

# FOR SUBMISSION

FUR SUBMISSION

<u>Term:</u> Five years, commencing on the following date, as specified in the approval by the Delegated Decision Maker: <u>DATE TBA</u>

For operations within the Coast Mountains Natural Resource District under Tree Farm License 1 and Forest License A16835, held by:

**Coast Tsimshian Resources Limited Partnership** 

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Coast Tsimshian Resources LP	FOR SUBMISSION: Forest Stewardship Plan for TFL 1 and FL A16835
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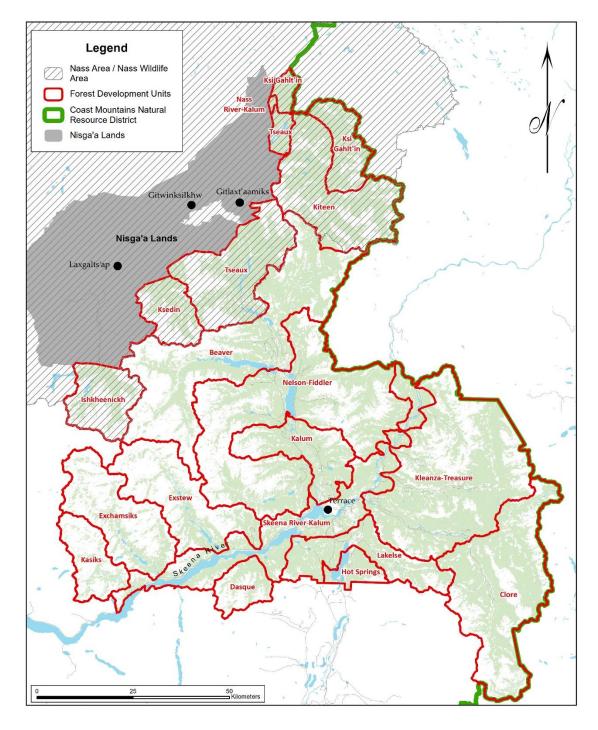
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# FSP KEY MAP

# FSP Overview Map, showing Forest Development Units (FDU) in red



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# 1 Introduction

This Forest Stewardship Plan (FSP) has been prepared for the operations of Coast Tsimshian Resources Limited Partnership ("Coast Tsimshian", "CTR", or "the FSP Holder") under Tree Farm License 1 and Forest License A16835 within the Coast Mountains Natural Resource District. The FSP describes:

- 1. the planned areas of interest (known as Forest Development Units or FDUs) that will contain logging and road activities, and
- 2. results and strategies for each FDU that are consistent with applicable legislation and objectives set by government.

The results and strategies must be measurable or verifiable: this will allow the Designated Decision Maker<sup>1</sup> to evaluate whether consistency with the objectives is being achieved. Within the FSP document, the description of each result or strategy will indicate whether it applies to all, some, or just one of the FDUs identified in the FSP.

Preparation of an FSP is a requirement of the *Forest and Range Practices Act* (FRPA), which was enacted on January 31, 2004. The FRPA and its associated regulations identify objectives and/or prescribe requirements for the following resource values:

- Soils
- Timber (including Forest Health)
- Wildlife
- Water
- Fish
- Biodiversity

- Cultural Heritage Resources
- Recreation Resources
- Resource Features
- Visual Quality
- Forage

A supporting document has been prepared which includes rationales for the results and strategies described in the FSP, as well as providing descriptions of how the FSP relates to certain resource values. While the Supporting Document is not part of this FSP, it is expected that the reader will refer to it while reviewing this FSP.

# 1.1 Description of the Forest Tenure and the FSP Area

This FSP is for operations under Tree Farm License (TFL) 1 and Forest License (FL) A16835, and falls within the Coast Mountains Natural Resource District. TFL 1 and FLA16835 are held by CTR.

The allowable annual cut (AAC) of TFL 1<sup>2</sup> is 320,277 m<sup>3</sup>, and for FL A16835 is 244,037 m<sup>3</sup>. The historical operating areas of these tenures are spread throughout the former Kalum Forest District (now part of the Coast Mountains Natural Resource District).

The operating area covered by this FSP includes all of TFL 1 and the portion of the Kalum Timber Supply Area (TSA) under the FSP Holder's stewardship from Lakelse Lake in the south to the Nass Valley in the north (see FSP Key Map).

# 1.2 Term of the Forest Stewardship Plan

The term of this plan is for five years starting from the date specified in the approval by the Delegated Decision Maker.

<sup>&</sup>lt;sup>1</sup> For this FSP, the Designated Decision Maker is the District Manager of the Coast Mountains Natural Resource District, BC Ministry of Forests

<sup>&</sup>lt;sup>2</sup> The AAC provided for TFL 1 does not include 29,950 m<sup>3</sup> that is apportioned to BC Timber Sales

## 1.3 Interpretation

All references to the Forest Act mean the Forest Act (Chapter 157), current to December 1, 2022.

All references to the *Forest and Range Practices Act*, or to FRPA, mean the *Forest and Range Practices Act* (SBC 2002, Chapter.69), current to December 1, 2022.

All references to the Forest Planning and Practices Regulation, or to FPPR, mean the Forest Planning and Practices Regulation (BC Reg 14/2016), consolidated to November 22, 2022.

All references to the *Government Actions Regulation*, or to GAR, mean the *Government Actions Regulation (BC Reg 582/2004)*, consolidated on November 22, 2022.

All references to the *Invasive Plant Regulation* mean the *Invasive Plant Regulation* (BC Reg 18/2004), consolidated on November 22, 2022.

All references to the Land Act mean the Land Act (Chapter 245), current to December 1, 2022.

All references to the Wildlife Act mean the Wildlife Act (Chapter 488), current to December 1, 2022.

All references to the *Kalum Sustainable Resource Management Plan*, or Kalum SRMP, mean the *Kalum Sustainable Resource Management Plan (April 2006), including amendments, as they occur from time to time.* 

All references to the Kalum Land and Resource Management Plan, or Kalum LRMP, mean the Kalum Land and Resource Management Plan (May 2002), including amendments, as they occur from time to time.

Unless otherwise noted, statements and information provided are current to November 2022. Every effort has been made to ensure that current data have been used in map generation and analyses. While this does not mean that the data is up-to-date or completely accurate, it is the best available information.

# 1.4 Content Requirements

The required content in a FSP is described in the FRPA and the FPPR.

The basic requirements are:

- A map that shows the boundary of proposed and approved FDUs (FRPA s. 5(1)(a)). There are 18 FDUs.
- Ten of the FDUs are aligned to match Landscape Unit boundaries:

Beaver Nelson-Fiddler

Kalum Kasiks Exchamsiks
Exstew Skeena River-Kalum Kleanza-Treasure

Dasque Clore

Eight of the FDUs partially match the Landscape Units but are constrained by other administrative boundaries:

Nass River-Kalum Tseax Ksedin Ishkheenickh Lakelse Hot Springs

Kiteen Ksi Gahlt'in

- A description of the results and/or strategies necessary to be consistent with applicable legislation and with objectives that have been set by government (FRPA s. 5(1)(b)). The results and strategies are described in Section 2.
- A description or a map showing the following where it exists on the FSP area:

As required per FPPR s. 14(2) & (3)) Higher Level

- Ungulate Winter Range

Wildlife Habitat Areas

Higher Level Plan features

- Skeena Islands Area

- Skeena Islands High Conservation

- Fisheries Sensitive Watersheds
- Lakeshore Management Zones
- Scenic Areas
- L1 Lakes
- Community Watersheds
- Old Growth Management Areas
- Areas where harvest is prohibited
- Cutting Permits and Road Permits held by the FSP Holder

Area

- Water Management Units
- Ecosystem Network
- Pine Mushroom Habitat
- Special Habitats for General Wildlife
- Special Management Zones

This information is provided on the FSP maps as described in Section 4.

- Description of the Stocking Standards that will apply on the FDUs (FPPR s. 16). Described in <u>Section</u> 3.2.
- Where applicable, address:

Invasive plants (FPPR s. 17). Section 3.3

Natural range barriers (FPPR s. 18). Section 3.4

The cumulative effect of multiple FSPs in an area (FPPR s. 19). Section 3.5

- Information on public review and advertisement as well as efforts to share information with First Nations, must also be provided (FRPA s. 18 and FPPR s. 21 & 22). Section 3.6
- Signature by an authorized representative of the licensee (FRPA s. 5(3)). Title page

# 1.5 Explanation of Objectives, Results and Strategies

**Objectives** are descriptions of how overall goals are to be achieved. In this case, the goals are increased flexibility in forest management, decreased administrative complexity and environmental protection. Objectives can vary from place to place depending on the circumstances of the area. The FRPA defines three types of objectives:

Objectives set in regulation: these objectives are explicitly stated in the FPPR and apply provincially.

Objectives enabled by regulation: The Government Action Regulation (GAR) provides authority to the Ministers responsible for the Forest Act, Land Act and Wildlife Act to establish objectives for certain items described in the regulation. These objectives can apply at many different scales.

Notices providing information on habitat amount, distribution and attributes have been provided for several wildlife species under section 7(2) of the FPPR ("Section 7" notices).

Under GAR, Wildlife Habitat Areas and Ungulate Winter Range have been established for areas that overlap with the FDUs.

See the Supporting Document to this FSP for further discussion of these items.

Land-use objectives: These are objectives specific to a certain area that have been established through a Landscape Unit Plan or some sort of higher-level plan such as a Land and Resource Management Plan or Sustainable Resource Management Plan. The Minister responsible for the Land Act sets these objectives.

The Kalum Sustainable Resource Management Plan (SRMP) was approved in April 2006, using the cabinet-approved Kalum Land and Resource Management Plan (LRMP) as its basis. The objective in the Kalum SRMP were amended in 2017 by ministerial order for the Kiteen area and the Skeena Islands area. The objectives within the SRMP and the amendments are considered land-use objectives under the FRPA.

#### Results are

- measurable or verifiable outcomes in respect of an established objective, and
- the situations or circumstances that determine where in a FDU the outcomes will be applied.

#### Strategies are

- measurable or verifiable steps or practices that will be carried out to achieve consistency with an established objective, and
- the situations or circumstances that determine where in a FDU the steps or practices will be applied.

Some **Practice Requirements** can be affected by results or strategies. Under the FPPR there are practices described that must be followed; however, some of these practice requirements are optional if the FSP contains results or strategies for objectives that also meet the intent of the practice. Conversely, some of these optional practice requirements, if committed to in the FSP, relieve the FSP Holder from having to provide results or strategies for certain objectives. These practice requirements are considered to achieve some of the objectives set by government. It is up to the FSP Holder to indicate whether the results and strategies in the FSP allows the FSP to be exempted from following these optional practice requirements or whether, by following certain practice requirements, the FSP does not require results or strategies for certain objectives.

More information on the objectives, results, and strategies and how they relate to the resource values can be found in the Supporting Document to this FSP.

## 1.6 Parts of this document that comprise the Forest Stewardship Plan

In accordance with the FRPA, the only parts of this document that are the Forest Stewardship Plan are:

- the title/signature page;
- the results and strategies, as described in Section 2;
- the additional information provided, discussed, or referenced in Section 3; and
- the 1:50,000 scale maps indicating the FDUs as attached as part of <u>Section 4</u>.

A separate document has been prepared which provides supporting information for this plan. This Supporting Document is not considered part of the Forest Stewardship Plan; however, it is important to have the Supporting Document in hand as it will provide context and help in understanding this FSP.

# 1.7 Acronyms

Acronyms used in the FSP or Supporting Document are:

AAC: Allowable Annual Cut

AIA: Archaeological Impact Assessment
AOA: Archaeological Overview Assessment

ATV: All-Terrain Vehicles

BA: Basal Area

BCTS: British Columbia Timber Sales

BEC: Biological, Ecological, and Climatic; or Biogeoclimatic Ecosystem Classification

C&E: Compliance and Enforcement CDC: Conservation Data Center CHR: Cultural Heritage Resource

CHRR: Cultural Heritage Resource Review

CMNRD: Coast Mountains Natural Resource District

CMT: Culturally Modified Tree

CP: Cutting Permit

CWD: Coarse Woody Debris
CWH: Coastal Western Hemlock

DDM: Delegated Decision Maker
DFO: Fisheries and Oceans Canada
ECA: Equivalent Clearcut Area

ECA. Equivalent Clearcut Area

EMS: Environmental Management System ESSF: Engelmann Spruce Sub-alpine Fir

FA: Fuel Assessment

FAR: Fuel Assessment Rating
FDP: Forest Development Plan
FDU: Forest Development Unit

FL: Forest License

FLTC: Forestry License to Cut

FMSS: Fire Management Stocking Standard FPPR: Forest Planning and Practices Regulation

FRPA: Forest and Range Practices Act

FSP: Forest Stewardship Plan FSR: Forest Service Road

GAR: Government Actions Regulation

GWM: General Wildlife Measure ICH: Interior Cedar-Hemlock

ILMB: Integrated Land Management BureauIWMS: Identified Wildlife Management StrategyLRMP: Land and Resource Management Plan

LU: Landscape Unit

MAg: Ministry (or Minister) of Agriculture

MFLNRO: Ministry (or Minister) of Forests, Lands and Natural Resource Operations

MFLNRORD: Ministry (or Minister) of Forests, Lands, Natural Resource Operations and Rural

Development

MH: Mountain Hemlock

MOE: Ministry (or Minister) of Environment MOF: Ministry (or Minister) of Forests

MOFR: Ministry (or Minister) of Forests and Range

MOTSA: Ministry (or Minister) of Tourism, Sports, and the Arts

MSRM: Ministry (or Minister) of Sustainable Resource Management MWLAP: Ministry (or Minister) of Water, Land and Air Protection

NA: Nass Area

NAR: Net Area to be Reforested
NDT: Natural Disturbance Type
NLG: Nisga'a Lisims Government
NRFL: Non-Renewable Forest License

NSR: Not sufficiently restocked

NWA: Nass Wildlife AreaNWC: Nass Wildlife CommitteeOGMA: Old Growth Management AreaOSBG: Objectives Set by Government

QP: Qualified Professional

RESULTS: Reporting Silviculture Updates and Land Status Tracking System

RIC: Resource Inventory Committee RMA: Riparian Management Area

RMZ: Riparian Management Zone

RP: Road Permit

RPBio: Registered Professional Biologist RPF: Registered Professional Forester

RRZ: Riparian Reserve Zone RUP: Road Use Permit

SP: Site Plan

SPAR: Seed Planning and Registry System
SRMP: Sustainable Resource Management Plan
SRMZ: Special Resource Management Zone

SU: Standards Unit
TFL: Tree Farm License

TIRMP: Thunderbird Integrated Resource Management Plan

TRP: Total Resource Plan
TSA: Timber Supply Area

TSFA: Terrain Stability Field Assessment

TSL: Timber Sale License
UWR: Ungulate Winter Range
VIA: Visual Impact Assessment
VQO: Visual Quality Objective
VSC: Visual Sensitivity Class

WAP: Watershed Assessment Procedure

WHA: Wildlife Habitat Area

WTRA: Wildlife Tree Retention Area

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# 2 OBJECTIVES, RESULTS AND STRATEGIES

This section describes the objectives, the strategies to be carried out by the FSP Holder, and the results to be achieved by the FSP Holder. This will ensure that activities within the FDUs that are directed by this FSP are consistent with applicable legislation and with objectives. In addition, practice requirements that are subject to exemption are also described.

