Heritage Forest Management Plan District Lots 30, 31, 32 Galiano Island, BC



Developed by:

The Heritage Forest Management Committee on behalf of The Galiano Club

Prepared by:

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Section 1.0 Introduction

1.1 Background and Value to the Community

In December of 2005 The Galiano Club took ownership of just over 126 hectares or 311 acres of Heritage Forest. The Heritage Forest Lands are held in trust by the Galiano Club for the benefit of the Galiano Community, present and future.

The lands will be managed in a manner that maintains or enhances the integrity of ecosystems while contributing to the economic and social well being of the Galiano community.

Benefits to the community will be realized through provisions for maintaining natural values, allowing recreational use of the land, accommodating educational opportunities, contributing to local economic opportunities by allowed small scale sustainable forestry or harvesting of alternative forest products, and allowing for the designation and subdivision of a small percentage of the land to accommodate affordable housing, including housing for senior citizens.

The term 'Heritage Forest' is a land-use designation within Galiano's Official Community Plan Bylaw #108 (Consolidated June 1, 2006) and Land Use Bylaw #127 (Consolidated August 18, 2006) describing forest land that has been donated to the Galiano Community by landowners in return for residential development rights. As of the date of this Plan, two landowners have selected the Heritage Forest option in order to achieve their residential development goals. The resulting Heritage Forest lands are being held in trust by the Galiano Club, a local incorporated organization in existence for over 30 years that has as one of its objects the stewardship of forested land, for the benefit of the entire Galiano Community.

In order for the Galiano Club to take ownership of the Heritage Forest they were required to place a covenant on the land as an added measure to ensure long-term sustainable management. The covenant is a legally binding document that is attached to the titles of the Properties. It stays with the land regardless of the owner or any changes to our local bylaws. The Covenant is held by two organizations – in this case the Galiano Conservancy Association and Habitat Acquisition Trust (Victoria). These covenant holders are responsible for monitoring the Heritage Forest lands to ensure that the Galiano Club does not violate any of the measures laid out within the covenant document. Covenant holders are also responsible for taking legal action in light of a significant breach of the covenant document.

1.2 Plan Purpose

This management plan is a statement of how the Heritage Forest lands on Remnant Lot 1 District Lots 30 and 31 and Remnant Lot, District Lot 32, hereto referred to as 'the Properties' will be managed in the future. It states in a broad but comprehensive manner, management goals, objectives and related strategies for achieving them.

1.3 Heritage Forest / Community Parks Co-management

The Properties are bordered by two small Community Parks and a Public Shore Access that are managed by the Galiano Island Parks and Recreation Commission (GIPRC). The Community Parks, Shore Access and the Properties share a number of common management concerns including public access, providing recreational opportunities and associated facilities such as parking, washrooms, and signage. Both the GIPRC and the Galiano Club have recognized the value of addressing these common issues in a cooperative manner, thus avoiding duplication of services, providing connectivity for recreational activities and reducing the management footprint on the land.

This Plan outlines objectives and strategies that apply to both the GIPRC managed lands and the Properties. The Plan clearly states those activities or strategies that are to be carried out by the GIPRC management authority. All other activities and strategies are to be carried out by the Galiano Club.

1.4 Management Planning Process

The Management Plan was developed by the Heritage Forest Management Plan Committee consisting of representatives from the Galiano Club (Title Holders in Trust), the Galiano Conservancy Association (covenant holder), Habitat Acquisition Trust (covenant holder), the Galiano Island Parks and Recreation Commission (managers of two neighbouring Community Parks and one neighbouring Public Shore Access) and members of the Public. The planning committee completed an open planning process that included three public open houses and consultation with the Local volunteer fire department, owners of lands bordering on the Properties, and individuals from the Sticks Allison and Georgia View neighbourhoods.

The Management Plan was drafted in accordance with the legal obligations outlined in the Section 219 covenant registered on title of the Properties and with applicable policies and regulations set out in the Galiano Island Local Trust Committee Official Community Plan Bylaw

#108 (Consolidated June 1, 2006) and Land Use Bylaw #127 (Consolidated August 18, 2006).

The Management Plan was approved by the Covenant Holders. In addition the Management Plan was ratified by the Title Holders in Trust by special resolution at an extraordinary general meeting.

The management plan must be reviewed and revised, every ten years or as otherwise agreed to by the Title Holders in Trust and the Covenant Holders.

1.5 Property Location

The Properties are located on Galiano Island, one of the southern Gulf Islands in the Strait of Georgia, British Columbia. The Properties can be accessed from the terminus of Georgia View Road at the southeastern end of Galiano Island. Access to the Properties is approximately 7 kilometers by road from the Sturdies Bay Ferry Terminal. Please refer to MAP 1 for the location of the Properties.

1.6 Legal Description of the Properties

The Properties are legally described as:

Parcel Identifier: 025-936-107

Lot 1, District Lots 30 and 31, Plan VIP76997, Galiano Island, Cowichan Land District except that part in Plan VIP76997,

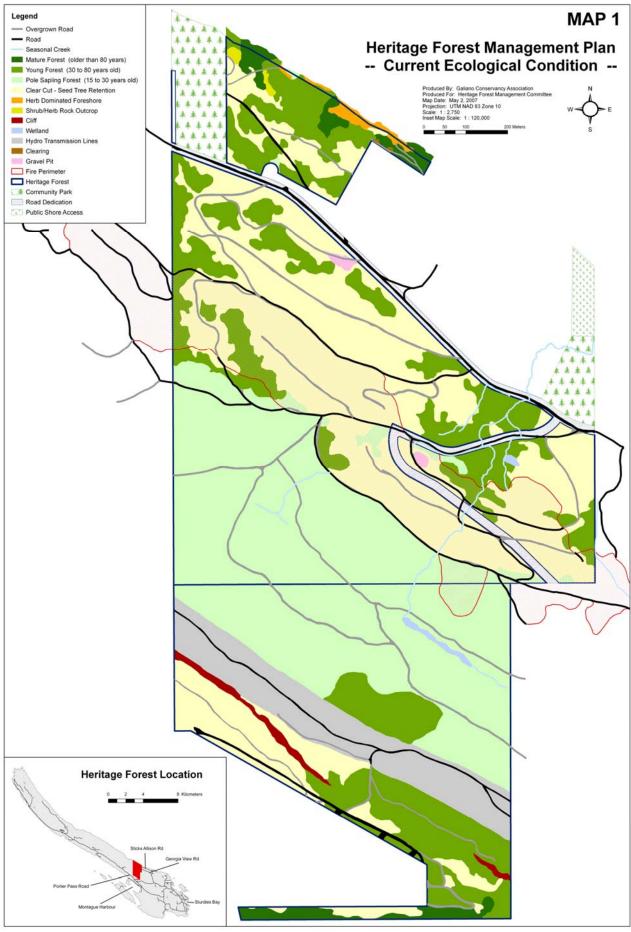
Parcel Identifier: 001-273-655

Remnant, District Lot 32, Plan 77822, Galiano Island, Cowichan Land District except part in

Plan VIP77822.

1.7 Size of the Properties

The Properties are within the Capital Regional District. Remnant Lot 1, DL 30 and 31 totals 77.46 hectares in size. Remnant, DL 32 totals 48.6 hectares in size.



1.8 Land Use and Ownership History

The following is an excerpt from the Baseline Report For REM 1, DL 30 and 31, Plan VIP76997 And REM DL 32, Plan 77822 Galiano Island, Cowichan Land District, British Columbia (Erickson, 2006)¹.

District Lots 30, 31 and 32 were crown granted as part of a tract of 8,294.2 acres of land on Galiano Island, to Samuel Mathews Robbins in June 1889, for a price of \$1 per acre. The land was bought on behalf of the Vancouver Coal Mining and Land Company Ltd. In 1902 this company was purchased by Western Fuels Ltd. along with the title to District Lots 30, 31 and 32 and the rest of the Galiano lands. In 1944 timber extraction rights were sold to Nanaimo based companies. The land was then purchased along with Western Fuels Ltd by the Powell River Company in 1951. During the merger of Powell River and MacMillan Bloedel in 1960, all of the Galiano holdings were transferred to MacMillan Bloedel.

