

Cortes Forestry General Partnership Community Forest K4G

Forest Stewardship Plan

Draft October 2019

Plan Preparer

I certify that the work described herein fulfills the standards expected of a member of the Association of British Columbia Forest Professionals and that I did personally complete the work covered in this Plan.

October 8, 2019

Ione M. Brown, RPF

Hecate Integrated Resources Ltd

Date

Authorized Licensee

Kevin Peacey Co-Chair

Cortes Forestry GP

Aaron Ellingson, Co-Chair

Cortes Forestry GP

Date

Date

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ABBREVIATIONS, ACRONYMS, AND DEFINITIONS USED WITHIN THE FSP

CFA means community forest agreement

FDU(s) means forest development unit(s)

FPPR means the Forest Planning and Practices Regulation under FRPA

FRPA means the Forest and Range Practices Act

FSP means Forest Stewardship Plan

Free Growing Stand means a stand of healthy trees of a commercially valuable

species, the growth of which is not impeded by competition

from plants

GAR means the Government Action Regulation under FRPA

GMZ Under the Vancouver Island Land Use Plan, describes a General

Management Zone

HLP means – Higher Level Plan with established objectives by

government

IWMS means Identified Wildlife Management Strategy as defined in

version 2004

LUP means landscape unit plan: Higher Level Plan with established

objectives

Net area to be reforested means the area specified in a silviculture site plan which is

scheduled for basic reforestation (net area of block only)

OGMA(s) means old growth management area(s)

Primary Forest Activity As defined in FPPR Section 1(1) means one or more of a) timber

harvesting, b) silviculture treatments, or c) road construction,

maintenance and deactivation

Qualified Person means a person who by experience and/or education is

considered knowledgeable and able to provide advice on a given

subject in a given situation

Qualified Professional means a person who by education, experience and professional

credentials is considered knowledgeable and able to provide expert advice on a given subject in a given situation and is licensed or regulated by a governing body or association

RMZ means riparian management zone where activities are prescribed

in order to protect the adjacent stream

RMA means riparian management area where defined practices are

carried out to protect stream banks or RRZ

RRZ means riparian reserve zone where trees are retained to

maintain stream integrity, unless an exemption is provided for a specific circumstance or situation that must be provided for by a

Qualified Professional

UWR Ungulate Winter Range: identified habitats for critical winter

survival of ungulates (deer and/or elk)

VILUP means the Vancouver Island Land Use Plan (Higher Level Plan)

WHA means Wildlife Habitat Area that has been formally designated

through GAR or grandparented for a particular wildlife species of

concern for a region

WTRA means wildlife tree retention areas

FOREST STEWARDSHIP PLAN

1. INTRODUCTION

The Cortes Forestry General Partnership (CFGP) holds a Community Forest Agreement K4G that was awarded in August 2013 by the Ministry of Forests, Lands, Natural Resource Operations and Rural Development (MFLNRORD). This entity is an equal partnership between the Klahoose Forestry No 2 Limited Partnership (KF2LP) and the Cortes Community Forest Cooperative (CCFC) who are tasked with managing the 3,862 hectares of Crown land on Cortes Island.

The 'Vision', 'Mission Statement', 'Values', and 'Governing Principles' of forest management developed by the community for Community Forest Licence K4G are outlined on the website http://www.cortesforestrypartnership.com/ and found within the Cortes Forest Management Objectives (CFMO), which can be located on the website and will be updated periodically. Current version is September 2019.

2. APPLICATION OF THE FSP (FRPA S.3(4))

The holder has prepared this Forest Stewardship Plan (FSP) as required under s.3(4) of the *Forest* and *Range Practices Act (FRPA)*, in order to carry out and plan primary forest activities within Forest Development Units (FDUs). Reference to the legislation within this FSP refers to any legislation as it was on the date of submission of this FSP.