This information is organized by FRPA resource values:

- Soils
- Timber
- Wildlife
- Fish
- Water

- Biodiversity
- Visual Quality
- Cultural Heritage Resources
- Recreation Resources

For each resource value, the objectives set in regulation as described in FPPR are given followed by the land-use objectives as described in the Kalum SRMP and amendments to the SRMP. While some objectives may address more than one resource value, they have been organized by the value that is most applicable.

After each objective described in FPPR and where applicable, a statement is provided identifying which of the FPPR practice requirements are optional and eligible for exemption (and that relate to the objective) and which of these are being "exempted" (i.e., will no longer apply to activities under this FSP) or "not exempted" (i.e., the practice requirements continue to apply). Unless otherwise noted, the eligible practice requirements that are not exempted will apply on all FDUs. For clarity, when it is indicated below that an "eligible practice requirement is not exempted", this is an undertaking that the FSP Holder will comply with that practice requirement.

Results or strategies are then specified that are consistent with the objective. These results and strategies apply in addition to practice requirements that are not exempted. Where a reference number is **bolded**, the strategy or result was created specifically for that objective. Where a reference number is not bolded, it was created for another objective but is noted with a comment as also being consistent with the current objective. This acknowledges that results and strategies may address more than one resource value and associated objective. For additional clarity regarding the application of results or strategies to wildlife management, the appropriate wildlife order or notice is noted under the result or strategy reference number.

As a point of information, results or strategies that begin with "CTR17" are carried forward from a previous CTR FSP.

# 2.1 Soil

# FPPR s. 5 Soils Objective

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description	
Objective:	FPPR s. 5: "The objective set by government for Columbia's forests, to conserve the productivity a			oils is, without unduly reducing the supply of timber from British d the hydrologic function of soils. "
	Practice Red	quirement(s) e	ligible for exemption:	FPPR s. 35,36
	Eligible F	Practice Requi	rement(s) exempted:	None
	Eligible Practice Requirement(s) not exempted.			FPPR s. 35,36
CTR17-01	Lakelse; Skeena River Kalum	Result	1. No new roads a existing roads a 2. The equivalent Holder commer commenced (us) 3. Before blocks a Creek, a detaile nature and exte 4. When the FSP are carried out This result will not ap	clearcut area (ECA) amount five years after logging by the FSP noces is to be the same or less than before that logging sing the same method of ECA calculation both times). The submitted by the FSP Holder for CP issuance within Alwyn and road and channel assessment is in place that describes the ent of sediment sources and mobility within the watershed. Holder commences operations on blocks submitted in (3), they consistent with actions identified in the assessment in (3). The poly where the FSP Holder and the District Manager (or his/her action is required to prevent or address potential losses due to ealth factors.
CTR17-04	All	Strategy	holder's responsibilit or CP), the FSP hold  1. Perform a risk a minimum inspe a. For roads more than three mon the start o b. For roads inspection  2. Conduct inspect 3. Set priorities ar inspection in (2)	assessment to determine an inspection frequency, or follow these ction frequencies: that are subject to active log hauling or that will not be inactive for nine months, the minimum inspection frequency is once every ths. The initial inspection will occur within 30 days before or after f hauling. that will be inactive for more than nine months, the minimum frequency is once per calendar year, under snow-free conditions. tions in accordance with (1).
	g results and str 0 and <u>CTR1</u>	-	ibed in relation to othe	r objectives, are also consistent with FPPR s. 5 Objective:

## Kiteen LUOR Order: Objective 3(1) Hydrologic Stability of Watersheds

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description
Objective:	Kalum SRMP Kiteen LUOR Order – Objective 3 (1):  Maintain the hydrologic stability of watersheds so that the Equivalent Clearcut Area threshold of 30% is not exceeded, except where a hydrologic assessment is completed by a qualified professional prior to any harvesting that would cause the thresholds to be exceeded and that subsequent activities are conducted in a manner that is consistent with the results of the assessment.		
CTR17-02	Ksi Gahlt'in	Result	During the term of this FSP, the FSP Holder will ensure that the ECA¹ of the Kiteen and Cranberry watersheds will not exceed 30%, except where a hydrologic assessment is completed by a qualified professional prior to any harvesting that would cause the thresholds to be exceeded.  ¹ Calculation of ECA will be consistent with the Watershed Assessment Guidebook (2 <sup>nd</sup> Ed, version 2.1 April 1999).
CTR17-03	Ksi Gahlt'in	Strategy	During the term of this FSP, the FSP Holder will ensure that any harvesting resulting in an ECA greater than 30% within the Kiteen and Cranberry watersheds is conducted in a manner that is consistent with the results of the hydrological assessment completed for that harvesting.

# 2.2 Timber

# **FPPR s. 6 Timber Objective**

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description		
Objective:		FPPR s. 6: "The objectives set by government for timber are to (a) maintain or enhance an economically valuable supply of commercial timber from British Columbia's forests, and			
	(b) ensure that provisions of the	(b) ensure that delivered wood costs, generally, after taking into account the effect on them of the relevant provisions of this regulation and of the <i>Act</i> , are competitive in relation to equivalent costs in relation to regulated primary forest activities in other jurisdictions, and			
	(c) ensure that the provisions of this regulation and of the <i>Act</i> that pertain to primary forest activities do not unduly constrain the ability of a holder of an agreement under the <i>Forest Act</i> to exercise the holder's rights under the agreement."				
	Practice Requirement(s) eligible for exemption: FPPR s. 43.1(1)				
	None				
	Eligible Prac	tice Requirem	ent(s) not exempted:	FPPR s. 43.1(1)	
CTR17-05	All	Result	at least the min standards that a	locks logged by the FSP Holder are reforested to: imum stocking with the species identified in the stocking apply to this FSP; and	
				rowing heights and free growing dates as described in the ards that apply to this FSP.	

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description
CTR22-01	All	Strategy	Within the FDU(s), during the term of this FSP, for standard units (SU) to be authorized via this FSP, the FSP holder will:
			<ol> <li>Where 50% of the SU is located within 500 m of three or more known instances of structures or infrastructure<sup>1</sup>, a Fuel Assessment (FA)<sup>2</sup> will be conducted. The assessment will consider current conditions and future conditions under both conventional stocking standards and Fire Management Stocking Standards (FMSS).</li> <li>Where 50% of the SU is located within 500 m of one or two known instances of</li> </ol>
			structures or infrastructure <sup>1</sup> , a FA <sup>2</sup> may be conducted at the discretion of the prescribing forester.  3. If the FA in (1) or (2) determines that the Fuel Assessment Rating (FAR) is projected to be moderate, high or extreme using conventional stocking standards, and if the FAR is projected to drop at least one class using FMSS, FMSS will be used (as described in the stocking standards that apply to this FSP).
			<sup>1</sup> Structures or infrastructure are those that are known, legally established, in usable condition, vulnerable to fire and known to have been actively used within the year previous to SP field data gathering.
			<sup>2</sup> A FA means that a Fuel Assessment Worksheet as found in Appendix B of the Wildfire Threat Assessment Guide and Worksheets (June 2020) will be completed.

The following results and strategies, described in relation to other objectives, are also consistent with FPPR s. 6 Objective: <u>CTR17-35</u>, <u>CTR17-36</u>, <u>CTR17-38</u>, and <u>CTR17-41</u>.

# 2.3 Wildlife

### FPPR s. 7 Wildlife Habitat Objective

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description		
Objective:	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."				
	The FSP Hold	er is required	to prepare results and strategies for FPPR s. 7(1) if:		
<ol> <li>A notice is issues by the Minister responsible for the Wildlife Act providing descriptions of the habite distribution, and attributes for a species (as per FPPR s. 7(2)).</li> <li>AND</li> <li>The objective is NOT already addressed by an objective in relation to a WHA, UWR, GWM or wildlifeature (as per FPPR s. 7(3)).</li> </ol>					
	As of May 2022, for the area covered by the FSP Holder's FDU, Section 7 notices providing descriptions of habitat area, distribution, and attributes have been released by the Minister responsible for the <i>Wildlife Act</i> for coastal tailed frog, grizzly bear, Marbled Murrelet, mountain goat, and moose.				
	The following	have been est	ablished over the area covered by the FDU(s) as of May 2022:		
	<ul> <li>Mountain</li> </ul>	Goat UWR;			
	<ul> <li>Moose U</li> </ul>	•			
Coastal Tailed Frog WHA; and			HA; and		
	Grizzly B				
	Therefore, the FSP Holder is exempt from preparing results and strategies for mountain goat, moose, coastal tailed frog, and grizzly bear. Nonetheless, some of the results and strategies provided in this FSP for other wildlife species may also be of benefit to these species.				

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description
	Practice Red	quirement(s) e	ligible for exemption: None
CTR17-08	All FDUs that overlap Grizzly Bear Watershed Units or Moose Ungulate Winter Range	Result	<ol> <li>For blocks logged during the term of this FSP by the FSP Holder within the FDU(s):</li> <li>within Grizzly Bear Watershed Units<sup>1</sup>, or</li> <li>outside of Grizzly Bear Watershed Units<sup>1</sup> but within Moose UWR<sup>2</sup>, where an SP identifies that this result is necessary to provide for or conserve Moose Winter Range habitat,</li> <li>the stocking and inter-tree spacing requirements for the site associations described in the stocking standards for wildlife forage that apply to this FSP (Table A2) are met when free-growing is declared.</li> <li>As shown on the FSP maps, which correspond to Map 7 of the Kalum SRMP (April 2006).</li> <li>As shown on the FSP maps, which corresponds to Ungulate Winter Range Order U-6-009.</li> </ol>
CTR22-04	All	Result	<ol> <li>For the purposes of providing visual screening in blocks logged during the term of this FSP by the FSP Holder:</li> <li>After logging is complete, retain regenerating deciduous trees and herbaceous brush within 10 m of a road¹, measured from the edge of the road running surface, except where an operational safety (e.g., line of sight for road safety) or forest health concern exists.</li> <li>Deciduous trees and herbaceous vegetation within 10 m of a road¹, measured from the edge of the road running surface, are not considered competing vegetation for the application of the stocking standards that apply to this FSP.</li> <li>For in-block road(s)¹, (1) and (2) do not apply if the Site Plan for the block states this result does not apply to the in-block road(s).</li> </ol>

The following results and strategies, described in relation to other objectives, are also consistent with FPPR s. 7(1), particularly with respect to the Section 7 Notice for Marbled Murrelet:  $\underline{CTR17-35}$ ,  $\underline{CTR17-36}$ , and  $\underline{CTR17-37}$ .

# Kalum SMRP Objective 11 Grizzly Bear Forage

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description
Objective:	Maintain natur  a. prov b. mair c. on tl Vary achi d. with	- Objective 11: ral level of forage supply for grizzly bears in the watersheds identified on Map 7 by: riding an adequate supply of berry feeding; ntaining natural levels of forage supply as present in old growth forests; the rich and wetter sites implement regeneration and free to grow standards consistent with Table 8. r from these standards based on site specific factor, provided parts a) and b) in this objective will be eved; and, in McKay-Davies and Copper watersheds, no more than 30% of the forested land base, excluding through will be between 25 and 100 years old.	
CTR17-50	Clore; Kleanza- Treasure;	Result	During the term of this FSP, logging operations by the FSP Holder are carried out within the portion of the Copper Grizzly Bear watershed¹ that falls within the FDU(s) only if:  1. Less than 30% of the forested land base, excluding hardwoods, is between 25 and 100 years old within the portion of the Grizzly Bear watershed that falls within the FDU(s); or  2. An analysis of the Grizzly Bear watershed indicates that having more than 30% of the area within the portion of the Grizzly Bear watershed that falls within the FDU(s) will not result in the 30% threshold being exceeded for the entire Grizzly Bear watershed and other tenure holders will not be unduly impacted.  ¹ As shown on the FSP maps. This information corresponds to the map provided with the Kalum SRMP (April 2006)

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description
The following result, described in relation to another objective, is also consistent with Kalum SRMP Objective 11: CTR17-08.			

