



**Kitasoo Forest Company Ltd.**

## Forest Stewardship Plan

Submission Date:

April 16, 2019

## Signature of Person Required to Prepare Plan

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Grant Scott, RPF  
Managing Director  
Authorized Licensee Signing Authority  
Kitasoo Forest Company Limited

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Date

## Signature & Seal of RPF, Plan Preparer

### CERTIFICATION OF SIGNING PROFESSIONAL

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 supervise the work.

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Gary Gallinger, RPF  
Operations Planner  
Capacity Forest Management Limited

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Date



## Table of Contents

Signature of Person Required to Prepare Plan .....	ii
<b>1.0 INTRODUCTION .....</b>	<b>1</b>
1.1 Forest Stewardship Plan – General Comments.....	1
1.2 Definitions and Abbreviations.....	1
<b>2.0 INTERPRETATION .....</b>	<b>6</b>
2.1 Tenses .....	6
2.2 Objectives Cancelled .....	6
<b>3.0 SUBMISSION DATE, TERM AND COMMENCEMENT .....</b>	<b>6</b>
3.1 Submission Date .....	6
3.2 Term (FRPA S. 6(1)) .....	6
3.3 Commencement Date .....	6
<b>4.0 HOLDER, APPLICATION AND EXTENSION OR TERMINATION OF THIS FSP .....</b>	<b>6</b>
4.1 Holder .....	6
4.2 Application of This FSP .....	6
4.3 FSP Extension or Termination .....	6
<b>5.0 FSP MAP (FRPA S. 5 (1)(A) &amp; FPPR S. 14): FDUS &amp; DESIGNATIONS IN EFFECT.....</b>	<b>7</b>
5.1 Details Concerning FDUs Identified (FPPR s. 14(1)(a)) .....	7
5.2 Designations in Effect (FPPR s. 14(3)) .....	7
<b>6.0 OBJECTIVES IN EFFECT, RESULTS OR STRATEGIES .....</b>	<b>9</b>
<b>6.1 Great Bear Rainforest Order .....</b>	<b>9</b>
6.1.1 Division 2 – First Nations.....	9
6.1.1.1 Objectives for first nation information sharing and engagement (GBRO Part 2 s.3) .....	9
6.1.1.2 Objectives for identification of Aboriginal Forest Resources and Aboriginal Heritage Features (GBRO Part 2 s.4) .....	9
6.1.1.3 Objectives for Aboriginal Forest Resources (GBRO Part 2 s.5).....	9
6.1.1.4 Objectives for Aboriginal Heritage Features (GBRO Part 2 s.6) .....	10
6.1.1.5 Objectives for Historical Culturally Modified Trees (GBRO Part 2 s.7).....	11
6.1.1.6 Objectives for Aboriginal Tree Use (GBRO Part 2 s.8).....	11
6.1.1.7 Objectives for retention of western yew (GBRO Part 2 s.9).....	12



<b>6.1.2</b>	<b>Division 3 - Aquatic Habitat</b> .....	<b>16</b>
6.1.2.1	Objectives for Important Fisheries Watersheds (GBRO Part 2 s.10).....	16
6.1.2.2	Objectives for Type 1 Aquatic Habitat (GBRO Part 2 s.11).....	16
6.1.2.3	Objectives for Type 2 Aquatic Habitat (GBRO Part 2 s.12).....	18
6.1.2.4	Objectives for Forested Swamps (GBRO Part 2 s.13).....	19
6.1.2.5	Objectives for Upland Stream areas (GBRO Part 2 s.14).....	20
6.1.2.6	Objectives for Active Fluvial Units (GBRO Part 2 s.15).....	21
6.1.3.1	Objectives for ecological representation (GBRO Part 1 s.4).....	22
6.1.3.2	Objectives for Landscape Reserve Designs (GBRO Part 1 s.5).....	23
6.1.3.3	Objectives for Managed Forest and Natural Forest (GBRO Part 1 s.6).....	24
6.1.3.4	Objectives for Restoration Zones and Restoration Landscape Units (GBRO Part 1 s.7).....	24
6.1.3.5	Objectives for Red-Listed Plant Communities and Blue-Listed Plant Communities (GBRO Part 2 s.16).....	27
6.1.3.6	Objectives for Stand Retention (GBRO Part 2 s.17).....	28
<b>6.1.4</b>	<b>Division 5 - Wildlife</b> .....	<b>29</b>
6.1.4.1	Objectives for grizzly bear habitat (GBRO Part 2 s.18).....	29
6.1.4.2	Objectives for grizzly and black bear dens (GBRO Part 2 s.19).....	30
6.1.4.3	Objectives for Kermode Bear habitat (GBRO Part 2 s.20).....	31
<b>6.2</b>	<b>Objectives Prescribed Under Legislation (FRPA s.149; FPPR s.5-10)</b> .....	<b>32</b>
6.2.1	Objectives set by government for soils (FPPR s. 5).....	32
6.2.2	Objectives set by government for wildlife (FPPR s. 7).....	32
6.2.3	Objectives set by government for water, fish, wildlife and biodiversity in riparian areas (FPPR s. 8).....	35
6.2.4	Objectives set by government for fish habitat in fisheries sensitive watersheds (FPPR s. 8.1).....	37
6.2.5	Objectives set by government for water in community watersheds (FPPR s. 8.2).....	37
6.2.6	Objectives set by government for wildlife and biodiversity (FPPR s. 9 and 9.1).....	37
6.2.7	Objectives set by government for cultural heritage resources (FPPR s. 10).....	38
<b>6.3</b>	<b>Objectives Prescribed Under Legislation for Visual Resources (GAR s. 17)</b> .....	<b>39</b>
<b>6.4</b>	<b>Resource Features Identified Under GAR (GAR s. 5)</b> .....	<b>40</b>
<b>7.0</b>	<b>MEASURES SET BY GOVERNMENT</b> .....	<b>41</b>
<b>7.1</b>	<b>Measure set by Government to Prevent the Introduction and Spread of Invasive Plants (FRPA s. 47 and FPPR s. 17)</b> .....	<b>41</b>
<b>7.2</b>	<b>Measures Set by Government Related to Range Barriers (FPPR s. 18)</b> .....	<b>42</b>
<b>8.0</b>	<b>EVEN-AGED STOCKING STANDARDS (FPPR S. 44)</b> .....	<b>43</b>
<b>8.1</b>	<b>Species Selection</b> .....	<b>43</b>
<b>8.2</b>	<b>Stocking</b> .....	<b>44</b>
8.2.1	Target Stocking Standards.....	44
8.2.2	Minimum Stocking Standards.....	44
8.2.3	Minimum Inter-Tree Distance.....	44
<b>8.3</b>	<b>Regeneration Date and Free Growing Timeline</b> .....	<b>44</b>
<b>8.4</b>	<b>Minimum free growing heights and characteristics</b> .....	<b>44</b>



<b>APPENDIX 1: FSP MAP AND IDENTIFICATION OF FDUS .....</b>	<b>45</b>
<b>APPENDIX 2: EVEN-AGED STOCKING STANDARDS .....</b>	<b>46</b>



## 1.0 INTRODUCTION

The Kitsoo Forest Company Limited (KFCL) is a forest company wholly owned by the Kitsoo / Xai'xais First Nations, who reside on the coast of British Columbia at and within the vicinity of the community of Klemtu on Swindle Island. The traditional territory of the Kitsoo / Xai'xais First Nations encompasses an area of approximately 850 000 hectares from the southern tip of the Don Peninsula to the Klekane Inlet to the north and from the Coast Mountains in the east to Aristazabal Island in the west. There is a long history of resource use within the traditional territory, including fishing, hunting, food collection and harvesting of trees. The vision of the Kitsoo / Xai'xais First Nations is to apply the best definition of the term sustainable to the wealth of resources found in the traditional territory in perpetuity.

It is an objective for the KFCL to practice sound and sustainable forest stewardship on lands within the traditional territory of the Kitsoo / Xai'xais First Nations and to achieve a level of independence concerning forest management decisions.

### 1.1 Forest Stewardship Plan – General Comments

The area to which this Forest Stewardship Plan (FSP) applies overlapped with portions of the Mid-Coast Timber Supply Area (TSA), the North Coast TSA and Tree Farm License (TFL) 25 Block 5 (held by Western Forest Products Inc.). As of January 1, 2017, parts of these two TSAs were combined to form the Great Bear Rainforest North TSA. Two Ministry of Forests, Lands and Natural Resource Operations (FLNRORD) districts - Coast Mountains (North Coast) and North Island – Central Coast - also have portions of their administrative boundaries that overlap with the FSP area.

Direction provided by FLNRORD has indicated that the North Island – Central Coast Resource District (NICCRD) will administer the review and approval of this FSP for both districts.

Cutting Permits and Road Permits issued to the KFCL under the WFP Mainland Coast FSP will remain under that FSP until obligations under those permits are met. Any new permits issued under the KFCL FSP will meet the KFCL FSP commitments.

### 1.2 Definitions and Abbreviations

The following definitions and abbreviations are provided for reference:

**Aboriginal Forest Resource** - means a forest plant resource listed in Schedule J of the GBRO, or other forest plant resource identified by first nations during First Nation Engagement that is utilized for food, social, medicinal or ceremonial purposes.

**Aboriginal Heritage Feature** - means an artifact, feature, or site of the general types listed in Schedule I of the GBRO, other than a Contemporary Culturally Modified Tree or a Historical Culturally Modified Tree, that is known, is found, or is identified during First Nation Engagement and is important to the cultural practices, knowledge or heritage of a first nation.

**Aboriginal Interests** - means the asserted or proven aboriginal rights or aboriginal title or the treaty rights of an Applicable First Nation in the order area.

**Aboriginal Tree Use** - means the use of Monumental Cedar, other cedar or other tree species to fulfill the domestic needs of the Applicable First Nation for such things as shelter, transportation, tools, fuel, and art, but does not include the use of Monumental Cedar, other cedar or other tree species for purposes of commercial production or sale.



**Active Fluvial Unit** – means an active floodplain, where water flows over land in a normal flood event, and includes low and medium benches and the hydrogeomorphic zone of an active fan.

**Applicable First Nation** – means any First Nation with an asserted or established aboriginal right, aboriginal title or treaty right to the area under consideration.

**Bear Den** - means a den identified by a Qualified Professional that is suitable for winter hibernation and maternity.

**BEC** – Biogeoclimatic Ecosystem Classification.

**Blue-listed Plant Community** - means a plant community listed in Schedule O of the GBRO that is Sufficiently Established and meets the age, stand structure and area criteria described in Schedule O of the GBRO.

**Cedar Stewardship Area** - means an area identified in Schedule Q of the GBRO, or a similar area that is identified by first nations through First Nation Engagement that is for the purpose of maintaining, enhancing and providing access to cedar for cultural use.

**Contemporary Culturally Modified Tree** - means a tree that was modified less than eighty years ago by first nations people as part of their cultural use of the tree.

**Cultural Cedar Stand** - means three or more Monumental Cedars or Contemporary Culturally Modified Trees where each tree is within 30 metres of another Monumental Cedar or Contemporary Culturally Modified Tree.

**Cutblock** - means an area within which a tenure holder is authorized to harvest timber, as identified in a cutting permit, timber sale license or other cutting authority.

**DDM** – Delegated Decision Maker.

**DM** – District Manager.

**Development Area** – means an area in a watershed defined by the boundaries shown on a site plan or multiple site plans where an annual or multi-year project of timber harvesting and road construction is planned or carried out, and includes any Stand Retention, Management Zones, Reserve Zones, mapped reserves or other areas where timber harvesting is restricted or managed pursuant to the GBRO or FRPA and the regulations made under FRPA.

**EBM** – Ecosystem Based Management.

**Equivalent Clearcut Area** - means an indicator that quantifies the percentage of the forested portion of a watershed that has been altered by harvesting, fires, insects or disease and has not recovered to a state of Hydrologically Effective Greenup.

**First Nation Engagement** - means reasonable efforts to communicate, share information, engage in dialogue, and identify and resolve issues with Applicable First Nations and includes provision and consideration of all relevant information about potential impacts on Aboriginal Interest.

**FDU(s)** – Forest Development Unit(s).

**Forested Swamp** – means a forested mineral wetland or a forested peatland with standing or gently flowing nutrient rich water in pools or channels and the water table is usually at or near the surface of the wetland or peatland. It does not include poorly drained areas transitional to uplands where Folisolic growing substrate (i.e. folic material derived from the litter of trees and lesser vegetation of upland sites) occupies 50% or more of the site or hydromorphic organic matter (organic material



accumulated under saturated conditions) and wetland species hydrophytes occupy less than 50% or the site area.

**FPPR** – Forest Planning and Practices Regulation of the Forest and Range Practices Act.

**FRPA** – Forest and Range Practices Act.

**FSP** – Forest Stewardship Plan.

**FSP holder or plan holder or Holder** – refers to licensees under the Forest Act that are holders and/or signatories to this FSP.

**Functional Riparian Forest** - means forest that has reached Hydrologically Effective Greenup and that also contains some large trees adjacent to streams to provide for large organic debris.

**GAR** – Government Actions Regulation of the Forest and Range Practices Act.

**GBRO** – Great Bear Rainforest Order.

**Historical Culturally Modified Tree (HCMT)** - means a tree that was modified more than eighty years ago by first nations people as part of their cultural use of the tree.