In October 1991 District Lots 30 and 31 were purchased from MacMillan Bloedel by 411313 B.C. Ltd. In December 2005 Lot 1, District Lots 30 and 31, Galiano Island, Cowichan District, Plan VIP76996 except that part in Plan VIP76997 was transferred to The Galiano Club to be held in trust as Heritage Forest.

In April 1991 District Lot 32 was purchased from MacMillan Bloedel by Scoones Bulldozing Ltd. And Active Pass Developments Ltd. In June 1999 District Lot 32 was purchased by 575302 B.C. Ltd. of Parksville, BC. In May 2000 District Lot 32 was purchased by 607814 B.C. Ltd. In December 2005 District Lot 32, Galiano Island, Cowichan District, except part in Plan VIP77822 was transferred to The Galiano Club to be held in trust as Heritage Forest.

1.9 Land Use Designation and Zoning

The Properties have a current Land Use Designation in the Galiano Island Official Community Plan (Consolidated June 1, 2006) of 'Forest'. These OCP policies state the following objectives for 'Forest':

- 1. To preserve a forest land base,
- 2. To protect the aesthetic value of forest land,
- 3. To encourage local economic opportunities for small scale sustainable forestry,
- 4. To protect riparian zones, sensitive ecosystems, watersheds and biodiversity, and

¹ This document will hence forward be referred to as "the Baseline Report"

5. To create a non-profit community—owned forest and to ensure that the use of such forest is consistent with the sustainable forest principles set out elsewhere in this Plan, and that the lands so acquired are preserved for forestry use in perpetuity for future generations.

The Properties have a current zoning designation of "Heritage Forest" under Galiano Land Use Bylaw NO. 127 (Consolidated August 18, 2006).

Under Galiano Land Use Bylaw NO. 127 (Consolidated August 18, 2006), Section 7.4, the following uses are permitted in the Heritage Forest Zone:

- 1. Timber production and harvesting
- 2. Accessory forestry uses including the sawmilling and planning of timber harvested on the same lot and the growing of seedlings in nurseries.

Under Galiano Land Use Bylaw NO. 127 (Consolidated August 18, 2006), Section 7.4, the following Buildings and Structures are permitted in the Heritage Forest Zone for Forestry Uses:

- 1. A single non-residential unenclosed building or structure with a floor area not exceeding 70 square meters is permitted on each lot for timber production and harvesting uses, subject to screening requirements.
- 2. Enclosed buildings and structures for forestry education and research uses, not exceeding 70 square meters in total floor area, are permitted on each lot, subject to screening requirements.

1.10 Section 219 Covenant

A section 219 Covenant is registered on the titles of the two Properties - Remnant Lot 1, District Lots 30 and 31 and Remnant, District Lot 32 – restricting the permitted uses on the Properties and determining the overall management framework for the Properties.

1.10.1 The Intent of the Covenant

The intent of the Section 219 Covenant between The Galiano Club, Habitat Acquisition Trust and the Galiano Conservancy Association (December 5th, 2005) is stated in section 2.1 of the document:

"The parties each agree that the general intent of this Agreement is:

- (a) to protect and preserve the Amenities and the Land, part of the unique and geographically limited Coastal Douglas-fir Biogeoclimatic Zone;
- (b) to restrict activities on the Land that are not Forest Activities to low impact, non-vehicular recreational activities, such as horseback riding, non-motorized cycling, hiking and walking;

- (c) to ensure that any Forest Activities on the Land are carried out in accordance with the Silva Forest Foundation Standards in order to ensure the long term sustainability of the forest;
- (d) to prevent the subdivision or residential use of the Land except in accordance with this Agreement."

1.10.2 Statutory Right of Way granted to the Covenant Holders

Associated with the Section 219 Covenant, and described under section 6.1 of the covenant document is a Statutory Right of Way (SRW) granted to the covenant holders. The SRW stipulates that the covenant holders may enter upon the land:

- Without notice if they reasonably hold the opinion that the Owners in Trust have breached or are in breach of the covenant,
- Once each year on a date chosen by the covenant holders, and communicated to the Owners in Trust in writing at least 48 hours in advance of the visit,
- Without notice at any time in an emergency,
- Upon reasonable notice not to be less than 90 days to undertake works and activities.

For the purposes of:

- Inspecting the amenities and the land
- Undertaking work, activities and operations to rehabilitate or restore the amenities of the land,
- Undertaking or evaluating any acts or programs that have been agreed to in this Management Plan.

The Galiano Conservancy Association has agreed to take the primary responsibility for the annual monitoring of the covenant.

1.11 Liens, Charges and Interests

For a list of charges, liens, and interests registered on the title for Remnant Lot 1, District Lots 30 and 31, please refer to *Appendix 1*.

For a list of charges, liens, and interests registered on the title for Remnant, District Lot 32, please refer to *Appendix 2*.

2.1 Context

The following paragraphs provide the general context for the management of the Properties and are direct quotations from the registered Section 219 Covenant:

FORM C, TERMS OF INSTRUMENT – PART 2

GIVEN THAT:

- (d) As a service to the Community, the Owner has accepted responsibility of ownership of the Land as a community forest created under legislation of the Galiano Island Local Trust Committee;
- (e) Under a declaration of trust registered on December 1, 2005 in the Land Title Office under registration number EX153880, the Owner holds the Land for the benefit of the Community;
- (f) The management of the Land as forest and recreational land will provide significant social, educational, aesthetic and economic benefit to the Community;

2.2 Management Goal

Management of the lands will strive to maintain or enhance the integrity of ecosystems while contributing to the economic and social well being of the Galiano community.

2.3 Objectives

1. Sustainable Forestry

To provide local economic opportunities for small scale sustainable forestry and associated non-timber forest products activities in accordance with the Silva Forest Foundation Standards for Ecologically Responsible Timber Management.

2. Conservation:

To maintain and enhance the integrity of Coastal Douglas-fir forest, aquatic, foreshore, and associated ecosystems within the Properties and to contribute to landscape level ecological connections with regard to natural areas located on surrounding lands.

3. Ecological Restoration:

To facilitate ecological restoration that maintains and enhances the natural integrity of the ecological systems within the Properties.

4. Low Impact Recreation

To provide low impact day-use recreation opportunities in cooperation with the Galiano Island Parks and Recreation Commission on both the Properties and adjoining lands designated as Community Park and Public Shore Access.

5. Education

To provide opportunities for education and research about the ecology of area, cultural values, and any restoration or forestry related activities taking place on the land.

6. Affordable Housing

In accordance with the Galiano Island Official Community Plan Bylaw #108 (Consolidated June 1, 2006) and Land Use Bylaw #127 (Consolidated August 18, 2006), designate suitable areas where the development and operation of affordable housing, including housing for senior citizens may occur, and allow for subdivision within designated areas and subsequent transfer of the parcel(s) to, or, purchase of the parcel(s) for a nominal consideration by an incorporated non-profit society having as one of its objects the development and operation of affordable or seniors' housing.

3.1 Biological and Geographical Inventory

3.1.1 Climate

The rainshadow effect of the Olympic and Vancouver Island mountains and the moderating effects of the ocean are the dominant influences on the climate of Galiano Island. Kerr (1951) describes the Island as having a "Transitional, Cool Mediterranean Climate". Galiano exhibits a pattern of warm, dry summers and mild, wet winters with an average of approximately 1,900 to 2,000 hours of sunshine (Ronneseth and Barr, 1982) and 254 frost free days (Agriculture Canada, 1989) per annum. The average annual rainfall recorded at the North Galiano Atmospheric Environment Service station is 920 mm (from 1977 to 1988). Annual rainfall ranges from 597.3 mm to 1152.6 mm (Harrison, 1994). Over 75% of the total annual precipitation falls during the winter months (Nov. to Feb.), with less than 10% falling as snow.

The months of January and February produce the coldest mean temperatures of 4° to 5° Celsius, while July and August are the warmest months with mean temperatures of 17° to 19° Celsius. The combined effects of low precipitation, warm temperatures, and high number of sunshine hours often result in an annual moisture deficit on Galiano Island from mid-June to early October (Harrison, 1994). This deficit can often reach drought conditions in areas of recent clearcuts, such as those found on the Properties, and can result in an extreme forest fire hazard.