#### Kiteen LUOR Order: Fur-bearers Objectives

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description	
Objective:	Kalum SRMP	Kalum SRMP Kiteen LUOR Order Objectives		
	6(20) Minimize	impacts to kn	nown high value fisher and wolverine habitats.	
	6(21) Maintain	6(21) Maintain known fisher and wolverine denning sites.		
CTR17-56	Ksi-Gahlt'in	Result	During the term of this FSP, the FSP holder will ensure that impacts to known active fisher and wolverine denning sites are minimized by maintaining a 100 meter no-harvest boundary around those sites during forest activities unless alternate management direction is provided by a Qualified Professional.	
The following results and strategies, described in relation to other objectives, are also consistent with Kalum SRMP Kiteen LUOR Objective 6(20): <a href="https://creativecommons.org/creative-nt-40">CTR17-15</a> , <a href="https://creative-nt-40">CTR17-15</a> , <a href="https://creative-nt-40">CTR17-16</a> , <a href="https://creative-nt-40">CTR17-35</a> , <a href="https://creative-nt-40">CTR17-36</a> ,				

# Kiteen LUOR Order: Goshawk Objectives

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description				
Objective:	Kalum SRMP	Kiteen LUOR	Order Objectives				
	7 (22) Maintain and reproduct		post-fledging habitats at known goshawk nest area, in order to support continued use of eas.				
	7 (23) Maintair	n all known go	shawk nest and post-fledging areas				
	there are no m	nechanized act	and August 15, around any active goshawk nest, maintain a 500-metre buffer in which tivities allowed. Mechanized activities means road construction and timber culture activities.				
	there are no fo	7(25) Between February 15 and August 15, around any active goshawk nest, maintain a 200-metre buffer in which there are no forestry-related human activities allowed, unless no practicable alternative exists. Forestry related human activities include log hauling and those activities not identified as mechanized activities.					
	7(26) Maintain	7(26) Maintain foraging habitat around known goshawk and post-fledging areas.					
	7(27) Maintain at least 30% of the perimeter around known goshawk nests and post fledging areas so that it is directly connected by mature or old forests to a comparable forest in the foraging area. A foraging area is the hunting territory typically used by a pair of goshawks. Where the perimeter is less than 30%, forests that are available will be used, and the most suitable adjacent forest will be allowed to mature over time to provide connectivity, as determined by a qualified professional.						
	goshawk nest be used. Suita	and post-fledg able forest are	e and old forest structure and function within determined foraging area around known ging areas. Where at least 60% does not currently exist, forests that are available must as adjacent to foraging areas must be maintained as recruitment areas to provide the d function over time				

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description
CTR17-10	Ksi Gahlt'in	Strategy	<ol> <li>During the term of this FSP, the FSP holder will ensure that when primary forest activities are planned within 500m of known goshawk nest areas:</li> <li>The nest and post-fledging area will be assessed by a qualified professional prior to authorization of the primary forest activities;</li> <li>The assessment will contain management recommendations consistent with Kalum SRMP Kiteen LUOR Order Objectives 7(22), (23), (26), (27) &amp; (28);</li> <li>Primary forest activities will be consistent with those assessments' management recommendations.</li> <li>No mechanized activities will occur within 500m of any active goshawk nest between February 15 and August 15.</li> <li>No forestry-related human activity will occur within 200m of any active goshawk nest between February 15 and August 15, unless no practicable alternative exists.</li> </ol>
CTR17-11	Ksi-Gahlt'in	Result	<ol> <li>During the term of this FSP, when primary forest activities are executed adjacent to a known goshawk nest and/or post-fledging area the FSP holder will:</li> <li>Maintain ≥ 30% of the perimeter around known goshawk nests and post-fledging areas so that it is directly connected to by mature or old forests to a comparable forest in the foraging area. When the perimeter is composed of &lt; 30% mature or old forests, the most suitable adjacent forest will be maintained for recruitment in to mature or old forest, as determined by a qualified professional.</li> <li>Maintain ≥ 60% mature and old forest structure and function within determined foraging areas around goshawk nest and post-fledging areas. Where &lt; 60% exists, the most suitable forest will be maintained for recruitment in to mature or old forest.</li> </ol>

# 2.4 Fish

# FPPR s. 8 Riparian Objective

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description				
Objective:	unduly reducing quality, fish hare FPPR 12(3): E	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."  FPPR 12(3): Despite section 12.1 (2) and (6), a person who prepares a forest stewardship plan must specify in it, for the objective set out in section 8, a result or strategy that addresses retention of trees in a riparian management zone.					
	Practice Red	quirement(s) e	ligible for exemption:	FPPR s. 47, 48, 49, 50, 51, 52(2), 53			
	Eligible F	Practice Requir	None				
	Eligible Practice Requirement(s) not exempted: FPPR s. 47, 48, 49, 50, 51, 52(2), 53						

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description
CTR22-06	All	Result	<ul> <li>During the term of this FSP, for all blocks logged by the FSP Holder within the FDU(s):</li> <li>1. Retain an amount of BA within the RMZ of a stream, wetland or lake as follows: <ul> <li>a. on S1, S2, and S3 Streams¹, retain a minimum of 20% of the BA of the RMZ;</li> <li>b. on S4 and S5 Streams¹, and on the lower 100 m² of S6 Streams¹ that are direct tributaries of S1, S2, or S3 Streams¹, retain a minimum of 10% of the BA of the RMZ;</li> <li>c. on all other S6 Streams¹, no BA retention is necessary, unless required by another result or strategy in this FSP;</li> <li>d. on all Wetlands¹ and Lakes¹, a minimum of 10% of the BA of the RMZ will be retained.</li> </ul> </li> <li>2. BA retention in RMZs may be distributed in a non-uniform manner along the stream; clumps of retention may be interspersed with portions of RMZ that have no retention.</li> <li>3. The use of area retention will be considered a reasonable estimate of BA retention if the forest type of the retained portion of the RMZ is similar to that of the original portion.</li> <li>1 Stream, Wetland, and Lake is as defined in FPPR</li> </ul>
			<sup>2</sup> Measured from the confluence of the S6 and S1, S2 or S3 streams to 100 m slope distance upstream on the S6 stream.

The following results and strategies, described in relation to other objectives, are also consistent with FPPR s. 8 Objective:  $\underline{CTR17-01}$ ,  $\underline{CTR17-49}$ , and  $\underline{CTR17-51}$ .

### FPPR s. 8.1 Fisheries Sensitive Watersheds Objective

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description			
Objective:	prevent to the fisheries sensi the fisheries so (3) The objecti	extent describ tive watershed ensitive waters ive set by gove	ed in subsection (3) the from resulting in a mached was established.	government for fish habitat in fisheries sensitive watersheds is to the cumulative hydrological effects of primary forest activities in the aterial adverse impact on the habitat of the fish species for which tion (2) applies only to the extent that it does not unduly reduce s."		
	Practice Red	quirement(s) e	ligible for exemption:	FPPR s. 55, 56, 57		
	Eligible Practice Requirement(s) exempted: None					
	Eligible Practice Requirement(s) not exempted: FPPR s. 55, 56, 57					
Not applicable	<u>Comment</u> : No strategy or result is necessary as there are no fisheries sensitive watersheds within the FDUs, and the December 31, 2005 time frame has passed.					

### Kiteen LUOR Order: Water, Fish, and Riparian Objectives

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description				
Objective	Kalum SRMP	Kiteen LUOR	Objectives				
	3(2) Maintain t		functioning of streams, rivers, wetland complexes and lakes, including those that do not				
	3(3) Ensure that industrial forestry activity on all rivers and streams does not cause significant consequences for fish habitat or human water consumption from channel bank erosion, channel aggradation, degradation or dewatering, or change in channel morphology.						
	` '	eserve zones akes and wetl	and management zones and/or riparian features identified in Schedule B for all rivers, ands.				
		wdown within akes and wetl	riparian reserve zones and/or management zones as large woody debris for all rivers, ands.				
			sited large woody debris in rivers and streams in riparian classes S1 to S4, except sfy safety considerations.				
	3(8) Maintain t	he functional i	ntegrity of all floodplains and alluvial fans.				
	Schedule	F. Acceptable	ested area of the hydroriparian zone within the Ecosystem Network, as identified on e rationales for amending the Ecosystem Network are identified in Schedule F1.				
	General V	Vildlife on Sch					
	General V timber tha on adjace	Vildlife on Sch at is outside the ant forest value	ested area of the hydroriparian zone for each polygon identified as Special Habitats for edule H, except where no practicable alternative access exists to access or harvest e hydroriparian zone; to mitigate a safety concern; or where required to negate impacts is from a compelling forest health issue.				
	` '		ligenous fish populations.				
			integrity of fish bearing streams, rivers and lakes. ogic functioning of:				
	` '	• •	and and lake within a Water Management Unit identified on Schedule I; and				
	b) each		wnstream stream receiving water from a cutblock within a Water Management Unit				
	11(36) a) Retain 100% of the forested area of the hydroriparian zone of each stream, wetland and lake within a Water Management Unit as shown on Schedule I, unless harvesting is required to address compelling forest health issues or as set out in b)						
	b) Cutblocks may overlap a Water Management Unit as shown on Schedule I by no more than 200m or 50% of any individual cutblock area, whichever is less, provided that the riparian management practice applicable to the forest land base outside a Water Management Unit is maintained.						
	11(37) To the extent practicable, maintain Water Management Units within the Order Area or restore them to a roadless state, including by:						
	a) deactivating existing roads following completion of harvesting and silviculture obligations; and     b) constructing no new roads for commercial forestry operations.  1. Effectiveness masses the continued use of a helitat by the appoint that historically used it.  1. Effectiveness masses the continued use of a helitat by the appoint that historically used it.						
			ontinued use of a habitat by the species that historically used it.				
CTR17-13	Ksi Gahlt'in	Result	During the term of this FSP, the FSP holder will maintain reserve zones and management zones around riparian features identified in Schedule B <sup>1</sup> for all rivers, streams, lakes and wetlands.				
			<sup>1</sup> As listed on Schedule B to the <i>Amendment to Land Use Objectives for the Kalum Sustainable Resource Management Plan (2006) – (Kiteen area only).</i>				
CTR17-14	Ksi Gahlt'in	Strategy	During the term of this FSP, the FSP Holder will retain blowdown within riparian reserve zones and/or management zones identified in Schedule B¹ as large woody debris for all rivers, streams, lakes and wetlands.				
			<sup>1</sup> As listed on Schedule B to the <i>Amendment to Land Use Objectives for the Kalum Sustainable Resource Management Plan (2006) – (Kiteen area only).</i>				
CTR22-02	Ksi Gahlt'in	Strategy	During the term of this FSP, the FSP Holder will, for any of its activities in or about a S1, S2, S3 or S4 stream, maintain naturally deposited large woody debris in rivers and streams in riparian classes S1 to S4 identified in Schedule B¹, except where necessary to satisfy safety considerations.				
			<sup>1</sup> As listed on Schedule B to the <i>Amendment to Land Use Objectives for the Kalum Sustainable Resource Management Plan (2006) – (Kiteen area only).</i>				

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description
CTR17-15	Ksi Gahlt'in	Strategy	During the term of this FSP, the FSP holder will retain 100% of the forested area of the hydroriparian zone within the Ecosystem Network, as identified on the FSP maps. Acceptable rationales for amending the Ecosystem Network are:
			<ol> <li>To address access issues that were overlooked or unknown during the initial Ecosystem Network delineation, where no practicable alternative exists.</li> <li>To account for cut blocks in place prior to establishment of the Ecosystem Network, including those:         <ul> <li>approved under section 196(1) of the Forest and Range Practices Act;</li> <li>as declared areas under section 14(4) of the Forest Planning and Practices Regulation; or</li> <li>that have a cutting permit in place</li> </ul> </li> <li>To address a compelling forest health issue (e.g., a forest pest or disease is established in the Ecosystem Network and spreads to the point where it threatens adjacent values and resources outside the Ecosystem Network).</li> <li>New data and information such as ground truthing of the hydroriparian zone, new resource inventories, First Nations cultural sites and updated wildlife mapping. Notwithstanding the exceptions detailed under items 1 to 3 above, in no case will the Ecosystem Network be smaller than the hydroriparian zone.</li> </ol>
CTR17-16	Ksi Gahlt'in	Result	During the term of this FSP, the FSP holder will retain 100% of the forested area of the hydroriparian zone for each polygon identified as Special Habitats for General Wildlife, as identified on the FSP maps, except where no practicable alternative access exists to access or harvest timber that is outside the hydroriparian zone; to mitigate a safety concern; or where required to negate impacts on adjacent forest values from a compelling forest health issue.
CTR17-17	Ksi Gahlt'in	Strategy	During the term of this FSP, the FSP holder will retain 100% of the forested area of the hydroriparian zone of each stream, wetland and lake within a Water Management Unit as shown on the FSP maps, unless harvesting is required to address compelling forest health issues or as set out in Result CTR17-15.
CTR17-18	Ksi Gahlt'in	Strategy	During the term of this FSP, the FSP holder will ensure that all cutblocks which overlap a Water Management Unit as shown on the FSP Maps, will not overlap the Water Management Unit by more than 200 meters or 50% of any individual cutblock area, whichever is less, provided that the riparian management practice applicable to the forest land base outside the Water Management Unit is maintained.
CTR17-19	Ksi Gahlt'in	Result	To the extent practicable, during the term of this FSP the FSP Holder will:  1. deactivate existing roads within Water Management Units as shown on the FSP maps following completion of harvesting and silviculture obligations; and  2. construct no new roads for commercial forestry operations within a Water Management Unit as shown on the FSP maps.
CTR22-03	Ksi Gahlt'in	Strategy	During the term of this FSP, primary forest activities planned by the FSP Holder on alluvial fans and floodplains will be:  1. designed to maintain the functional integrity of geomorphic processes through consultation with a qualified professional using guidance documents and experience to:  a. identify fans/floodplains in an operating area;  b. determine potential hydrogeomorphic hazards through pre-typing watershed areas and review of aerial photographs;  c. recognize and identify key features in the field;  d. develop prescriptions that deal with hydrogeomorphic hazards; and,  e. develop and implement a process to monitor results and mitigate/minimize impacts on functional integrity; and,  2. carried out according to the design in (1) above, ensuring that all people involved
			<ul> <li>in supervising or conducting logging or road-building operations:</li> <li>a. are made aware of the hazards of undertaking forestry activities on alluvial fans and floodplains;</li> <li>b. follow prescriptions and designs;</li> <li>c. report to the FSP holder any observed hazards; and,</li> <li>d. do not deviate from prescriptions or designs without the approval of the FSP holder.</li> </ul>

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description
CTR17-58	Ksi Gahlt'in	Strategy	During the term of this FSP, the FSP holder will address the potential impacts of harvesting and road construction activities to fish bearing streams through the adoption of:  1. Results CTR22-06 and CTR17-13 (riparian management);  2. Strategy CTR17-14 and CTR22-02 (large woody debris management);  3. Strategy CTR22-03 (alluvial fan and floodplain management);  4. Strategy CTR17-18 and Result CTR17-19 (Water Management Unit management); and,  5. Strategies CTR17-15, CTR17-17 and Result CTR17-16; (hydroriparian and Ecosystem Network management).