**Hydrologically Effective Greenup** - means the height, stocking density and crown closure at which the hydrologic conditions of a harvested site are restored to near pre-harvest conditions with the regrowth of new forest at the site.

**Important Fisheries Watershed** - means a watershed area identified in Schedule E of the GBRO, but not including watersheds composed entirely of S5 or S6 streams flowing directly to the ocean.

**Landscape Reserve** - means an area in a Landscape Unit where commercial harvesting is not permitted.

**Landscape Reserve Design** - means a system of Landscape Reserves in a Landscape Unit which is designed to meet requirements for Old Forest representation, and simultaneously contribute to protection of Aboriginal Heritage Features, Aboriginal Forest Resources and other land use objectives.

**Landscape Unit** - means a Landscape Unit within the order area shown in Schedule A of the GBRO.

**Managed Forest** - means the area of productive forest that is or will be available for timber harvest.

**Management Zone** - means an area referred to in the GBRO for the protection of a feature and that specifies direction on the alteration, removal, recruitment or management of trees

**Minimum Old Forest Retention Level** - means the minimum percentage of the total forest area in a Site Series Group to be retained as Old Forest for the order area shown in Column “B” of Schedule G of the GBRO.

**Monumental Cedar** - means a large old western redcedar tree or a large old yellow cedar tree that has the attributes necessary to fulfill the Aboriginal Tree Use needs of the Applicable First Nation primarily for totem poles, canoes, or long beams and poles to build longhouses, community halls or similar community structures.

**Natural Boundary** - means the visible high water mark, or bankfull width, of any lake, river, stream or other body of water where the presence and action of the water are so common and usual, and so long continued in all ordinary years, as to mark on the soil of the bed of the body of water a character distinct from that of its banks, in vegetation, as well as in the nature of the soil itself.

**Natural Forest** - means the area of productive forest that is not Managed Forest.





**Old Forest** - means any of the following:

- (a) a stand of trees 250 years or older;
- (b) an old, structurally complex stand comprised mainly of climax species where older seral remnants may still be present in the upper canopy and typically have:
  - (i) standing snags;
  - (ii) rotting logs on the ground; and
  - (iii) patchy understories; or
- (c) a stand of trees that has reached the climax state for the ecosystem it is found in where trees naturally cycle at an age less than 250 years.

**Old Forest Representation Target** - means a long term Old Forest Representation Target for a Site Series Group for the order area shown in Column "A" in Schedule G of the GBRO.

**OPIC** – Operational Implementation Committee.

**Primary Forest Activities** – mean one or more of the following (according to the FPPR):

- (a) Timber harvesting
- (b) Silviculture treatments
- (c) Road construction, maintenance and deactivation.

**Qualified Professional** – an applied scientist or technologist, acting alone or together with another professional, if:

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

**Red-listed Plant Community** - means a plant community listed in Schedule N of the GBRO that is Sufficiently Established and meets the age, stand structure and area criteria described in Schedule N of the GBRO.

**Reserve Zone** - means an area referred to in the GBRO where commercial timber harvesting and road building are not permitted unless otherwise specified in the order.

**Restoration Zone** - means a zone established within a Restoration Landscape Unit Landscape Reserve Design that is established for the purpose of restoration of old forest structural attributes.

**RESULTS** - Reporting Silviculture Updates and Land Status Tracking System

**Site Series** - means sites capable of producing the same late seral or climax plant communities within a biogeoclimatic subzone or variant.

**Site Series Group** - means a Site Series or Site Series Group listed in Schedule S of the GBRO.

**Stand Retention** - means small patches of trees and understory vegetation that are located in a Cutblock or contiguous to a Cutblock.

**Sufficiently Established** - means, a Red-Listed Plant Community or Blue-Listed Plant Community most commonly associated with late mature or Old Forest stand characteristics, with the exception of floodplains, or a Red-Listed Plant Community or Blue-Listed Plant Community found in a stand not defined as Old Forest but with a complex, open stand structure, along with a quantity and distribution of indicator plants for the listed community, that constitutes an element occurrence with a good or better viability rank.



**Temporary Old Forest Reserve** - means a temporary spatially defined Old Forest reserve outside of Landscape Reserve Designs where timber harvesting will not take place during the period of time that the Temporary Old Forest Reserve, or portion thereof, is in effect.

**Tree Length<sup>1</sup>** - means a distance equal to the measured or potential height of the dominant trees at Old Forest condition in the forest stands within or adjacent to a feature.

**Type 1 Aquatic Habitat** - means any of the following:

- (a) a reach of a watercourse and its active floodplain with a continuous channel bed that is greater than 1.5 meters in width, with an average gradient less than or equal to 5% and is known to be, or has potential to be, inhabited by fish;
- (b) a lake greater than 0.25 hectares, or a marsh or fen wetland greater than 0.25 hectares, connected by a perennial or seasonal stream to fish habitat described in (a);
- (c) an estuary or marine interface zone connected by a perennial or seasonal stream to fish habitat described in (a) or (b); or
- (d) herring spawn areas, kelp beds and other highly productive nearshore habitat used by valued marine invertebrates for reproduction and rearing.

**Type 2 Aquatic Habitat** - means any of the following:

- (a) S1 to S3 stream reaches that are not Type 1 Aquatic Habitat;
- (b) S4 stream reaches, with an average gradient less than or equal to 5%, that are known to be inhabited by fish and are directly connected to Type 1 Aquatic Habitat or S1 to S3 streams that are Type 2 Aquatic Habitat;
- (c) lakes greater than 0.25 hectares that are not Type 1 Aquatic Habitat; or
- (d) marsh and fen wetlands greater than 0.25 hectares that are not Type 1 Aquatic Habitat.

**Type 1 Restoration Landscape Unit** - means a Landscape Unit listed as a Type 1 Restoration Landscape Unit in Schedule H of the GBRO.

**Type 2 Restoration Landscape Unit** - means a Landscape Unit listed as a Type 2 Restoration Landscape Unit in Schedule H of the GBRO.

**Upland Stream** - means a stream reach that is not Type 1 aquatic habitat and not Type 2 aquatic habitat.

**UWR** – Ungulate Winter Range.

**Watershed Planning Unit** - means a watershed or watershed sub-unit that is used as a unit of analysis for calculating Functional Riparian Forest retention in Upland Stream areas.

**WHA** – Wildlife Habitat Area.

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<sup>1</sup> If Coast First Nations, the Ministry of Forest, Lands and Natural Resource Operations and major licensees develop Tree Height Tables, that are standardized across Biogeoclimatic Ecosystem Classification variants, those Tree Height Tables will be used when determining Reserve and Management Zones.



## **2.0 INTERPRETATION**

### **2.1 Tenses**

In this FSP, the singular includes the plural and the plural the singular, unless the context indicates otherwise.

### **2.2 Objectives Cancelled**

If an objective for which a result or strategy is included within this FSP is cancelled by approval by government, then the result or strategy within this FSP concerning the cancelled objective is no longer applicable effective the date of the cancellation of the objective.

## **3.0 SUBMISSION DATE, TERM AND COMMENCEMENT**

### **3.1 Submission Date**

This FSP was submitted on April 16, 2019.

### **3.2 Term (FRPA S. 6(1))**

The term of this FSP is five years beginning on the commencement date.

### **3.3 Commencement Date**

The commencement date for this FSP is June 22, 2019.

## **4.0 HOLDER, APPLICATION AND EXTENSION OR TERMINATION OF THIS FSP**

### **4.1 Holder**

The Holder of this FSP is Kitsoo Forest Company Limited, a wholly owned forest company of the Kitsoo / Xai'xais First Nation.

### **4.2 Application of This FSP**

This FSP applies to the lands defined by the Kitsoo / Xai'xais First Nations as Traditional Territory and to the following Forest Licenses held by Kitsoo Forest Company Limited:

- Non-Replaceable Forest Licenses A84184, A84185 and 94535, and
- Replaceable Forest Licenses A91438, A94009 and 94536.

### **4.3 FSP Extension or Termination**

This FSP may be extended after the commencement date according to applicable legislation. Alternatively, this FSP may be terminated by the Holder if it is replaced with another approved FSP.



## **5.0 FSP MAP (FRPA S. 5 (1)(a) & FPPR S. 14): FDUS & DESIGNATIONS IN EFFECT**

The FSP map illustrates the forest development units (FDUs) and the applicable land use designations that are in effect on the date of submission and that intersect with FDUs defined for the FSP area. Refer to Appendix 1 for more detailed FSP maps.

### **5.1 Details Concerning FDUs Identified (FPPR s. 14(1)(a))**

One FDU is identified for the FSP area. It is the result of the consolidation of three FDU(s) from previous FSPs.

FDU A is defined by the boundaries of forest tenures held by KFCL, approved by the British Columbia government under the Forest Act, and by the area of the Great Bear Rainforest North TSA and of TFL 25 Block 5 that intersects with the Kitsoo/Xai'xais First Nations Traditional Territory.

### **5.2 Designations in Effect (FPPR s. 14(3))**

The FSP Map illustrates the various designations and other areas in effect four months prior to the submission of the FSP and applicable to the FSP area as required by FPPR section 14(3).

Designations generally restrict or prohibit industrial primary forest activities and include:

- Ungulate Winter Ranges;
- Wildlife Habitat Areas;
- Scenic Areas as established by the District Manager;
- Commercial timber harvest prohibitions by other legislative enactments (e.g. provincial parks or private land);
- Holder cutting permits or road permits.

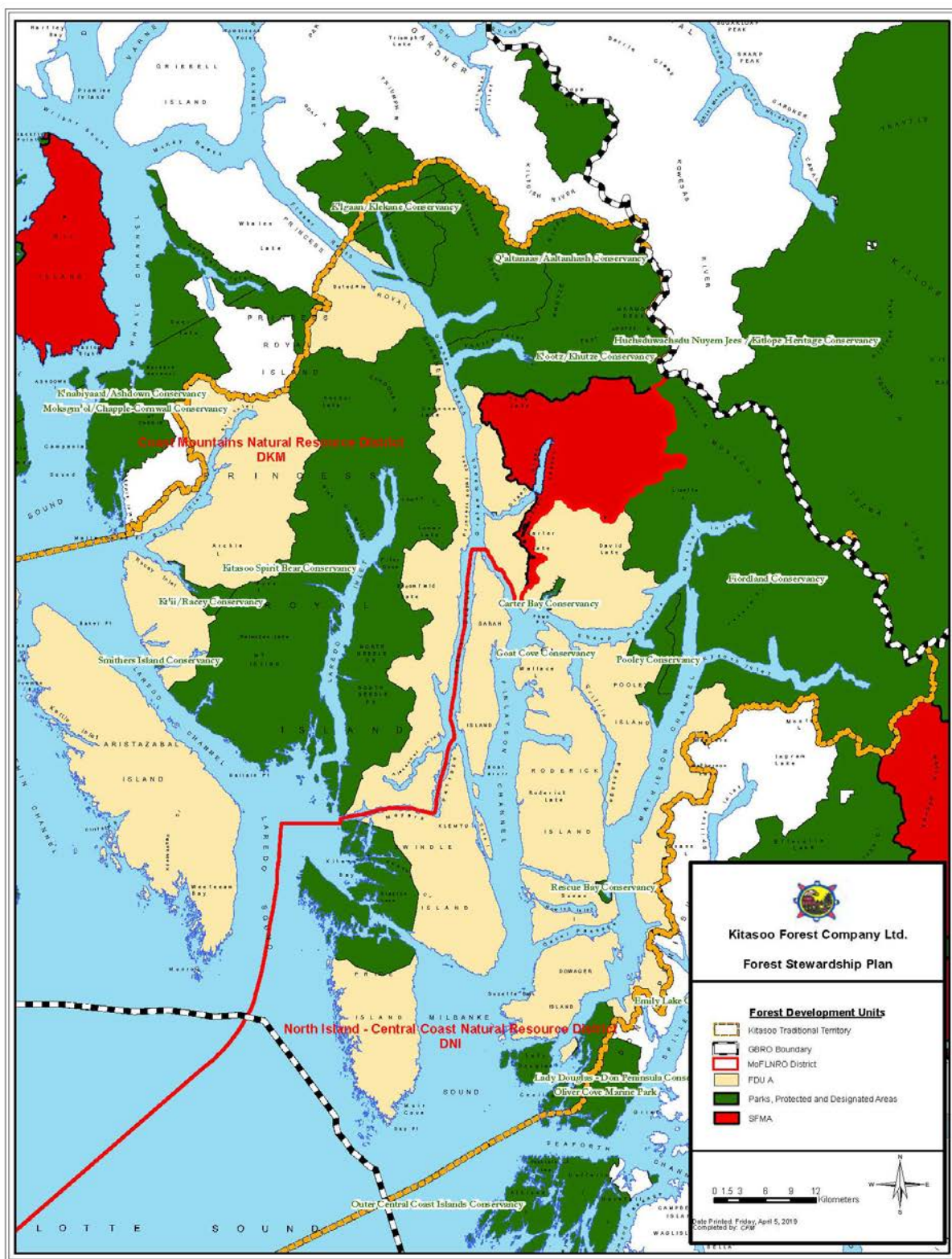


Figure 1: Reference map illustrating the forest development unit (FDU) defined by this FSP and in relation to the Kitisoo (Kitasoo / Xai'xais First Nations) Traditional Territory.



