction with the Savary Island Committee and the local barge operator(s) to reduce or discourage the number of vehicles transported to Savary Island.
- 6.3.e A study to identify alternative barge landing sites may be considered.
- 6.3.f Boat owners are to ensure they do not discharge any effluent that could pollute local waters nor moor their boats in a manner which could be harmful to local shellfish, eelgrass or other marine life.

6.4 AIR TRANSPORTATION

Policies – Air Transportation

6.4.a It is recommended that, as a priority, Medi-Vac landing sites (helicopter and seaplane) be identified, designed and maintained in consultation with the appropriate authorities.

SECTION 7 - SERVICING PROVISIONS

7.1 WATERSHED AND AQUIFER STEWARDSHIP

An annual average rainfall of 89 centimetres (35") is the only source of water for Savary's watershed. Studies conducted to date indicate that a single deep aquifer supplies the majority of the Island's groundwater. Three perched or shallow aquifers (suspended on semi-pervious clay layers) supply shallow wells and a handful of natural springs on the Island. Drinking water is drawn from all of these sources. The aquifers vary in water quality and quantity. A number of factors can influence the quality and quantity of the Island's water supply including geological conditions, soils, vegetation cover, sewage disposal methods, handling and storage of potential contaminants and proximity to the sea.

The maintenance of the quality of the aquifer water must take priority over quantity. Documented evidence shows signs of contamination or possible saltwater intrusion in some areas (Glover, 1994; Tupper, 1996). Therefore, there is a need to conduct a hydrogeological assessment to determine the level of protection required to sustain the quality and quantity of the Island's water supply.

Savary Shores Improvement District has the only community water system on Savary Island. All other property owners rely on individual wells (or sandpoints), the Island's springs or collected rainwater as their source of potable water supply. Until such time as the aquifer's sustainability has been proven, through a comprehensive hydro-geological study, rates of water consumption should be limited.

Watershed stewardship is a community-based responsibility designed to ensure a healthy supply of water for future generations through protection of the Island's aquifers from the harmful impacts of contamination and over consumption. A watershed stewardship program will also help to protect sensitive and ecologically rich intertidal areas. Providing the community with the means to realize this commitment is crucial. A stewardship program involves implementing an educational component along with active involvement by landowners aimed at responsible management of the watershed and the groundwater resources. Funding for education may be required if Island residents are to be successful in this endeavour.

Objectives – Watershed and Aquifer Stewardship

- 7.1.1 To manage and protect the Island's water resources on a sustainable basis and to prevent damage to springs.
- 7.1.2 To work in conjunction with the Ministry of Environment and the Vancouver Coastal Health Authority to maintain high water quality and to ensure the wise use and protection of the Island's water resources.
- 7.1.3 To promote aquifer conservation strategies that will reduce water demand by discouraging non-essential, large-scale uses of domestic water (such as lawn sprinkling).
- 7.1.4 To acquire a more comprehensive knowledge of Savary's watershed by monitoring the quality and quantity of the groundwater aquifers on Savary Island.

Policies – Watershed and Aquifer Stewardship

- 7.1.a The Approving Officer with the Ministry of Transportation may require proof of an adequate potable water supply as a condition of subdivision approval.
- 7.1.b The Regional District may adopt a subdivision servicing bylaw to specify a minimum daily water supply required per parcel. This volume may vary depending on the proposed use and whether the lots are to be serviced by a community water system.
- 7.1.c In highly developed areas where water supply problems are currently being experienced (such as the Indian Point area), consideration should be given to the relative merits of potable water being provided by a community water system.
- 7.1.d Installation of individual wells in areas of high well density will be discouraged in favour of an approved local community water system.
- 7.1.e Proposals to establish a community water system to service five or more parcels shall be supported, conditional on a water management review being prepared by a professional geo-scientist or engineer.
- 7.1.f In order to limit the wasteful use of the Island's aquifers, all community water systems established on Savary should meter water consumption and penalize excessive over-users.

- 7.1.g Inactive and abandoned wells are now required to be capped under the Ground Water Protection Regulation to avoid contamination of the Island's aquifers.
- 7.1.h Methods of water conservation such as low water use fixtures, composting toilets, retention of rainwater and runoff in cisterns and ponds, and other means are encouraged.
- 7.1.i The use of chemical fertilisers, pesticides and herbicides should be strongly discouraged in order to protect the aquifers and adjacent marine ecosystems.
- 7.1.j Uses which are consumptive of large quantities of water shall be prohibited, through zoning, from locating on Savary Island.
- 7.1.k A public education program should be implemented to raise awareness about the potential for groundwater contamination and the need for wellhead protection.
- 7.1.I The Ministry of Environment shall be requested to designate Savary Island as a Groundwater Management Area under a local board that would maintain the collection and analysis of data on groundwater use and supply.

7.2 SEWAGE TREATMENT AND DISPOSAL

As the community grows, it generates larger volumes of sewage effluent. Since the aquifers are the principal source of drinking water on Savary, ensuring that pathogenic material from this effluent does not contaminate the aquifer is essential.

While septic systems are an improvement over the old "weeping boxes" used in the past, use of other innovative methods of treatment may be more effective at protecting the drinking water.

Authorized persons (registered practitioners) are now responsible for the sizing and installation of septic systems on Savary Island. Permits through the local Health Officers are no longer required, however a filing with the Vancouver Coastal Health Authority must be made by the registered practitioner. Alternative forms of treatment such as packaged treatment plants and engineered package treatment systems (type 2 and type 3 systems) may be considered for installation by the registered practitioners. Alternative forms of sewage disposal may be discussed with a registered practitioner, however only a registered practitioner may design and install a sewage system.