The FSP contains the following components:

- 1. Map illustrating the FDU within which primary forest activities may occur, and
- 2. Results and/or Strategies to address objectives set by government or through Higher Level Plans

LICENSEES AND LICENCES

This FSP applies to the Holder of Community Forest Agreement K4G, the Cortes Forestry General Partnership.

AREAS SUBJECT TO CUTTING PERMIT OR ROAD PERMIT

Cutting Permits and Road Permits in effect as of the date of submission of this FSP are not part of the review for this FSP.

TERM OF THE FSP (FRPA S.6(1))

The term of this FSP will be for five years. The FSP may be terminated earlier if the licensee(s) elects to replace it with another approved FSP, or the FSP may be extended pursuant to the FRPA and its regulations.

COMMENCEMENT OF TERM OF THE FSP (FRPA S.6(1)(B))

The term of this FSP commences on the date specified by the Minister or his Delegated Decision Maker (DDM).

3. MAP (FRPA SECTION 5(1)(A) AND FPPR S.14)

The FSP Map shows the areas that are within the boundary of the FDU that may be available for primary forest activities and also those areas that are within the boundary of the FDU but are not part of the FSP.

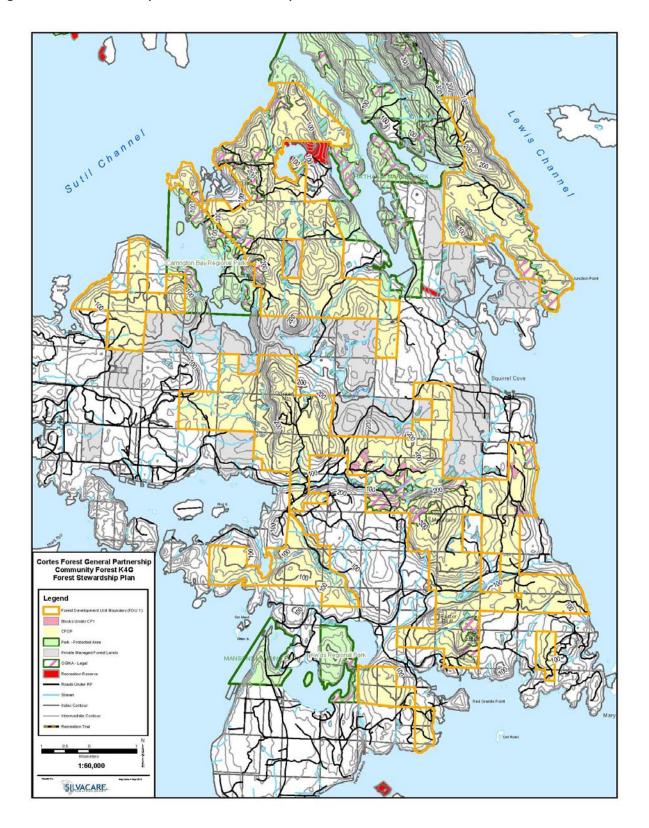
As per s.14(3) of the *Forest and Range Practices Act (FPPR)*, the FSP describes the elements that have been identified and in effect as of the Date of Submission of this FSP and where those elements are applicable to this FSP. These elements are shown on the FSP mapping where applicable, as follows (not all of the following occur in the areas under this FSP):

- Ungulate winter range,
- Wildlife habitat area,
- Fisheries sensitive watershed,
- Lakeshore management zone, including specifying the width of the zone, if the zone is identified on a map accompanying the establishment of the lakeshore management zone,
- Scenic area,
- Lake identified as an L1 lake under section 49 (1) (b) (ii) if the lake has been identified on a map accompanying the identification,
- Community watershed,
- Old growth management area,

- Parks and protected areas
- Recreation sites and trails
- Special Resource Management Zones (Vancouver Island Land Use Plan)
- Area in which commercial timber harvesting is prohibited by another enactment,

Additional elements may also be shown on the FSP mapping and are identified on the map legend for reference.