3.1.2 Topography

The Properties range in elevation from sea level to approximately 210 meters. In general, the topography rises gently from the Georgia Strait with a north east facing slope ending at the 210 meter elevation mark. A number of relatively flat benches are intermittently spaced along the northeast facing slope. At the height of the Properties, the terrain changes to a south / southwestern aspect and descends towards the Trincomali channel on a steep grade. This includes a ridge/cliff running from the northwest to the southeast, diagonally across the Properties.

3.1.3 Hydrology

Approximately 80% of the total area of the Properties falls within the Cook Cove Groundwater Region, with a surface flow that empties into the Georgia Strait. The remaining 20% contributes to the Montague Harbour Groundwater Region, with surface water flowing to the south/southwest into the Trincomali channel. Over 90% of the Properties are designated as Groundwater Recharge Areas, only the foreshore area along the Georgia Strait is considered as a groundwater discharge zone.

One stream and associated watershed is located on the northeast facing slope of the Properties, within the Cook Cove Groundwater Region. It is relatively small, totaling approximately 184 hectares, of which about half is encompassed by the Properties. The intermittent stream headwaters in a marsh and swamp ecosystem located in the northeast corner of Remnant, District Lot 32 and runs down through Remnant 1, District Lot 31 and out its northeastern corner. In 2006, the majority of the stream channel was dry by the end of May. The stream is fed by a number of springs along its length. In dry conditions, the springs create isolated small pools and wetted areas within the stream channel before seeping back into the groundwater. In 2006, many of the springs persisted through to the end of June; however their persistence through the remaining dry summer months was not assessed due to the timeframe of this study. The official name of the stream is not known, however it has been called "Sticks Allison Creek" in a stream mapping study conducted by the Galiano Conservancy Association. An isolated branch of this stream channel was identified in the southwest corner of Remnant 1 DL30&31. The isolated branch flows only during the late fall and winter months and drains a level area located midway up the northwest facing slope of the Properties, before disappearing back into the groundwater.

The hydrology of the Properties has been significantly impacted through the construction of logging roads and the compaction created by heavy machinery during logging. A number of roads have altered natural drainage patterns during fall and winter storm events by diverting surface flow from broad slopes into concentrated, channels or ruts along the road. This pattern is also evident along old skidder trails found within the area.

3.1.4 Wildlife

Killdeer

The Properties' diverse ecosystems support many species of animals. Fauna observed while surveying the lot are listed below.

List of bird species observed or certain to be present. The list does not include marine birds. (List compiled by Mike Hoebel)

Vultures	<u>Pigeons</u>	Woodpeckers
Turkey Vulture	Band-tailed Pigeon	Red-breasted Sapsucker
	Rock Pigeon	Downy Woodpecker
Hawks, Eagles and	Owls	Hairy Woodpecker
<u>Falcons</u>	Barred Owl	Northern Flicker
Cooper's Hawk		Pileated Woodpecker
Red-tailed Hawk	<u>Nightjars</u>	
Bald Eagle	Common Nighthawk	<u>Flycatchers</u>
Merlin		Olive-sided Flycatcher
Peregrine Falcon	<u>Hummingbirds</u>	Pacific-slope Flycatcher
	Rufous Hummingbird	Willow Flycatcher
Plovers		

<u>Vireos</u> <u>Wrens</u> <u>Tanagers</u>

Warbling Vireo Bewick's Wren Western Tanager

Hutton's Vireo House Wren

Cassin's Vireo Winter Wren <u>Sparrows</u>

Spotted Towhee

Ravens and CrowsKingletsGolden-crowned SparrowCommon RavenGolden-crowned KingletWhite-crowned Sparrow

Northwestern Crow Ruby-crowned Kinglet Fox Sparrow

Song Sparrow
Dark-eyed Junco

Grosbeaks

<u>Swallows</u> <u>Thrushes</u> Da

Northern Rough-winged Varied Thrush Swallow American Robin

Violet-green Swallow Swainson's Thrush Black-headed Grosbeak

Tree Swallow

Barn Swallow <u>Starlings</u> <u>Blackbirds</u>

European Starling Red-winged Blackbird Brown-headed Cowbird

Chickadees and Bushtits

Chestnut-backed <u>Waxwings</u>

Chickadee Cedar Waxwing <u>Finches</u>
Common Bushtit Purple Finch

 Warblers
 House Finch

 Nuthatches and Creepers
 Orange-crowned Warbler
 Red Crossbill

 Park house of a Newtonian
 Well-see and Westbern
 Pinc Sinking

Red-breasted Nuthatch Yellow-rumped Warbler Pine Siskin
Brown Creeper Townsend's Warbler American Goldfinch

MacGillivray's Warbler

Wilson's Warbler

Other fauna observed includes:

Mammals Amphibians Reptiles

Red Squirrel Red Legged Frog Northwestern Garter Snake

Raccoon Pacific Tree Frog
Columbian Black-tailed Rough-skinned Newt
Deer Long Toed Salamander

Deer Mouse River Otter

3.1.5 Soil

According to the Agriculture Canada report, *Soils of the Gulf Islands of British Columbia Volume 3*, the Properties are characterized by three different soil types from the ocean inland:

1. Saturna – Qualicum: Saturna-Qualicum soils are dominantly (45 - 60%) well-drained saturna soils, with a subdominant proportion (25 - 55%) of rapidly to well drained deep

- (>150cm), sandy loam to sand textured soils developed on glaciofluvial, fluvial, or marine deposits with 20-50% coarse fragments (Qualicum soils). In addition, bedrock exposures are the most common inclusions. This soil type occurs along the foreshore portion of the Properties.
- 2. Saturna: Saturna is the dominant soil type on the Properties and covers the majority of the gently to moderately sloping, northeast facing areas. Saturna soils are well-drained and have developed on shallow deposits of channery, sandy loam to channery, loamy sand textured, colluvial and glacial drift materials over sandstone bedrock within 100cm of the surface. Coarse fragment content varies between 20 and 50%.
- 3. Rock-Saturna: Sandstone bedrock exposed or covered with a shallow mineral soil layer or moss, mineral soils are either colluvial or glacial drift derived. Coastal cliff talus, and ridges characterize landscape position of these soils. A finger of this soil type protrudes in into the southeastern corner of Rem DL32. These are well drained soils.

3.1.6 Ecosystem Types and Associated Flora

The Properties are located within the Coastal Douglas-fir Biogeoclimatic zone. Within British Columbia, the Coastal Douglas-fir zone is considered an "Ecosystem at Risk". Due to the diverse topography and extensive history of timber extraction on the Properties prior to their transfer to the current owners in trust, the Galiano Club, they are characterized by a wide variety of both modified and natural ecological conditions. Natural ecosystem types found on the Properties include an intermittent stream, a marsh ecosystem and several swamp ecosystems along with their associated riparian ecosystems, patches of 'Mature' and maturing 'Young' forest along the foreshore characterized by shore pine (Pinus contorta), a grass dominated community along the foreshore containing flora characteristic of a Garry oak (Quercus garryanna) associated ecosystem, and a sensitive inland cliff ecosystem. The patches of mature forest along the foreshore are identified within the East Vancouver Island and Gulf Islands Sensitive Ecosystem Inventory (SEI) and are categorized as 'Second Growth Forest Conifer' with a subdominant category of 'Old Forest Conifer'. Modified ecosystem types include clearcuts, gravel pits, roads, regenerating and young forests, and hydro transmission line right of ways. A total of forty-six different natural and modified ecosystem types were identified on the Properties. Each of these ecosystem types are described in Section 8.5 of the Baseline Report and are spatially represented on Map 1 of this Plan. A representative photo of each ecosystem type has also been included in Appendix 'A' of the Baseline Report.