# 2.5 Water

# FPPR s. 8.2 Water Objective

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description			
Objective:	waterworks in hydrological et (a) a material a (b) the water fr water treatmer (i) a (ii) the supply of ti	FPPR s. 8.2:  "(2) The objective set by government for water being diverted for human consumption through a licensed waterworks in a community watershed is to prevent to the extent described in subsection (3) the cumulative hydrological effects of primary forest activities within the community watershed from resulting in  (a) a material adverse impact on the quantity of water or the timing of the flow of the water from the waterworks, or  (b) the water from the waterworks having a material adverse impact on human health that cannot be addressed by water treatment required under  (i) an enactment, or  (ii) the license pertaining to the waterworks.  (3) The objective set by government under subsection (2) applies only to the extent that it does not unduly reduce the supply of timber from British Columbia's forests."  Practice Requirement(s) eligible for exemption: FPPR s. 59, 60, 61				
	Eligible F	Practice Requir	rement(s) exempted:	None		
	Eligible Practice Requirement(s) not exempted:			FPPR s. 59, 60, 61		
CTR17-20	Beaver; Hot Springs; Kalum; Kleanza- Treasure; Lakelse; Skeena River- Kalum; Tseax	Result	logging commences  1. Equivalent clea Watershed, and 2. An assessment (and associated natural flow reg a. the thresh below; or b. a threshol parameter then  3. Subject to (4) b and ECA for su ECA for the cor  4. If there is a par above, then the Watershed.  1 Deep, Eneeksagila Rosswood (Clear shown on the FSF	his FSP, within Community Watersheds¹ in the FDU(s), before under authority of this FSP the FSP Holder will ensure that: ur-cut area (ECA) is calculated (as per 3) for the entire Community of for individual sub-basins larger than 250 ha; or the entire Community of the conducted. The assessment will determine the parameter of threshold) that is appropriate as a measure of maintenance of the parameter of the assessment determines that old for ECA is different than 20%, then that threshold is used in 4 of for a parameter other than ECA is more appropriate, then that threshold is used in (4) below the low, ECA for sub-basins larger than 250 ha is less than 20%; below for sub-basins larger than 250 ha is less than 20%;		

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description
CTR17-21	Kleanza- Treasure; Skeena River-Kalum	Result	<ol> <li>During the term of this FSP, within the Virginia Brook and Drake Community Watersheds¹:</li> <li>Timber harvesting by the FSP Holder is limited to actions required to prevent or address potential losses due to fire, wind, or forest health factors, as mutually agreed between representatives of the FSP Holder and the Ministry responsible for Community Watersheds.</li> <li>Road construction by the FSP Holder to access timber beyond the Community Watersheds is acceptable.</li> </ol> ¹ As shown on the FSP maps

### **Kalum SMRP Objective 17 Community Watersheds**

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description		
Objective:	Maintain the q established Co basins larger t	Kalum SRMP - Objective 17:  Maintain the quality, quantity, and natural flow regimes of water in watersheds identified on Map 9 as newly established Community Watersheds. Ensure a clearcut equivalency of less than 20% of the watershed area in subbasins larger than 250 hectares, unless a different threshold is determined as being more appropriate as a measure of maintenance of natural flow regimes.			
	The following results and strategies, described in relation to other objectives, are also consistent with Kalum SRMP Objective 17: CTR17-20 and CTR17-21.				

# Kiteen LUOR Order: Objective 3(7) Ground Water

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description		
Objective:	Kalum SRMP Kiteen LUOR Order – Objective 3 (7): Ensure that when new roads and trails are built, ground water is allowed to reach natural ground water receiving sites.				
The following result, as described in relation to another objective, is also consistent with Kalum SRMP Kiteen LUOR Order Objective 3 (7): CTR17-04.					

# 2.6 Biodiversity

FPPR s. 9 Landscape-level Biodiversity Objective

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Descrip	tion				
Objective:	FPPR s. 9: "The objective set by government for wildlife and biodiversity at the landscape level is, without unduly reducing the supply of timber from British Columbia's forests and to the extent practicable, to design areas 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."							
	Practice Red	quirement(s) el	ligible for	exemption:	FPPR s. 64, 65			
	Eligible F	Practice Requir	rement(s)	exempted:	None			
	Eligible Prac	tice Requireme	ent(s) not	exempted:	FPPR s. 64, 65			
CTR17-35	All	Strategy	Within th	ne FDU(s), d	uring the term of this FSP:			
		0,	1. Th	e FSP Holde	r will ensure that areas logged by the FSP Holder will have been o logging with respect to			
			a.	temporal a	ney are of a size and distribution that emulates the historical and spatial distribution of the Natural Disturbance Types (NDTs) ests within the FSP area; and			
			b.	targets tha	ney are moving towards the patch size and seral stage distribution at are in place for NDTs, calculated separately for each LU that the FDU(s).			
			inc five	lude process	he reviews in (1) above will be considered complete if they steps in (4) and (5) below that have occurred at least once within a approval of this FSP, and then at least once within every five reafter.			
			de <sup>v</sup> Mo	velopment is ountains Natu	(1) above will be considered complete if the FSP Holder's included in the most recent seral/patch analysis for the Coast aral Resource District that applies to the FDU(s) and that analysis in five years old.			
			4. <b>Te</b>	-	duct seral stage analysis by LU and NDT.			
			a.	Determine Holder's F	the proportional representation of the LUs within the FSP			
			b.	Determine	the proportional representation with respect to sensitive areas <sup>1</sup> FSP Holder's FDU(s).			
			C.		the need for actions to address seral stage imbalances, based um SRMP (April 2006).			
			d.	If necessa implement	ry, prepare action plan(s) to address seral stage imbalances and them.			
			е.	-	summary of the allowable seral stages			
			_	•	te patch size distribution by LU and NDT.			
			a.		the proportional representation of existing patch sizes within the er's FDU(s).			
			b.	Determine	the target patch size distribution for the FDU(s).			
			C.	the Kalum to Land Us	the need for actions to address patch size imbalances, based on SRMP (April 2006) or, for the Ksi Gahlt'in FUD, the Amendment se Objectives for the Kalum Sustainable Resource Management S) – (Kiteen area only).			
			d.	If necessa implement	ry, prepare action plan(s) to address patch size imbalances and them.			
			e.	Prepare a	summary of the allowable patch size distribution.			
			Manag	ement Zones	lude items such as seral stage targets for Special Resource s in the Kalum SRMP, Ungulate Winter Range seral requirements, ar in nature if identified in the review in (1) above.			

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description
CTR17-36	All	Result	<ol> <li>Within the FDU, the FSP Holder will ensure that</li> <li>The sizes and distribution of harvest openings under this FSP are within the targets¹ described in an allowable patch size and seral stage distribution.</li> <li>If there are areas that are outside of target¹ levels for patch size and seral stage distribution, within five (5) years of the most recent patch/seral analysis for the Coast Mountains Natural Resource District, harvest activities under this FSP are shown to be static or moving toward the target¹ levels for these areas.</li> <li>¹ Target levels for LUs and Special Resource Management Zones are from the Kalum SRMP and, for the Ksi Gahlt¹in FUD, the Amendment to Land Use Objectives for the Kalum Sustainable Resource Management Plan (2006) – (Kiteen area only); target levels for FDUs are as determined through Strategy CTR17-35.</li> </ol>

#### FPPR s. 9.1 Stand-level Biodiversity Objective

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description		
Objective:		FPPR s. 9.1: "The objective set by government for wildlife and biodiversity at the stand level is, without unduly reducing the supply of timber from British Columbia's forests, to retain wildlife trees."			
	Practice Requirement(s) eligible for exemption: FPPR s. 66, 67				
	Eligible F	Practice Requi	rement(s) exempted:	FPPR s. 66, 67	
Eligible Practice Requirement(s) not exempted: None					
	The following results and strategies, described in relation to other objectives, are also consistent with FPPR s. 9.1 Objective: CTR22-06, CTR17-28, CTR22-05, CTR17-40, CTR17-41, and CTR17-51.				

#### **Non-spatial Old Growth Order**

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description		
Objective:	OLD GROWTH ORDER (Higher Level Plan Objectives):  The Minister responsible for land use planning (the Minister of Sustainable Resource Management at the time)				
	made an <i>Order Establishing Provincial Non-spatial Old Growth Objectives</i> , effective June 30, 2004. This Order establishes landscape units (LU) and biodiversity emphasis for each LU, and retention levels for old growth by natural disturbance type. This "Old Growth Order" requires an analysis of each LU with respect to the amount of old-growth remaining by biogeoclimatic ecological classification.				
Practice Requirement(s) eligible for exemption:  None					
Not Applica	Not Applicable – Superseded by Kalum Sustainable Resource Management Plan				

#### Kalum SRMP Objective 1 Seral Stage Distribution

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description	
Objective:	Kalum SRMP - Objective 1:  Maintain a range of forest seral stages by biogeoclimatic variant, within each landscape unit, consistent with Tables 1, 2, and 3.			
The following results and strategies, described in relation to other objectives, are also consistent with Kalum SRMP Objective 1: CTR17-35 and CTR17-36.				

### Kalum SRMP Objective 2 Old Seral Stage Forest

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description	
Objective:	Kalum SRMP - Objective 2:  Maintain old seral stage forest within each undeveloped watershed listed in Table 4 and shown on Map 3 consistent with Table 5.			
Not Applica	Not Applicable to this FSP			

### Kalum SRMP Objective 3 Old Growth Management Areas

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description
Objective:	conditions, thre	cruit old seral soughout each	stage forest, reflective of the full range of ecosystems, including some with interior forest rotation within the Old Growth Management Areas shown on Map 4. Forest harvesting limited to insect or disease control measures that are necessary to mitigate severe tes in the OGMAs, or other resource values in the landscape.
CTR17-37	All	Result	During the term of this FSP, within the FDU, no logging by the FSP Holder of old seral stage forest within the OGMAs¹ other than for insect or disease control measures that are necessary to mitigate severe damage to the habitat attributes in the OGMAs, or other resource values in the landscape, or in accordance with strategy CTR17-38.  ¹ As shown on the FSP maps, which correspond to the OGMAs shown on Map 4 of the Kalum SRMP (April 2006, and as updated from time to time by Government).

## Kalum SRMP Objective 4 Operational flexibility within OGMAs

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description		
Objective:	Kalum SRMP - Objective 4: Provide operational flexibility in managing OGMAs by allowing up to 10 hectares or 10% of the individual OGMA area, whichever is less, to be disturbed for one or more of the following purposes:				
	<ul> <li>allowing road development where no practicable alternative exist;</li> <li>to better reflect physical features that were intended to form the actual boundaries of the OGMA;</li> <li>to improve harvest boundary alignment in a way that will contribute to the maintenance of the OGMA;</li> <li>to address a compelling forest health issue; or,</li> </ul>				
	to shift the location of the contiguous area of the OGMA to improve the retention of old forest attributes as identified through field assessment.  The allowable disturbance described above is conditional upon a forest agreement holder identifying and reserving from harvesting an alternative area(s) within the same BEC variant within a landscape unit, provided the alternative area:				
	<ul> <li>is of equal or greater extent in total than the area to be disturbed; and,</li> <li>will result in equal or greater retention of key old forest attributes that are understood to be important for biodiversity conservation.</li> </ul>				

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description
CTR17-38	All	Strategy	During the term of the this FSP:
			<ol> <li>Within the FDU(s), the FSP Holder may disturb an OGMA<sup>1</sup> for one or more of the following purposes, subject to (2) and (3) below:</li> </ol>
			<ul> <li>a. to allow road development where no practicable alternative exists;</li> </ul>
			<ul> <li>to better reflect physical features that were intended to form the actual boundaries of the OGMA;</li> </ul>
			<ul> <li>to improve harvest boundary alignment in a way that will contribute to the maintenance of the OGMA;</li> </ul>
			d. to address a compelling forest health issue;
			<ul> <li>to shift the location of the contiguous area of the OGMA to improve the retention of old forest attributes as identified through field assessment;</li> </ul>
			f. to preserve First Nations traditional and cultural use; and
			g. to reflect or address operational considerations.
		<ol><li>Replacement OGMA(s) is selected by the FSP Holder within the same BEC variant within a landscape unit, provided the alternative OGMA:</li></ol>	
			a. is of equal or greater extent in total than the area to be disturbed; and,
			<ul> <li>will result in equal or greater retention of key old forest attributes that are understood to be important for biodiversity conservation;</li> </ul>
			and
			<ol> <li>An amendment request to disturb and replace the OGMA is referred to the District Manager (or his/her delegate) by the FSP Holder, and the District Manager approves the request:</li> </ol>
			<ul> <li>a request for a minor amendment<sup>2</sup> is submitted in advance of, or in conjunction with, the submission of a CP and/or RP application;</li> </ul>
			<ul> <li>a request for a significant amendment<sup>3</sup> is submitted in advance of the submission of a CP and/or RP application.</li> </ul>
			<sup>1</sup> As shown on the FSP maps, which correspond to the OGMAs shown on Map 4 of the Kalum SRMP (April 2006, and as updated from time to time by Government).
			<sup>2</sup> A minor amendment disturbs 10 hectares or 10% of an individual OGMA*, whichever is less, and is further defined in the Skeena Old Growth Management Policy (August 2010).
			<sup>3</sup> A significant amendment is as defined in the Skeena Old Growth Management Policy (August 2010).