Figure 1: Forest Stewardship Plan Area Overview Map



4. DESIGNATION AND OBJECTIVES IN EFFECT UNDER FPPR S.14

The following land use designation, objectives and notices apply to the FSP. Details are found in the appendices of this plan:

Vancouver Island Land Use Plan - Order (October 24, 2000)

Cortes Landscape Unit Plan (2012)

Order Establishing OGMAs for the Sunshine Coast District ((2012)

Species at Risk Notice – Sunshine Coast Forest District – (Dec 2004 rev Mar 2006)

K4G Cutting Permit ZZ (not included as a document in this FSP)

5. GRANDPARENTED DESIGNATIONS - (FRPA S. 181)

Under s. 180 and 181 of *FRPA* the following designations are grandparented and shown on the FSP mapping in the appendices.

Recreation Sites

No other grandparented designations, objectives or measures are found within the areas under this FSP.

RESULTS AND STRATEGIES (FRPA S.5(1)(B)

Objectives Set by Government are outlined in s.149 (1) of FRPA. In addition the area is subject to grandparented objectives that result from previous executive orders as they relate to the Vancouver Island Land Use Plan. As per s.5(1)(b) of the FRPA, a FSP must specify intended results or strategies, each in relation to (i) objectives set by government and (ii) other objectives that are established under the Act or the regulations and that pertain to all or part of the area subject to the plan.

The FSP holder has set out results and/or strategies to meet all objectives that are required for areas under this FSP. Results and strategies are written to meet the following standards:

- ➤ **Results** are written to be measurable or verifiable outcomes in respect of each particular objective, and describe the situation or circumstance where the outcomes will be applied.
- > Strategies are written to be measurable or verifiable steps or practices that will be carried out in respect of each particular objective, and the situation or circumstance where the steps or practices will be applied.

As per s.5(2)(b) of *FRPA*, a FSP must also be consistent with timber harvesting rights granted by the government for Community Forest Agreement area for K4G.

Applicable Areas

The FSP covers the tenure area of Community Forest K4G, which falls within one Forest Development Unit (FDU 1).

All of the results and strategies in this FSP apply to FDU 1.

6. OBJECTIVES RESULTING FROM HIGHER LEVEL PLANS FRPA S.5(1)(B)(II)

VANCOUVER ISLAND LAND USE PLAN-HIGHER LEVEL PLAN (HLP) ORDER

The objectives set by government for land use designation were defined by the established order identified in Appendix C in this document. The Vancouver Island Land Use Plan (VILUP) took effect in October 2000, which has established land use objectives for Special Management Zones and Resource Management Zones (Enhanced Forestry Zones) within the VILUP area. The Vancouver Island Land Use Plan Summary document (2000) is used as background information for establishing the importance of certain values in the area and including this information into the planning for development in areas under this FSP.

Results, Strategies or Measures

Although the FDU falls within the VILUP area, there are no objectives within the HLP itself that apply to the FSP. No results or strategies are required to meet the objectives within the HLP.

ORDER ESTABLISHING PROVINCIAL NON-SPATIAL OLD-GROWTH OBJECTIVES

The Non-Spatial Old Growth Order (NSOGO) was signed by the Minister of Sustainable Resource Management (note previous Ministry name) and took effect June 30, 2004. This order applies to areas under this FSP and supplements *FPPR* Section 9.

Results, Strategies or Measures

The NSOGO has been replaced by the Old Growth Management Areas Order (Appendix E) for the Cortes Landscape Unit. The FSP holder has developed results and/or strategies to meet the OGMA Order which can be found in the section for OGMAs below.

No further results, strategies or measures are required to meet the objectives of the NSOGO.

ORDER ESTABLISHING OLD GROWTH MANAGEMENT AREAS

Old Growth Management Areas (OGMAs) within the Cortes Landscape Unit have been established by Order of the Minister July 10, 2012

Strategy

The FSP holder(s) will comply with the applicable objectives of the legal order for OGMAs within the Cortes Landscape Unit.

7. OBJECTIVES PRESCRIBED UNDER FRPA SECTION 149

SOIL RESOURCES (FPPR S.5)

The objective set by government for soils is, without unduly reducing the supply of timber from British Columbia's forests, to conserve the productivity and hydrologic function of soils.