3.2 Disturbance History

The primary natural disturbances on the Properties are fire, wind and disease. Pathogens and wind disturbance are currently evident within forest stands of all ages and would have been the most frequent small scale disturbance for the area. Fire scars were observed on several of the older remnant trees throughout the Properties. It was not determined whether the fire scars were

of natural or human origin. Fire would have constituted less frequent (250 to 500 years) larger scale disturbances. The history of disturbance on these Properties over the past 100 years has been dominated by logging and associated road building. According to maps created by the former owner of the Properties – MacMillan Bloedel – portions of the property were logged in 1872, 1873, 1874, 1879, 1926, 1942, 1946, 1947, 1962, 1968, 1972 and 1987. In addition, satellite imagery and aerial photographic records show a large portion of the Properties logged between June 1998 and June of 2000. Use of heavy equipment and machinery for logging operations occurring over the past 30 to 40 years has impacted soil ecology over a substantial portion of the Properties through compaction, removal of organic material and general disturbance. In addition to the large scale timber harvesting operations, recent selective logging has occurred along the thin foreshore 'finger' portion of the Properties that borders on recently created residentially zoned lots. The logging likely took place just before or during the rezoning and subdivision process with a probable objective of creating a view of the ocean from the residential properties.

3.2.1 Wildfire – Summer of 2006

In the summer of 2006 a wildfire originating on a neighbouring property swept through the Heritage Forest Lands, burning approximately 27 hectares of the Properties and about 32 hectares in total (Fire perimeter is shown on Map 1). The fire was classified as a rank 3-4 according to Ministry of Forests Fire Intensity Ranks and was characterized by vigorous surface fire and frequent crowning. The portion of the fire on the Properties was generally restricted to an area clear-cut under previous ownership in 1999 with the exception of roughly one hectare that protruded into the young Douglas-fir plantation. The fire scorched and killed most of the remnant trees scattered throughout the burn area and ground cover was generally burnt down to the mineral soil (Kopetski, 2006). Fire suppression measures required the reactivation of a number of old logging roads on the site and in some cases the creation of new tracts of road and fire guard. There was disturbance to the soils resulting from the use of heavy machinery over a significant area of burn site. In addition fire suppression required aerial dispersal of fire retardant material, and extensive cutting of 'danger' trees. Post-fire rehabilitation of the site included road and fire-guard de-activation and reclamation, stream bank restoration where temporary road crossings had been created, measures to limit stream bank erosion and, general soil erosion control through broadcast seeding of native grasses. These measures were carried out in accordance with a Fire Suppression Rehabilitation Plan (September 19th, 2006 - Fire No. V60335) prepared by John Davies on behalf of the Ministry of Forests Fire Protection Branch. A student attending the University of Victoria Restoration of Natural Systems Program has also independently prepared a restoration plan for the fire area entitled "Post Fire Restoration of the Heritage Forest Area, Galiano Island, British Columbia" (Kopetski, 2006). The report outlines possible measures for further soil and stream bank erosion control as well as possible strategies for reducing the spread of Scotch Broom within the burn area.

There are currently two First Nations groups who according to the BC Treaty Commission have made an official claim to have traditionally occupied Galiano Island. The first is the Hul'qumi'num Treaty Group, which includes the Cowichan Tribes, the Chemainus Band, the Lyackson Band, the Penelakut Tribe, the Halalt Band, and the Lake Cowichan Band. The second is the Tsawwassen First Nation. No documentation regarding First Nations use specific to the Properties was found.

It is recommended that any development of detailed forestry plans includes notification of interested First Nations groups in accordance with the Silva Forest Foundation Standards for Ecologically Responsible Timber Management. It is also recommended that opportunities for collaboration with First Nations on educational materials and programs within or pertaining to the Properties be taken. Similarly, opportunities to incorporate traditional values into Forestry or Restoration management strategies and activities may be taken.

5.1 Introduction to Management Zones

Management zones provide a framework for defining where and how various activities and uses may occur within the Properties. Five Management Zones have been created:

Zone:		Percentage of total Management Area:
1.	Protected Stand Network	39.5%
2.	Sustainable Forestry Zone	43.2%
3.	Community Park/Shore Access Zone	5.0%
4.	Hydro Transmission Line Zone	6.7%
5.	Affordable Housing Zone	5.6%

The extent and locations of the Management Zones are shown on MAP 2 and are based on the ecological characteristics of the Properties, whether the management authority for the land is the Galiano Club or the Galiano Island Parks and Recreation Commission, the terms of the BC Hydro and Power Authority Rights-Of-Way, and whether the land is suitable for potential residential use.

5.2 Management Zone Definitions and Permitted Uses

A description of each Management Zone including a list of permitted uses and special restrictions is provided below. Specific policies and strategies related to the various listed uses are described later in this Plan.

5.2.1 Protected Stand Network:

The Protected Stand Network consists of areas representative of all ecosystem types (Site Series) found within the Properties and includes unique, rare or sensitive ecosystems in their entirety. The primary purpose of this Management Zone is to enhance the Conservation objective stated in Section 2.3 of this Plan. The criteria used to create this zone are reflective of guidelines found within the Silva Forest Foundation Standards for Ecologically Responsible Timber Management.

The Protected Stand Network is composed of areas characterized by one or more of the following criteria:

- 1. Rare and sensitive ecosystems: streams, wetlands, mature forest, cliffs, rocky outcrops, shoreline shrub/herb dominated areas, steep slopes > 55%
- 2. Ecosystem types with wet soils.

- 3. Ecosystem types with dry, poor and relatively shallow soils
- 4. Riparian zones 50m buffer around all aquatic features
- 5. Ridge and scree slope zones 20m buffer around all cliff areas
- 6. Areas providing connectivity with neighbouring Parks or Protected Areas and between areas characterized by criteria 1 through 5 within the Properties.

Common or zonal ecosystems found within the Properties but not included within the Protected Stand Network as a result of criteria 1 through 5 constitute areas that provide connectivity under criteria 6.

These criteria were applied to 'Ecosystem Type' mapping and associated data provided in the Baseline Report. The data was analyzed using a Geographic Information System.

Permitted Uses:

All activities occurring within this zone must be conducted in a manner consistent with the Conservation objective outlined in Section 2.3 of this Plan. With the previous condition in mind, the following uses may occur within the Protected Stand Network:

- 1. Low impact, non motorized recreational activities.
- 2. Education, research and ecological monitoring activities.
- 3. Ecological restoration.
- 4. Removal of timber as part of an ecological restoration initiative that has as it's primary objective the initiation or acceleration of the recovery of an ecosystem with respect to its health, integrity and sustainability.
- 5. Harvesting of alternative forest products that are not readily available within any other Management Zone. Such a product may only be harvested in a manner which does not compromise the integrity of the ecosystem from which it is being removed. Compliance with this condition must be demonstrated prior to any permit being granted under Section 13.3 of this Plan.
- 6. No facilities or structures may be located within the Protected Stand Network.
- 7. No new trails or roads other than those designated within Section 12.2 of this Plan may be created within the Protected Stand Network.

5.2.2 Sustainable Forestry Zone:

This Management Zone consists of lands that are currently suitable, or may become suitable in the future, for harvest of timber and/or non-timber forest products. Any forestry strategies or activities taking place within this zone must comply with the Silva Forest Foundation Standards for Ecologically Responsible Timber Management and the general policies set out in Section 13.2 of this Plan. Any non-timber forest product harvest activities must be completed in a manner consistent with the Conservation Objective stated in Section 2.3 of this Plan and the general policies set out in Section 13.3 of this Plan.

Permitted Uses:

- 1. Low impact, non motorized recreational activities.
- 2. Education, research and ecological monitoring activities.
- 3. Ecological restoration.
- 4. Harvesting of timber.
- 5. Harvesting of alternative forest products.
- 6. Facilities or structures related to forestry.
- 7. Facilities or structures related to recreation including toilets, bike racks, picnic tables, benches, and kiosks.
- 8. Facilities and structures related to educational activities including covered areas, tables, benches and signage.
- 9. New roads and trails in accordance with a permitted forestry plan may be created within the Sustainable Forestry Zone.

5.2.3 Community Park/Shore Access Zone:

This Management Zone delineates Community Park and Public Shore Access lands under the management authority of the Galiano Island Parks and Recreation Commission. This plan will describe only those management strategies and activities related to recreation and public access for this zone.

Permitted Uses:

- 1. Low impact, non motorized recreational activities.
- 2. Facilities including parking areas, toilets, bike racks and kiosks.

5.2.4 Affordable Housing Zone:

The Affordable Housing Zone delineates a broad Area of the Properties within which a smaller lot or lots may be created to accommodate affordable housing, including housing for senior citizens in accordance with the Galiano Island Official Community Plan Bylaw #108 (Consolidated June 1, 2006) and Land Use Bylaw #127 (Consolidated August 18, 2006) and the registered Section 219 Covenant.