## Kalum SRMP Objective 5 Stand Structure through Wildlife Tree Retention

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description
Objective:		tural diversity in the targets in	in managed stands by retaining wildlife tree patches in each cut block, over the rotation, a Table 6. Shift or vary targets shown in Table 6 among cut blocks within a cut block

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description
CTR22-05	Kiteen, Beaver, Nelson- Fiddler, Kalum, Kasiks, Exchamsiks, Exstew, Skeena River- Kalum, Kleanza- Treasure, Dasque, Clore, Nass River- Kalum, Tseax, Ksedin, Ishkheenickh, Lakelse, Hot Springs	Result	During the term of this FSP, within the FDU(s), wildlife tree retention¹ for a cut-block or cut-block aggregate² logged by the FSP Holder is consistent with Table 6 of the Kalum SRMP (April 2006).  ¹ Consider retaining wildlife habitat attributes in WTRA as habitat anchors, and document these considerations in the Site Plan.  ² A Cut-block aggregate is a group of cut blocks which are within 10 kilometers radius of each other and where the SP or CP for these blocks refers to the fact that they are a cut block aggregate (as defined in the Kalum SRMP, April 2006).
CTR17-41	All	Strategy	<ol> <li>During the term of this FSP, within the FDU(s), the FSP Holder will carry out timber harvesting within a WTRA designated by a licensee other than the FSP Holder, only if:         <ol> <li>the trees on the net area to be reforested of the cut block to which the WTRA relates have developed attributes that are consistent with a mature seral condition; or</li> <li>the other licensee is subject to FPPR s. 67, and the Minister responsible for WTRAs provides an exemption under FPPR s. 91 (2); or</li> </ol> </li> <li>the other licensee is not subject to FPPR s. 67 and one, or more, WTRA replacement areas have been established that provide an area that is consistent with Table 6 of the Kalum SRMP or Kalum SRMP Kiteen LUOR Objective 4(10) for the cut-block to which the WTRA relates.</li> </ol>

# Kalum SRMP Objective 6 Species Composition

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description		
Objective:	Kalum SRMP - Objective 6:				
	Maintain the natural composition of dominant tree species across each landscape unit and throughout the rotation.				
The following result, as described in relation to another objective, is also consistent with Kalum SRMP Objective 6: CTR17-05					

### Kalum SRMP Objective 7 Temporal and Spatial Distribution of Cutblocks

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description	
Objective:	Kalum SRMP - Objective 7:  Attain a landscape pattern of patchiness that, over a long term, reflects the natural disturbance patterns as per Table 7 (of the Kalum SRMP).			
The following results and strategies, described in relation to other objectives, are also consistent with Kalum SRMP Objective 7: CTR17-35 and CTR17-36				

## Kalum SMRP Objective 8 Kiteen and Cedar Wildlife Connectivity Corridor

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description		
Objective:	Maintain fores Kiteen (Ksi Ga	Kalum SRMP - Objective 8:  Maintain forest stand structure and function for continued wildlife movement through the level pass between the Kiteen (Ksi Gahlt'in) and Cedar drainages identified on Map 5.  • Within polygon "A", retain 100 % of forested area.			
	<ul> <li>Within po</li> </ul>	lygon "B", timb	per harvesting will be limited to partial cutting systems.		
CTR17-45	Kiteen; Beaver	Result	During the term of this FSP, within the identified area through the level pass between the Kiteen and Cedar drainages that is within the FDU(s), identified as the "Kiteen and Cedar SRM" wildlife connectivity corridor:  1. 100% of the forested area located in the polygon "Full Retention"* is retained by the FSP Holder.  2. Within the polygon "Partial Retention"*, logging by the FSP Holder is limited to partial cutting systems (i.e., seed tree; shelterwood; single-tree or group selection).  1 As shown on the FSP maps, which correspond to the area shown on Map 5 of the Kalum SRMP (April 2006).		

### Kalum SMRP Objective 9 Williams and Thomas/Clore Wildlife Connectivity Corridor

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description
Objective:		t stand structu	re and function to facilitate wildlife movement, in the level pass between the Williams ds identified on Map 5.
CTR17-46	Lakelse; Clore	Result	During the term of this FSP, within the FDU(s), activities by the FSP Holder within the "Williams and Thomas/Clore SRM" wildlife connectivity corridor¹ identified for the maintenance of wildlife movement options in the low level pass between the Williams and Thomas/Clore are limited to:  1. providing or maintaining access to timber that would be otherwise isolated; or 2. removal of trees threatened or infested by insects, disease or fire where there is a risk to forests or forested land outside of the corridor, as agreed by the District Manager (or his/her delegate); or 3. fire control.  1 As shown on the FSP maps, which correspond to the area shown on Map 5 of the Kalum SRMP (April 2006).

### Kalum SMRP Objective 10 Skeena Islands

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description	
Objective:	Kalum SRMP - Objective 10 (as amended by Land Use Objectives Regulation Order to Amend the Kalum SRMP for the Skeena Islands Area, effective December 7, 2017):			
	(a) With (b) Outs char (c) Outs stun cm i (d) Only can outs	in the High Co side the High Co nnels. side the High Co nps, logs, and n diameter at to where it is oft be achieved, notice those area	herwise not practicable and the objective to conserve rare plant community complexes may new roads be constructed within the High Conservation Areas to access timber	
CTR17-49	Dasque; Exstew; Skeena River-Kalum	Result	<ol> <li>During the term of this FSP, within the FDU(s), for each CP issued to the FSP Holder within the "Skeena Islands Area¹":</li> <li>Except as per (3), for "High Conservation Areas¹", retain Crown forested land.</li> <li>Outside the "High Conservation Areas¹":         <ul> <li>a. retain a harvest-free 50-metre buffer around all back channels; and</li> <li>b. retain a harvest-free 50-metre buffer around coniferous stumps, logs, and snags greater than 50 cm in diameter and around live coniferous trees greater than 50 cm in diameter at breast height.</li> </ul> </li> <li>Construct roads within "High Conservation Areas¹" necessary to access timber beyond those areas only if:         <ul> <li>a. no practicable alternative exists; and</li> <li>b. a qualified professional evaluates the proposed road and determines that rare plant community complexes² can be conserved.</li> </ul> </li> <li>As shown on the FSP maps, which correspond to the area shown on Map 6 of the Kalum SRMP Land Use Objectives Order for Skeena Islands (December 2017).</li> <li>Rare plant community complex, as defined in the Kalum SRMP Land Use Objectives Order for Skeena Islands (December 2017), - means an area supporting a rare plant community and the nearby representation of the range of successional stages and vegetation. A rare plant community is a high bench Sitka Spruce-Salmonberry (CWHws1/07, CWHvm1/09) and middle bench Black Cottonwood-Redosier Dogwood (CWHws1/08, CWHvm1/10).</li> </ol>	

# Kalum SMRP Objective 12 Lakelse River SRMZ

FSP Ref #		plicable DU(s)	Result or Strategy?	Description		
Objective:	Kalı	Kalum SRMP - Objective 12:				
	Mai	Maintain wildlife habitat and biodiversity within the Lakelse River Special Resource Management Zone (Map 8).				
	•	In Subzone 1 - no harvesting of timber or blowdown salvage will occur.				
	•	minimum	15 % retentio	ral stage target is a maximum of 27%; the maximum opening size is 15 hectares; a n within the cut blocks is required to add structural diversity; and in any five year 50% of the volume harvested is to be harvested by using a selection silviculture system.		

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description
CTR17-51	Lakelse; Hotsprings; Skeena River - Kalum	Result	<ul> <li>During the term of this FSP, for each CP issued to the FSP Holder within the areas identified in the FDU(s) as "Lakelse River SRMZ" subzones<sup>1</sup>:</li> <li>1. In Subzone 1; <ul> <li>a. no logging or road construction unless the District Manager (or his/her delegate) agrees that logging or road construction is necessary for control of insects, disease or fire.</li> </ul> </li> <li>2. In Subzone 2: <ul> <li>a. early seral stage (i.e., less than 40 years) is less than 27% of the subzone area;</li> <li>b. the maximum opening size will be less than 15 hectares (net) and retention (WTRA and other reserves) shall be at least 15% of gross block area;</li> <li>c. at the end of the term of this FSP, at least 50% of the timber volume scaled under this FSP shall be by selection silviculture systems (i.e., seed tree; shelterwood; single-tree or group selection).</li> </ul> </li> <li><sup>1</sup> As shown on the FSP maps. This information corresponds to the map provided with the Kalum SRMP (April 2006)</li> </ul>

# Kalum SMRP Objective 13 Upper Kitsumkalum SRMZ

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description
Objective:	Kalum SRMP	- Objective 13	
	timber within the	he Upper Kitsu	and ecosystem representation within the Upper Kitsumkalum Valley by not harvesting Imkalum SRMZ (Map 8). Road construction is acceptable to access the timber outside other practicable route alternative.
CTR17-52	Beaver; Nelson- Fiddler	Strategy	During the term of this FSP, harvesting timber within the area identified in the FDU(s) as "Upper Kitsumkalum SRMZ1" will be limited to situations where access is required to the timber harvesting land base beyond that area and where there is no other practical way to provide for this access, other than by building road in or through it. If this occurs, a rationale must be prepared and provided by the FSP Holder to the appropriate agency responsible for the Kalum SRMP ahead of a CP or RP application. This rationale must detail why the road is required in or through the "Upper Kitsumkalum SRMZ" and include an evaluation of alternate options. Any response from the agency responsible for the Kalum SRMP will be provided with the CP or RP application.  1 As shown on the FSP maps. This information corresponds to the map provided with the Kalum SRMP (April 2006).

# Kalum SMRP Objective 14 Miligit Creek SRMZ

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description	
Objective:	Kalum SRMP - Objective 14: Conserve uncommon reticulated fens (Map 8) within the Miligit Valley area.			
CTR17-53	Kleanza- Treasure	Result	During the term of this FSP, no logging or road construction by the FSP Holder within the uncommon reticulated fens in the areas identified in the FDU(s) as the "Miligit Creek SRMZ1".  1 As shown on the FSP maps. This information corresponds to the map provided with the Kalum SRMP (April 2006).	

### Kiteen LUOR Order: Objective 4(9) Patch Distribution

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description		
Objective:	Maintain a lan	Kalum SRMP Kiteen LUOR Objective 4(9):  Maintain a landscape pattern of patchiness that, over the long term, reflects the natural disturbance pattern within the forested area of each Landscape Unit shown in Schedule C, as per Schedule C1.			
	The following results and strategies, described in relation to other objectives, are also consistent with Kalum SRMP Kiteen LUOR Objective 4(9):				

### Kiteen LUOR Order: Objective 4(10) Wildlife Tree Retention Areas

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description
Objective:	Maintain or red	cruit structural	Objective 4(10): diversity in managed stands by retaining at least 3.5% of each proposed cutblock and blocks aggregated on an annual basis as wildlife tree retention areas, over the rotation.
CTR17-40	Ksi Gahlt'in	Result	During the term of this FSP, the FSP holder will retain at least 3.5% of each proposed cutblock and at least 12% of proposed cutblocks aggregated* on an annual basis, as wildlife tree retention areas, over the rotation.  * A Cut-block aggregate is a group of cut blocks which are within 10 kilometers radius of each other and where the SP or CP for these blocks refers to the fact that they are a cut block aggregate (as defined in the Kalum SRMP, April 2006).

## Kiteen LUOR Order: Objective 4(11) Red-listed Ecological Communities Retention

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description
Objective:	Retain 100% of where:  a. required to terrain coof road er from harv	of the area and o access timbe nditions such a nter and leave	Order - Objective 4 (11): I basal area of red listed ecological communities <sup>1</sup> as listed on Schedule D, except er that otherwise would be isolated from harvest beyond the core area; as slope, gradient, or terrain stability constrain road locations and dictate that sections red-listed ecological communities to access timber that otherwise would be isolated are exists.
			of a red-listed ecological community is 0.25 ha. Where the community exists as the omplex, the minimum size of the complex is 1 ha.
CTR17-42	Ksi Gahlt'in	Strategy	During the term of this FSP, the FSP Holder will retain 100% of the area and basal area of red listed ecological communities² within all cutblocks except where:  a. required to access timber that otherwise would be isolated from harvest beyond the core area;  b. terrain conditions such as slope, gradient, or terrain stability constrain road locations and dictate that sections of road enter and leave red-listed ecological communities to access timber that otherwise would be isolated from harvest; or c. no practicable alternative exists.  2 As listed on Schedule D of the Amendment to Land Use Objectives for the Kalum Sustainable Resource Management Plan (2006) – (Kiteen area only) and spatially defined as per footnote 1 of the objectives stated above.

### Kiteen LUOR Order: Objective 4(12) Red-listed Ecological Communities Buffer

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description	
Objective:	Kalum SRMP Kiteen LUOR Order - Objective 4 (12):  Retain a windfirm, forested buffer around the red listed ecological communities¹ listed on Schedule D, as required to maintain the conditions of soil chemistry, moisture, temperature, and light that define and sustain the ecosystem except where:  a. required to access timber that otherwise would be isolated from harvest beyond the core area;  b. terrain conditions such as slope, gradient, or terrain stability constrain road locations and dictate that sections of road enter and leave red-listed ecological communities to access timber that otherwise would be isolated from harvest; or  c. no practicable alternative exists.			
			of a red-listed ecological community is 0.25 ha. Where the community exists as the omplex, the minimum size of the complex is 1 ha.	
CTR17-43	Ksi Gahlt'in	Strategy	During the term of this FSP, the FSP Holder will retain a windfirm, forested buffer around the red listed ecological communities¹ within all cutblocks, as required to maintain the conditions of soil chemistry, moisture, temperature and light that define and sustain the ecosystem except where:  a. required to access timber that otherwise would be isolated from harvest beyond the core area;  b. terrain conditions such as slope, gradient, or terrain stability constrain road locations and dictate that sections of road enter and leave red-listed ecological communities to access timber that otherwise would be isolated from harvest; or c. no practicable alternative exists.  ¹ As listed on Schedule D of the Amendment to Land Use Objectives for the Kalum Sustainable Resource Management Plan (2006) – (Kiteen area only) and spatially defined as per footnote 1 of the objectives stated above.	

### Kiteen LUOR Order: Objective 4(13) Blue-listed Ecological Communities Retention

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description
Objective:	Kalum SRMP Kiteen LUOR Order - Objective 4 (13):  Retain at least 70% of the area or basal area of each blue-listed community <sup>2</sup> within a cutblock, as listed on Schedule E. <sup>2</sup> The required minimum size of a blue-listed ecological community is 0.25 ha. Where the community exists as the dominant component of a complex, the minimum size of the complex is 1 ha.		
CTR17-44	Ksi Gahlt'in	Strategy	During the term of this FSP, the FSP Holder will retain 70% of the area or basal area of blue listed ecological communities¹ within all cutblocks.  ¹ As listed on Schedule E of the Amendment to Land Use Objectives for the Kalum Sustainable Resource Management Plan (2006) – (Kiteen area only) and spatially defined as per footnote 2 of the objective stated above.

# Kiteen LUOR Order: Objective 4(14) Tree Species Diversity

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description
Objective:	Kalum SRMP Kiteen LUOR Order – Objective 4(14)  Maintain a diversity of coniferous and deciduous species that represent the natural species composition at the landscape and stand levels by ensuring that all cutblocks at the free-growing stage will have a diversity of species ecologically appropriate to the site.		
The following result, as described in relation to another objective, is also consistent with Kalum SRMP Kiteen LUOR Order Objective 4(14): CTR17-05.			