Strategy

The FSP holder will comply with the objectives set by government for soils (FPPR s.5).

The default limits (practice requirements) for soil disturbance and for permanent access structures as per s.35 and s.36 of the *FPPR* will apply and no result and/or strategy is required for these sections.

TIMBER RESOURCES (FPPR S.6)

The objectives set by government for timber are to:

- a) Maintain or enhance an economically valuable supply of commercial timber from British Columbia's forests,
- b) Ensure that delivered wood costs, generally, after taking into account the effect on them of the relevant provisions of this Regulation and of the Act, are competitive in relation to equivalent costs, in relation to regulated primary forest activities in other jurisdictions, and
- c) Ensure that the provisions of this Regulation and of the Act that pertain to primary forest activities do not unduly constrain the ability of a holder of an agreement under the Forest Act to exercise the holder's rights under the agreement.

Result and/or Strategy

The FSP holder is exempt from the requirement to develop a result or strategy to meet this objective, therefore no result or strategy is required.

WILDLIFE RESOURCES (FPPR SECTION 7, UWR AND SPECIES AT RISK)

- 1. The objective set by government for wildlife is, without unduly reducing the supply of timber from British Columbia's forests, to conserve sufficient wildlife habitat in terms of amount of area, distribution of area and attributes of those areas, for
 - (a) the survival of the species at risk;
 - (b) the survival of regionally important wildlife; and

- (c) the winter survival of specified ungulate species.
- 2. Aperson required to prepare a forest stewardship plan must specify a result or strategy in respect of the objective stated under subsection (1) only if the Minister of Environment (MFLNRORD), or a designated official, notifies the person of the applicable, (a) species referred to in subsection 1), and (b) indicators of the amount, distribution and attributes of wildlife habitat described in subsection (1).

Strategy

The FSP holder will comply with the objectives set by government for wildlife.

Where an area is identified by the FSP holder as having populations of species at risk but does not have the attributes listed within the Notice, the FSP holder will incorporate the recommendations provided by a Qualified Professional into plans for conserving wildlife habitat consistent with the s.7 Notices. The FSP holder will conserve and track the amount, distribution and attributes of wildlife habitat in a manner consistent with the Notice.

Orders Establishing Ungulate Winter Range

There are no established Ungulate Winter Range areas established in areas under this FSP. Should such areas become established at a future date, the FSP holder will amend this strategy accordingly.

Orders Establishing Wildlife Habitat Areas

There are currently no approved Wildlife Habitat Areas (WHAs) in areas under this FSP. However there are proposed WHAs within the Sunshine Coast Natural Resource District for Northern Goshawk (MFLNRORD letter May 28, 2019). Upon approval of these proposed WHAs, persons required to prepare a FSP will be exempted from the obligation to prepare results or strategies for Northern Goshawk to meet the s.7(2) Notices, in the mature THLB in the Sunshine Coast Natural Resource District. None of these proposed WHAs fall within areas under this FSP.

Marbled Murrelet (Brachyramphus marmoratus)

An inventory identifying Marbled Murrelet habitat suitability has been conducted by Regional Biologists covering areas on Cortes Island (and surrounding areas). The results of these surveys have been incorporated into support information for the FSP.

Wildlife Habitat Areas have not yet been established for Marbled Murrelet for areas within the FSP boundary. Further habitat for Marbled Murrelet is also proposed for establishment in WHAs and the majority of this habitat overlaps with existing legal OGMAs and parks and protected areas both within and adjacent to the FSP area.

Strategy

The FSP holder will conduct primary forest activities in areas under this FSP to be consistent with the objectives set by government for wildlife under s.7 of the FPPR, and the Notice authorized under s.7(2) of the FPPR "Indicators of the Amount, Distribution and Attributes of Wildlife Habitat Required for the Survival of Species at Risk in the Sunshine Coast Forest District".