The Affordable Housing Zone includes areas of the Properties that satisfy all of the following criteria:

- 1. Access: Must have frontage on Public Road Dedication.
- 2. Minimize forest fragmentation.
- 3. Minimize impact on protected ecology.
- 4. Adjacent to existing rural residential areas and related services.

These criteria were applied to 'Ecosystem Type' mapping and associated data and 'property boundary' mapping provided in the Baseline Report. The data was analyzed using a Geographic Information System.

Permitted Uses:

- 1. Subdivision of one or more small lots for the purposes of providing affordable housing, including housing for senior citizens in accordance with the Galiano Island Official Community Plan Bylaw #108 (Consolidated June 1, 2006) and Land Use Bylaw #127 (Consolidated August 18, 2006). Upon subdivision and simultaneous transfer to an incorporated non-profit society having as one of its objects the development and operation of affordable or seniors' housing, the newly created small lot or lots would no longer be subject to the management constraints of this Plan nor the management authority of the Galiano Club.
- 2. Low impact, non motorized recreational activities.
- 3. Education, research and ecological monitoring activities.
- 4. Ecological restoration.
- 5. Harvesting of timber.
- 6. Harvesting of alternative forest products.
- 7. Permanent facilities or structures should not be located within the Affordable Housing Zone.
- 8. New trails and/or roads other than those designated within Section 12.2 of this Plan should not be created within the Affordable Housing Zone.

5.2.5 Hydro Transmission Line Zone:

This Management Zone delineates the portion of the Properties on Remnant DL32 that is subject to a right of way registered on title in favour of the British Columbia Hydro and Power Authority. The right of way allows for the construction, erection, stringing, operation, maintenance, removal and replacement of towers and poles including anchors, guy wires, brackets, cross-arms, insulators, transformers and their various attachments as well as one or more lines of wire for the transmission and distribution of electric energy. BC Hydro and Power Authority or its assigns or successors has the right to construct and maintain roads, and to clear the right of way and keep it cleared of any trees, growth, buildings, or obstructions which might, in the opinion of BC Hydro or its assigns or successors, interfere with or endanger the transmission lines and related structures. BC Hydro or its assigns or successors must provide at least 30 days notice to the owner (Galiano Club) for any planned clearing activities. BC Hydro and Power Authority or its assigns or successors must gain the approval of the owner prior to any application of a herbicide treatment.

The agreement also stipulates that the Galiano Club may not build or create any structure on the right of way, excavate below ground level within 50 feet of any BC Hydro or its assigns or successors structure, or plant any vegetation upon the right of way which, in the opinion of BC Hydro or its assigns or successors, might interfere with or endanger the transmission lines and related structures. The Right of Way document contains a number of further specific details

pertaining to the relationship between the owner of the property and BC Hydro or its assigns or successors. The document is included as *Appendix 3* of this Plan.

Pemitted Uses:

Activities that require the creation of any type of structure or pile, the removal of vegetation or the growing of vegetation will first require the expressed permission of the BC Hydro and Power Authority or its assigns or successors. With this condition in mind, the following uses may occur:

- 1. Low impact, non motorized recreational activities.
- 2. Education, research and ecological monitoring activities.
- 3. Ecological restoration.
- 4. Harvesting of timber.
- 5. Harvesting of alternative forest products.

Where areas of the Hydro Transmission Zone overlap with the Protected Stand Network Zone, the Owners in Trust and Covenant Holders will endeavor to work in cooperation with the BC Hydro and Power Authority or its assigns or successors to reduce forest fragmentation and to minimize any impact to the ecology of the area by proposed or active management activities.



6.1 General Strategies for Conservation of Fauna

- 1. No commercial, recreational, or subsistence hunting or fishing will be permitted within the Properties. Hunting or fishing may be allowed accessory to:
 - Permitted harvest of alternative forest products in accordance with the principles outlined in Section 12.3 of this Plan.
 - Permitted ecological restoration activities in accordance with Section 7.0 of this Plan.
 - Permitted education research and monitoring activities in accordance with Section 8.0 of this Plan.
- 2. Community and academic research projects involving wildlife species and their habitat will be encouraged.

6.2 General Strategies for Conservation of Flora

- 1. There will be no removal of any native flora within the Properties with the exception of:
 - Permitted timber harvest in accordance with the principles outlined in Section 12.2 of this Plan and with the Silva Forest Foundation Standards for Ecologically Responsible Timber Management,
 - Permitted harvest of alternative forest products in accordance with the principles outlined in Section 12.3 of this Plan.
 - Permitted ecological restoration activities in accordance with Section 7.0 of this Plan,
 - Permitted education, research and monitoring activities in accordance with Section 8.0 of this Plan.
- 2. Signage requesting visitors to stay on designated trails should be put in place to minimize damage to native vegetation.
- 3. Trails will be constructed in such a manner as to avoid sensitive areas such as wildflower populations located along the shoreline or wetlands.

6.3 Control of Invasive Exotic Species

Invasive exotic species pose a threat to the ecological health of the Properties. Large tracts of invasive exotic species such as Scotch Broom can be found within the Properties in areas that have been subject to past disturbance such as clearcutting or road building and in naturally open areas such as cliffs and ridges. Controlling the spread of invasive exotic species will reduce impacts to biodiversity and improve the general ecological health of the Properties.

- 1. If resources are available, a strategic plan for the removal of invasive exotic species such as Scotch Broom may be created to maximize the effectiveness of any removal programs.
- 2. If resources are available, invasive exotic species such as Scotch Broom may be removed and subsequent seeding of native species may be undertaken.
- 3. Surrounding landowners may be encouraged to undertake measures to ensure the control of exotic species, and prevent further spread into the Properties.

6.4 Pesticides and Fertilizers

No chemical pesticides or fertilizers shall be used or applied within the Properties.

6.5 Fire

There is a high risk of fire within the Properties during months of low precipitation and warm temperatures. The risk is at its greatest in late July, August, and early September, before the autumn rains. Fuel loads within regenerating plantation and recently clearcut areas of the Properties are high and are symptomatic of high intensity wildfire conditions. Similar conditions exist on adjacent Properties. The potential consequence of wildfire within the Properties is very high due to the presence of Hydro Transmission Lines that service Southern Vancouver Island. Wildfire originating from or spreading through the Properties would also pose a threat to neighbouring lands.

Emergency response to any fire reported within the Properties is within the jurisdiction of the Local volunteer fire department. The BC Forest Service Fire Protection Branch should be alerted to any potential forest fire threat.

- 1. Open fires will not be permitted within the Properties with the exception of specially permitted controlled burning of slash or debris for fuel reduction or ecological restoration purposes under Section 7.2 of this Plan. Any controlled burning must be undertaken in accordance with the policies of all appropriate authorities including the Local volunteer fire department and the BC Forest Service Fire Protection Branch.
- 2. The public will be notified that open fires are prohibited within the Properties.
- 3. The Galiano Club will endeavour to work with other organizations to educate the public on the dangers of fire in the forests of Galiano.
- 4. Signs will be posted designating the area as a "no fire zone" and providing contact information and procedures for reporting fires.
- 5. Emergency access roads within the Properties will be maintained in order to allow fire department vehicles to access the Properties.

- 6. The Properties may be closed to public use in the event of an extreme forest fire rating.
- 7. Monitoring for fires and visitor behavior that could lead to fire may rely on local volunteers.
- 8. Opportunities to participate in collaborative programs aimed at reducing fire risk and fuel load within the Properties while maintaining or enhancing the integrity of ecosystems within the Properties may be explored.

6.6 Climate Change

Management of the Properties should consider long-term ecosystem health in light of potential significant shifts in local climate conditions resulting from global warming. Minimizing the impacts of climate change will depend on the level of ecosystem resiliency or the ability of ecosystems to adapt to shifting conditions. In turn, ecosystem resiliency is dependent on a healthy biodiversity and maintaining connectivity or protecting pathways of species migration. This plan has considered these key components of ecosystem resilience in all aspects of the management of the Properties and through the creation of the Protected Stand Network Zone.