### Kiteen LUOR Order: Objective 4(15) Tree Species Diversity - Deciduous

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description
Objective:	Kalum SRMP Kiteen LUOR Order – Objective 4(15)  Maintain a diversity of coniferous and deciduous species that represent the natural species composition at the landscape and stand levels by ensuring that where an area larger than one contiguous hectare is harvested and it is composed of more than 50% deciduous trees by basal area, it will either be regenerated with a similar deciduous stand or will be replaced at a different location on a similar site series by regenerating an existing coniferous stand with similar deciduous species.		
CTR17-06	Ksi Gahlt'in	Result	During the term of this FSP, the FSP holder will ensure that harvested areas larger than 1 contiguous hectare composed of more than 50% deciduous trees by basal area will either be regenerated with a similar deciduous stand or will be replaced at a different location on a similar site series by regenerating an existing coniferous stand with similar deciduous species. Regeneration and/or replacement will be achieved via application of the Ksi Gahlt'in Deciduous Stocking Standards (as described in the stocking standards that apply to this FSP). Regeneration and/or replacement will be considered complete upon declaration of Free Growing status.

## Kiteen LUOR Order: Objective 4(17) Ecosystem Network Structural Connectivity

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description
Objective:	Maintain struct  a. required t  b. required t  gradient c  Ecosystei	tural connectivo access timbo access timbo	
CTR17-47	Ksi Gahlt'in	Strategy	During the term of this FSP, the FSP holder will maintain the structural connectivity in the Ecosystem Network, as identified on the FSP maps except where:  a. required to access timber beyond the Ecosystem Network that would otherwise be isolated from harvest;  b. required to access timber that would otherwise be isolated from harvest due to terrain conditions such as slope, gradient or terrain stability that constrain road locations and dictate that sections of road enter and leave the Ecosystem Network; or  c. no practicable alternative exists.

### Kiteen LUOR Order: Objective 4(18) Ecosystem Network Buffer

FSP Ref #	Applicable Result or Strategy?	Description
Objective:	forest conditions:  a. Continuous forest cover b. Small discontinuous car c. ≥70% structure and fund d. Multi-canopy levels, mu e. In conjunction with the f	fer around the Ecosystem Network, as identified on Schedule F that meets the following nopy gaps ction <sup>1</sup> retained, including large, old trees, snags and coarse woody debris

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description
CTR17-48	Ksi Gahlt'in	Strategy	During the term of this FSP, the FSP holder will retain a 200 metre buffer around the Ecosystem Network, as identified on the FSP maps that meets the following forest conditions:  a. Continuous forest cover b. Small discontinuous canopy gaps c. ≥70% structure and function¹ retained, including large, old trees, snags and coarse woody debris d. Multi-canopy levels, multi-aged forest e. In conjunction with the forested core, maintain interior forest conditions ≥200 metres in width f. 0% permanent road access, except where, for ecological reasons, no other alternative is possible  ¹ Any harvest unit within the buffer portion of the Ecosystem Network will, within the buffer, retain ≥70% of the naturally occurring mature and old-forest structure (live trees, range of diameter classes, snags, coarse woody debris, tree species, etc.) of the harvest unit measured either as basal area (m²) or forested area (ha.). No further harvesting may occur within the harvest unit (within the Ecosystem Network buffer area) until the harvested portion has returned to a mature or older condition (i.e., ICH > 100 years, CWHws2 > 80 years, MH > 120 years).

# Kiteen LUOR Order: Objective 5(19) Pine Mushroom

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description
Objective:	Kalum SRMP Kiteen LUOR Order - Objective 5 (19):		
	Maintain at least 50% of the productive pine mushroom ( <i>Tricholoma magnivelare</i> ) sites, as identified in Schedule G, in forest ages ranging from 80 to 200 years. <sup>1</sup>		
	If future research shows that silviculture systems (other than clearcut harvesting) can perpetuate pine mushroom production, the areas having these silviculture systems will contribute to meeting the objective.		
CTR17-55	Ksi Gahlt'in	Result	During the term of this FSP, primary forest activities by the FSP Holder do not result in depletion of forests aged between 80 and 200 years within the productive pine mushroom sites, as identified on the FSP maps, below 50%.

# 2.7 Visual Quality

## FPPR s. 9.2(2) Visual Quality Objective

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description		
Objective:	FRPA s. 181: "All objectives in respect of areas continued under section 180 that were in effect immediately before the effective date are continued as objectives under this <i>Act</i> ."				
	GAR s. 17: "A	visual quality	class for a scenic area is continued under this regulation a visual quality objective if		
	(a) the visu	al quality class	s has been		
		et out before C er the <i>Forest A</i>	October 24, 2002 in a letter from the district manager to the holder of an agreement Act, or		
	` '		most recent tree farm license visual landscape inventory prepared by the holder of a and approved by the regional manager, and		
	(b) in existence on the coming into force of this section.'				
	FPPR s. 9.2(2	): "The objectiv	ve set by government in relation to visual quality for a scenic area, that		
	<ul><li>(a) was established on or before October 24, 2002, and</li><li>(b) for which there is no visual quality objective</li><li>is to ensure that the altered forest landscape for the scenic area</li></ul>				
	(c) in visual s	sensitivity clas	s 1 is in either the preservation or retention category,		
	(d) in visual s	sensitivity clas	s 2 is in either the retention or partial retention category,		
	(e) in visual s	sensitivity clas	s 3 is in either the partial retention or modification category,		
	(f) in visual s	sensitivity clas	s 4 is in either the partial retention or modification category, and		
	(g) in visual s	sensitivity clas	s 5 is in either the modification or maximum modification category."		
	Practice Red	quirement(s) e	ligible for exemption: None		

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FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description
CTR17-22	All FDUs that overlap Known Scenic Areas	Strategy	<ul> <li>Within the FDU(s), during the term of this FSP, the FSP Holder will ensure that:</li> <li>1. A visual impact assessment (VIA) will be carried out and attached or referred to in the SP for blocks that are located within known scenic areas and that are identified with a Visual Quality Objective (VQO) of Preservation (P), Retention (R), Partial Retention (PR), or Modification (M), or with a Visual Sensitivity Class (VSC) of 1, 2, 3, or 4, as shown on the FSP Maps.</li> <li>a. VSC will be treated as having VQOs as follows: <ol> <li>i. VSC 1 = Retention</li> <li>ii. VSC 2 = Partial Retention</li> <li>iii. VSC 3 and 4 = Modification</li> <li>iv. VSC 5 = Maximum Modification</li> </ol> </li> <li>2. The VIA will <ol> <li>a. review the visual landscape from up to three viewpoints, identified as per (3)</li> <li>i. If more than 3 potential viewpoints are identified, additional viewpoints to be assessed may be determined through agreement between</li> </ol> </li> </ul>
			representatives of the FSP Holder and the Ministry responsible for this objective.  b. describe how the visual design is consistent with the VQO.  3. Viewpoints are identified as follows:  a. by meeting the viewpoint criteria¹; or  b. if no viewpoints meet the viewpoint criteria¹, the VIA will use an alternate point that is closest, in the opinion of the FSP Holder, to meeting the viewpoint criteria.
			<ul> <li>Viewpoint criteria: for a visual landscape, a viewpoint must be:         <ul> <li>at a point along a travel corridor² that allows for an extended viewing experience³, or</li> <li>at a public place of congregation that persons can stop for an extended viewing experience³.</li> </ul> </li> <li>A travel corridor is defined as a route, highway or waterway regularly used by the public to travel from one geographic area to another.</li> <li>Extended viewing experience = greater than 60 seconds uninterrupted view when stopped at a public place of congregation, or while travelling at the posted/ normal speed on a travel corridor.</li> </ul>
CTR17-23	All FDUs that overlap Known Scenic Areas	Result	Within the portion of the FDU(s) that overlaps known scenic areas, the block configuration in a SP and CP prepared by the FSP Holder and signed during the term of this FSP will be consistent with the visual design as described in a VIA prepared in accordance with Strategy CTR17-22.

# Kalum SMRP Objective 15 Upper Copper River Viewscape

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description
Objective:	Limonite Cree a. perr b. reta rese	ling of remoter k (within the K mit only one br in a minimum erve is accepta	ness and pristine viewscape on the Upper Copper River (Zymoetz River) above the alum SRMP area). The following are practice requirements: idge crossing at any time; and, of 100 meters no harvest reserve on both sides of the river. Less than 100 meters able where this makes "best" operational/environmental practice, or for other site provided the objective is met.

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description
CTR17-54	Kleanza- Treasure	Result	During the term of this FSP, within the Coast Mountains Natural Resource District and on the Upper Zymoetz (Copper) River, upstream of the confluence with Limonite Creek:  1. there will not be more than one active bridge crossing at any given time;  2. a 100 m¹ reserve is established along either side of the river, or less if "Preservation" visual quality can be achieved for the first 100 m¹ from the banks of the river, as described/ determined in a SP prepared by the FSP Holder for the area where the reserve is less than 100 m*.

### Kalum SMRP Objective 16 Sue Channel/Hawkesbury Island Visual Quality

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description		
Objective:	Kalum SRMP - Objective 16:  Maintain the visual quality of the area visible from the Sue Channel/Hawkesbury Island protected area (Map 8) by:  applying single tree or group selection silviculture system; and,  limiting the maximum opening size to 1-2 tree lengths.				
Not Applica	Not Applicable to this FSP				

# 2.8 Cultural Heritage Resources

## FPPR s. 10 Cultural Heritage Resources Objective

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description		
Objective:	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 <i>Heritage Conservation Act</i> ."			
	Practice Req	quirement(s) e	ligible for exemption:	None	

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description
CTR17-24	All	Strategy	During the term of this FSP:  1. The FSP Holder will meet regularly with local First Nation groups that have asserted claim area within the FSP Holder's FDU(s). As a minimum, meetings must occur annually when forest development operations (i.e., layout, road construction, or logging) will be occurring within the First Nation's traditional territory. When there are no operations planned in the next calendar year in the First Nation's traditional territory, a telephone, email or letter exchange will be considered adequate.  a. The FSP Holder will  i Share, review and discuss any previously unknown cultural heritage resource information¹.
			ii Request from the First Nation any information¹ on cultural heritage resources of continuing importance to the First Nation that has not been previously shared with the FSP Holder.  b. Where traditional use information is made available, the FSP Holder will hold any information received in confidence. It is only with the express written consent or direction of the holder of the Traditional Use information that the FSP Holder will release any traditional use information to any other party (including other First Nation groups, the Government of BC or its Ministries, or BC Timber Sales).  c. The FSP Holder will review with respective First Nations the areas where forest development operations are planned with the intent of describing and addressing the concerns of both parties. Specifically:  i Determine areas or items of concern related to cultural heritage resources. This includes defining the nature and extent of cultural heritage resources that may be impacted by the planned operations.  ii Describe forest management activities that will conserve or protect the cultural heritage resources defined in (i) above.  iii Modify planned operations where and as necessary to conserve or protect the cultural heritage resources defined in (i) above.  iv Attempt to resolve any conflicts through consensus.  d. With reference to the areas or items of concern as defined in (1.c.i) and at the request of either party for specific information for which there is a demonstrable link between the request and the potential impact on the cultural heritage resource, available information directly related to the defined resource shall be shared between the FSP Holder and the First Nation. "Available information" means reports, studies or plans, whole or portions thereof, that either party has direct access to or has in its possession.  2. The FSP Holder will prepare a summary² of the process in (1) above, indicating
			whether there were any issues and how they were resolved. If issues were not resolved, the summary² will describe how the parties have attempted to address the issues. In the unlikely event that meetings have not occurred, the summary² will document the efforts made to meet and/or review information with First Nations. The summary will be provided to,  a. The First Nation representative, and  b. The District Manager (or his/her delegate).  1 including but not limited to traditional use information, archaeological information, cultural sites and traditional use studies 2 summary will respect confidentiality

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FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description
CTR17-25	Nass River- Kalum; Tseax; Kiteen; Ksedin; Ishkheenick h; Ksi Gahlt'in	Strategy	During the term of this FSP:  1. The FSP Holder will meet regularly with the Nisga'a Lisims Government (NLG) to discuss planned forest development operations that will be occurring within lands subject to Nisga'a Treaty rights. At a minimum, meetings must occur annually when activities will be occurring within those lands within the next year. When there are no activities planned within those lands, a telephone, email or letter exchange will be considered adequate.  a. The FSP Holder will  i Share, review and discuss any previously unknown cultural heritage resource information'.  iii Request from NLG any information' on cultural heritage resources of continuing importance to NLG that has not been previously shared with the FSP Holder.  b. Where traditional use information is made available, the FSP Holder will hold any information received in confidence. It is only with the express written consent or direction of NLG that the FSP Holder will release any traditional use information to any other party (including other First Nation groups, the Government of BC or its Ministries, or BC Timber Sales).  c. The FSP Holder will review with NLG the areas where forest development operations are planned with the intent of describing and addressing the concerns of both parties. Specifically:  i Determine areas or items of concern related to cultural heritage resources. This includes defining the nature and extent of cultural heritage resources that may be impacted by the planned operations. ii Describe forest management activities that will conserve or protect the cultural heritage resources defined in (i) above.  iv Attempt to resolve any conflicts through consensus.  d. With reference to the areas or items of concern as defined in (i.c.i) and at the request of either party for specific information for which there is a demonstrable link between the request and the potential impact on the cultural heritage resource shall be shared between the FSP Holder and NLC. "Available information" means reports, studies or plans, who