If primary forest activities are proposed for areas where suitable habitat has been identified through habitat surveys, in the non-contributing land base, the harvested area will be replaced with suitable habitat within the contributing land base (THLB) as it has been defined during the TSR II analyses. Any exchanges will be tracked by the FSP holder and a notice sent to MFLNRORD.

Grizzly Bear (*Ursus arctos*)

Grizzly bears are not found (typically) in areas under this FSP, therefore the s.7(2) Wildlife Notice for this species does not apply to the FDUs under this Plan.

No result or strategy is required.

Coastal Tailed Frog (Ascaphus truei)

Coastal Tailed frogs are not found within areas under this FSP, therefore the s.7(2) Wildlife Notice for this species does not apply to the FDUs under this Plan.

No result or strategy is required.

Vananda Creek Sticklebacks (Gasterosteus species 16 and 17)

Vananda Creek Sticklebacks are not known to be found within areas under this FSP, therefore the s.7(2) Wildlife Notice for this species does not apply to the FDUs under this Plan.

No result or strategy is required.

Northern Goshawk (Accipiter gentilis laingi)

The Goshawk is on the Red List in British Columbia.

Strategy

Where an area has been identified by the FSP holder as having populations of species at risk, or where an active nest has been found, these areas will be managed on a site-specific basis consistent with the recommendations of a Qualified Professional.

WATER QUALITY, FISH, WILDLIFE AND BIODIVERSITY IN RIPARIAN AREAS (FPPR S.8)

The objective set by government for water, fish, wildlife and biodiversity within riparian areas is, without unduly reducing the supply of timber from British Columbia's forests, to conserve, at the landscape level, the water quality, fish habitat, wildlife habitat and biodiversity associated with those riparian areas.

Result

The FSP holder(s) will comply with the requirements listed in the *FPPR* for s.47 (Stream Riparian Class), s.48 (Wetland Riparian Class), s.49 (Lake Riparian Class), s.50 (restrictions in a riparian management area), s.51 (restrictions in a riparian reserve zone), s.52(2) (restrictions in a riparian management zone), and s.53 (Temperature Sensitive Stream), where these requirements apply to areas under the FSP.

Strategies

- 1. Trees will be retained as required within the RMA of all streams, wetlands and lakes necessary for the protection of wildlife habitat and biodiversity values.
- 2. The FSP holder(s) will retain a Qualified Professional to determine the retention levels necessary at the site level to meet the objectives set by government for water, fish, wildlife and biodiversity within riparian areas, at the landscape level. The Qualified Professional will:
 - a) consider the factors listed in *FPPR* Schedule 1 s.2 to determine the type of management regime on a site specific basis, and
 - b) design riparian retention to be consistent with s.52(2) of the FPPR.
- 3. The FSP holder will conduct activities in the riparian management area that incorporate the recommendations made by the Qualified Professional and will minimize sediment and coarse woody debris inputs into streams to the extent practicable.

4. Riparian Reserve Zones will be assessed by a Qualified Professional for wind throw risk. Recommendations by the Qualified Professional will be incorporated into site level planning which may include carrying out treatments to lessen the potential impact to stream banks, streams and fish habitat from windthrow, as per s.51(1) of the FPPR.

FISH HABITAT IN FISHERIES SENSITIVE WATERSHEDS (FPPR S.8.1)

There are no "fisheries sensitive watersheds" established under sections 180(f) and 180(g) of FRPA for the area under this FSP.

In the event that Fisheries Sensitive Watersheds are established during the term of this FSP, the FSP holder will comply with the objectives set in s.8.1 of the FPPR.