Objectives – Sewage Disposal
- 7.2.1 To ensure that the disposal of sewage, sludge or household effluent does not lead to health hazards or environmental degradation through contamination of the aquifer or marine waters within the Savary Island planning area.
- 7.2.2 To investigate the relative merits of small community effluent systems as a means of addressing the Island's sewage disposal situation.
- 7.2.3 To prohibit the creation or use of private marine outfalls.

Policies – Sewage Disposal

- 7.2.a The Savary Island Committee and the Powell River Regional District will support efforts of the Vancouver Coastal Health Authority to ascertain the cumulative affects of conventional septic tanks and dispersion fields.
- 7.2.b Landowners are encouraged to properly maintain sewage disposal systems.
- 7.2.c Where local property owners are unable to develop their properties due to an inability to obtain approval for a conventional on-site septic treatment system, the feasibility of establishing a community sewer system or a localized effluent treatment plant which meets Municipal sewage regulation requirements, should be explored providing treated effluent will not negatively impact the environment.
- 7.2.d Private sewage outfalls into the marine waters of the planning area shall not be supported.

7.3 SOLID WASTE AND HAZARDOUS MATERIAL MANAGEMENT

All goods and materials brought onto Savary are potential wastes. It is up to everyone to act responsibly with regard to their containment and appropriate disposal. Savary is geotechnically and hydro-geologically unsuitable for a landfill. Thus, there is no landfill site on Savary Island nor is there a desire to create one. As a result, all solid waste and hazardous materials originating on Savary Island need to be transported off Island for disposal. Private operators providing garbage pick-up and recycling have served the Island intermittently. Materials picked up are subsequently trucked off Island by barge and delivered to the recycling depot or waste transfer site in Powell River. Annual funding for education and provision of service is required if Savary is to take care of its waste management program.

Objectives – Solid Waste and Hazardous Material Management

- 7.3.1 To ensure programs and services are in place to effectively manage wastes so there is no degradation of air, water or soil quality on Savary Island as a result of waste recycling and disposal.
- 7.3.2 To encourage the reduction, re-use and recycling of waste materials.
- 7.3.3 To require hazardous materials and petroleum products to be handled in a manner that will prevent environmental contamination.

Policies – Solid Waste and Hazardous Material Management

- 7.3.a The Powell River Regional District and Ministry of Environment should establish and fund a public education program which will:
 - (i) encourage the reduction, re-use and recycling of all solid wastes generated on the Island; and
 - (ii) inform Islanders of the dangers of use of hazardous materials, including pesticides and chemical fertilisers, and how those materials may be safely disposed of.
- 7.3.b As a community initiative, hazardous household chemicals should be collected on an annual basis for safe disposal off Island.
- 7.3.c To avoid the potential risk of leachate originating from a landfill site contaminating the Island's groundwater supply, no provision has been made for a site on Savary Island for the disposal of solid wastes. There shall be no burying of garbage on Savary Island and all solid wastes must be disposed of off Island.

To service the current population in the short term, it is essential that a plan and funding program be developed for the regular removal of waste material from the Island.

Due to the number of small lots which already exist on Savary, future population pressures could create the need to locate a waste transfer station on the Island. To prepare for this eventuality, a suitable site should be identified and set aside. Transfer site use would be limited to the short-term storage of waste materials prior to their transport to the mainland for disposal.

7.3.d As an alternative to Island property owners each needing to individually transport and maintain a supply of fuel on their property, there is need for a central fuelling station on the Island. The site selected shall:

- (i) be readily accessible from a main road;
- (ii) include provisions for secondary containment, pressure testing and groundwater monitoring;
- (iii) include provision for above ground storage tanks only;
- (iv) have an impermeable surface and site drainage catch basin so as to prevent petroleum products from draining off the site; and
- (v) incorporate other pertinent government regulations as may be required to ensure the environmental safety of the site and the Island.
- 7.3.e Due to the risk of groundwater contamination, the use of underground fuel storage tanks on the Island shall be prohibited.
- 7.3.f Derelict vehicles should not be permitted to remain on Savary Island. A system for the regular removal of derelict vehicles should be explored with the Powell River Regional District and local businesses so as to prevent groundwater contamination and rectify the unsightly condition they create.
- 7.3.g Endorse the prohibition of open burning of inorganic wastes due to concern over the smoke and potentially hazardous fumes which may be emitted. Open burning also increases forest fire risk.

7.4 **FIRE PROTECTION**

Fire protection is an important consideration in any community. Hazard mapping has been completed for the Island and has indicated that east and west portions of the Island have an extreme interface hazard rating. As the number of full and part-time residents has increased, so has the number of medical emergencies requiring treatment on Savary Island and/or transportation to hospital requiring vessel or air transport off of the Island. On Savary, local road conditions, water shortages in some areas and limited equipment present great challenges in fighting fires. Fire protection services on Savary Island have improved considerably in the past few years with the construction of a new fire hall/community hall in 1996 and a very pro-active fire protection and readiness approach by the volunteer fire department. It is anticipated that two new substations with rapid response fire vehicles, located on the east and west ends of the Island, will be completed by 2007. The Savary Island Volunteer Fire Department (SIVFD) continues to actively recruit and train volunteer firefighters and medical first responders.