## 6.0 OBJECTIVES IN EFFECT, RESULTS OR STRATEGIES

### 6.1 Great Bear Rainforest Order

Section 1 of the *Forest and Range Practices Act* (FRPA) defines objectives set by government to include objectives set by government under section 93.4 of the *Land Act*. In March of 2009, the Minister of Agriculture and Lands amended government land use objectives for ecosystem-based management (EBM) within the Central and North Coast area. On June 13, 2013, the Order was amended again to improve clarity and understanding to aspects of the earlier orders; to capture substantial corrections to the Grizzly Bear habitat datasets (objective 17 in both Orders); and, to correct grammatical, punctuation and spelling errors from the original documents.

The Great Bear Rainforest Order was legally established on January 28, 2016, replacing both previous Orders, and Parts 1 and 2 of the Order affect objectives in all FDUs.

For clarity, the particular objective addressed is included under each relevant subsection as it appears in the GBRO. The Divisions for Parts 1 and 2 of the GBRO are amalgamated to allow the objectives of the similar Division to be discussed together.

#### 6.1.1 Division 2 – First Nations

##### 6.1.1.1 Objectives for first nation information sharing and engagement (GBRO Part 2 s.3)

- (1) *For the purpose of implementing and achieving the intent of the objectives in this land use order conduct First Nations Engagement with Applicable First Nations*

##### 6.1.1.2 Objectives for identification of Aboriginal Forest Resources and Aboriginal Heritage Features (GBRO Part 2 s.4)

- (1) *In Development Areas, through field reconnaissance or field assessments and First Nation Engagement as appropriate in areas proposed for road building or harvesting, identify Aboriginal Forest Resources, Aboriginal Heritage Features, Historical Culturally Modified Trees, Contemporary Culturally Modified Trees, Monumental Cedar and Cultural Cedar Stands.*

##### 6.1.1.3 Objectives for Aboriginal Forest Resources (GBRO Part 2 s.5)

- (1) *Maintain or enhance Aboriginal Forest Resources in sufficient quantity and manner to support Applicable First Nations' present and future stewardship and use of those resources.*
- (2) *Despite subsection (1), Aboriginal Forest Resources may be harvested or altered in order to meet silvicultural obligations, provided there has been First Nation Engagement with Applicable First Nations.*





#### **6.1.1.4 Objectives for Aboriginal Heritage Features (GBRO Part 2 s.6)**

- (1) In Development Areas, protect Type 1 Aboriginal Heritage Features, as defined in Schedule I of the GBRO.*
- (2) Adjacent to Type 1 Aboriginal Heritage Features, maintain a Reserve Zone with a minimum width of 200 metres, measured from the edge of the Type 1 Aboriginal Heritage Feature, to protect the Type 1 Aboriginal Heritage Feature.*
- (3) Despite subsections (1) and (2), the Type 1 Aboriginal Heritage Feature and the Reserve Zone may be modified with the support of, or lack of objection from, the Applicable First Nation.*
- (4) Despite subsections (2) and (3), the Reserve Zone may be modified when:*
  - (a) alternative measures are implemented to avoid, mitigate or otherwise address impacts on the Type 1 Aboriginal Heritage Feature;*
  - (b) there has been First Nation Engagement with Applicable First Nations regarding the alternative measures; and*
  - (c) the modification is required for road access, other infrastructure, or to address a safety concern and there is no practicable alternative.*
- (5) In Development Areas, protect Type 2 Aboriginal Heritage Features, as defined in Schedule I of the GBRO.*
- (6) Adjacent to Type 2 Aboriginal Heritage Features, maintain a Reserve Zone with a minimum width of 1 Tree Length measured from the edge of the feature, and a Management Zone with an average minimum width of 0.5 Tree Lengths measured from the outer edge of the Reserve Zone to protect the Type 2 Aboriginal Heritage Feature from the site-specific local hazards and windthrow.*
- (7) Despite subsections (5) and (6), the Type 2 Aboriginal Heritage Feature and its Reserve Zone and Management Zone may be modified with the support of, or lack of objection from, the Applicable First Nation*
- (8) Despite subsections (5), (6) and (7), the Type 2 Aboriginal Heritage Feature may be altered or removed and the Reserve Zone and Management Zone may be modified when:*
  - (a) alternative measures are implemented to avoid, mitigate or otherwise address impacts on the Type 2 Aboriginal Heritage Feature;*
  - (b) there has been First Nation Engagement with Applicable First Nations regarding the alternative measures; and*
  - (c) the modification is required for road access, other infrastructure, or to address a safety concern and there is no practicable alternative.*



#### **6.1.1.5 Objectives for Historical Culturally Modified Trees (GBRO Part 2 s.7)**

- (1) In Development Areas, protect Historical Culturally Modified Trees.*
- (2) Adjacent to Historical Culturally Modified Trees, maintain a Management Zone of sufficient width and design to protect the Historical Culturally Modified Trees from site specific local hazards and windthrow.*
- (3) Despite subsections (1) and (2), the Historical Culturally Modified Tree and the Management Zone may be modified with the support of, or lack of objection from, the Applicable First Nation*
- (4) Despite subsections (1), (2) and (3), a Historical Culturally Modified Tree and the Management Zone may be altered or harvested if there has been First Nation Engagement with Applicable First Nations; and*
  - (a) alteration or harvesting is required for road access, other infrastructure, or to address a safety concern and there is no practicable alternative; or*
  - (b) protection of all of the Historical Culturally Modified Trees in the cutting permit area or timber sale licence area would make harvesting economically unviable.*

#### **6.1.1.6 Objectives for Aboriginal Tree Use (GBRO Part 2 s.8)**

- (1) Maintain a sufficient volume and quality of western redcedar, yellow cedar and other tree species to support the Applicable First Nations' present and future Aboriginal Tree Use*
- (2) In Cedar Stewardship Areas, maintain, and recruit as necessary, Monumental Cedar, western redcedar and yellow cedar in a quantity sufficient to support the Applicable First Nations' present and future Aboriginal Tree Use.*
- (3) Within Development Areas, retain Monumental Cedar with windfirm buffers and Cultural Cedar Stands in a quantity sufficient to support the Applicable First Nations' Aboriginal Tree Use.*
- (4) For the purposes of subsection (3), a Monumental Cedar and its windfirm buffer, or a Cultural Cedar Stand, may be altered or harvested provided that there has been First Nation Engagement with Applicable First Nations; and*
  - (a) it has been determined that the Monumental Cedar or Cultural Cedar Stand is not suitable or is not required for a cultural cedar use;*
  - (b) the Monumental Cedar or Cultural Cedar Stand will be provided to the Applicable First Nation;*
  - (c) the harvesting is required for road access, other infrastructure, or to address a safety concern and there is no practicable alternative; or*
  - (d) retention of all of the Monumental Cedar and Cultural Cedar Stands in the Cutblock area would make harvesting economically unviable.*





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- (5) *Within a Cutblock, for the first 15% of the pre-harvest stand retained in Stand Retention as specified in section 17(1) of the GBRO, design Stand Retention to maintain mature and old western redcedar and yellow cedar representative of the pre-harvest stand.*

#### **6.1.1.7 Objectives for retention of western yew (GBRO Part 2 s.9)**

- (1) *In Development Areas, retain western yew trees<sup>2</sup>.*
- (2) *Despite subsection (1), western yew trees may be altered or harvested if:*
- (a) *alteration or harvesting is required to accommodate operational requirements for road and bridge construction and there is no practicable alternative; or*
  - (b) *the retention of all western yew trees in a Cutblock would make harvesting economically unviable and measures are implemented to provide for use of the altered or harvested western yew trees by Applicable First Nations.*
- (3) *Where practicable, include western yew trees in Stand Retention.*
- (4) *All areas retained or managed in accordance with subsections (1), (2) and (3) must be documented and submitted as digital spatial data at the end of each calendar year to the Applicable First Nation and the Province of British Columbia.*

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<sup>2</sup> To be considered a tree a Western Yew must have a height of at least 2 metres or be a height or diameter specified by a First Nation during First Nation engagement.



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### Strategy for Objectives 6.1.1.1 to 6.1.1.7

- (1) If the Holder conducts Primary Forest Activities, the Holder will comply with the objectives in 6.1 Division 2 - First Nations Objectives.
- (2) If the Holder conducts Primary Forest Activities, the Holder will make all reasonable efforts to meet with applicable First Nations, whose asserted traditional territories are included within the FDUs of this FSP, to understand how each First Nation wishes to be engaged regarding development under this FSP. Guidance, processes, protocols or agreements between the Holder and a First Nation, developed as a result of such meetings or communication, will define how information sharing/engagement is conducted by the Holder under this FSP with the respective First Nation.

During these engagement meetings, the Holder will request information regarding the location of any known individual or groups of AFR's or AHF's.

The Holder will seek to define desirable attributes for field identification of Monumental Cedar through Engagement with Applicable First Nations.

The FSP Holder will, through First Nation Engagement with the Applicable First Nations, request information on their stewardship, use of AFR's and preferred management options and will assist Applicable First Nation's to access those resources should they request it throughout timber harvesting, road building, and post-harvest activities.

- (3) Where there is no existing bilateral guidance, process, protocol or agreement between the Holder and an applicable First Nation, and the First Nation does not wish to engage to develop such bilateral guidance/process/protocol or agreement, before undertaking development, the Holder will make all reasonable efforts to:
  - (a) Annually:
    - (i) Meet with the designated representatives of applicable First Nations
    - (ii) Share an overview of planned and proposed activities across the entire territory
    - (iii) Provide 1:20,000 scale maps of specific areas where activities are proposed
    - (iv) Work with the applicable First Nations to identify, understand and discuss respective interests and concerns
    - (v) Ask the First Nations whether or not they wish to see detailed follow-up as described in Section (b)
    - (vi) Submit the location of Yew trees found during development and report those locations by way of maps, digital files or whatever method is agreed upon as a result of engagement meetings. These same files will also be sent to the DM. If an alternative method is agreed upon by OPIC, that method will be used.
  - (b) If requested by the First Nation as per section 3(a)(v), before submitting applications for operational Crown authorizations, the Holder will make all reasonable efforts to:
    - (i) Provide overview and site level maps to the applicable First Nation showing the proposed development that the Holder plans to submit for Crown authorization;



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- (ii) Meet with designated representatives of applicable First Nations to review and discuss further details on planned and proposed activities including strategies adopted to address concerns identified during the initial (annual) meeting or correspondence;
  - (iii) Share more detailed information that has been collected during the assessment and development of the planned and proposed activities in context of the interests or concerns that the applicable First Nation has regarding the proposed and planned activities;
  - (iv) Modify or adjust proposed and planned forest development activities to address the identified new information, interests and concerns;
  - (v) Prepare a summary of the engagement process, including:
    - 1) Date, participation and method of any applicable communication
    - 2) A description of identified issues and how they were resolved

In the event that the meetings have not occurred, the Holder will prepare a summary of the efforts made to meet and/or review the information.

- (vi) Provide the summary described in section (3)(b)(v) along with the application to:
  - 1) The District Manager; and
  - 2) The designated representatives of the Applicable First Nation

- (4) Where Aboriginal Heritage Features are identified, the Holder will make all reasonable efforts to engage with the Applicable First Nation and will implement a minimum 200m Reserve Zone on Type 1 features and a minimum 1 Tree Length Reserve Zone plus 0.5 Tree Length Management Zone on Type 2 Features. If the Holder wishes to consider a modified Reserve Zone or Management Zone for either a Type 1 or Type 2 Feature, the Holder will:

- (a) Request to meet with the designated representatives of the Applicable First Nation;
- (b) Provide site level information, including 1:5000 maps of the Reserve Zone in question; and
- (c) Complete any required field surveys or site visits as required.

If there are no objections raised by the Applicable First Nation regarding the modification, and the Holder can address any concerns raised by the Applicable First Nation regarding the modification, the Holder will produce a final summary package of the proposed modification to the First Nation and request a response from the First Nation indicating their support or lack of objection.

- (5) Where Historical Culturally Modified Trees are identified, the Holder will make all reasonable efforts to engage with the Applicable First Nation and will implement a Management Zone of sufficient width and design to protect the HCMTs from local hazards and windthrow. If the Holder wishes to consider a modified Management Zone or alteration of a HCMT, the Holder will:
  - (a) Request to meet with the designated representatives of the Applicable First Nation;
  - (b) Provide site level information, including 1:5000 maps of the HCMTs in question;
  - (c) Complete any required field surveys or site visits as required; and



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- (d) Seek an authorization permit from the appropriate authority for HCMTs that are under the Heritage Conservation Act.

If there are no objections raised by the Applicable First Nation, and the Holder is able to address any concerns raised by the Applicable First Nation regarding the modification or alteration, the Holder will produce a final summary package of the proposed modification to the First Nation, and request a response from the First Nation indicating their support or lack of objection.

- (6) In any instance that a HCMT or Aboriginal Heritage Feature is discovered during Primary Forest Activities the Holder will immediately stop work in the area and contact the applicable First Nation. The Holder will work directly and promptly with the applicable First Nation to determine a resolution at that time.
- (7) All Reasonable efforts will include the timeframe as follows:
- (a) For Section 3(a) efforts, a period of 60 days commencing on the first date at which attempts to meet or share information have been made; and
  - (b) For Section 3(b) efforts, a period of 30 days commencing on the first date at which attempts to meet or share the requested follow-up information have been made.
  - (c) For Sections 4 and 5 efforts, a period of 30 calendar days commencing on the first date at which attempts to meet or share information have been made, and then a period of 15 calendar day after the final summary package has been sent.