WATER IN COMMUNITY WATERSHEDS (FPPR S.8.2)

- 1. "Community watershed" means a community watershed
 - (a) that is continued under section 180(e) of the FRPA, and
 - (b) for which a water quality objective has not been
 - (i) continued under section 181 of the FRPA, or
 - (ii) established under the Government actions Regulation.
- 2. The objective set by government for water being diverted for human consumption though a licensed waterworks in a community watershed is to prevent to the extent described in subsection (3) the cumulative hydrological effects of primary forest activities within the community watershed from resulting in
 - (a) a material adverse impact on the quantity of water or the timing of the flow of the water from the waterworks, or
 - (b) the water from the waterworks having a material adverse impact on human health that cannot be addressed by water treatment required under
 - (i) an enactment, or
 - (ii) the licence pertaining to the waterworks.
- 3. The objective set by government under subsection (2) applies only to the extent that it does not unduly reduce the supply of timber from British Columbia's forests

Result and/or Strategy

There are no Community Watersheds within areas under this FDP, therefore no result or strategy is required.

In the event that a Community Watershed is established during the term of this FSP, the FSP holder will comply with the objectives set in s.8.2 of the FPPR.

WILDLIFE AND BIODIVERISTY RESOURCES - LANDSCAPE LEVEL (FPPR S.9)

The objective set by government for wildlife and biodiversity at the landscape level is, without unduly reducing the supply of timber from British Columbia's forests and to the extent practicable, to design areas in which timber harvesting is to be carried out that resemble, both spatially and temporally, the patterns of natural disturbance that occur within the landscape.

Results

The FSP holder will comply with the maximum cutblock size as per *FPPR* s.64 and the adjacency requirements as per *FPPR* s.65.

OBJECTIVE FOR WILDLIFE AND BIODIVERSITY RESOURCES - STAND LEVEL (FPPR S.9.1)

The objective set by government for wildlife and biodiversity at the stand level is, without unduly reducing the supply of timber from British Columbia's forests, to retain wildlife trees.

Results

The FSP holder will comply with the establishment of wildlife tree retention areas as per *FPPR* s.66 and s.67.

8. VISUAL QUALITY OBJECTIVES (FPPR S.9.2)

The objectives set by government under the Government Action Regulations (B.C. Reg. 582/2004), s.7(2) and s.17.

Scenic Area

Areas of the FSP are found within a Scenic Area due to the proximity of popular boating channels touring around the island and towards Desolation Sound. The visual landscape inventory polygons identified in this area include Retention (R) and Partial Retention (PR) polygons.

Strategy

The FSP holder will ensure that primary forest activities that fall within the Visual Landscape Reserve polygons are designed so that alteration falls within the allowable alteration limits from significant public viewpoints, and meets the Visual Quality Objectives, as described in FPPR s.1(1).

9. OBJECTIVES FOR CULTURAL HERITAGE RESOURCES (FPPR S.10)

The objective set by government for cultural heritage resources is to conserve, or, if necessary, protect cultural heritage resources that are:

- a) The focus of a traditional use by an aboriginal people that is of continuing importance to that people, and
- b) Not regulated under the Heritage Conservation Act.

Strategies

The FSP holder will comply with the objective set by government for cultural heritage resources using the following means:

- Wherever possible, the FSP holder will minimize or eliminate any potential impact on cultural heritage resources that are of value or relative importance to aboriginal peoples, as determined by the affected First Nations, or a combination of Qualified Professionals and the Delegated Decision-Maker.
- 2. The FSP holder will engage regularly with the First Nations and will review materials made known through Ministry sources, or through local First Nation sources including any archaeological overview studies, traditional use mapping, or other materials to

ensure avoidance of traditional use areas when planning for primary harvest activities.

- 3. Through planning and development of areas, the FSP holder will document and map any evidence of cultural use and, where requested, will conduct surveys for culturally modified trees or other cultural resources.
- 4. Cedar is recognized as a cultural resource and opportunities for continued traditional use by First Nations will be provided for through the planting of cedar on ecologically suitable sites and through the protection of cedar as recruitment for future cultural use in retention for riparian areas, wildlife habitat and old-growth management areas.
- 5. The FSP holder hosts regular public meetings on Cortes for all residents, including First Nations' members and licensee representatives, where operational updated and early stage planning information is provided for anyone who may be affected by these plans. Additional meetings are welcome and will be arranged upon request.