Objectives – Fire Protection

- 7.4.1 To encourage all Island residents and visitors to know about and use fire safe practices.
- 7.4.2 To support the provision of adequate firefighting capability on Savary Island.
- 7.4.3 To support the provision of adequate Emergency Medical Response capability on Savary Island.

Policies – Fire Protection

- 7.4.a Subject to financial and security constraints, fire fighting equipment should be stationed in various strategic locations on the Island and effort made to train local residents on how to respond to the outbreak of fire and how to safely use early response fire fighting equipment. In addition, local residents and tourists should be educated on how to prevent fire (both structural and wildfire) and how to report fire.
- 7.4.b To aid emergency personnel in locating a reported incident, each property owner is encouraged to post a street number (4 in. in height or more) where it can be seen from the road.
- 7.4.c In locations where community water services have adequate capacity, fire hydrants or standpipes should be provided at regular intervals.
- 7.4.d In locations where standpipes for fire protection purposes are not provided, effort should be made to establish community water storage reservoirs at convenient locations throughout the Island.
- 7.4.e In keeping with Bylaw No. 298, the Savary Island Volunteer Fire Department Fire Chief or Deputy may exercise their ability to control or prohibit fires during periods of high fire risk, including a ban on campfires on the foreshore.
- 7.4.f The Savary Island Volunteer Fire Department is encouraged to continue to take the lead in implementing a plan for community fire safety management on Savary.

SECTION 8 - DEVELOPMENT ASSESSMENT AREAS

The Sensitive Ecosystems Inventory, jointly managed by Environment Canada and the Ministry of Sustainable Resource Management, the Savary Island Dune and Shoreline Study conducted by Thurber Engineering Ltd. and the Sand Dune Eco systems on Savary Island Study by K. Dunster each provide detailed information on Savary Island's environmentally sensitive areas and hazard lands.

Areas identified by these studies that require protection include:

- the active shoreline dune areas and the large area of inland dunes in the middle of the Island;
- areas that are potentially hazardous to development such as the steep bank areas along most of the north and south shorelines; and
- a number of ecologically sensitive areas.

Pursuant to Section 919.1(1) of the *Local Government Act*, an official community plan may designate Development Permit Areas for the protection of the natural environment, its ecosystems and biological diversity and for the protection of development from hazardous conditions. Landowners are encouraged to follow the guidelines established for the three Development Assessment Areas listed below and identified on Map Schedule D:

Development Assessment Area 1: Shoreline Areas Development Assessment Area 2: Shoreline and Inland Dune Areas Development Assessment Area 3: Ecologically Sensitive Areas

General Development Guidelines

- 1) The general development guidelines apply to Development Assessment Areas 1, 2 and 3.
- 2) If any part of a lot is within a Development Assessment Area, as shown on Map Schedule D, then development on any portion of the lot should be assessed.
- 3) Where land is included within more than one Development Assessment Area, property owners are encouraged to meet the guidelines of all applicable Development Assessment Areas when evaluating and developing the land.
- 4) Unless an assessment is conducted and the guidelines and recommendations are followed:
 - (i) lands within the area should not be subdivided;
 - (ii) construction of, addition to or alteration of a building or other structure within the assessment area should not be started; and
 - (iii) land within the area should not be altered by:
 - a) the creation of nonstructural impervious or semi-impervious surfaces;
 - b) the removal, alteration, disruption or destruction of vegetation;

- c) the disturbance of soils;
- d) flood protection works; and/or
- e) the construction of roads, trails, docks, wharves and bridges.
- 5) Prior to initiating development within a Development Assessment Area, property owners are encouraged to have (at the land owners expense) a report conducted by a Qualified Professional¹.
- 6) The Qualified Professional should evaluate the proposed development activities against the objectives and guidelines of the applicable Development Assessment Area. In cases where harmful or adverse effects are anticipated, the report should include recommendations as to how the impact of the works or activities proposed within the Development Assessment Area may be mitigated.

Each Development Assessment Area is described in detail below.

8.1 DEVELOPMENT ASSESSMENT AREA 1: SHORELINE AREAS

The shoreline areas identified as DA-1 on Map Schedule D which is attached hereto and forms part of the Savary Island Official Community Plan are hereby designated as "Development Assessment Area 1".

Objectives - Development Assessment Area 1: Shoreline Areas

8.1.1 To ensure safety, to reduce the risk to private and public property and to maintain annual rates of coastal shoreline and cliff erosion at, or below, natural levels, Development Assessment Area 1: Shoreline Areas has been established along the north and south shores of Savary Island.

¹ For the purposes of **Development Assessment Areas 1 and 2**, a **"Qualified Professional"** means a Geotechnical Engineer acting alone or together with another environmental professional.

For the purposes of **Development Assessment Area 3**, a **"Qualified Professional"** means an Ecologist acting alone or together with another environmental professional.

A **"Qualified Professional"** must satisfy the following criteria:

⁽a) the individual is registered and in good standing in British Columbia with an appropriate professional organization constituted under an Act, acting under that association's code of ethics and subject to disciplinary action by that association;

⁽b) the individual's area of expertise is recognized as acceptable for the purpose of providing all or part of the assessment report in respect to the development proposal; and

⁽c) the individual is acting within that individual's area of expertise.

8.1.2 A Qualified Professional should determine if the proposed development activities and/or vegetation removal will increase erosion and/or adversely affect slope stability or the natural shoreline process.