## 6.1.2 Division 3 - Aquatic Habitat

### 6.1.2.1 Objectives for Important Fisheries Watersheds (GBRO Part 2 s.10)

- (1) *Maintain hydrological and fluvial processes in watersheds within the range of natural variation by maintaining an Equivalent Clearcut Area of less than 20% in each of the Important Fisheries Watersheds shown in Schedule E of the GBRO.*
- (2) *Despite subsection (1), an Equivalent Clearcut Area of more than 20% may be maintained provided that:*
  - (a) *there has been First Nation Engagement with Applicable First Nations;*
  - (b) *a coastal watershed assessment or similar assessment of watershed sensitivity to forest development disturbance is completed by a Qualified Professional;*
  - (c) *an amount, type and distribution of forest cover sufficient to sustain natural hydrological and fluvial processes within the watershed is maintained; and*
  - (d) *the effectiveness of the management strategies implemented pursuant to subsection (2)(c) are monitored.*

### Result

- (1) When conducting primary forest activities, the Holder will comply with the Objectives for important fisheries watersheds.
- (2) Where there are other licence holders operating in a watershed, the FSP Holder will communicate and share information as necessary in order to ensure that the ECA limits are not exceeded by the FSP Holder based on the information available at time of analysis.
- (3) If it is not necessary to maintain an ECA less than 20%, the steps in (2) of the objective will be undertaken.

### 6.1.2.2 Objectives for Type 1 Aquatic Habitat (GBRO Part 2 s.11)

- (1) *Protect and maintain Type 1 Aquatic Habitat by, in a Development Area, maintaining an adjacent Reserve Zone with a minimum width of 1.5 Tree Lengths and do not alter or harvest the forest in the Reserve Zone unless there is no reasonably practicable alternative.*
- (2) *Despite subsection (1), the width of the Reserve Zone may be decreased at specific locations to address site characteristics and values, provided that:*
  - (a) *a decrease is no more than 0.5 Tree Lengths; and*
  - (b) *there is no net loss of Reserve Zone area required in subsection (1) in the Development Area.*
- (3) *Despite subsections (1) and (2), the width of the Reserve Zone may be decreased, at specific location to address site characteristics and values, by more than 0.5 Tree Lengths provided that:*
  - (a) *there has been First Nation Engagement with Applicable First Nations;*
  - (b) *there is no net loss of Reserve Zone area required in subsection (1) in the Development Area;*



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- (c) *an aquatic habitat assessment has been prepared by a Qualified Professional that specifies measures:*
- (i) *to maintain the geomorphic and hydriparian characteristics of the stream channel;*
  - (ii) *to maintain the life cycle needs of fish in affected stream reaches;*
  - (iii) *to maintain local terrestrial habitat needs and linkages to other reserves; and*
  - (iv) *to minimize loss of trees in the Reserve Zone from windthrow; and*
- (d) *Measures in subsection (3)(c) are implemented that will maintain geomorphic and hydriparian characteristics of the stream channel, the life cycle needs of fish, local terrestrial habitat needs and low risk of windthrow.*
- (4) *Despite subsections (1), (2) and (3), for the lower portion of the Kimsquit River and its tributaries identified in Schedule P of the GBRO maintain a Reserve Zone with a width of 150 meters on each side of the Natural Boundary, unless there is no reasonable or practicable alternative for future road access, other infrastructure, or to address a safety concern. Existing road access and infrastructure is exempt from this reserve provision.*
- (5) *Where some or all of the forest required in subsections (1) and (2) has been previously altered or harvested, to the extent practicable, recruit or create Functional Riparian Forest in the Reserve Zone in the shortest time practicable.*

## **Result**

- (1) When conducting primary forest activities, the Holder will comply with the Objectives for Type 1 Aquatic Habitat.
- (2) The lower portion of the Kimsquit River and its tributaries identified in Schedule P of the GBRO are not within the plan area; therefore, no result or strategy is defined.



### **6.1.2.3 Objectives for Type 2 Aquatic Habitat (GBRO Part 2 s.12)**

- (1) *Maintain the natural ecological function of Type 2 Aquatic Habitat by, in a Development Area, retaining 90% of the forest in an adjacent Management Zone with a minimum width of 1.5 Tree Lengths.*
- (2) *Despite subsection (1), the width of the Management Zone in any Development Area may be decreased by up to 0.5 Tree Lengths to address site characteristics, provided there is no net loss of Management Zone area within the Development Area.*
- (3) *Despite subsections (1) and (2), a Management Zone may be increased or decreased by more than 0.5 Tree Lengths and alteration or harvesting within the Management Zone may occur provided that:*
  - (a) *there has been First Nation Engagement with Applicable First Nations;*
  - (b) *there is no net loss of Management Zone area required in subsection (1) in the Development Area;*
  - (c) *an aquatic habitat assessment has been prepared by a Qualified Professional that specifies measures:*
    - (i) *to maintain the geomorphic and hydroriparian characteristics of the stream channel;*
    - (ii) *to maintain the life cycle needs of fish in affected stream reaches;*
    - (iii) *to maintain local terrestrial habitat needs and linkages to other reserves; and*
    - (iv) *to minimize loss of trees in the Reserve Zone from windthrow; and*
  - (d) *measures in subsection (3)(c) are implemented.*
- (4) *Where some or all of the forest required in subsections (1), (2) and (3) has been previously altered or harvested, to the extent practicable, recruit or create Functional Riparian Forest in the Management Zone in the shortest time practicable.*

### **Result**

- (1) When conducting primary forest activities, the Holder will comply with the Objectives for Type 2 Aquatic Habitat.



#### **6.1.2.4 Objectives for Forested Swamps (GBRO Part 2 s.13)**

- (1) Maintain the ecological characteristics and function of Forested Swamps.*
- (2) Within Development Areas, adjacent to Forested Swamps greater than 0.25 hectares, retain 70% of the Functional Riparian Forest in a Management Zone with a minimum width of 1.5 Tree Lengths.*
- (3) Despite subsection (2), the width of the Management Zone adjacent to a Forested Swamp may be decreased by up to 0.5 Tree Lengths to address site specific values.*
- (4) Despite subsections (2) and (3), the width of the Management Zone may be decreased by more than 0.5 Tree Lengths and additional harvesting within the management may occur provided that:*
  - (a) there has been First Nation Engagement with Applicable First Nations;*
  - (b) A Forested Swamp assessment has been prepared by a Qualified Professional that specifies measures:*
    - (i) to maintain local terrestrial habitat needs and linkages to other reserves; and*
    - (ii) to minimize loss of trees in the Management Zone from windthrow; and*
  - (c) measures in subsection (4)(b) are implemented.*
- (5) Where some or all of the forest within the Management Zone required in subsections (2), (3) and (4) has been previously altered or harvested, to the extent practicable, recruit or create Functional Riparian Forest in the Management Zone in the shortest time practicable.*

#### **Result**

- (1) When conducting primary forest activities, the Holder will comply with the Objectives for Forested Swamps.*





#### **6.1.2.5 Objectives for Upland Stream areas (GBRO Part 2 s.14)**

- (1) *Maintain the hydrological and fluvial processes in the portion of Watershed Planning Units occupied by Upland Streams.*
- (2) *For the purposes of subsection (1), in the portion of the Watershed Planning Unit where Upland Streams occur, maintain a minimum of 70% of the forest as Functional Riparian Forest.*
- (3) *For the purposes of subsection (2), preferentially allocate the Functional Riparian Forest to encompass:*
  - (a) *Upland Streams that flow into Type 1 Aquatic Habitat and Type 2 Aquatic Habitat and that pose moderate to high risk of sediment transport.*
  - (b) *Upland Stream reaches with unique microclimate or other rare ecological or sensitive geomorphological characteristics;*
  - (c) *Upland stream reaches with known tailed frog habitat; and*
  - (c) *other Upland Streams that flow into Type 1 Aquatic Habitat and Type 2 Aquatic Habitat;*
- (4) *Despite subsection (2), in the portion of the Watershed Planning Unit where Upland Streams occur, less than 70% of the forest may be maintained as Functional Riparian Forest provided that:*
  - (a) *there has been First Nation Engagement with Applicable First Nations;*
  - (b) *a coastal watershed assessment or similar assessment of watershed sensitivity to forest development disturbance is completed by a Qualified Professional;*
  - (c) *an amount, type and distribution of forest cover sufficient to sustain natural hydrological and fluvial processes within the portion of the watershed where Upland Streams occur is maintained; and*
  - (d) *the effectiveness of the management strategies implemented pursuant to subsection (4) (c) are monitored.*

#### **Result**

- (1) When conducting primary forest activities, the Holder will comply with the Objectives for Upland Stream areas.
- (2) Where there are other licence holders in the Watershed Planning Unit, the FSP Holder will communicate and share information as necessary in order to ensure that enough Functional Riparian Forest area is retained by the FSP Holder based on the information available at time of analysis.
- (3) If a Qualified Professional determines it is not necessary to maintain 70% of the forest as Functional Riparian Forest, the steps in (4) of the Objectives will be undertaken.



#### **6.1.2.6 Objectives for Active Fluvial Units (GBRO Part 2 s.15)**

- (1) Reserve all forest on Active Fluvial Units.*
- (2) Adjacent to Active Fluvial Units, retain a minimum of 90% of the forest in a Management Zone with an average width of 1.5 Tree Lengths.*
- (3) Despite subsections (1) and (2), forest on an Active Fluvial Unit may be altered or harvested, and less than 90% of the forest in the Management Zone may be retained, to allow for road access, or to address a safety concern, provided that:*
  - (a) there has been First Nation Engagement with Applicable First Nations;*
  - (b) no reasonably practicable alternative to access a Development Area is available;*
  - (c) an Active Fluvial Unit assessment has been prepared by a Qualified Professional that:*
    - (i) specifies measures to maintain stream flow patterns and flow capacity and geomorphic stability of the Active Fluvial Unit for roads or other infrastructure; or*
    - (ii) where the removal of 4 or more live trees is proposed for safety reasons, provides an assessment of the potential impact on geomorphic stability; and*
  - (d) the measures in (3)(c) are implemented in a manner that will maintain the flow patterns, flow capacity and geomorphic stability of the Active Fluvial Unit.*
- (4) Where some or all of the forest required to be retained in subsection (1) and (2) has been previously altered or harvested, to the extent practicable, recruit or create Functional Riparian Forest on that Active Fluvial Unit in the shortest time practicable.*

#### **Result**

- (1) When conducting primary forest activities, the Holder will comply with the Objectives for active fluvial units.*



## 6.1.3 Division 4 - Biodiversity

### 6.1.3.1 Objectives for ecological representation (GBRO Part 1 s.4)

- (1) *Maintain landscape level biodiversity as follows:*
  - (a) *For each Site Series Group in the order area, maintain a distribution of forest stand ages that will achieve the Old Forest Representation Targets listed in Column "A" in Schedule G of the GBRO by no later than 2264;*
  - (b) *For each Site Series Group in the order area, retain an amount of Old Forest equal to or greater than the order area Minimum Old Forest Retention Levels listed in Column "B" in Schedule G of the GBRO and*
  - (c) *For the purposes of subsections (1)(a) and (1)(b), for each Site Series Group in a Landscape Unit, retain a minimum of 30% of the total forest area of the Site Series Group as Old Forest.*
- (2) *Despite subsection (1)(c), harvesting of Old Forest in a Site Series Group in a Landscape Unit may occur where less than 30% of the total forest area of the Site Series Group in the Landscape Unit is Old Forest, provided that:*
  - (a) *within the Landscape Unit area:*
    - (i) *alteration or harvesting is required for road access, other infrastructure, or to address a safety concern, where there is no practicable alternative; or*
    - (ii) *the lesser of 20% of the total forest area or the Minimum Old Forest Retention Level specified in Schedule F of the GBRO is maintained as Old Forest; and*
  - (b) *The aggregate area of Old Forest in the order area harvested under subsection (2)(a) following the date of establishment of this order does not exceed 18,650 hectares.*
- (3) *For each Site Series Group listed in Schedule L of the GBRO, in the Landscape Units listed in Schedule K of the GBRO, up to 5% of the area required to meet the minimum Old Forest requirements specified in subsection (1)(c) or (2)(a)(ii) can be met in forest that is not Old Forest where this results in an improved ecological outcome.*
- (4) *Where there is not enough Old Forest available to meet the targets in subsections (1)(b) and (1)(c), or as a result of subsection (2), recruit forest to meet the Old Forest requirements by no later than 2264.*
- (5) *Despite subsections (1)(c) and (2)(a)(ii), for each Site Series Group listed in Schedule L of the GBRO, up to 5% of the area required to meet the minimum Old Forest requirements specified in subsections (1)(c) or (2)(a)(ii) may be met in Old Forest in a higher level Site Series Group in the same variant.*
- (6) *Despite subsections (1)(c), (2)(a)(ii), and (5), for each Site Series Group listed in Schedule M of the GBRO, and despite subsection (1)(a) for each Site Series Group in the CWHxm2, CWHdm and CWHmm1 biogeoclimatic variants, up to 5% of the combined area of each Site Series Group in the Thurlow, Fulmore, Gray and Estero Landscape Units required under subsections (1)(c) and (2) to meet the target for that Site Series Group may be met in an equal or higher level Site Series Group listed in Schedule M of the GBRO in any of the four Landscape Units.*