10. MEASURES TO PREVENT THE INTRODUCTION AND SPREAD OF INVASIVE PLANTS

As per s.47 of the *FRPA*, the FSP holder must carry out measures specified in a FSP to prevent the introduction or spread of prescribed species of invasive plants. Appendix G lists those plants that are invasive under the *Invasive Plants Regulation*.

Himalayan blackberry (*Rubus discolor*) is not indicated in the Invasive Plants Regulation but this is also an introduced species which can aggressively spread. For both Himalayan Blackberry and Scotch Broom, the most effective method of control is prompt and successful reforestation of cutblocks with ecologically suitable species.

The FSP holder will carry out the following measures to prevent the introduction or spread of prescribed species of invasive plants:

- Ensure that areas of exposed soils > 0.1 hectare are re-vegetated with seedlings or with a grass seed, as prescribed by a Qualified Professional, within one year of harvest completion,
- Promote awareness and recognition of invasive plant species to staff, contractors and sub-contractors, and
 - Ensure that road building and harvesting contractors inspect vehicles and equipment, particularly tracks and undercarriage when being transported to

and from Cortes Island, for the presence of plant parts, and that equipment be cleaned prior to leaving (or arriving to) areas that are known to contain invasive species.

- ➤ Where the risk of spread of invasive plants, as identified by a Qualified Professional, is deemed to be low, areas >0.1 ha may be left to naturally regenerate with native species
- Report new occurrences of Species of Concern (noted species of concern are Scotch Broom, varieties of Hogweed and all varieties of Knotweed) to the Coastal Invasive Plant Committee by filling in the "Invasive Alien Plant Program" (IAPP) or using the Report-A-Weed application for android and IOS devices. Staff and contractors will be provided training regarding the use of Report-A-Weed
- Where vegetation is identified as a Priority Species, the FSP holder will take site specific measures to control the spread and/or eliminate the plant as required using the Prevent, Eradicate, Contain or Control measures for Coastal Areas as found in Appendix G

11. MEASURES RELATED TO NATURAL RANGE BARRIERS

As per *FPPR* s.18, the FSP holder(s) must carry out measures specified in a FSP to mitigate the removal or ineffectiveness of a range barrier caused, directly or indirectly, through carrying out a forest practice. There are no known range resources within the area of this plan, therefore no measures are provided to meet the objectives.

12. STOCKING STANDARDS

General

FPPR Section 16: FPPR Section 44(1) applies in all situations and circumstances under this FSP and in all FDUs, where a free growing stand is required to be established under *FRPA* Section 29.

The regeneration date, stocking standards, free growing heights and species as per FPPR s 44(1)(a) and (b) are outlined in Appendix B.

FRPA Section197 election for stocking standards

EVEN AGED MANAGEMENT

The stocking standards in Appendix B apply to harvest units and/or standards units where even aged management is practiced, specifically those stands where Basal Area retention is <8 m²/ha. The standards are based on ecologically suitable species for each site and will be documented by the prescribing Forester in each Site Plan.

INTERMEDIATE CUTTING STANDARDS

The FSP holder is exempt from the requirements of sections 29 (1) of the FRPA if the holder harvests timber for the reasons referred to under FPPR section 44(3)(h). The FSP holder will ensure that, for a period of 12 to 24 months after completion of harvest, the area on which the timber harvesting was carried out conforms to the stocking standards specified in FPPR section 16(4) for the area (Appendix B, Table 1).

Stands suitable for an Intermediate Cut harvest will be >1.0 ha with no openings that are >0.1 ha in size and will be fully stocked with ecologically suitable species.

SINGLE ENTRY DISPERSED RETENTION SYSTEM STOCKING STANDARDS (SEDRSS)

The application of the SEDRSS as a silvicultural system will be used as a tool to meet those specific objectives outlined by the FSP holder in the Community Forest Management Objectives (CFGP), as appropriate for the areas under the FSP. Management strategies reflect the strong community philosophy for sustainable, responsible management of the Community Forest including the retention of healthy dominant trees in each stand and ensuring an abundance of older age classes to improve the overall ecological function and diversity of the forest. Use of SEDRSS will be restricted to specific situations and circumstances that are suitable for this partial cut harvest method.