Guidelines - Development Assessment Area 1: Shoreline Areas

- 8.1.a New septic tanks, drainage and deposit fields or irrigation water systems should not be constructed within 30 metres of the natural top of slope.
 (Minimal garden watering and grey water releases are permitted within 30m of the natural top of slope and shoreline areas.)
- 8.1.b All vegetation on the slope between the top and toe of slope should be retained.
- 8.1.c Indigenous species should be identified and their habitats protected from disturbance. The use of invasive, non-native plants (e.g. Scotch broom) for the purposes of slope stabilization is not recommended. A list of suggested plant species for bluff crest plantings is available in the *Savary Island Dune and Shoreline Study*, Thurber Engineering Ltd.
- 8.1.d Public access in this area should be limited to designated trails so as not to unnecessarily promote an increase in soil erosion. Beach access trails should be limited to public accesses where slopes display active erosion.
- 8.1.e Shoreline protective measures and structures intended to assist in stabilizing natural coastal erosion should not be established without appropriate permits and licenses.
- 8.1.f. The Geotechnical assessment conducted by a Qualified Professional should ensure that building locations are safe from erosion hazards for a 50 year time horizon (at a minimum).

Exemptions - Development Assessment Area 1: Shoreline Areas

Within Development Assessment Area 1: Shoreline Areas, the recommendation to have a development assessment does not apply to:

- (i) existing permanent structures, roads, trails and other developments lying within the Development Assessment Area at the time of adoption of this bylaw including the repair, renovation or reconstruction of a permanent structure on its existing foundation; and/or
- (ii) the removal of trees certified as hazardous by a qualified arborist.

In addition to the above exemptions, these recommendations only apply to the lands within the Development Assessment Areas identified in Appendix B based on the *Savary Island Dune and Shoreline Study*.

8.2 DEVELOPMENT ASSESSMENT AREA 2: SHORELINE AND INLAND DUNE AREAS

The shoreline and inland dune areas identified as DA-2 on Map Schedule D which is attached hereto and forms part of the Savary Island Official Community Plan are designated as "Development Assessment Area 2".

A number of ecologically important areas, some unique in British Columbia, have been identified on Savary Island (*Sand Dune Ecosystems on Savary Island*; K. Dunster, 2000). Paramount amongst these are the fragile, active fore-dune, dune meadow and young dune forest areas located along the south shore and at Indian Point. The plant associations in the active dune areas are considered to be rare. Plant associations between shore pine (*Pinus contorta* var. *contorta*) and salal (*Gaultheria shallon*) and the Big headed sedge (*Carex macrocephala*) and Seashore bluegrass (*Poa douglasii* ssp. *macrantha*) are potentially unique to the Georgia Depression Ecoprovince. These areas include a number of sections along the south shore of Savary and Indian Point.

The land between Whalebone and Beacon Points constitutes the best and most complete Canadian example of the geography of coastal dune ecosystems and dune associated plant successions when included with the inland dune area (Dunster, 2000).

A thick cover of sand dunes, now inactive and stabilized by vegetation, is present along a 1.2 kilometre section of the Island on the west half of D.L. 1375. The dunes, up to 15 metres thick, are covered in grasses and trees and extend in a markedly northwesterly direction.

Dune areas can be relatively dynamic with shifting sand and migrating dunes. The tree cover is now well established on the dunes, but appears to be thinner than elsewhere on the Island. This vegetation has the effect of reducing the extent of the areas of sand dunes still currently active on Savary. There is a need to ensure the dune area is not disturbed or its vegetative cover removed.

The high permeability of the sand dunes has caused them to be identified as a significant location where groundwater recharge to the main aquifer occurs (*Preliminary Assessment of the Groundwater Resources of Savary Island*; Tupper, 1996). The inland dunes are described as being part of the most significant dune geography and successional dune ecology in Canada (Dunster, 2000).

Objectives - Development Assessment Area 2: Shoreline and Inland Dune Areas

- 8.2.1 Development Assessment Area 2: Shoreline and Inland Dune Areas has been established to preserve and protect the Island's active and inactive sand dunes by limiting land development and ensuring the dune's protective vegetative cover and sensitive ecosystems are retained.
- 8.2.2 A Qualified Professional should determine if the proposed development activities will:
 - a) increase dune erosion;
 - b) decrease dune stability;
 - c) adversely affect the natural dune formation processes; and/or
 - d) negatively affect the dune ecosystems and associated plant succession.

And further, a Qualified Professional should form an opinion as to whether the proposed development activities and/or the disturbance of vegetation should be permitted and if so, should make recommendations to mitigate any negative impact the proposal will have on dune stability, dune ecosystems and plant succession.

Guidelines - Development Assessment Area 2: Shoreline and Inland Dune Areas

- 8.2.a Effort should be made to limit construction in Development Assessment Area 2 to trails and utility works. Public access in these areas should be limited to designated trails so as not to unnecessarily promote an increase in soil erosion or threaten plant ecology.
- 8.2.b Preservation of the dune environment in accordance with the recommendation of Qualified Professional should be the prime consideration when locating any building or structure in Development Assessment Area 2.
- 8.2.c Road construction, terrain disturbances or siting of structures should not take place on dunes if other options are available.
- 8.2.d Retention of the existing vegetation should be the main focus of any development assessment issued for Development Assessment Area 2. The planting of native grasses and erosion-resistant hedge vegetation is encouraged in areas of the sand dunes that are exposed to wind and water erosion as a result of human activity and development.
- 8.2.e Protective measures and structures intended to assist in maintaining both active and inactive dune environments are permitted.