### **6.1.3.2 Objectives for Landscape Reserve Designs (GBRO Part 1 s.5)**

- (1) *For each Landscape Unit in the order area, prepare a Landscape Reserve Design that:*
  - (a) *addresses the Minimum Old Forest Retention Levels specified in sections 6.3.1(1)(c) and 6.3.1(2), the Old Forest Representation Targets specified in sections 6.3.1(1)(a) and 6.3.1(1)(b) and the Managed Forest area specified in section 6.3.3(1)(a); and*
  - (b) *to the extent practicable simultaneously contributes to the protection and stewardship of:*
    - (i) *Aboriginal Heritage Features, Aboriginal Forest Resources, and Aboriginal Tree Use; and*
    - (ii) *Red-Listed Plant Communities, Blue-Listed Plant Communities, habitat important for species at risk, ungulate winter range, and habitat for regionally important wildlife including, but not limited to, mountain goats, grizzly bears, northern goshawks, tailed frogs, and marbled murrelets.*
- (2) *For the purposes of subsection (1)(a), when preparing a Landscape Reserve Design, the provisions in sections 6.3.1(3), 6.3.1(5) and 6.3.1(6) shall apply.*
- (3) *No commercial timber harvesting is permitted in a Landscape Reserve Design.*
- (4) *For the purposes of subsection (1):*
  - (a) *complete Landscape Reserve Designs within five years of the date of establishment of this order in those Landscape Units where harvesting is occurring or planned to commence within 5 years; or*
  - (b) *complete Landscape Reserve Designs prior to declaring areas or prior to the application for a road permit or cutting permit in those Landscape Units where harvesting is currently not occurring or is not planned to commence within 5 years.*
- (5) *Despite subsection (1)(a), for each Site Series Group in a Landscape Unit, a percentage of the Old Forest Representation Targets specified in section 6.3.1(1)(a) equivalent to 75% of the Average Operational Landbase Netdown for that Site Series Group is not required to be spatially defined until 2264.*
- (6) *Holders of licenses or tenures with an allowable annual cut of less than 20,000 cubic metres per year are exempt from subsections (1) and (4).*
- (7) *For the purposes of subsection (1), where because of harvest history or landscape characteristics or where not practicable to meet Minimum Old Forest Retention Levels in a Landscape Reserve Design:*
  - (a) *forest that is not Old Forest may be included in the Landscape Reserve Design; and*
  - (b) *establish Temporary Old Forest Reserves outside of the Landscape Reserve Design, with an area sufficient to meet the Landscape Unit Minimum Old Forest Retention Level.*
- (8) *Despite subsection (3), thinning and silvicultural treatments are permitted in Landscape Reserve Designs to expedite restoration to Old Forest structural characteristics.*
- (9) *Old Forest in a Site Series Group within a Temporary Old Forest Reserve established under subsection (7)(b) may be harvested when:*



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- (a) *in the Type 1 Restoration Landscape Units referenced in section 6.3.4(1)(a), there has been sufficient recruitment of Old Forest in that Site Series Group to meet Old Forest Representation Targets within a Landscape Reserve Design; or*
    - (b) *in any Landscape Unit not referenced in section 6.3.4(1)(a), an equivalent area of younger forest in that Site Series Group in a Landscape Reserve Design in that Landscape Unit becomes Old Forest.*
  - (10) *A Landscape Reserve Design may be altered or modified to address new information provided that:*
    - (a) *a Qualified Professional develops an alternative Landscape Reserve Design;*
    - (b) *the alternative Landscape Reserve Design meets the requirements of subsections (1) and (5); and*
    - (c) *any area removed from the altered Landscape Reserve:*
      - (i) *where none of the flexibility provisions in sections 6.3.1(3), 6.3.1(5) and 6.3.1(6) apply, is replaced with an equivalent area of forest in the same Site Series Group, and that is in the same seral stage or has similar stand structural characteristics; or*
      - (ii) *where a flexibility provision in section 6.3.1(3), 6.3.1(5) or 6.3.1(6) applies, is replaced with an equivalent area of forest, consistent with that flexibility provision.*

#### **6.1.3.3 Objectives for Managed Forest and Natural Forest (GBRO Part 1 s.6)**

- (1) *Identify and maintain in the order area:*
  - (a) *an area of Managed Forest of 550,032 hectares that is or will be available for timber harvest; and*
  - (b) *a Natural Forest area that continues to grow older over time subject to natural disturbance and non-forest tenure activity and has an area of 3,108,876 hectares.*

#### **6.1.3.4 Objectives for Restoration Zones and Restoration Landscape Units (GBRO Part 1 s.7)**

- (1) *Restore landscape level biodiversity in Landscape Units with extensive past forest development activity by:*
  - (a) *Within Landscape Reserve Designs in each Type 1 Restoration Landscape Unit listed in Schedule H of the GBRO, designating a minimum of 30% of each Site Series Group as a Restoration Zone within two years of the date of establishment of this order, or as soon as practicable thereafter; and*
  - (b) *Within Landscape Reserve Designs in each Type 2 Restoration Landscape Unit listed in Schedule H of the GBRO, designating a minimum of 30% of each Site Series Group as a Restoration Zone prior to any development activity that will result in more than 30% of the Landscape Unit area being within Site Series Groups containing less than 30% total Old Forest.*



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- (2) *For the purposes of subsections (1)(a) and (1)(b), when designating a Restoration Zone within a Landscape Reserve Design, the provisions in sections 6.3.1(3), 6.3.1(5) and 6.3.1(6) shall apply.*
- (3) *The boundaries of a Restoration Zone may be altered or modified to address new information, provided that:*
- (a) a Qualified Professional develops an alternative Landscape Reserve Design;*
  - (b) the alteration or modification is required to address an operational access, infrastructure or safety issue and there is no practicable alternative;*
  - (c) the alteration or modification maintains or improves ecological outcomes;*
  - (d) any area removed from the Restoration Zone:*
    - (i) where none of the flexibility provisions in sections 6.3.1(3), 6.3.1(5) and 6.3.1(6) apply, is replaced with an equivalent area of forest in the same Site Series Group, and that is in the same seral stage or has similar stand structural characteristics;*  
*or*
    - (ii) where a flexibility provision in section 6.3.1(3), 6.3.1(5) or 6.3.1(6) applies, is replaced with an equivalent area of forest, consistent with that flexibility provision;*
  - (e) any area removed from the Restoration Zone for safety reasons that does not also maintain or improve ecological outcomes must be replaced with an equivalent area of forest, consistent with the flexibility provisions in sections 6.3.1(3), 6.3.1(5) and 6.3.1(6); and*
  - (f) the boundary alteration for an individual Restoration Zone in a Landscape Unit does not exceed 10 hectares in a calendar year.*
- (4) *Despite subsection (3)(f), a boundary alteration for an individual Restoration Zone in a Landscape Unit may exceed 10 hectares per year provided that a documented rationale for the alteration is prepared by a Qualified Professional.*

### **Strategy for Objectives 6.1.3.1 to 6.1.3.4**

- 1) The Holder will collaborate with other Holders of FSPs and a G2G Operational Implementation Committee (OPIC or equivalent) to obtain results consistent with the GBRO area objectives, in Landscape Units and between and among Holders of FSPs.
- (2) For the GBRO Area, the Holder will:
  - (a) Use the non-binding table “Implementation Guidance Table – Old Forest Targets by Landscape Unit” as an aid or starting point in the achievement of the legally specified site series group old forest requirements for the GBRO area.
  - (b) Reach agreement on specifying targets or specifying proportions of the GBRO area ecological representation and managed forest objectives including the flexibility in GBRO Part 1 ss 4(2)-4(6) and allocate to the Landscape Units; and update targets on an agreed period or as required.
  - (c) If fair and effective agreement cannot be reached: will apply the Implementation Guidance Table until agreement is reached and notify the other Holders; or will request the Minister to act under FPPR s 19.



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- (3) For the lands to which the GBRO applies in each Landscape Unit in which the Holder holds tenures with active planning or operations, the Holder will:
- (a) Apply strategy s 1 and s 2.
  - (b) Reach agreement on targets or proportions of ecological representation and managed forest including the flexibility in GBRO Part 1 ss 4(2)-4(6), identify drawdowns and small surpluses, and identify procedures for managing Landscape Reserves, between and amongst Holders of FSPs.
  - (c) If fair and effective agreement cannot be reached: in the interim, the Holder may proportion the LU representation targets by total forest area, and proportion the minimum old, between Holders of FSPs, identifying surpluses, and inform the other Holders, and may not develop Landscape Reserves established by other Holders; or, the Holder of the FSP may request the Minister to act under FPPR s 19.
- (4) The holder of the FSP will participate in designing LRDs and Restoration Zones that are consistent with GBRO objectives, and will:
- (a) Design a single LRD with all Holders of FSPs in the Landscape Unit (including those that are exempt from leading an LRD).
  - (b) Complete LRDs within the GBRO timelines, and designate Restoration Zones with the GBRO timelines, unless there are no planned operations within the Landscape Unit.
  - (c) Agree as necessary on methods for altering or modifying LRDs (e.g. Order Part 1 ss 5(3), 5(10) and the 2016 Landscape Reserve Design Methodology), that will be consistent with meeting proportional targets and avoiding undue constraints between Holders of FSPs.
  - (d) In applying strategies ss 1 – 4 in relation to operational planning, site plans or development areas, the Holder of the FSP will use strategic TEM/PEM and VRI age inventories for SSG old forest requirements.
- (5) The operations of the Holder of this FSP will be consistent with meeting the agreed upon target allocations or specified proportions of the ecological representation targets and the managed forest targets, in:
- (a) The Landscape Units in which the Holder of the FSP operates and in the LRD when completed;
  - (b) The areas of the timber harvesting rights granted by the government to the Holder of the FSP; and
  - (c) Areas to which the GBRO applies.



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#### **6.1.3.5 Objectives for Red-Listed Plant Communities and Blue-Listed Plant Communities (GBRO Part 2 s.16)**

- (1) *Protect each occurrence of a Red-Listed Plant Community during a primary forest activity as per Schedule N of the GBRO.*
- (2) *Despite subsection (1), up to 5% of each occurrence of a Red-Listed Plant Community may be disturbed if there is no practicable alternative for road access, other infrastructure or to address a safety concern.*
- (3) *Reserve a minimum of 70% of each occurrence of a Blue-Listed Plant Community during a primary forest activity or reserve a minimum of 70% of the total area of each Blue-Listed Plant Community within a Landscape Unit as per Schedule O of the GBRO.*

#### **Result**

- (1) When conducting primary forest activities, the Holder will comply with the Objectives for Red-Listed Plant Communities and Blue-Listed Plant Communities.
- (2) Until the GBRO Field Manual for Red-Listed Plant Communities and Blue-Listed Plant communities becomes available, the Holder will:
  - a) Comply with Schedule N for Red listed plant communities and,
  - b) Comply with Schedule O for Blue Listed plant communities.





### 6.1.3.6 Objectives for Stand Retention (GBRO Part 2 s.17)

- (1) *Maintain forest structure and diversity at the stand level:*
  - (a) *by maintaining a minimum of 15% of a Cutblock area as Stand Retention; and*
  - (b) *in Cutblocks 20 hectares or greater in size, by distributing 50% of the Stand Retention within the Cutblock, except in:*
    - (i) *second growth stands where a windthrow hazard assessment indicates a moderate or higher biophysical hazard for windthrow; and*
    - (ii) *Old Forest stands where local knowledge has identified the potential for catastrophic inflow or outflow winds.*
- (2) *To the extent practicable, include the following within stand retention:*
  - (a) *Aboriginal Forest Resources that are maintained or enhanced by retention in a mature or older forest;*
  - (b) *habitat elements important for species at risk, ungulate winter range, and regionally important wildlife;*
  - (c) *representation of ecosystems and plant communities listed in Schedule N and Schedule O of the GBRO;*
  - (d) *Functional Riparian Forest adjacent to Active Fluvial Units, Forested Swamps, fen and marsh wetlands and Upland Streams with unique features or moderate or higher risk of sediment transport;*
  - (e) *western red cedar and yellow cedar for future Aboriginal Tree use;*
  - (f) *western yew;*
  - (g) *within restoration landscape units, remnant patches of Old Forest in Site Series Groups where less than 30% of the total forest area is Old Forest; and*
  - (h) *wildlife trees and coarse woody debris.*

### Result

- (1) When conducting primary forest activities, the Holder will comply with the Objectives for Stand Retention.
- (2) When calculating Stand Retention, the formula shall be:  
$$\text{Stand Retention \%} = \text{Retention Area} / (\text{Total Area Under Prescription}).$$



## 6.1.4 Division 5 - Wildlife

### 6.1.4.1 Objectives for grizzly bear habitat (GBRO Part 2 s.18)

- (1) *Maintain 100% of class 1 grizzly bear habitat shown in Schedule D of the GBRO; and*
- (2) *Maintain 50% of class 2 grizzly bear habitat shown in Schedule D of the GBRO.*
- (3) *Despite subsection (1), class 1 grizzly bear habitat polygons shown in Schedule D of the GBRO may be altered or harvested, provided that:*
  - (a) *there has been First Nation Engagement with Applicable First Nations;*
  - (b) *a Qualified Professional:*
    - (i) *completes an assessment that identifies the characteristics of the habitat and linkages, where appropriate, to other grizzly bear habitat; and*
    - (ii) *confirms that the alteration or harvesting will result in no net loss of class 1 grizzly habitat and connectivity and no functional loss of habitat connectivity; and*
  - (c) *measures are implemented that will ensure the alteration or harvesting will not cause a material adverse impact to the suitability of the class 1 grizzly bear habitat.*
- (4) *Despite subsection (1), class 1 grizzly bear habitat polygons may be altered or harvested for road access or to address safety concern, provided that:*
  - (a) *there has been First Nation Engagement with Applicable First Nations;*
  - (b) *there is no other practicable alternative for road access or other infrastructure, or the alteration or harvesting is required to address a safety concern;*
  - (c) *the road-right-of-way clearing width is the minimum safe width necessary to accommodate the road; and*
  - (d) *measures are implemented that, to the extent practicable, will ensure the alteration or harvesting will not cause a material adverse impact to the suitability of the class 1 grizzly bear habitat.*

### Result

- (1) When conducting primary forest activities, the Holder will comply with the Objectives for grizzly bear habitat.