The criteria for suitable stands include the following:

- 1) Conifer second-growth stands only, this application is not suitable for broadleaf stands and will not be applied to Old Growth stands in areas under this FSP,
- 2) Dispersed retention residual basal area ranging from $5 39 \text{ m}^2/\text{ha}$ and the contiguous opening size is > 1.0 ha, and
- 3) Stands that have moderate to higher productivity.

The objectives for areas where SEDRSS is applied will be identified and outlined on a site specific basis and documented in each Site Plan by the prescribing Forester prior to harvesting.

The specific standards for SEDRSS are found in Appendix B, Tables 2 and 3. Survey procedures will follow the recommended methodologies outlined in the SEDRSS Framework Implementation Guide (Coastal), 2014.

Climate Change

The primary forest activities of the FSP holder will take place in lower elevation areas of the Coastal Western Hemlock dry and very dry maritime areas. There has been a substantial level of harvesting over the years over these areas resulting in the majority of the forests being moderately productive Douglas-fir, western hemlock and western redcedar second-growth stands with patches of Old Growth scattered throughout.

The MFLNRORD produced an update to the "Reference Guide for Forest Development Stocking Standards" (revised March 2019) in response to climate change projections showing a possible shift in tree species and ecological suitability for reforestation on certain sites.

At this time, there are no recommended changes to species selection in the Biogeoclimatic Zones (subzones/variants) that are located within areas under this FSP. The FSP holder(s) will continue to monitor the recommended stocking standards and species suitability for areas where primary forest activities are conducted and amend the Stocking Standards in Appendix B as these become necessary.

Forest Health Factors

All stems considered to be crop trees will meet or exceed the Free Growing Damage Criteria as outlined in the Single Entry Dispersed Retention Stocking Standard (2014) Damage Criteria for Managed Stands in Coastal British Columbia (Section 1.4).

Risk of Spruce Weevil is low for most of the plan area. If spruce is chosen as an ecologically suitable species for planting, then only resistant stock will be used and as a minor contributor to the overall stocking of the NAR.

DWARF MISTLETOE

Dwarf Mistletoe is found in stands with western hemlock within areas under this FSP. If hemlock is to be considered a crop tree (preferred or acceptable) during surveys, it will not be accepted as a well-spaced tree within 10 metres of the drip line where a qualified surveyor has determined there is a risk of infection of regenerating seedlings. Ecologically suitable species other than hemlock will be planted in areas where mistletoe occurs in the overstory or adjacent stand.

BALSAM WOOLY APHID

The Balsam Woolly Aphid feeds on balsam (Abies grandis) and can cause mortality in older second growth trees. There are areas near to Cortes Island that have had known infestations, but due to the relatively minor population of balsam on Cortes, the risk of a large infestation would be considered lower. Monitoring for this insect can be done through aerial surveys and communication with adjacent licensees and government to follow areas of spread. Planting with species other than balsam lessens the risk additionally.

WHITE PINE BLISTER RUST

Any reforestation of white pine must be with rust-resistant stock or the regenerating seedlings would not be included as contributing to the crop trees. Natural white pine regeneration can be accepted if seedlings are pruned to remove lower branches to a height of 3 metres.

ROOT DISEASES

Root rot diseases do occur throughout areas under the FSP but fairly infrequently and are generally restricted to small pockets. Both *Phellinus* and *Armillaria* can occur in these areas. As long as the pockets are small and the area can be replanted with a less susceptible species such as Cw, Pw or Dr, no further treatments will normally be required. If cases become larger and more concentrated, then further treatments such as de-stumping may become necessary to reduce the impact. Root rot will be monitored and documented on a site level basis when found.

See Appendix B under this FSP for specific footnotes related to ecologically suitable species and forest health notes.