Exemptions - Development Assessment Area 2: Shoreline and Inland Dune Areas

Within Development Assessment Area 2: Shoreline and Inland Dune Areas, the recommendation to have a development assessment does not apply to:

- (i) existing permanent structures, roads, trails and other developments lying within the Development Assessment Area at the time of adoption of this bylaw including the repair, renovation or reconstruction of a permanent structure on its existing foundation; and/or
- (ii) the removal of trees certified as hazardous by a qualified arborist.

8.3 DEVELOPMENT ASSESSMENT AREA 3: ECOLOGICALLY SENSITIVE AREAS

Ecologically significant areas and other important ecosystems (from the *Sensitive Ecosystems Inventory*) identified as DA-3 on Map Schedule D, which is attached hereto and forms part of the Savary Island Official Community Plan, are hereby designated as "Development Assessment Area 3". These include areas of old forests, mature forests, wetlands and herbaceous ecosystems. Some lands within Development Assessment Area 3 overlap areas contained within Development Assessment Areas 1 and 2. Although Development Assessment Areas 1 and 2 have been identified primarily due to their physical attributes (sensitive dune areas or hazardous cliffs), they may also contain rare plant species and important plant associations which are classed as ecologically sensitive areas. Examples of ecologically sensitive areas include Mace point and the site of the northern limit of Garry Oak (*Quercus garryana*). The Big Meadow at the south end of Jullian Road is the site of a variety of herbaceous plants, sedges and grasses.

Objectives - Development Assessment Area 3: Ecologically Sensitive Areas

- 8.3.1 Development Assessment Area 3: Ecologically Sensitive Areas has been established to identify, preserve and protect ecologically sensitive areas and other important ecosystems on Savary Island.
- 8.3.2 A Qualified Professional should be hired to:
 - a) determine the nature and extent of the ecologically sensitive areas affecting the parcel proposed for development activities;
 - b) determine the impact the proposed development activities and/or removal or disturbance of vegetation will have on the ecologically sensitive areas; and
 - c) make recommendations with respect to whether a development should take place and any conditions that should be undertaken to mitigate any negative impact on the ecologically sensitive areas.

Guidelines - Development Assessment Area 3: Ecologically Sensitive Areas

8.3.a Retention of the existing vegetation will be the main focus when considering development within Development Assessment Area 3. The planting of native vegetation is encouraged in areas of disturbance resulting from human activity and development.

Exemptions - Development Assessment Area 3: Ecologically Sensitive Areas

Within Development Assessment Area 3: Ecologically Sensitive Areas, the recommendation to have a development assessment does not apply to:

- (i) existing permanent structures, roads, trails and other developments lying within the Development Assessment Area at the time of adoption of this bylaw including the repair, renovation or reconstruction of a permanent structure on its existing foundation; and/or
- (ii) the removal of trees certified as hazardous by a qualified arborist.

In addition to the above exemptions, no development assessment is recommended within Development Assessment Area 3: Ecologically Sensitive Areas where no more than 40% of the lot is to be disturbed or to a maximum of 1 ha. which ever is less, for the construction of a driveway access, septic system, well, single family dwelling and/or accessory buildings.

SECTION 9 - DEVELOPMENT PERMIT AREAS

The Sensitive Ecosystems Inventory, jointly managed by Environment Canada and the Ministry of Sustainable Resource Management, the Savary Island Dune and Shoreline Study conducted by Thurber Engineering Ltd. and the Sand Dune Ecosystems on Savary Island Study by K. Dunster each provide detailed information on Savary Island's environmentally sensitive areas and hazard lands.

Areas identified by these studies that require protection include:

- the active shoreline dune areas and the large area of inland dunes in the middle of the Island;
- areas that are potentially hazardous to development such as the steep bank areas along most of the north and south shorelines; and
- a number of ecologically sensitive areas.

Pursuant to Section 919.1(1) of the *Local Government Act*, an official community plan may designate Development Permit Areas for the protection of the natural environment,

its ecosystems and biological diversity and for the protection of development from hazardous conditions.

The following Development Permit Areas are designated in accordance with Section 919.1(1) of the *Local Government Act*.

Development Permit Area 1: Shoreline Areas Development Permit Area 2: Shoreline and Inland Dune Areas Development Permit Area 3: Ecologically Sensitive Areas

General Development Permit Guidelines

- 1) The general development permit guidelines apply to Development Permit Areas 1, 2 and 3.
- If any part of a lot is within a Development Permit Area, as shown on Map Schedule D, then development on any portion of the lot requires a development permit unless exemptions apply (see Exemptions under each Development Permit Area).
- 3) Where land is included within more than one Development Permit Area, one development permit is required; however, the application must meet the guidelines of all applicable Development Permit Areas.
- 4) Unless an exemption applies (see Exemptions under each Development Permit Area) or the owner obtains a development permit:
 - (i) lands within the area must not be subdivided;
 - (ii) construction of, addition to or alteration of a building or other structure within the area must not be started; and
 - (iii) land within the area must not be altered by:
 - a) creation of impervious or semi-impervious surfaces;
 - b) removal, alteration, disruption or destruction of vegetation;
 - c) disturbance of soils;
 - d) flood protection works; or
 - e) construction of roads, trails, docks, wharves or bridges.
- 5) Prior to the issuance of a development permit the applicant is required to provide to the Regional District (at the applicant's expense) a report by a Qualified

Professional³. The Qualified Professional must evaluate the proposed development activities against the objectives and guidelines of the applicable Development Permit Area. In cases where harmful or adverse effects are anticipated, the report must include recommendations as to how the impact of the works or activities proposed within the Development Permit Area may be mitigated.