6.7 Threats to Flora and Fauna by Owners of Adjacent Private Lands or Through Trespass.

Impacts to the ecology of the Properties may occur as a result of management activities occurring on adjacent private lands or through trespass on the Properties. An example of a trespass activity is tree cutting for views by owners of adjacent lands or for firewood by a member of the Public. Examples of impacts stemming from management activities on adjacent lands include the contamination of surface and ground water through the use or misuse of pesticides and other toxic materials or the spread of invasive exotic species. Strategies for reducing the likelihood of these impacts occurring are as follows:

- 1. Contact and inform adjacent landowners about the existence, location and general management objectives of the Properties.
- 2. Ensure that property lines bordering on residential areas are well marked.
- 3. Complete regular informal volunteer monitoring of areas of the Properties that are accessible from adjacent private lands.
- 4. Impacts to the Properties that result from activities taking place on an adjacent property or activities conducted on the Properties though trespass should be reported to the Galiano Club. The Galiano Club should then notify the covenant holders at which time an appropriate course of action will be determined.

7.1 Ecological Restoration Policy

As outlined in the Baseline Report, a large portion of the Properties has been impacted by intensive timber harvesting, road building and associated use of machinery over the past 35 years. Past land use activities within the Properties have resulted in damaged soil ecosystems, impacts to hydrology, destruction of wildlife habitat, the spread of invasive exotic species and an overall reduction in biotic diversity. Over time, natural processes will heal the damaged landscape. However, there is potential for helping the land heal through the initiation of ecological restoration projects. The Society for Ecological Restoration (SER) International Primer on Ecological Restoration defines ecological restoration as:

"The process of assisting the recovery of an ecosystem that has been degraded, damaged, or destroyed. It is an intentional activity that initiates or accelerates ecosystem recovery with respect to its health (functional processes), integrity (species composition and community structure), and sustainability (resistance to disturbance and resilience)."

The SER International Primer on Ecological Restoration (Society for Ecological Restoration International Science and Policy Working Group, Version 2, October 2004) is included with this plan in *Appendix 4*.

The initiation of ecological restoration projects or programs within the Properties is desired and may be facilitated by the Galiano Club. In addition, the integration of ecological restoration principles and/or activities into all aspects of the management of the Properties will be encouraged. Policies guiding the initiation of ecological restoration projects, programs and activities are as follows:

- 1. All ecological restoration projects, programs or activities will require authorization by the Galiano Club prior to initiation.
- 2. Galiano Club may authorize the initiation of ecological restoration projects or ongoing ecological restoration programs on a case by case basis. The Galiano Club shall specify conditions that, in their opinion, are adequate to ensure that the ecological integrity of the Properties is not jeopardized by the proposed activities.
- 3. Proposed ecological restoration projects or programs should generally adhere to the Society For Ecological Restoration (SER) International's "Guidelines for Developing and Managing Ecological Restoration Projects, 2nd Edition" (Clewell, Rieger and Munro, 2005). This document is also included in *Appendix 4* of this Plan. The degree to which projects or

programs must adhere to the SER International guidelines is dependent on the scope and impact of the proposal. The level of adherence to the guidelines is at the discretion of the Galiano Club.

7.2 Use of Fire In Ecological Restoration Projects or Programs

The potential for using controlled burns to achieve ecological restoration objectives as well as to reduce fuel loads within the forest is well documented. Projects or programs that propose the use of fire as a tool for ecological restoration or fuel load reduction may be permitted in accordance with the policies stated in Section 8.1 of this Plan. In addition, any such project or program must comply with the following policies:

- 1. Projects or programs must be undertaken in accordance with local fire regulations.
- 2. Projects or programs should consult the BC Forest Service Fire Protection Branch.
- 3. Projects or programs must be overseen both conceptually and in the field by a qualified and experienced Fire Boss.
- 4. Project proponents will endeavour to notify owners or inhabitants of neighbouring Properties prior to carrying out any controlled burn activity.

8.1 Formal Education, Ecological Monitoring and Research Policy

In keeping with the Conservation Objective as stated in Section 2 of this Plan, the Properties will provide opportunities for learning within the Galiano community and for educational institutions or agencies throughout the region. Policies regarding the activities of formal researchers, monitoring studies and educational users are modeled after regulations outlined by British Columbia's *Ecological Reserve Act*. The policies are as follows:

- 1. Formal research or educational use within the Properties may be undertaken only when authorized pursuant to this plan. Fees may be charged by the Galiano Club.
- 2. The Galiano Club may authorize the use of the Properties for research or education on a case by case basis. The managers shall convey conditions that, in their opinion, are adequate to protect the Properties and any ongoing research from disruption; provided however that minimally disruptive procedures such as collection of some plant and animal specimens, soil and water samples, and the like, may occur with specific authorization.
- 3. The Galiano Club shall not authorize research or educational use that is likely to cause any significant disruption within the Properties without first consulting the covenant holders The Galiano Conservancy Association and Habitat Acquisition Trust.

8.2 Informal Interpretive and Naturalist Activities

The Galiano Club will encourage the use of the Properties for informal interpretive and naturalist activities for the Galiano Community. The Galiano Club will achieve this through the development of partnerships with appropriate local organizations such as the Galiano Naturalists, the Galiano Conservancy Association or the Galiano Island Forest Association. Any activities proposed by educational partners should first notify the Galiano Club.

Section 9.0 Access

9.1 Types of Access to the Properties

Access to the Properties falls under four major categories:

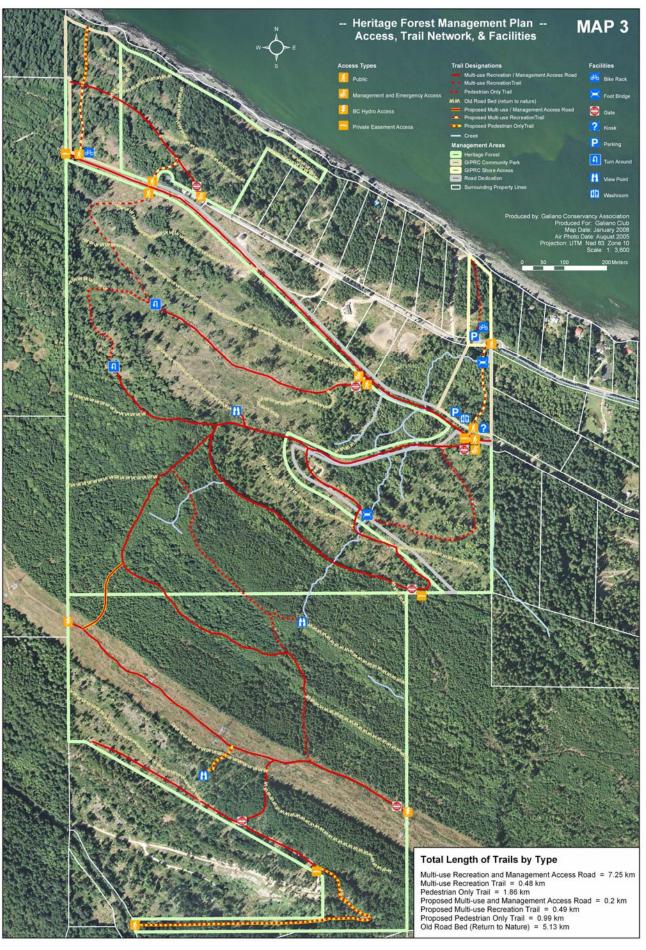
- 1. Public Access: Limited to non-motorized use including foot traffic, horses and bicycles.
- 2. Private Easement Access: Limited to owners of lands beyond with registered easements on title of one or more of the Properties. Private Easement Access includes motorized vehicles.
- 3. Management Related and Emergency Access: Limited to vehicles and equipment for emergency response purposes and for carrying out permitted management activities such as the carrying out of planned forestry programs, ecological restoration programs the ongoing maintenance of the Properties.
- 4. BC Hydro Access: Limited to vehicles and equipment required for the management of Hydro Transmission Lines within the Hydro Transmission Line Zone and for emergency response purposes.

Access points and their designations are shown on MAP 3.