#### **6.1.4.2 Objectives for grizzly and black bear dens (GBRO Part 2 s.19)**

- (1) *Protect grizzly Bear Dens and black Bear Dens.*
- (2) *Adjacent to grizzly Bear Dens, maintain a Reserve Zone with a minimum width of 50 meters.*
- (3) *Despite subsections (1) and (2), alteration or removal of:*
  - (a) *a black Bear Den; or*
  - (b) *a grizzly Bear Den or its Reserve Zone, or both,*  
*may occur, provided that:*
    - (a) *there has been First Nation Engagement with Applicable First Nations;*
    - (b) *the alteration or removal is required for road access or to address a safety concern and there is no reasonably practicable alternative; and*
    - (c) *the alteration or removal does not occur during the winter hibernation season.*
- (4) *In addition to subsections (1) and (2), adjacent to any Reserve Zone required in subsection (2), maintain a Management Zone with an average width equal to 1.0 Tree Length, measured from the outer edge of the Reserve Zone, to protect the integrity of the Reserve Zone.*
- (5) *Within the Management Zone required under subsection (4), alteration or removal of trees may occur outside of the winter hibernation season to:*
  - (a) *accommodate operational requirements for road and bridge construction, where no practicable alternative exists;*
  - (b) *accommodate road maintenance and deactivation, the removal of danger trees, and brushing and clearing within the right-of-way, for safety purposes, on any existing road under active tenure; or,*
  - (c) *mitigate the impact of windthrow.*
- (6) *All found Bear Dens must be documented and submitted to the Applicable First Nations and the Province of British Columbia at the end of each calendar year.*

#### **Result**

- (1) When conducting primary forest activities, the Holder will comply with the Objectives for grizzly and black Bear Dens and will conduct First Nations Engagement when required using the Strategy proposed for 6.1.1.1 to 6.1.1.7.
- (2) All found Bear Dens will be reported to the Applicable First Nations and the Province of British Columbia at the end of each calendar year by way of digital files or paper maps until an agreed upon method is developed by the OPIC.



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#### **6.1.4.3 Objectives for Kermode Bear habitat (GBRO Part 2 s.20)**

- (1) *To maintain Kermode bear habitat, within the Kermode stewardship areas shown in Schedule R of the GBRO:*
  - (a) *Maintain a maximum of 30% early seral forest and 40% mid seral forest;*
  - (b) *Maintain a maximum 70% crown closure within managed stands by the declaration of free-growing; and*
  - (c) *do not alter critical black bear habitat.*
- (2) *Despite subsection (1) (c), up to 5% of a critical black bear habitat occurrence may be altered if there is no practicable alternative for road access or other infrastructure, or to address a safety concern, provided there has been First Nation Engagement with Applicable First Nations.*

#### **Result**

- (1) When conducting primary forest activities, the Holder will comply with the Objectives for Kermode Bear habitat.



## 6.2 Objectives Prescribed Under Legislation (FRPA s.149; FPPR s.5-10)

### 6.2.1 Objectives set by government for soils (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 the hydrologic function of soils.*

#### Result

For FDU A the Holder will undertake to comply with soil disturbance and permanent access structure limits prescribed in sections 35 and 36 of the FPPR.

In accordance with FPPR s 12.1(1) the FSP Holder is exempt from the requirement to specify intended results and strategies set out in FPPR s. 5.

### 6.2.2 Objectives set by government for wildlife (FPPR s. 7)

- (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 areas and attributes of those areas, for*
  - (a) *the survival of species at risk,*
  - (b) *the survival of regionally important wildlife, and*
  - (c) *the winter survival of specified ungulate species.*
- (2) *A person 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 Water, Land and Air Protection, 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).*
- (3) *If satisfied that the objective set out in subsection (1) is addressed, in whole or in part, by an objective in relation to a wildlife habitat area or an ungulate winter range, a general wildlife measure, or a wildlife habitat feature, the minister responsible for the Wildlife Act must exempt a person from the obligation to specify a result or strategy in relation to the objective set out in subsection (1) to the extent that the objective is already addressed.*
- (4) *On or after December 31, 2004, a notice described in subsection (2) must be given at least 4 months before the forest stewardship plan is submitted for approval.*

#### Results

The Holder will manage, for the requirements under FPPR section 69, for the following species:

- ♦ Mountain Goat (*Oreamnos americanus*);
- ♦ Coastal Tailed Frog (*Ascaphus truei*);
- ♦ Great Blue Heron (*Ardea herodias fannini*);
- ♦ Marbled Murrelet (*Brachyramphus marmoratus*);



- ♦ Queen Charlotte Goshawk (*Accipiter gentilis laingi*);

and will undertake to comply with the Species at Risk Notices – FPPRA section 7(2), for the North Island Central Coast Natural Resource District dated March 2, 2006 and for the North Coast Natural Resource District dated December 30, 2004, until Notice is met at the district level.

The Holder operates in landscape units also managed by other licensees who have approved FSPs over the FSP area; therefore, communication for the purposes of integrating landscape level results and strategies is necessary. The Holder will comply with the legal requirements of the Orders establishing any existing or future WHA or UWR that intersect with the FDUs defined by this FSP, including the applicable General Wildlife Measures.

### **Ungulate Winter Ranges (UWR)**

#### Mountain Goat (*Oreamnos americanus*)

UWR U-5-004 for the NICCRD has been established by an Order by the Minister for the FSP area. This UWR Order exempts the Holder from the requirement to specify a result or strategy. The Holder will comply with the legal requirements of the Order.

### **Wildlife Habitat Areas (WHA)**

The Holder will comply with the legal requirements of the Orders establishing WHAs, including the applicable General Wildlife Measures, for the FSP area.

#### Coastal Tailed Frog (*Ascaphus truei*)

Where the Holder conducts primary forest activities in areas specified by the FPPR section 7(2) Notices and areas containing suitable habitat are identified and evaluated by a qualified professional, the Holder will propose WHA establishment as follows:

- (1) First in the NCLB, then in the THLB consistent with the attributes contained in the Notices;
- (2) Within the North Coast Natural Resource District, WHAs 6-056 and 6-057 have been established in an Order by the Minister. These WHAs exempt the Holder from the requirement to specify a result or strategy in the Coast Mountain Natural Resource District.
- (3) Within the North Island-Central Coast Natural Resource District, a maximum combined 1549 ha of which not more than 183 ha will be in the mature THLB, will be delineated for this species. Thirty-three future WHAs are planned.

If suitable habitat is identified by primary forest activities and it is not categorized above, the suitable habitat will be managed based on the advice of a qualified professional, taking into account the 2004 *IWMS Accounts and Measures*.

#### Great Blue Heron (*Ardea herodias fannini*)

Where the Holder conducts primary forest activities in areas specified by the FPPR section 7(2) Notices and areas containing nesting colonies are identified and evaluated by a



qualified professional to be suitable, the Holder will propose WHA establishment as follows:

- (1) First in the NCLB, then in the THLB consistent with the attributes contained in the Notices;
- (2) Within the North Island Central Coast Natural Resource District, a maximum of 240 ha of which not more than 36 ha will be in the mature THLB, will be delineated for this species.

WHA 1-394, with an area of 4.7ha, has been established by an Order for the North Coast Natural Resource District by the Minister. This leaves a remaining area of 235 ha, of which 35.2 will be in the mature THLB, yet to be put into WHA. Two future WHAs are planned.

If suitable habitat is identified by primary forest activities and it is not categorized above, the suitable breeding habitat will be managed based on the advice of a qualified professional, taking into account the 2004 *IWMS Accounts and Measures*.

#### Marbled Murrelet (*Brachyramphus marmoratus*)

For the former North Coast Forest District, now part of the Coast Natural Resource District, the Deputy Minister of Environment established WHAs by an Order on June 29, 2010. This WHA Order exempts the Holder from the requirement to specify a result or strategy within the former North Coast Forest District for this species. The Holder will comply with the legal requirements of the Order.

Where the Holder conducts primary forest activities within the North Island Central Coast Natural Resource District, in areas specified by the FPPR section 7(2) Notices, the Holder will maintain habitat by:

- (1) maintaining an amount of suitable habitat as per the Notice, in the Non-Contributing Land Base (NCLB), across the landbase, within the Plan Area.
- (2) despite section (1), harvesting in the NCLB, in areas of suitable nesting habitat, is permitted, subject to consideration of habitat distribution and attributes, provided an area of equivalent or better habitat is retained in the Timber Harvesting Land Base (THLB) taking into account the 2004 *Identified Wildlife Management Strategy Accounts and measures for managing Identified Wildlife (IWMS Accounts and Measures)*.
- (3) within the THLB, and subject to consideration of the *IWMS Accounts and Measures* for habitat distribution and attributes, maintain a proportional amount (based on the proportion of district habitat in the Plan Area) of suitable habitat as specified in the applicable District Notice.

#### Queen Charlotte Goshawk (*Accipiter gentilis lainqi*)

Where the Holder conducts primary forest activities in areas specified by the FPPR section 7(2) Notices and areas containing breeding habitat are identified and evaluated by a qualified professional to be suitable, the Holder will propose WHA establishment as follows:

- (1) Within the North Island – Central Coast Natural Resource District a maximum combined area of 277 ha, of which not more than 128 ha will be within the mature THLB.



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- (2) Within the North Coast Natural Resource District, a maximum combined area of 600 ha, of which not more than 201 ha will be within the mature THLB.

If breeding habitat is identified during primary forest activities and it is not categorized above, the suitable breeding habitat will be managed based on the advice of a qualified professional, taking into account the 2004 *IWMS Accounts and Measures*.

### 6.2.3 Objectives set by government for water, 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.*

#### Results

**Notwithstanding the commitments made in Section 6.1.2 of this FSP relating to the GBRO, the holder of this FSP adopts the following Strategies:**

For riparian classes, the Holder adopts the regulation defaults prescribed by the FPPR sections 47 – Streams, 48 – Wetlands, and section 49 – Lakes.

#### ***Riparian Management Zone Tree Retention – Wetlands and Lakes***

Additionally, for lakeshore management zones found within the area described by the letter establishing an interim measure – establishment of interim management zones of 40 meters on L1 lakes within the former Mid-Coast Forest District, dated August 12, 1996, will apply.

- For class L1-A lakes within the former Mid-Coast forest district, the Holder will implement a 40 m (slope distance) lakeshore management zone (LMZ).
- For class L1-B lakes within the former Mid-Coast forest district, the Holder will:
  - implement a 10 m (slope distance) reserve zone;
  - implement a 40 m (slope distance) LMZ.

Where a reserve zone exists, or where trees are being retained, the Holder will assess the windthrow hazard. This assessment will guide retention of trees within the RMZ.

For all wetlands and lakes, trees will be retained in RMZs where deemed necessary by the Holder for the conservation of wildlife and biodiversity values. Windfirm dominant and co-dominant conifers displaying good wildlife tree attributes will be targeted for retention.

Retention levels in riparian management zones will be consistent with Table 1:





**Table 1 Retention Levels of Trees Adjacent to Wetlands and Lakes in Riparian Management Zones**

Riparian Class	RMZ Basal Area Retention Level
W1, W2, W3, W4, W5	0 – 100%
L1-B (within the former Mid Coast District only)	0 – 100%
L2, L3, L4	0 – 100%

***Restrictions in Riparian Management Areas***

The Holder adopts the default practice requirements described in FPPR section 50.

***Restrictions in Riparian Reserve Zones***

The Holder adopts the default practice requirements described in FPPR section 51.

***Restrictions in Riparian Management Zones***

The Holder(s) will adopt FPPR section 52(2) as that section was on the date of submission of this FSP.