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description
CTR17-27	All	Strategy	During the term of this FSP:
		0,	<ol> <li>Before logging commences on any block where site specific cultural heritage resource information for an area in a FDU is not available, the FSP Holder will conduct a cultural heritage resource review (CHRR), which will consist of:</li> </ol>
			<ul> <li>a. A review of known information for the area covered by the block, including but not limited to archaeological overview assessments, archaeological impact assessments, traditional use studies, information gathered for nearby blocks, and information received through CTR17-24 and CTR17-25;</li> <li>b. A review of the block by a person with knowledge and experience in recognition of cultural heritage resources to identify the location, nature, and extent of cultural heritage resources of ongoing importance to a First</li> </ul>
			Nation/NLG.  c. If, in the opinion of the person conducting the review there is potential for impact to a cultural heritage resource of ongoing importance to a First Nation/NLG, the CHRR will include recommendations for the conservation, mitigation or protection of the cultural heritage resource, and will be shared with the appropriate First Nation(s)/NLG.
			d. If, in the opinion of the person conducting the field review there is potential for resources covered by the <i>Heritage Conservation Act</i> (HCA), the block will be adjusted to protect the potential HCA resource or an archaeological impact assessment will be done.
			<ol> <li>For any potential cultural heritage resource sites identified by operational personnel (i.e., layout, road construction, or harvesting crews), which were not previously identified through cultural heritage resource information sharing as described in CTR17-24 and CTR17-25, a CHRR as described in (1) above, or for which a process, policy, strategy, or result that describes how to deal with that cultural heritage resource is not in place or has not been shared with the appropriate First Nation(s) or NLG:</li> <li>a. the FSP Holder will be notified; and</li> </ol>
			<ul> <li>a site visit will be conducted to determine the need for mitigative measures.</li> </ul>
			3. Any new cultural heritage resource information resulting from items (1) or (2) above and a description of any mitigative measures will be shared/provided to the appropriate First Nation(s)/NLG and District Manager by the FSP Holder in accordance with item (4) below.
			<ol> <li>Information noted in (3) above will be shared/provided by the FSP Holder as follows:</li> </ol>
			<ul> <li>a. Where a cultural heritage resource feature is discovered before a cutting authority is issued, at or before application for the cutting authority.</li> <li>b. Where a cultural heritage resource feature is discovered after a cutting authority is issued, the information will be shared/provided within two weeks of the FSP Holder being notified of the cultural heritage resource features' discovery.</li> </ul>
CTR17-28	All	Result	Within the FDU(s), during the term of this FSP, for any block with cedar in retention zones (including WTRAs or RMZs¹), removal of cedar by a First Nation or NLG from these retention areas for cultural purposes occurs as follows:  1. no more than 5% of the co-dominant/ dominant stems within a WTRA are
			removed, with no more than 10% of the stems within a given hectare, unless the SP describes how the WTRA can retain its function; and
			<ol> <li>removal of co-dominant/dominant stems from within an RMZ area must be consistent with the RMZ retention described in result CTR22-06, unless the SP describes how the RMZ can retain its function; and</li> </ol>
			<ol> <li>removal from within an active cutting authority held by the FSP Holder is authorized through a letter of agreement between the FSP Holder and a First Nation Council, appropriate House Chief or designate, or NLG. Alternatively, removal can be authorized by a permit issued by the responsible Ministry.</li> </ol>
			<sup>1</sup> Removal of trees from within RRZs will be as per the FPPR – currently, removal for cultural purposes is not an allowed activity within RRZs.

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FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description
CTR17-29	All	Strategy	During the term of this FSP, within the FDU, during layout¹ of a cutblock, the FSP Holder will ensure that:  1. Where post-contact CMTs are found:  a. if the CMT is a bark-strip, test-hole, or plank tree, then record and provide information on the CMT in accordance with Strategy CTR17-27 (3);  b. if the CMT is a canoe or totem pole tree (or log), then stop work, record, and provide information on the CMT in accordance with Strategy CTR17-27 (2) and (3).

# Kiteen LUOR Order: Objective 10(33) Cultural Heritage Resources

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description
Objective:	Kalum SRMP Kiteen LUOR – Objective 10(33)		
	Preserve cultural heritage resources and cultural sites, including culturally modified trees, trails, cache pits, house pits, grave sites, fishing sites, pictograph sites, smoke houses, cabins, and camping sites.		
The following results and strategies, described in relation to other objectives, are also consistent with Kalum SRMP Kiteen LUOR Objective 10(33): CTR17-24, CTR17-27, and CTR17-29.			

## Kiteen LUOR Order: Objective 10(34) Cedar

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description		
Objective:	Kalum SRMP Kiteen LUOR – Objective 10(34)				
	Maintain a sustainable source of cedar for the applicable First Nation to practice their traditional, cultural and subsistence uses.				
The following results and strategies, described in relation to other objectives, are also consistent with Kalum SRMP Kiteen LUOR Objective 10(34): CTR17-05, and CTR17-28.					

# 2.9 Recreation Resources

## **Higher Level Plan Recreation Objectives**

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description							
Objective:	RECREATIO	N TRAILS & S	ES (Higher Level Plan Objectives):							
		22, the followin FDU under this	g are Recreation Sites/Trails that have established Hig FSP:	her Level Plan Objectives and						
Site/ Trail		Recreation Experience Objective	Site/ Trail Management Objective	Access objectives						

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description	
Big Cedar Ro Trail	ecreation	Appropriate semi-primitive motorized winter recreational activities	Active trail and natural vegetation will be retained within ten meters either side of the trail centerline	Winter motorized access from November 1 to June 30; all motorized activities restricted from July 1 to October 31
Bornite Moui Recreation T		Semi- primitive non- motorized	Active trail and natural vegetation will be retained within ten meters either side of the trail centerline	n/a
Gunsight Pe Recreation T		Semi- primitive non- motorized	Active trail and natural vegetation will be retained within ten meters either side of the trail centerline	n/a
Maroon Mou Recreation T		Semi- primitive non- motorized	Active trail and natural vegetation will be retained within ten meters either side of the trail centerline	n/a
Pine Lake Ro Site	ecreation	Roaded	Shoreline, and natural vegetation will be retained within site boundaries	n/a
Pine Lake Ro Trail	ecreation	Semi- primitive non- motorized	Active trail, lake shoreline and natural vegetation will be retained within ten meters either side of the trail centerline	n/a
Red Sand La Interpretive F		Roaded	Shoreline and natural vegetation will be conserved within the site boundaries  Small scale timber harvesting and silviculture practices will exist on the site as part of forest interpretation and education  Forest interpretation activities and education on local ecosystems and forest practices will be provided through brochures, self-guided interpretive trails and signage.	n/a
Sterling Mou Recreation T		Appropriate semi-primitive motorized winter recreational activities	Active trail and natural vegetation will be managed within ten meters either side of the trail centerline	Winter motorized access from November 1 to June 30; all motorized activities restricted from July 1 to October 31
Thornhill Mo Recreation T		Semi- primitive non- motorized	Active trail and natural vegetation will be retained within ten meters either side of the trail centerline	n/a
Practic	e Requirement	t(s) eligible for exemption:	None	

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description
CTR17-30	Beaver; Hot Springs; Kleanza Treasure; Lakelse; Nelson- Fiddler	Result	<ul> <li>During the term of this FSP, on these established Recreation Trails or Sites with established objectives within the FDU(s):</li> <li>Big Cedar Recreation Trail;</li> <li>Bornite Mountain Recreation Trail;</li> <li>Gunsight Peak Recreation Trail;</li> <li>Maroon Mountain Recreation Trail;</li> <li>Pine Lake Recreation Trail;</li> <li>Sterling Mountain Recreation Trail.</li> <li>No disturbance by the FSP Holder for logging, road construction or silviculture activities to natural vegetation within 10 m of trail centerline other than for a required crossing as per (3).</li> <li>Development activities by the FSP Holder that occur within 50 m either side of trail centerline: <ul> <li>a. will only occur after the planned activity has been referred to the Minister responsible for the trail;</li> <li>b. a CP, RP, or FSR submission indicates that development is within 50m of the trail and describes the results of the referral to the Minister responsible for the trail.</li> </ul> </li> <li>3. Trail crossings by the FSP Holder are permitted if required to access productive forest land that would otherwise be isolated contingent upon the following conditions: <ul> <li>a. The trail location is re-established if the crossing disturbs it. Alternatively, the trail may be relocated away from the crossing. The timing of the trail crossing, re-establishment, or trail relocation will require authorization from the Ministry responsible for the trail.</li> <li>b. A trail crossing is deactivated once it is no longer required.</li> </ul> </li> <li>4. For trails with a "non-motorized" recreation objective: <ul> <li>a. only the existing access to the trail is maintained (as per CTR17-34), unless otherwise authorized by the Ministry responsible for the trail;</li> <li>b. where a new road created by the FSP Holder comes within 50 m of a trail, a barrier is in place to prevent access to the trail by two- or four-wheel drive vehicles (not including ATVs¹) or an alternative is identified in consultation with the Ministry responsible</li></ul></li></ul>
CTR17-31	Nelson- Fiddler; Kalum	Result	During the term of this FSP, on these established Recreation Sites with established objectives within the FDU(s):  • Pine Lake Recreation Site;  • Red Sand Lake Interpretive Forest Site.  No disturbance¹ by the FSP Holder to areas within 10 m of lake shorelines; river, stream or creek-banks or marine foreshore (this only applies to sites where an RRZ is not in existence). The remainder of the area within the recreation sites will be reserved from disturbance by the FSP Holder other than where authorized by the Ministry responsible for the Recreation Site, or where action or access is required to prevent or address potential losses due to fire, wind, or forest health factors.  ¹ from activities related to the FSP Holder's road construction, logging or silviculture activities

FSP Ref #	Applicable FDU(s)	Result or Strategy?	Description
CTR17-32	Kalum	Strategy	<ol> <li>During the term of this FSP, on the Red Sand Lake Interpretive Forest Site:</li> <li>Small scale timber harvesting and silviculture practices by the FSP Holder are acceptable on the site as part of forest interpretation and education.</li> <li>Any forestry activity by the FSP Holder within this Interpretive Forest Site:         <ol> <li>Will only occur after the planned activity has been referred to the Ministry responsible for the Site.</li> <li>Will be planned to meet the objective of forest interpretation and education; a description of the activity, how it meets the objective and its proposed outcomes will be provided with the first permit associated with the activity, whether it be a RP, RUP or a CP application.</li> </ol> </li> </ol>
CTR17-33	Nelson- Fiddler	Result	<ul> <li>During the term of this FSP, on these established Recreation Trails with established objectives within the FDU(s):</li> <li>Big Cedar Recreation Trail;</li> <li>Sterling Mountain Recreation Trail.</li> <li>No motorized activity by the FSP Holder as per access objective identified for the trail, except as follows: <ul> <li>a. motorized activity for silviculture or planning activities (or for access to silviculture or planning activities) is acceptable if written or email notice is given to the Ministry responsible for the trail, and the Ministry's representative provides an exemption.</li> </ul> </li> </ul>
CTR17-34	All	Result	During the term of this FSP, on all established recreation sites or trails with established objectives within the FDU(s), at least four-wheel drive status is maintained for roads under the control of the FSP Holder when those roads are the only access to the trail or site.

# 3 ADDITIONAL FSP INFORMATION

In addition to the objectives, results and strategies, there are several other items to be shown or addressed in the FSP.

## 3.1 Areas under Cutting Authority

The FSP maps show blocks and roads that are currently under Cutting Permit (CP) and Road Permit (RP) that are under the control of Coast Tsimshian Resources under TFL 1 and FL A16835.

In addition, cutblocks or roads that are currently under CP, RP, Timber Sale Licence (TSL), or Forest Service Road (FSR) and are held by others are shown on the FSP maps.

## 3.2 Stocking Standards

The FSP must describe the Stocking Standards that will apply on the FDUs (FPPR s. 16). The following information is provided to describe the stocking standards that apply on the FDUs in this FSP.

Tables describing the stocking standards that apply on the FDUs in this FSP are provided in Appendix A. The stocking standards in Appendix A include:

- <u>Table A1</u>: species, regeneration dates, stocking required at regeneration, free-growing heights and required stocking at free-growing for the site series that occur within the FSP area;
- <u>Table A2</u>: standards for plant associations identified for wildlife forage areas;
- Table A3: standards for stands heavily infected with Annosus root disease;
- <u>Table A4</u>: standards for multi-layer management;
- Table A5: Single Entry Dispersed Retention Stocking Standards (SEDRSS) for constrained sites
- <u>Table A6</u> and <u>Table A7</u>: provide hazard ratings for spruce leader weevil and maximum percent of spruce by hazard rating;
- Footnotes that apply to <u>Table A1</u>, <u>Table A2</u>, and <u>Table A3</u>: "Standards" footnotes are part of the stocking standards. "Advisory" footnotes are provided to guide the prescribing forester but are not part of the stocking standards.

#### 3.2.1 Application of stocking standards

Subject to the following sections (3.2.2 through 3.2.12), the stocking standards may be applied across one cutblock (as per FPPR s. 44) or across several cutblocks (FPPR s. 45) as long as the area within the cutblock(s) has been mapped to identify the BEC (zone, subzone, variant, site series, and, where applicable, annosus infection level) as described for each stocking standard and only if the appropriate stocking standard identified in Appendix A for the BEC (zone, subzone, variant, site series, and, where applicable, annosus infection level) is used.

The following stocking standards may be applied for areas where timber harvesting consists of intermediate cutting (commercial thinning, removal of individual trees or other forms) (as per FPPR 44(4)):

- Standards for multi-layer management in Table A4 (subject to Section 3.2.4)
- Single Entry Dispersed Retention Stocking Standards in Table A5 (subject to Section 3.2.5)
- Commercial Thinning Stocking Standards in Section 3.2.6

#### 3.2.2 Even-aged management

Even-aged management stocking standards apply to any silviculture system where:

- The silviculture management objective is to develop a harvest crop consisting of a single age class or layer, generally the youngest age class following harvest or silviculture layers 3 and 4. Trees from other age classes or layers may be retained on the site for seed trees and/or management of other values: and
- 2. Retention of trees within age classes or layers other than the intended harvest crop is limited to a basal area less than or equal to 10 m<sup>2</sup> per hectare. Basal area is to be measured on any live retention tree equal to or greater than 12.5 cm dbh; and
- 3. The management system creates openings larger than 0.6 hectares.

For the purposes of (1) above, if a single subsequent harvest entry on the stand is planned within 20 years, even-aged management will apply. This option would be utilized when implementing seed tree systems or similar management regimes.

Even-aged management silviculture systems include clearcut, clearcut with reserves, seed tree, shelterwood, and patch cut (where the openings created meet the above definitions).