The Board may specify development permit conditions under Section 920(7) and 920(7.1) of the *Local Government Act* based on the report of the Qualified Professional.

Each Development Permit Area is described in detail below.

9.1 Development Permit Area 1: Shoreline Areas

The shoreline areas identified as DP-1 on Map Schedule D which is attached hereto and forms part of the Savary Island Official Community Plan are hereby designated as "Development Permit Area 1".

Objective - Development Permit Area 1: Shoreline Areas

9.1.1 To ensure safety, to reduce the risk to private and public property and to maintain annual rates of coastal shoreline and cliff erosion at, or below, natural levels, Development Permit Area 1: Shoreline Areas has been established along the north and south shores of District Lot 1375.

Guidelines - Development Permit Area 1: Shoreline Areas

9.1.a A Qualified Professional will determine if the proposed development activities and/or vegetation removal will increase erosion and/or adversely affect slope stability or the natural shoreline process.

- (a) the individual is registered and in good standing in British Columbia with an appropriate professional organization constituted under an Act, acting under that association's code of ethics and subject to disciplinary action by that association;
- (b) the individual's area of expertise is recognized as acceptable for the purpose of providing all or part of the assessment report in respect to the development proposal; and
- (c) the individual is acting within that individual's area of expertise.

³ For the purposes of **Development Permit Areas 1 and 2**, a **"Qualified Professional"** means a Geotechnical Engineer acting alone or together with another environmental professional.

For the purposes of **Development Permit Area 3**, a **"Qualified Professional"** means an Ecologist acting alone or together with another environmental professional.

A "Qualified Professional" must satisfy the following criteria:

- 9.1.b New septic tanks, drainage and deposit fields or irrigation water systems are not to be constructed or installed within 30 metres of the natural top of slope.
- 9.1.c All vegetation on the slope between the top and toe of slope must be retained.
- 9.1.d Indigenous plant species shall be identified and their habitats protected from disturbance. The use of invasive, non-native plants (e.g. Scotch broom) for the purposes of slope stabilization is not permitted. A list of suggested plant species for bluff crest plantings is available in the *Savary Island Dune and Shoreline Study*, Thurber Engineering Ltd.
- 9.1.e Public access in this area should be limited to designated trails so as not to unnecessarily promote an increase in soil erosion. Where slopes display active erosion, beach access trails should be limited to public accesses.
- 9.1.f Shoreline protective measures and structures intended to assist in stabilizing natural coastal erosion are not permitted.
- 9.1.g The geotechnical assessment conducted by a Qualified Professional must certify that building locations are safe from erosion hazards for a 50 year time horizon (at a minimum).

Exemptions - Development Permit Area 1: Shoreline Areas

The requirement for a development permit within Development Permit Area 1: Shoreline Areas does not apply to:

- (i) existing permanent structures, roads, trails and other developments lying within the development permit area at the time of designation of this Development Permit Area including the repair, renovation or reconstruction of a permanent structure on its existing foundation; and
- (ii) the removal of trees certified as hazardous by a qualified arborist.

In addition to the above exemptions, the requirement for a development permit for areas identified as Development Permit Area 1: Shoreline Areas on Map Schedule D only apply to the lands within the setback areas identified in Appendix B – Development Assessment Areas which reflects the *Savary Island Dune and Shoreline Study*. For Bluff areas, the setback is based on the 50 year time horizon.

9.2 DEVELOPMENT PERMIT AREA 2: SHORELINE AND INLAND DUNE AREAS

The shoreline and inland dune areas identified as DP-2 on Map Schedule D which is attached hereto and forms part of the Savary Island Official Community Plan are designated as "Development Permit Area 2".

A number of ecologically important areas, some unique in British Columbia, have been identified on Savary Island (*Sand Dune Ecosystems on Savary Island*; K. Dunster, 2000). Paramount amongst these are the fragile, active fore-dune, dune meadow and young dune forest areas located along the south shore and at Indian Point. The plant associations in the active dune areas are considered to be rare. Plant associations between shore pine (*Pinus contorta* var. *contorta*) and salal (*Gaultheria shallon*) and the big-headed sedge (*Carex macrocephala*) and seashore bluegrass (*Poa douglasii* ssp. *macrantha*) are potentially unique to the Georgia Depression Ecoprovince. These areas include a number of sections along the south shore of Savary and Indian Point.

The land between Whalebone and Beacon Points constitutes the best and most complete Canadian example of the geography of coastal dune ecosystems and dune-associated plant successions when included with the inland dune area (Dunster, 2000).

A thick cover of sand dunes, now inactive and stabilized by vegetation, is present along a 1.2 kilometre section of the island on the west half of D.L. 1375. The dunes, up to 15 metres thick, are covered in grasses and trees and extend in a markedly northwesterly direction.

Dune areas can be relatively dynamic with shifting sand and migrating dunes. The tree cover is now well-established on the dunes, but appears to be thinner than elsewhere on the island. This vegetation has the effect of reducing the extent of the areas of sand dunes still currently active on Savary. There is a need to ensure the dune area is not disturbed or its vegetative cover removed.