***Riparian Management Zone Strategy - Streams***

In respect of sections 8 and 12(3) of the FPPR, to address the retention of trees in a riparian management zone, the Holder of this FSP will:

- (1) ensure that prior to harvesting, retention levels within the RMZ's are determined by a qualified professional through a riparian assessment that considers:
  - (a) all the factors listed in Schedule 1, section 2 of the FPPR, as that section was on the date of submission of this FSP, and
  - (b) potential site specific safety and operational issues, and
- (2) design cutblocks and roads in a manner that is consistent with the retention levels as determined by the qualified professional as described in (a), and
- (3) minimize new coarse woody debris and sediment inputs into streams to the extent practicable, and
- (4) plan and conduct primary forest activities consistent with the results and recommendations of the assessment (1), design (2), and the intent (3).

Along stream segments where trees are to be retained in the RMZ, the Holder will use a Qualified Professional to assess the windthrow hazard. The result of that assessment will guide the retention of trees within RMZs.

For all streams, merchantable and/or non-merchantable trees will be retained in RMZs where deemed necessary by a Qualified Professional for the conservation of water quality, fish habitat, wildlife habitat, or biodiversity associated with riparian areas and to maintain stream bank and stream channel integrity. Where trees are retained in RMZs, windfirm dominant and co-dominant conifers displaying good wildlife tree attributes will be targeted for retention.



For streams that are within, or adjacent to, a cutblock, a Qualified Professional will assess and document the dependence of the stream on woody debris and streamside trees to maintain channel and/or stream bank stability.

For non-fish streams the Holder will be guided by the recommendations of a Qualified Professional.

#### **6.2.4 Objectives set by government for fish habitat in fisheries sensitive watersheds (FPPR s. 8.1)**

There are no fisheries sensitive watersheds described in Schedule 2 of the FPPR within the FSP area. Therefore, no result or strategy is required.

#### **6.2.5 Objectives set by government for water in community watersheds (FPPR s. 8.2)**

There are no community watersheds prescribed by legislation and within the FSP area. Therefore, no result or strategy is required.

#### **6.2.6 Objectives set by government for wildlife and biodiversity (FPPR s. 9 and 9.1)**

- 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 on which timber harvesting is to be carried out that resemble, both spatially and temporally, the patterns of natural disturbance that occur within the landscape.*
- 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.*

### **Result**

**Notwithstanding the commitments made in Sections 6.1.3 and 6.1.4 of this FSP, relating to the GBRO, the holder of this FSP adopts the following Results:**

- (1) The Holder adopts the default practice requirements described in FPPR sections 64 and 65 concerning wildlife and biodiversity at the landscape level; and
- (2) The Holder adopts the default practice requirements described in FPPR sections 66 and 67 concerning wildlife and biodiversity at the stand level, except, with respect to FPPR s. 12.5(2), where:
  - a) a tree must be felled to safely establish one or more tail-holds or guy-line tiebacks in a wildlife tree retention area to facilitate adjacent cable logging operations, or
  - b) a tree, or trees, within a wildlife tree retention area is modified (pruned or topped) to maintain the integrity of that wildlife tree retention area.



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### **6.2.7 Objectives set by government 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.*

#### **Strategy**

To meet the intent of FPPR S. 10, the strategies for dealing with cultural heritage resources are described under the strategies for Section 6.1.1 Division 2 – First Nations, of this FSP.



### 6.3 Objectives Prescribed Under Legislation for Visual Resources (GAR s. 17)

Scenic areas were made known by the North Coast District Manager in a letter dated September 17, 1997. The recommended Visual Quality classes from the Visual Landscape inventory were continued by establishment of the Government Action Regulation in December 13, 2004, as Visual Quality Objectives (VQOs) within the made known Scenic Areas.

Scenic areas were made known by the Mid Coast District Manager in a letter dated October 29, 1998. The recommended Visual Quality classes from the Visual Landscape inventory were continued by establishment of the Government Action Regulation in December 13, 2004, as Visual Quality Objectives (VQOs) within the made known Scenic Areas.

#### Result

- (1) For the purposes of this Result, a “significant public viewpoint”, as that term is used in the definition of “visually altered forest landscape” as defined in *FPPR s. 1.1* means a view point on water or land:
  - a. where many people traditionally congregate which may be a viewpoint in a park, highway pullout or rest stop, or city center; or,
  - b. included in the most current Visual Landscape Inventory; or,
  - c. determined to be important by a qualified professional.
- (2) Road construction and/or timber harvesting carried out or authorized by the Holder(s) within established scenic areas, will be consistent with:
  - a. the visual quality objectives as established by the District Manager; and,
  - b. the categories of visually altered forest landscape as of the date of submission.
- (3) The holder of the FSP will make application to the delegated decision maker for exemption consistent with *FPPR s. 12(7)* to carry out or authorize timber harvesting or road construction under the following strategy that would result in an alteration greater than specified in subsection (2) of this result where:
  - a. timber harvesting or road construction are related to the harvesting of timber that is damaged, destroyed or threatened by fire, insects, disease, wind, flooding, or other similar factors where the cutblock or road design, to the extent practicable will:
    - i. mimic naturally occurring landscape characteristics; and
    - ii. retain timber that is not damaged, destroyed or threatened where safe and operationally practicable to do so.



## **6.4 Resource Features Identified Under GAR (GAR s. 5)**

The karst system elements noted below have been identified as resource features, wherever they are found, within the North Island-Central Coast Resource District, by an Order dated March 23, 2007.

This identified resource feature is subject to practice requirements, as objectives have not been established for the management of the resource feature.

### **Result**

Where applicable within the Plan area, the Holder will adhere to the requirements of FPPR S. 70(1), to not damage or render ineffective a resource feature, with respect to the following karst system elements that have been identified as resource features:

- a) karst caves,
- b) significant surface karst features, and
- c) important features and elements within very high or high vulnerability karst.



## 7.0 MEASURES SET BY GOVERNMENT

### 7.1 Measure set by Government to Prevent the Introduction and Spread of Invasive Plants (FRPA s. 47 and FPPR s. 17)

For the purpose of Section 47 (*Invasive plants*) of the FRPA, a person who prepares a forest stewardship plan must specify measures in the plan to prevent the introduction or spread of species of plants that are invasive plants under the *Invasive Plants Regulation*, if the introduction or spread is likely to be the result of the person's forest practices.

- (1) Prior to starting development in a new area, the Holder will check the Invasive Alien Plant Program Application (IAPP) to ascertain known locations of invasive plants.
- (2) The Holder will mitigate the conditions suitable for invasive plant establishment by:
  - (a) revegetating all harvest openings by re-establishing an appropriate stand of trees to meet regeneration and free growing commitments and to promote seral stage succession and natural ecosystem functioning, and,
  - (b) in areas with confirmed occurrences of invasive plant species, revegetate exposed soil (>0.1 ha) along roadsides and landings by grass seeding and fertilizing within 2 growing season months after soil disturbance, recognizing that spring and fall are optimum times to seed.
- (3) The Holder will ensure that when revegetation activities are carried out under subsection (1) an agronomic grass seed that meets Common No. 1 Forage Mixture (or better), as advised in Appendix C of the "*Invasive Plant Information for FSP Preparers & Reviewers with the Coast Region*", will be used.
- (4) The Holder will:
  - (a) Investigate all occurrences of species covered under the *Invasive Plants Regulation* and all knotweed species identified during silviculture surveys at the pre-harvest site plan stage or post-harvest and report confirmed occurrences that were previously unknown to the IAPP within a month of identification.
  - (b) where a plant species is identified as an invasive plant species as described in the *Invasive Plants Regulation*, or as a knotweed, establish site specific measures to control the spread of the invasive plant species or knotweed with the assistance of the MoFLNRORD Invasive Plant Specialist;
  - (c) instruct employees and contractors to sufficiently clean equipment and vehicles prior to moving them from an area with known occurrences of invasive species, or from a location external to FDU A, to within the areas of primary forest activities;
  - (d) ensure contractors begin work in un-infested areas before moving into known infested areas;
  - (e) ensure contractors do not park equipment in known infested areas;
  - (f) instruct contractors not to move soil, subgrade or surfacing material from an area known to have invasive plants to an area known to be free on invasive plants.
  - (g) annually provide appropriate personnel training and information regarding the recognition of 10 most likely invasive plants that are known to exist, or likely to exist within FDU A, to all field staff and contractors.



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- (5) If invasive plants establish as a result of the Holders forest practices, the Holder will:
- (a) develop and implement an invasive plant treatment plan with assistance from the MoFLNRORD Invasive Plant Specialist.
  - (b) monitor the revegetated areas, repeating revegetation as necessary until exposed soil is eliminated.
  - (c) report the location of the invasive species through the Invasive Alien Plant Program.

## **7.2 Measures Set by Government Related to Range Barriers (FPPR s. 18)**

There are no range tenures established within the FSP area and that overlap with FDU A, therefore no result or strategy is required.



## 8.0 EVEN-AGED STOCKING STANDARDS (FPPR S. 44)

The stocking standards outlined in Appendix 2 apply to the Net Area to be Reforested (NAR) of areas harvested identified by standards units, subject to this FSP and within FDU A. The stocking standards, regeneration dates and free growing heights are to be interpreted in conjunction with professionally designed, signed and sealed site plans required by the FPPR section 34 prior to the commencement of harvesting activities. Tables 1, 2, 3 and 4 of Appendix 2 specify Species Selection, Target Stocking, Minimum Stocking and Free Growing Heights.

These are the latest stocking standards that the Forest Practices Branch of the MoFLNRORD adapted to climate change in 2014. The Holder is committed to climate change adaptation and will review stocking standards annually to ensure the latest climate change stocking standards are used.

The following standards apply to blocks and/or standards units (SU) where even-aged management is planned.

### 8.1 Species Selection

Species selection to determine compliance with s. 44(1) of the FPPR will be based on the ecosystem classification. Species, which are considered ecologically suitable and commercially valuable for each site series, are listed in Tables 1 – 3 of Appendix 2.

**Western hemlock** (*Tsuga heterophylla*) is found throughout FDU A. Hemlock dwarf mistletoe is a significant management concern because of its ability to spread from the overstory into canopy openings created by harvesting. Management efforts are directed to limiting this spread potential rather than to eradication. When indicated at the site plan level by the prescribing forester, the following techniques will be employed to limit the spread and/or reduce the incidence in the regenerating stand:

- locating perimeter falling boundaries to include heavily infected trees within the cutblock and designing retention patches or other reserves to exclude heavily infected trees,
- 3 meter knock down of mistletoe-infected HwBa regeneration,
- regeneration of alternative immune species within 20 metres of any infection source; be it an infected edge or an individual infected tree.
- Hw will not contribute to stocking if within 20 metres of any infection source; be it an infected edge or an individual infected tree.

**Sitka spruce** (*Picea sitchensis*) is susceptible to white pine weevil. Therefore, Sitka spruce is limited to a minor component of 20% of the target stocking standard in areas of moderate and high risk spruce weevil damage, unless weevil resistant stock is planted. If weevil resistant stock is planted, in areas of moderate and high risk spruce weevil damage, the use of Ss or Se to meet the MSS is not limited. Sitka spruce must display a healthy leader and meet minimum height requirements to be accepted as a crop tree at free growing.

**True Firs** (*Abies* spp.) are at risk of future infestation by the Balsam woolly adelgid. These trees will not be managed in pure plantations. Where listed as a preferred species, true firs will not contribute more than 30% towards the target stocking standard (TSS).

**Yellow Cedar** (*Cupressus nootkatensis*) is a high valued species that can move from “acceptable” to “preferred” status depending on micro-climate, cold air drainage and presence on site.





Prescribing foresters doing Site Plans will make the decision on acceptability on a site specific basis.

## **8.2 Stocking**

The stocking standards address the two components of stocking – the level and distribution. Stocking level is addressed using Minimum Stocking Standards (MSS). The stocking distribution is addressed by using minimum horizontal inter-tree distances and M-values derived from Target Stocking Standards (TSS) during silviculture surveys.

### **8.2.1 Target Stocking Standards**

M-value derived from the TSS listed in Table 4 of Appendix 2 will be used to ensure that stocking distribution is taken into account when assessing stocking levels. The TSS will be assigned at the SU level. The dominant site series of the SU will be used to assign the TSS to the SU.

### **8.2.2 Minimum Stocking Standards**

MSS listed in Table 4 of Appendix 2 will be used to assess the achievement of an acceptable stocking level on individual SUs. MSS will be assigned at the SU level. The dominant site series of the SU will be used to assign the MSS to the SU.

### **8.2.3 Minimum Inter-Tree Distance**

Minimum Horizontal Inter-Tree Distances will ensure that stocking distribution is taken into account when assessing stocking levels. Minimum Horizontal Inter-Tree Distances are assigned based on the following parameters and may vary across a Standards Unit as conditions warrant:

- within 10m of roadsides, where logging debris and shot rock limit growing medium, inter-tree distance may be reduced to 1.6m;
- on shallow soils where planting spots are limited, inter-tree distance may be reduced to 1.6m;
- adjacent areas of heavy slash accumulation, inter-tree distance may be reduced to 1.6m;
- in areas with a high water table where raised micro sites provide the only available growing medium, inter-tree distance may be reduced to 1.6m;
- in all helicopter logging areas, inter-tree distance may be reduced to 1.6m;
- on all other sites and situations, inter-tree distance is to be a minimum of 2.0m.

## **8.3 Regeneration Date and Free Growing Timeline**

The default regeneration delay date is 6 years and the free growing date will be 20 years.