9.2 Gates and Barriers

Gates or barriers will be required in order to prevent public access to the Properties by motorized vehicles. The following actions will be taken:

- 1. Determine an appropriate design and secure the material for the required barriers. Barriers should be as inconspicuous as possible, minimizing their effects on the aesthetic qualities of the Properties. They must also be easy to remove in order to accommodate vehicles in the event of an emergency.
- 2. Lockable Barriers will be placed at a number of locations as shown on MAP 3.
- 3. Keys to all barriers will be given to the local volunteer fire department, the Ambulance Unit Chief and RCMP officer on the Island. In addition keys will be available for those property owners who require use of easements across the Properties to access their lands beyond.
- 4. In the event that unauthorized access by motorized vehicle is occurring and cannot be controlled through discussion or raising awareness, the creation of lockable barriers or permanent decommission of roads in identified problem locations may be necessary.



10.1 Visitor Use

A variety of environmentally compatible, out door recreational activities may occur within the Properties. Dedicated trails will provide opportunities for cycling, walking/hiking, horseback riding, and naturalist activities as well as access to the shoreline areas. Overnight camping or public use of motorized vehicles is not permitted within the Properties. Visitors will not be allowed to remove any cultural or natural component of the Properties, including wildflowers, fungi, and archaeological artifacts, unless specifically permitted by the Galiano Club.

10.2 Commercial Use

Any commercial use of the Properties without the expressed written consent of the Galiano Club will be strictly prohibited. Fees may be charged for permitted activities. This regulation encompasses activities such as guided tours, commercial education programs, movie productions, dog walking services etc.

10.3 Dogs

Dogs must be under the control of their owners at all times within the Properties. This plan recommends that the issue of unleashed dogs be reviewed as necessary, so as to assess whether any conflicts with visitors, wildlife, or wildlife habitat have occurred. If this is the case, appropriate measures will be taken by the Galiano Club to ensure that visitors and the natural values of the Properties are protected.

10.4 Conflicts between Recreational Users

This management plan acknowledges that the uses permitted within the Properties may conflict with one another from time to time. The following strategies should minimize conflicts and provide direction for resolving any conflicts:

- 1. Provide signage at access points clearly stating types of uses permitted and where or on which trails each use may occur.
- 2. Provide signage at access points that states appropriate contacts for reporting conflicts and inappropriate use within the Properties including the RCMP and the Galiano Club.

- 3. If resources are made available, install appropriate stiles or fencing to deter use of pedestrian only trails by cyclists and horseback riders.
- 4. In the event of regular or consistent occurrence of conflicts between users the Galiano Club may research possible activities or strategies to address the problem including the possibility of amending this Plan to eliminate a permitted use from the Properties.

Section 11.0 Recreation Facilities

11.1 Parking

Parking facilities for the Properties for use by recreational day users will be located within the Community Park/Shore Access Zone at the two public access points – one at the end of Sticks Allison Road and the other on the eastern boundary of the Properties adjacent to the cul-de-sac on Georgia View Road. No formal parking facilities currently exist for the Properties. Presently, visitors to the Properties use the cul-de-sac at the end of Georgia View Road as a parking area. Parking on the shoulder of Georgia View Road has to date been adequate for the limited amount of public access to the Properties. It is anticipated that this will change once this Plan is in place and public awareness about the recreational opportunities within the Properties increases. Parking strategies are as follows:

- 1. The GIPRC will plan for the provision of parking facilities within the Community Park/Shore Access Zone to accommodate visitors accessing the Properties for recreation day-use purposes only from both Sticks Allison Road and Georgia View Road.
- 2. Community consultation, including the R.C.M.P and the local volunteer fire department, will occur.
- 3. Notify and consult as necessary with the BC Ministry of Transportation about proposed parking facilities.
- 4. Parking will not be permitted in front of emergency vehicle access points.
- 5. The placement of "No Parking" signs at emergency vehicle access points will be considered.
- 6. Consultation with adjacent land owners regarding the reduction of disturbance to private property (noise, trespassing etc.) will occur prior to the implementation of parking strategies.
- 7. Visiting groups will be encouraged to use a minimum number of vehicles or arrange for drop-off / pick-up transportation.

11.2 Trails

11.2.1 General Trail Policies

A trail network has been created in order to accommodate recreation, sustainable forestry, ecological restoration, education, research and monitoring activities within the Properties. Additional trails may be created to achieve future specific sustainable forestry and ecological restoration objectives proposed and permitted in accordance with the policies outlined in this Plan. General policies regarding trails and trail creation are as follows:

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- 1. Trail widths should be minimized in order to reduce forest fragmentation.
- 2. Trails should not run along sensitive, shallow soiled ridge and shoreline areas.
- 3. Trails should not run through wetlands or areas characterized by wet soils.
- 4. Trails used by vehicles for management purposes may not be located within 30 meters of wetlands or ponds.
- 5. Wherever possible, trails should follow old road beds or skidder tracks created during logging events that took place prior to the transfer of the Properties to the Galiano Club.
- 6. Use of old road beds and skidder tracks that are not part of the trail network outlined in this Plan should be discontinued and they should be left alone to naturalize. Should resources become available, these roads could be considered for planned ecological restoration activities.
- 7. Any trails, whether currently in use or being left to return to nature, that lead to lands beyond the Properties should be marked with "No Trespassing" or "Private Property" signs at the Properties lot lines.
- 8. Trail markers should be used where designated trail routes are confusing for example, where junctions between designated trails and old road beds that are being left to return to nature occur.
- 9. Where possible, when creating trails within the Properties, consideration should be given to integrating these trails as part of the larger Galiano Trail Network Plan developed by the Galiano Island Parks and Recreation Commission.

11.2.2 Types of Trails

Trails will support recreational uses within the Properties including walking/hiking, cycling, horseback riding and naturalist activities. Suitable trails will also provide access routes for management activities and emergency response vehicles. There is approximately 10.5 kilometers of designated trails within the Properties. Trails are designated under the following three categories (Trail routes and their designations are shown on MAP 3):

- 1. Pedestrian Only Trails: These trails are designated for foot traffic only to prevent impacts on sensitive areas by bicycles and horses. These trails should be maintained at a width and standard suitable for single track hiking.
- 2. Multi-use Recreation Trails: All permitted recreational activities may occur on multi-use trails. Motorized vehicles may not use these trails for management purposes. These trails should be maintained at a width that will allow two cyclists to pass and a standard that is passable for the average cyclist.
- 3. Multi-use Recreation and Vehicle Access Trails: These trails may be used for all recreational activities, and by motorized vehicles for permitted management, maintenance or emergency purposes. These trails should be maintained at a width suitable for single lane traffic and at a standard that is passable for a four wheel drive vehicle.

11.2.3 Trail Maintenance

Many of the trails designated on MAP 3 are currently (Fall 2007) overgrown, untended and in many cases impassible to motorized vehicles. As a result, significant maintenance - in some cases including machine work - is required in order for these trails to provide for the intended uses and comply with the intended standards designated within this Plan. Policies regarding trail maintenance are as follows:

- 1. Trails that are currently overgrown or impassible should be brought up to a standard that will accommodate the intended uses designated within this Plan. The timeline required to complete this work is unspecified as it is dependent on the availability of volunteer and financial resources. Priority should be given to opening up all designated trails within the Properties to a standard suitable for pedestrian use. Upgrading trails to a standard suitable for multi-use recreation and motorized vehicle use can then be considered.
- 2. Trail conditions may be monitored by volunteers and by visitors to the Properties. Signage at access points to the Properties could provide a means for reporting trail maintenance concerns.
- 3. Maintenance for trails designated for vehicle access should be done in consultation with an experienced road builder.
- 4. Subject to the availability of resources, trails should be maintained in order to provide a safe recreational experience and to reduce deterioration of the surrounding ecology by trail widening and erosion.
- 5. Should resources for trail maintenance not be available and trail conditions are deteriorated to a point where there are concerns for public safety or significant ecological impact, the trail(s) in question should be closed to the Public.
- 6. If certain recreational uses are causing extensive and consistent damage to specific trails, the exclusion of those damaging uses may be considered.
- 7. Maintenance standards for trails designated for management and emergency vehicle use should be determined in consultation with the local emergency services.
- 8. On pedestrian only trails, consider adjusting trail route around fallen trees rather than moving or cutting them.

11.3 Toilets

Toilet facilities may be located within the Community Park/Shoreline Access Zone as indicated on MAP 3. The Galiano Island Parks and Recreation Commission would purchase, operate and maintain such a toilet facility.