The high permeability of the sand dunes has caused them to be identified as a significant location where groundwater recharge to the main aquifer occurs (*Preliminary Assessment of the Groundwater Resources of Savary Island*; Tupper, 1996). The inland dunes are described as being part of the most significant dune geography and successional dune ecology in Canada (Dunster, 2000).

Objective - Development Permit Area 2: Shoreline and Inland Dune Areas

9.2.1 Development Permit Area 2: Shoreline and Inland Dune Areas has been established to preserve and protect the Island's active and inactive sand dunes by limiting land development and ensuring the dune's protective vegetative cover and sensitive ecosystems are retained.

Guidelines - Development Permit Area 2: Shoreline and Inland Dune Areas

- 9.2.a A Qualified Professional must determine if the proposed development activities are likely to:
 - a) increase dune erosion;
 - b) decrease dune stability;
 - c) adversely affect the natural dune formation processes; or
 - d) negatively affect the dune ecosystems and associated plant succession.

The Qualified Professional must make recommendations to mitigate any negative impact of the proposed development on dune erosion or stability, dune ecosystems or plant succession. A development permit may include conditions incorporating the recommendations of the Qualified Professional, to the extent that such conditions do not prevent the use of the land that is allowed under any applicable zoning bylaw or the development of the land to the density permitted by the zoning bylaw.

- 9.2.b Effort should be made to limit construction in Development Permit Area 2 to trails and utility works. Public access in these areas should be limited to designated trails so as not to unnecessarily promote an increase in soil erosion or threaten plant ecology.
- 9.2.c Development permits issued for parcels which contain dunes shall not permit road construction, terrain disturbances or siting of buildings or structures on dunes if other options are available.
- 9.2.d Retention of the existing vegetation will be a main focus of any development permit issued for Development Permit Area 2. The planting of native grasses and erosion-resistant hedge vegetation is encouraged in areas of the sand dunes that are exposed to wind and water erosion as a result of human activity and development.
- 9.2.e Protective measures and structures intended to assist in maintaining both active and inactive dune environments are permitted.

Exemptions - Development Permit Area 2: Shoreline and Inland Dune Areas

The requirement for a development permit within Development Permit Area 2: Shoreline and Inland Dune Areas does not apply to:

 (i) existing permanent structures, roads, trails and other developments lying within the development permit area at the time of adoption of this bylaw including the repair, renovation or reconstruction of a permanent structure on its existing foundation; and (ii) the removal of trees certified as hazardous by a qualified arborist.

9.3 DEVELOPMENT PERMIT AREA 3: ECOLOGICALLY SENSITIVE AREAS

Ecologically significant areas and other important ecosystems (from the *Sensitive Ecosystems Inventory*) identified as DP-3 on Map Schedule D, which is attached hereto and forms part of the Savary Island Official Community Plan, are hereby designated as "Development Permit Area 3". These include areas of old forests, mature forests, wetlands and herbaceous ecosystems. Some lands within Development Permit Area 3 overlap areas contained within Development Permit Areas 1 and 2. Although Development Permit Areas 1 and 2 have been identified primarily due to their physical attributes (sensitive dune areas or hazardous cliffs), they may also contain rare plant species and important plant associations which are classed as ecologically sensitive areas.

Objective - Development Permit Area 3: Ecologically Sensitive Areas

9.3.1 Development Permit Area 3: Ecologically Sensitive Areas has been established to identify, preserve and protect important ecologically sensitive areas and other important ecosystems on District Lot 1375.

Guidelines - Development Permit Area 3: Ecologically Sensitive Areas

- 9.3.a A Qualified Professional must:
 - a) determine the nature and extent of the ecologically sensitive areas affecting the parcel proposed for development activities;
 - b) determine the impact the proposed development activities and/or removal or disturbance of vegetation are likely to have on the ecologically sensitive areas; and
 - c) make recommendations with respect to any conditions that should be incorporated into the development permit to mitigate any negative impact on the ecologically sensitive areas.
- 9.3.b Retention of the existing vegetation will be a main focus of any development permit issued for Development Permit Area 3. The planting of native vegetation is encouraged in areas of disturbance resulting from human activity and development.

Exemptions - Development Permit Area 3: Ecologically Sensitive Areas

The requirement for a development permit within Development Permit Area 3: Ecologically Sensitive Areas does not apply to:

- (i) existing permanent structures, roads, trails and other developments lying within the development permit area at the time of adoption of this bylaw including the repair, renovation or reconstruction of a permanent structure on its existing foundation; and
- (ii) the removal of trees certified as hazardous by a qualified arborist.

SECTION 10 – HERITAGE CONSERVATION AREA

10.1 HERITAGE CONSERVATION AREA 1: ARCHAEOLOGICAL SITES

D.L. 1375 contains a number of archaeological sites and is designated as "Heritage Conservation Area 1" on Map Schedule E which is attached hereto and forms part of the Savary Island Official Community Plan.

First Nation peoples have used Savary Island for thousands of years. As a result, the Island contains a number of sites documented by the Archaeology Branch of the Ministry of Tourism, Culture and the Arts including an ancient village and other areas used for the gathering and processing of food and materials. These sites can be seen today as shell middens, house depressions and culturally modified trees. These remains are protected under the *Heritage Conservation Act* and are highly valued by Sliammon First Nation. Protection under the *Heritage Conservation Act* means that the sites may not be altered without a permit from the Archaeology Branch. Of the 12 known sites on Savary Island, five sites are located on D.L. 1375. Due to the extensive use of Savary Island by First Nation peoples, it is likely that within D.L. 1375 or on other areas of the Island, sites that have not been mapped or registered by the Archaeology Branch will be discovered. The Archaeology Branch will share the location of known, protected archaeological sites with a property owner on request to the Archaeology Branch at <u>http://www.archdatarequest.tsa.gov.bc.ca/</u>.