## **8.4 Minimum free growing heights and characteristics**

Minimum free growing heights will be assessed according to the stocking standards in Table 1 - 3 of Appendix 2. All trees assessed as free growing will meet the characteristics of good form, colour and vigour and be relatively free of significant pests. The trees meeting these free growing heights and characteristics can be reasonably assumed to be adapted to the site, growing well and would continue to do so.



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## APPENDIX 1: FSP MAP AND IDENTIFICATION OF FDUs



## APPENDIX 2: EVEN-AGED STOCKING STANDARDS

Each site proposed for harvesting and subject to a standards unit stocking standard will have been assessed by a qualified professional to meet the pre-harvest site planning requirements prescribed by the *FRPA* and *FPPR*. The following stocking standard tables are meant to be interpreted based on the opinion of a qualified professional concerning the site, its potential, unique circumstances and limitations, as well as the various characteristics of applicable tree species.

The Holder intends to utilize even-aged management across the cutblocks associated with this FSP through the following silviculture systems:

- Clearcut;
- Clearcut with reserves (groups, small patches or dispersed individual trees);
- Patch cut.

Dispersed small patches of less than 0.25 ha or individual trees will meet the Coast Regional Implementation Team criteria for even aged management of  $\leq 8\text{m}^2/\text{ha}$  of basal area retention.

Where residual basal area meets or exceeds  $5\text{m}^2/\text{ha}$  of retention, it will be reported in RESULTS.

Table 1. Stocking Standards Table for CWH vh2 BEC Classification.

BEC			Ecological Suitable Species and Minimum Free to Grow Heights (m)							
Zone	Subzone / Variant	Site Series	Ba	Cw	Hm	Hw	Plc	Se	Ss	Yc
CWH	vh2	01	1.8 <sup>7,19,47,53</sup>	1.5		2.0	1.5		3.0 <sup>7,53</sup>	1.5
CWH	vh2	03		1.0		1.3	1.3		2.0 <sup>7,53</sup>	1.0 <sup>3</sup>
CWH	vh2	04	2.3 <sup>19,47</sup>	2.0		1.8			4.0	2.0
CWH	vh2	05	2.3 <sup>19,47</sup>	2.0		1.8 <sup>2</sup>			4.0	2.0
CWH	vh2	06	2.3 <sup>19,47</sup>	2.0		1.8 <sup>2</sup>			4.0	2.0
CWH	vh2	07	2.3 <sup>19,47</sup>	2.0		1.8 <sup>2</sup>			4.0	2.0
CWH	vh2	11		1.0 <sup>1</sup>		1.3 <sup>1</sup>	1.3 <sup>1</sup>			1.0 <sup>1</sup>
CWH	vh2	12		1.0 <sup>1</sup>			1.3 <sup>1</sup>			1.0 <sup>1</sup>
CWH	vh2	13		1.0 <sup>1</sup>		1.3 <sup>1</sup>	1.3 <sup>53</sup>		2.0 <sup>1,53</sup>	1.0 <sup>1</sup>



Table 2. Stocking Standards Table for CWH vm1 and vm2 BEC Classification.

BEC			Ecological Suitable Species and Minimum Free to Grow Heights (m)							
Zone	Subzone/ Variant	Site Series	Ba	Cw	Hm	Hw	Plc	Se	Ss	Yc
CWH	vm1	01	1.8 <sup>26,47</sup>	1.5		3.0			3.0 <sup>7,35,53</sup>	
CWH	vm1	03		1.0		2.0	1.3 <sup>53</sup>			
CWH	vm1	04	1.8 <sup>47,53</sup>	1.5		3.0			3.0 <sup>15,35,53</sup>	
CWH	vm1	05	1.8 <sup>47</sup>	1.5		3.0			3.0 <sup>7,35</sup>	
CWH	vm1	06	1.8 <sup>47</sup>	1.5		3.0			3.0 <sup>7,35,53</sup>	
CWH	vm1	07	2.3 <sup>47</sup>	2.0		4.0 <sup>2</sup>			4.0 <sup>35</sup>	
CWH	vm1	08	2.3 <sup>47</sup>	2.0		4.0 <sup>2</sup>			4.0 <sup>35</sup>	
CWH	vm1	10	2.3 <sup>1,47</sup>	2.0 <sup>1</sup>					4.0 <sup>1,35</sup>	
CWH	vm1	13*		1.0 <sup>1</sup>			1.3 <sup>1</sup>			
CWH	vm1	14		1.5 <sup>1</sup>		3.0 <sup>1</sup>	1.3 <sup>53</sup>		3.0 <sup>1,35</sup>	
Zone	Subzone/ Variant	Site Series	Ba	Cw	Hm	Hw	Plc	Se	Ss	Yc
CWH	vm2	01	1.8 <sup>47</sup>	1.5	1.0 <sup>13,53</sup>	2.5			3.0 <sup>7,15,35</sup>	1.5 <sup>69</sup>
CWH	vm2	03		1.0	0.8 <sup>13,53</sup>	1.8	1.3 <sup>53</sup>			1.0 <sup>69</sup>
CWH	vm2	04	1.5 <sup>47</sup>	1.0	0.8 <sup>13,53</sup>	1.8			2.0 <sup>35,53</sup>	1.0 <sup>69</sup>
CWH	vm2	05	1.8 <sup>47</sup>	1.5	1.0 <sup>13,53</sup>	2.5			3.0 <sup>15,35</sup>	1.5 <sup>69</sup>
CWH	vm2	06	1.8 <sup>47</sup>	1.5	1.0 <sup>13,53</sup>	2.5			3.0 <sup>7,53</sup>	1.5 <sup>69</sup>
CWH	vm2	07	2.3 <sup>47</sup>	2.0	1.0 <sup>13,53</sup>	3.5 <sup>2</sup>			4.0 <sup>15,35</sup>	2.0 <sup>69</sup>
CWH	vm2	08	2.3 <sup>47</sup>	2.0 <sup>14</sup>	1.0 <sup>13,53</sup>	3.5 <sup>2,30</sup>			4.0 <sup>30,35</sup>	2.0 <sup>69</sup>
CWH	vm2	09	1.5 <sup>47</sup>	1.0 <sup>1</sup>	0.8 <sup>13</sup>	1.8 <sup>1</sup>	1.3 <sup>1,53</sup>			1.0 <sup>1,69</sup>
CWH	vm2	11		1.0 <sup>1</sup>	0.8 <sup>13,53</sup>	1.8 <sup>1</sup>			2.0 <sup>1,15,35,53</sup>	1.0 <sup>1,69</sup>



Table 3. Stocking Standards Table for MH mm1 and mm2 BEC Classification.

BEC			Ecological Suitable Species and Minimum Free to Grow Heights (m)							
Zone	Subzone/ Variant	Site Series	Ba	Cw	Hm	Hw	Plc	Se	Ss	Yc
MH	mm1	01	0.6 <sup>47</sup>		1.0	1.0 <sup>14,53</sup>				1.0
MH	mm1	02	0.6 <sup>47</sup>		0.8					0.8
MH	mm1	03	0.6 <sup>47</sup>		1.0	1.0 <sup>14,53</sup>				1.0
MH	mm1	04	0.6 <sup>47</sup>		1.0	1.0 <sup>14,53</sup>				1.0
MH	mm1	05	0.6 <sup>47</sup>		1.0	1.0 <sup>14,53</sup>				1.0
MH	mm1	06	0.6 <sup>1,47</sup>		0.8 <sup>1</sup>					0.8 <sup>1</sup>
MH	mm1	07	0.6 <sup>1,47</sup>		0.8 <sup>1</sup>					0.8 <sup>1</sup>
MH	mm1	08			0.8 <sup>1</sup>					0.8 <sup>1</sup>
MH	mm1	09			0.8 <sup>1</sup>					0.8 <sup>1</sup>
Zone	Subzone/ Variant	Site Series	Ba	Cw	Hm	Hw	Plc	Se	Ss	Yc
MH	mm2	01	0.6 <sup>47</sup>		1.0	1.0 <sup>14,44,53</sup>		1.0		1.0 <sup>17</sup>
MH	mm2	02	0.6 <sup>47</sup>		0.8	0.8 <sup>14,44,53</sup>		0.8		0.8 <sup>17</sup>
MH	mm2	03	0.6 <sup>47</sup>		1.0	1.0 <sup>14,44,53</sup>		1.0		1.0 <sup>17</sup>
MH	mm2	04	0.6 <sup>47</sup>		1.0	1.0 <sup>14,44,53</sup>				1.0 <sup>17</sup>
MH	mm2	05	0.6 <sup>47</sup>		1.0	1.0 <sup>14,44,53</sup>		1.0		1.0 <sup>17</sup>
MH	mm2	06	0.6 <sup>1</sup>		0.8 <sup>1</sup>					0.8 <sup>17</sup>
MH	mm2	07	0.6 <sup>1,47</sup>		0.8 <sup>1</sup>	0.8 <sup>14,44,53</sup>		0.8 <sup>1</sup>		0.8 <sup>17</sup>
MH	mm2	08			0.8 <sup>1</sup>					0.8 <sup>1,17</sup>
MH	mm2	09			0.8 <sup>1</sup>			0.8 <sup>1</sup>		0.8 <sup>1,17</sup>

Table 4. Target Stocking Standards (TSS) and Minimum Stocking Standards (MSS) by Site Series.

Stocking		Ecosystem Classification				
TSS	MSS	CWHvm1	CWHvm2	CWHvh2	MHmm1	MHmm2
400	200				8	02, 08
800	400	03, 14	03,09,11	03, 11, 13	02, 06, 09	06, 09
900	500	site series not listed above	site series not listed above	site series not listed above	site series not listed above	site series not listed above



## Footnote Definitions

Footnote #	Footnote	Footnote #	Footnote
<b>Conifer Tree Species</b>			
"Ba" means amabilis fir;	1 elevated microsites are preferred	46	restricted to area north of the Dean Channel
"Bg" means grand fir;	2 suitable on thick forest floors	47	risk of balsam wooly adelgid
"Bl" means subalpine fir;	3 restricted to coarse-textured soils	48	risk of heavy browsing by deer
"Bp" means noble fir;	4 restricted to medium-textured soils	49	applies only to rust resistant, planted stock.
"Cw" means western red cedar;	5 footnote retired	50	restricted to sites where the species occurs as a major species in a pre-harvest, natural stand
"Fd" means Douglas-fir;	6 restricted to nutrient-very-poor sites		
"Hm" means mountain hemlock;	7 restricted to nutrient-medium sites	51	restricted to areas with proven PI performance
"Hw" means western hemlock;	8 restricted to steep slopes	52	restricted to sheltered microsites with deep soil
"Lt" means tamarack;	9 restricted to southerly aspects	53	minor component
"Lw" means western larch;	10 restricted to northerly aspects	54	risk of unsuccessful release of advance regeneration
"Pa" means whitebark pine;	11 restricted to crest slope positions	55	acceptable in sx-sm portion of site series
"Pl" means lodgepole pine;	12 suitable on cold air drainage sites		
"Pw" means white pine;	13 restricted to upper elevations of biogeoclimatic unit		
"Py" means ponderosa pine;	14 restricted to lower elevations of biogeoclimatic unit		
"Sb" means black spruce;	15 restricted to northern portion of biogeoclimatic unit in region		
"Se" means Engelmann spruce;	16 restricted to southern portion of biogeoclimatic unit in region		
"Ss" means Sitka spruce;	17 restricted to western portion of biogeoclimatic unit in region		
"Sw" means white spruce;	18 restricted to eastern portion of biogeoclimatic unit in region		
"Sx" means hybrid spruce or interior spruce;	19 restricted, not in Queen Charlotte Islands		
"Sxs" means hybrid Sitka spruce;	20 restricted, not near outer coast		
"Sxw" means hybrid white spruce;	21 restricted to mainland		
"Yc" means yellow cedar.	22 restricted to southern Gardner Canal-Kitlope area		
	23 restricted to trial use		
	24 suitable (as a major species) in wetter portion of biogeoclimatic unit		
<b>Broadleaf Tree Species</b>			
"Acb" means balsam poplar;	25 suitable on sites lacking salal	69	Species is restricted to upper elevations when used in the southern portion of the biogeoclimatic unit
"Act" means black cottonwood;	26 suitable minor species on salal-dominated sites		
"At" means trembling aspen;	27 partial canopy cover required for successful establishment		
"Dr" means red alder;	28 limited by moisture deficit		
"Ep" means common paper birch;	29 risk of heavy browsing by moose		
"Mb" means bigleaf maple;	30 risk of porcupine damage		
"Qg" means garry oak;	31 risk of white pine blister rust		
"Ra" means arbutus;	32 limited by growing-season frosts		
	33 footnote retired and replaced with footnote 'a'		
"Biogeoclimatic unit" or "BGC classification" means the zone, subzone, variant and site series	34 risk of snow damage		
described in the most recent field guide published by the Ministry of Forests for the identification and interpretation of ecosystems, as applicable to a harvested area.	35 risk of weevil damage		
	36 suitable major species on salal-dominated sites		
	37 risk of heart rots		
	38 footnote retired		
	39 avoid exposed and windy sites		
"MIN" or "Min" means minimum.	40 risk of redheart		
	41 limited by poorly drained soils		
*Recommend Not Harvesting.	42 restricted to fresh soil moisture regimes		
	43 suitable on mainland coast only (QCI only)		
	44 suitable in areas with stronger maritime influence		
	45 suitable in areas with stronger continental influence		