11.4 Turn-arounds

Turn-arounds may be located at the endpoints of trails designated for use by motor vehicles as indicated on MAP 3. Turn-arounds will be large enough to accommodate a standard pick-up truck completing a three point turn.

11.5 Garbage

Garbage cans or related facilities may, if deemed necessary by the Galiano Club, be provided within the Properties. All management activities will ensure that no garbage is left on the Properties and will work toward the general goal of creating no waste or refuse. Visitors will be expected to "carry out what they carry in". As the number of visitors to the Properties increases, the amount of garbage that they leave behind may create a problem, at which time provisions in this Plan may need to be revised. Non-biodegradable refuse has accumulated on a variety of sites over the years and needs to be removed. In addition, logging cables, and other miscellaneous items have been reported. The following actions may be taken:

- 1. Post signage and organize educational activities that will encourage visitors to take responsibility for their own and other garbage.
- 2. Organize volunteer work parties as needed, removing garbage, abandoned structures, and miscellaneous items.

11.6 Signage

Signage will provide information to users of the Properties. A main information sign will be located within the Community Park/Shore Access Zone at the Georgia View and Sticks Allison access points on large sign boards as shown on MAP 3. The sign board should blend in with their natural surroundings as much as possible and must adequately protect any information or signage from year round weather conditions. The Galiano Island Parks and Recreation Commission may contribute resources to develop and create an appropriate sign board. The Galiano Club must approve of any information displayed on the sign boards. Signage should communicate the following information:

- 1. Map showing trail locations, trail uses and locations of facilities.
- 2. Guidelines for Public use of the Properties including "No Hunting or Discharge of Firearms", "No Fires", and "No Camping".
- 3. Where and how to report wildfire, trail maintenance issues, behavior of visitors that causes damage to natural amenities, removal of natural amenities, and damage to facilities.

- 4. Educational information about the ecology and natural features of the Properties
- 5. Information about the management objectives for the Properties, including that the Properties have specific goals for sustainable forestry.
- 6. Notification and/or explanation of any trail closures or management activities occurring within the Properties.
- 7. Opportunities for community participation in any recreation, education, research, monitoring, ecological restoration, sustainable forestry or non-timber forest product harvest activities.
- 8. Acknowledgement of organizations and partnerships involved in the management of the Properties.

11.7 Bridges

Bridges are required at two points where trails cross the seasonal creek shown on MAP 3. One bridge will be located within a Community Park managed by the Galiano Island Parks and Recreation Commission along a trail designated for multi-use recreation. As a result, the construction of the bridge or stream crossing should be completed to a standard appropriate for the accommodation of foot traffic, bicycles and horse traffic. The other bridge should be located on the Properties along a trail designated for foot traffic only and should be constructed to a standard suitable for pedestrian use.

- 1. If bridges become unsafe or unpassable, trails leading to the bridges should be closed until appropriate maintenance or repairs have been completed.
- 2. No treated wood or toxic finishes may be used during bridge construction or maintenance.

12.1 Types of Sustainable Forestry Activities

Sustainable forestry includes the harvest of timber through tree cutting, the harvest of non-timber forest products and all activities associated with the enhancement or tending of the targeted species or product. Harvest of timber and non-timber products may occur in isolation or as part of a single comprehensive plan. All harvest activities will require a permit.

12.2 Timber Harvest

Current ecological conditions within the Properties are not well suited for the implementation of a self sustaining ecologically responsible timber harvesting operation. A successful timber harvest program may not be possible for several decades until the majority of trees on the Properties have matured. However, with some ingenuity a restorative harvest of existing young timber for specialty products, resulting in partial cost recovery may be possible. The following policies apply to sustainable forestry projects or programs:

- 1. All sustainable forestry related projects, programs or activities will require a permit issued by the Galiano Club.
- 2. Proposed sustainable forestry projects or programs must adhere to the Silva Forest Foundation Standards for Ecologically Responsible Timber Management (May 1998 Proof) and must provide a written plan in order to qualify for a permit. Any data collection or inventory activities required by the proponent in order to produce a written plan must be done in accordance with Section 8.1 (Formal Education, Ecological Monitoring and Research Policy) of this Plan.
- 3. The Galiano Club may authorize permits for sustainable forestry related projects or programs on a case by case basis. Covenant Holders will be notified and consulted prior to any authorization. The Galiano Club shall convey conditions that, in their opinion, are adequate to ensure that the ecological integrity of the Properties is not jeopardized by the proposed activities.
- 4. Costs associated with all information gathering, planning, implementation, and ongoing monitoring of any sustainable forestry project or program as well as any directly related ecological restoration project or program will be incurred by the proponents.
- 5. Fees may be charged and fee structures may be put in place in association with permit authorization.

12.3 Non Timber Forest Product Harvest

Non-timber forest products (NTFPs) are all of the botanical and mycological species of the forest and their derived products, excluding conventional wood products such as timber, pulpwood and shakes. NTFPs include wild foods, craft and art products, floral greenery, medicinals, bio-fuels and forage (Cocksege, 2007). The following policies apply to the harvest of NTFPs:

- 1. All sustainable NTFP related projects, programs or activities will require a permit issued by the Galiano Club.
- 2. The Galiano Club may authorize permits for sustainable NTFP harvest on a case by case basis. Covenant Holders will be notified and consulted prior to any authorization. The Galiano Club shall convey conditions that, in their opinion, are adequate to ensure that the ecological integrity of the Properties is not jeopardized by the proposed activities.
- 3. Evaluation of a proposed NTFP activity should include consultation with the Centre for Non-Timber Resources at Royal Roads University.
- 4. Fees may be charged to cover the costs associated with any ecological evaluation including mapping and inventory required prior to issuing a permit.
- 5. A fee may also be charged for the permit and will depend on the scale and profitability of the activity.
- 6. Permits may be either volume based or area based and may stipulate restrictions or standards that the proponent must comply with.

Provisions for subdivision of the Properties to create one or more small lots for the purposes of affordable housing, including housing for senior citizens, are part of the Galiano Island Official Community Plan Bylaw #108 (Consolidated June 1, 2006) and Land Use Bylaw #127 (Consolidated August 18, 2006) and are also stipulated within the Section 219 covenant registered on title of the Properties. Any proposal for affordable housing and any activity associated with the realization of affordable housing is the responsibility of an incorporated non-profit society having as one of its objects the development and operation of affordable or seniors' housing. The Galiano Club will consider proposals for subdivision of a lot or lots that have support within the Galiano community and the support of the Galiano Island Local Trust Committee. The Galiano Club requires that all costs associated with the subdivision of the Properties, legal consultations, rezoning of the Properties and transfer of title are provided through the incorporated non-profit society having as one of its objects the development and operation of affordable or seniors' housing. The following policies will apply in the event of a subdivision for the purpose of affordable housing including housing for senior citizens:

- 1. The proposed lot location(s) should minimize fragmentation of forest ecosystems.
- 2. Any maintained trails or roads that exist within the boundaries of a newly subdivided Affordable Housing lot(s) should be re-routed to an appropriate area of the Properties.
- 3. Management activities on the Properties occurring within close proximity of any newly subdivided lot(s) should be evaluated in terms of their compatibility with residential use and addressed appropriately by the Galiano Club.

14.1 Insurance

The Section 219 Covenant requires that each Covenant Holder and the Owner will obtain and maintain general liability insurance in an amount not less than \$2,000,000.00 – with the Covenant Holders naming the Owner, and the Owner naming the Covenant Holders as additional insured - against claims for personal injury (including death) and property damage.

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Section 15.0 Communications

Knowledge about the Properties and the activities taking place within them, will from time to time, be communicated to the Galiano Community. Opportunities for participation in permitted activities should be well publicized. Transparency around the management of the Properties is of utmost importance.

Any revisions or changes to the intent or policy of this Plan or the approval of plans for sustainable forestry must be approved by the Covenant Holders (Galiano Conservancy Association and Habitat Acquisition Trust) and the membership of the Galiano Club. In addition, notification of any proposed changes should be communicated to the Galiano Community through local print media, by mailout or through advertised open houses.

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Silva Forest Foundation Standards for Ecologically Responsible Timber Management. May 1998 Proof. Silva Forest Foundation. Slocan Park BC.