Objective – Heritage Conservation Area 1: Archaeological Sites

10.1.1 Heritage Conservation Area 1: Archaeological Sites has been established to ensure the known and unknown archaeological sites located on D.L. 1375 are protected and to make certain that impacts from development are managed in accordance with the requirements of the *Heritage Conservation Act*.

Guidelines – Heritage Conservation Area 1: Archaeological Sites

10.1.a A Heritage Alteration Permit will only be issued for lands within Heritage Conservation Area 1 once the proponent has secured any required site alteration permits from the Archaeology Branch or a letter from the Archaeology Branch or a Qualified Archaeologist stating that a site alteration permit is not required.

- 10.1.b To determine if a site alteration permit is required, the proponent must engage a Qualified Archaeologist to:
 - a) determine the nature and extent of the archaeological sites on the land that are protected under the *Heritage Conservation Act*, prior to any land alteration or construction taking place;
 - b) determine if the proposed development is likely to impact an archaeological site;
 - c) where no archaeological site is likely to be impacted, furnish a letter to the proponent stating that no impacts are anticipated; and
 - d) where an archaeological site is likely to be impacted, conduct an archaeological impact assessment to locate and identify the precise boundaries of the site, determine its significance, determine the nature and magnitude of development-related impacts, and formulate recommendations to mitigate any negative impact of development on the site.
- 10.1.c A Heritage Alteration Permit may include conditions incorporating the recommendations of the Qualified Archaeologist to protect the site, to the extent that such conditions do not prevent the use of the land that is allowed under any applicable zoning bylaw or the development of the land to the density permitted by the zoning bylaw.

SECTION 11 - PLAN IMPLEMENTATION

The Savary Island Official Community Plan is the first step in the process needed to ensure the long term maintenance of the Island's rustic rural lifestyle and the protection of sensitive ecosystems. In order to implement the OCP, the following actions are required:

ACTION	APPLICABLE POLICY	JURISDICTION	PRIORITY
Zoning Bylaw	3.1.a	Regional District	High
Siting Permit System	3.1.f	Regional District	High
Road Upgrading and Maintenance	6.1.4 & 6.2.c & 6.2.g & 6.2.h & 6.2.i	Ministry of Transportation	High
Park & Open Space Network Plan	5.2.b	Regional District Savary Island Land Trust	Medium
Public Education Programs: -Water Conservation -Solid Waste Mgmt. -Sewage System Maintenance	7.1.k 7.3.a 7.2.b	Ministry of Health Savary Island Committee Regional District	Medium
Encourage Lot Consolidation	3.1.a	Savary Island Committee Savary Island Land Trust Regional District	High Ongoing
Heritage Registry	2.3.b	Regional District	Low
Designate Ground Water Mgmt. Area	7.1.1	Regional District	Medium
Encourage Regulation of Barge Traffic and Discourage Transportation of Vehicles	2.2.d & 6.3.c 6.3.d	Regional District	High
Hydro Geological Survey – Indian Springs	2.1.g	Regional District	Medium
Identify Medi-Vac Landing Sites	6.4.a	Regional District Provincial Emergency Program Savary Island Fire Dept.	High

APPENDIX A – DEFINITIONS

"Accessory Building or Structure" means a building or structure which is customarily incidental or subordinate to the principal use of the land, buildings or structures located on the same lot.

"Bed and Breakfast Operation" means the use of a residential dwelling to provide lodging and meals to paying guests on a short-term bases (less than thirty (30) days) which does not involve the rental of more than three (3) rooms at any one time for guest accommodation.

"Building" means any structure that encloses and shelters a use.

"**Campground**" means the temporary accommodation of travellers using tents, travel trailers, tent trailers or recreational vehicles with continuous occupancy not exceeding 3 months, but specifically excludes a manufactured home park or hotel/motel.

"**Commercial Use**" means a use providing for the retail sale, restaurants, fuel stations, repair and servicing of household, non-household, personal and non-personal goods, or for providing services to people.

"Dwelling Unit" means one (1) or a set of self-contained, habitable and inter-connected rooms occupied or intended to be occupied for residential and domestic purposes by not more than one (1) family and containing not more than one (1) set of cooking facilities.

"Family" means one (1) or more persons related by blood, marriage, adoption, foster parenthood, or a common-law couple sharing one (1) dwelling unit; or not more than seven (7) unrelated persons sharing one (1) dwelling unit.

"Home Occupation" means the use of a dwelling unit or accessory building or structure for the administrative, clerical or professional operations of a business or personal service use, or for the studio of an artist, music teacher, musician or craftsperson, as long as no outdoor storage is associated with the use.

"Industrial Use" means a use providing for the processing, fabricating, assembling, storing, transporting, distributing, wholesaling, testing, servicing, repairing, wrecking, or salvaging of goods, materials or things.

"One-family Residential" means the use of a parcel of land for a residential dwelling.

"Residential Dwelling" means a building containing not more than one (1) dwelling unit.





ROAD NETWORK - TRANSPORTATION PLAN

SAVARY ISLAND OFFICIAL COMMUNITY PLAN SCHEDULE D **DEVELOPMENT ASSESSMENT & DEVELOPMENT PERMIT AREAS**

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