### 3.2.3 Management for Wildlife Forage

Wildlife forage stocking standards set out in Appendix A <u>Table A2</u> apply when ecosystem classification identifies a complex that contains a treatable unit. A treatable unit is at least one hectare for pure subhygric to sub-hydric sites or two hectares of non-contiguous sub-hygric to sub-hydric sites within ecosystem complexes where the individual sites are greater than 0.25 hectares and such sites comprise more than 20% of the ecosystem complex area.

#### 3.2.4 Uneven-aged Management

For uneven-aged management, the multiple-layer stocking standards set out in Appendix A <u>Table A4</u> apply to any silviculture system where:

- 1. The silviculture management objective is to develop a stand that supports economically viable harvest entries at 20 to 50 year intervals; and
- 2. Retention of trees exceeds a basal area of 10 m<sup>2</sup> per hectare; or
- 3. Openings are less than 0.6 hectares in size with a target average in any harvest unit of 0.3 to 0.4 hectares, and less than 70 m wide (i.e., two tree-lengths) along its narrowest axis. Variance outside of these targets is allowed if supported by the proper rationale from a Qualified Professional.

Applicable silviculture systems are retention, single tree selection, and group selection.

### 3.2.5 Single Entry Dispersed Retention Stocking Standards

Single Entry Dispersed Retention Stocking Standards (SEDRSS) are intended for use on constrained sites, typically old growth coastal forest types. It is only applied on productive sites (as listed in <u>Table A5</u>) where higher level objectives cannot be met through other silviculture systems. SEDRSS stocking standards may be applied to areas where visual quality or wildlife management objectives constrain conventional logging options; areas with unstable or sensitive soils (generally considered terrain class IV and V); and areas outside the conventional timber harvest land base. SEDRSS may also be used as a tool to manage or address cultural heritage resources. SEDRSS is suitable for stands retaining 9 to 39 m² per ha of Layer 1 coniferous trees that create a suitable environment to maintain crop trees and contribute to potential future harvests. SEDRSS is not suitable for deciduous leading stands.

#### 3.2.6 Commercial Thinning Stocking Standards

Commercial thinning stocking standards apply to stands that have not reached culmination age where an intermediate harvest removes merchantable trees with the intent to maintain an appropriate (i.e., commercially viable within 10 to 25 years) stand without the need for regeneration.

The commercial thinning stocking standards for Layer 1 are:

- 1. The preferred and acceptable species as per Table A1, Table A2, and Table A3.
- 2. Post thinning density greater than 60% of the minimum preferred and acceptable stocking level by BEC unit as outlined in Table A1, Table A2, and Table A3.
- 3. Post thinning Basal Area greater than 30 m<sup>2</sup> per ha.

### 3.2.7 Selection of Well-Spaced Stems

#### Criteria for Evaluating Health, Form and Vigor

Trees that are selected as well-spaced are being chosen to form part of a future crop, so they must be of sufficient good health, form and vigor that they can be utilized as crop trees at the time of harvest. Crop trees may be utilized in the future as sources of lumber, veneer, or fiber.

The criteria for good health, good form and good vigor are as follows.

- Table A5-1 and Figures A5-1 to A5-4 in the <u>Establishment to Free Growing Guidebook Prince</u> <u>Rupert Forest Region</u> (version 2.3, October 2007), with the following exception:
  - For pine that is infected by Dothistroma: the <u>Defoliation Free Growing Damage Standard for Determinate Growth Conifers</u> (March 2, 2005).
- The acceptability standards for advanced regeneration and residual mature and pole layer crop trees in Appendix 10 of the Establishment to Free Growing Guidebook - Prince Rupert Forest Region (version 2.3, October 2007).
- For blocks using SEDRSS standards, Tables A and B from the <u>Free Growing Damage Criteria for Single Entry Dispersed Stocking Standards (SEDRSS) Managed Stands in Coastal BC and for Interior DFP and Layered Surveys (FS 660 2022/04/01, pages 27 32).
  </u>

The following qualifiers apply to the criteria for good health, good form and good vigor:

- the assessment of health, form and vigor applies only at the time of Free Growing;
- the criteria are specific to even-aged managed stands, and to layers 3 and 4 in uneven-aged managed stands; and
- the criteria do not apply to broadleaf species.

For layers 1 and 2 in uneven-aged management stands the criteria for good health, form, and vigor are:

- trees must not exceed the damage criteria of Table A of the Free Growing Damage Criteria for Multilayered Stands in British Columbia (February 2007);
- western hemlock trees must not be subject to a dwarf mistletoe infection rating of 4 or more as described in Figure 5 of the Dwarf Mistletoe Management Guidebook (July 1995); and
- trees must have at least 20% continuous live crown.

#### Minimum Horizontal Inter-Tree Distance

Unless otherwise stated within Appendix A, the following minimum inter-tree distances will apply for trees to be counted as well-spaced:

- 0.0 meters in Layer 1 of multi-layered stands;
- 1.0 meters between layers 1, 2, 3 and 4 for multi-layered stands;
- 1.0 meters for the wildlife forage stocking standards (<u>Table A2</u>) to allow for cluster management. This minimum inter tree spacing also applies within clusters when cluster management is identified as a stand level strategy in the site plan;

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- 1.6 meters on hygric, sub-hydric, colluvial or mechanically site prepared areas; and
- 2.0 meters for all other areas (except those areas where site factors or objectives require a different minimum inter-tree distance as identified in the Site Plan).

### 3.2.8 Brush and Broadleaf Competition Criteria

In addition to criteria for selection of Well-Spaced Stems, to be considered Free Growing a crop tree must:

- 1. Be free from unacceptable levels of herb, shrub, or broadleaf tree competition, in accordance with the criteria set out in Appendix 9 of the <a href="Establishment to Free Growing Guidebook Prince Rupert Forest Region">Establishment to Free Growing Guidebook Prince Rupert Forest Region</a> (version 2.3, October 2007), with the following exceptions:
  - where stocking standards include broadleaf tree species as preferred or acceptable species, these broadleaf species shall be deemed to not be in competition;
  - Layer 1 (> 12.5 cm dbh) broadleaf species retained within the SP for non-timber purposes will be considered non-competitive when assessing for Free Growing, if the total Layer 1 broadleaf species in the plot are either:
    - less than 6% crown closure
    - less than 8 m² basal area
  - to increase riparian and biodiversity values, alder, aspen, birch, and cottonwood are not considered competing vegetation within the first 10 meters of the riparian management zones of S1 to S5 streams, L1 and L3 lakes or W1 and W3 wetlands;
  - herbaceous vegetation less than 100% of the height of crop trees within 5 m of a S4, S5 or S6 stream is not considered competing vegetation;
  - to provide visual screening, deciduous trees and herbaceous vegetation within 10 m of the edge of the running surface of a roads are not considered competing vegetation.
- 2. Have experienced a minimum of 2 full growing seasons between any brushing treatment and the Free Growing assessment.
- 3. Meet the following minimum percentage height above competing brush to be Free Growing:

% Height above brush:	100%	125%	150%
Applies to:	ICH (as per approved Kalum quadrant methodology)	ESSF, MH	All other BEC zones

### 3.2.9 Complexes

Where a complex has been noted in a Silviculture Prescription or Site Plan, the standards unit(s) will be managed according to the dominant site series as identified in the Silviculture Prescription or Site Plan.

#### 3.2.10 Hardwoods

Hardwood (deciduous or "broadleaf") species are noted in the Stocking Standards and will be used as follows:

- Black cottonwood (Act) is a commercial species and will be considered a preferred or acceptable species as noted in the stocking standards in Appendix A.
- Red alder (Dr) is a commercial species and, when harvested from a stand where it was a leading species (i.e., ≥ 30% of original stand composition as per Forest Cover or Vegetative Resources Inventory label), can contribute to minimum stocking. Alder is not a known host of the strain of Annosus root disease found in British Columbia. On sites identified as having high incidence of Annosus root disease, alder can contribute to minimum stocking regardless of whether it was a leading species prior to harvest as noted in Table A3.
- Birch (Ep) is not currently considered a commercial species in the Kalum TSA but is considered a

commercial species in some portions of the Province. There are periodic markets for birch within the Kalum TSA. Birch has been shown to be ecologically viable within certain site series of the CWHws1 and is not a known host of Annosus root disease. On sites identified as having high incidence of Annosus root disease birch can contribute to minimum stocking as noted in Table A3.

- Where Fire Management Stocking Standards (FMSS) or Ksi Gahlt'in Deciduous Stocking Standards have been prescribed, black cottonwood (Act), alder (Dr), birch (Ep) and aspen (At) will be considered preferred and contributing to minimum stocking as per footnote 'c' in <u>Table A1</u> and <u>Table</u> A3.
- Where an SP has identified management for a component of hardwood, hardwoods (other than cottonwood, alder or birch as noted above) identified in the Stocking Standards may be used in calculating stocking above the minimum stocking (preferred and acceptable).
- For hardwood species (other than cottonwood, alder, or birch as noted in the bullets above), any desire to establish a hardwood management regime on an area (i.e., management where hardwoods make up any portion of the minimum stocking) will require consultation with the District Manager.

#### 3.2.11 Standard Units and Silviculture Surveys Stratification

Within each site plan a block may be subdivided into a series of standards units (SU). BEC zones and site series often form the basic unit of stratification. Within each SU, standards such as maximum site disturbance, silviculture system and stocking standards are the same. During silviculture surveys, these SUs may be further subdivided by stratums. The minimum stratum size for milestone surveys in an SU that is <=20 hectares is 1.0 ha. For an SU that is > 20 ha, the minimum stratum size is 2 ha or 5% of the standards unit, whichever is less. For the purposes of FPPR s. 46.11(2), for an area to be considered mappable, its minimum dimension must be at least 35 m and its mappable area must be at least 0.25 ha.

### 3.2.12 Effect of approval of the FSP

In accordance with FRPA s. 197(5), the FSP Holder specifies that they may choose to amend the stocking standards for silviculture prescriptions or SPs that are already in existence to conform to this FSP.

As per the FPPR s. 20(5), public notice of an amendment to the stocking standards will not be required.

### 3.3 Invasive Plants

The FSP must address the introduction or spread of invasive plants (FPPR s. 17) and the following are measures to be used for control of invasive plant species identified in the *Invasive Plants Regulation*:

- 1. use certified seed only in erosion control and grass-seeding activities;
- road construction, logging and silviculture machinery<sup>3</sup> that is to be transported from an off-pavement worksite more than 200 km away from the Coast Mountains Natural Resource District, and that is to do work under the authority of this FSP must be washed before entering an FDUs described in this FSP.

# 3.4 Natural Range Barriers

Where applicable (FRPA s. 48), the FSP must specify measures to mitigate the effect of removing or rendering ineffective natural range barriers (FPPR s. 18).

The following steps will be taken by the FSP Holder in the FDU(s) regarding natural range barriers:

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<sup>&</sup>lt;sup>3</sup> Road construction, logging, and silviculture machinery includes skidders, brushers, excavators, drills, loaders, and other heavy machinery. Also includes pickup trucks and ATVs.

- 1. Each year under the term of this FSP, the FSP Holder will determine if the FDU(s) overlaps with or is immediately adjacent to range tenures.
- 2. If the FSP Holder determines that its activities will remove or render ineffective a natural range barrier for a range tenure identified in (1), the FSP Holder will identify appropriate measures to mitigate these effects (e.g., access control at bridges).
- 3. The FSP Holder will inform the range tenure holder of measures identified in (2) and will consider additional or alternative measures if identified through discussions with the range tenure holder.
- 4. The FSP Holder will implement the measures identified in (2) or alternative measures identified through discussion with the range tenure holder in (3).

## 3.5 Cumulative Effect of Multiple FSPs

Where applicable, the FSP must address the cumulative effect of multiple FSPs in an area (FPPR s. 19). There are four effective FSPs that overlap with this FSP for TFL 1 and FL A16835:

- Kalum Ventures Ltd, Kitselas First Nation and Kitselas Forestry LP have an effective FSP that overlaps with this FSP in the Kalum River valley and along the Skeena River.
- BCTS has an effective FSP for its operations within the Coast Mountains Natural Resource District that overlaps this FSP in all areas within the Cascadia and Kalum TSAs.
- A&A Trading Ltd and Terrace Community Forest have an effective FSP for operations in the Kalum TSA, overlapping with this FSP along the Kalum River valley and Skeena River.
- Skeena Sawmills have an effective FSP overlapping with this FSP in the Kalum TSA.

The results and strategies from these FSPs are compared to ensure activities under the FSPs are not inconsistent with each other. The FSPs generally share similar approaches to landscape level issues, including proportionality for old growth and seral stage analyses, so are consistent with each other in this respect as well.

# 3.6 Referral and Public Review Summary

Details regarding referral of this Forest Stewardship Plan to agencies and First Nations, the public review process of the FSP, and any subsequent revisions to the FSP, are described in detail in the Supporting Document to this FSP.

# 4 MAPS

The FSP maps are provided separately from the FSP text.

The FSP maps are provided at a scale of 1:50,000. They show the critical content requirements as described in section 5(1)(a) of the *FRPA* and section 14 of the *FPPR*.

There are eighteen FDUs designated under this FSP. They are shown on the FSP maps and are identified as:

**Beaver** 

Clore

**Dasque** 

**Exchamsiks** 

**Exstew** 

**Hot Springs** 

Ishkheenickh

Kalum

**Kasiks** 

Kiteen

Ksi Gahlt'in

Kleanza-Treasure

Ksedin

Lakelse

Nass River-Kalum

**Nelson-Fiddler** 

Skeena River-Kalum

**Tseax** 

The FDUs were chosen primarily to match LU boundaries.

Coast Tainahian Danauman LD	FOR CURMICCION, Farrest Chausendakia Plan for TFL 4 and FL A4000	
Coast Tsimshian Resources LP	FOR SUBMISSION: Forest Stewardship Plan for TFL 1 and FL A1683	50
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# 5 Supporting Documentation

Information that supports or was used in the development of this FSP is contained in a separate document, including:

- information directly related to the results and strategies;
- general descriptions and discussion of issues that should add clarity and context to the enforceable results and strategies noted in this FSP with respect to the eleven resource values that have been identified in the FRPA;
- a description of the sources of information used in preparing this FSP; and
- Public, Agency and First Nation referral, comment, review and response information.



# APPENDIX A STOCKING STANDARDS TABLES

### In the following tables:

- "Biogeoclimatic unit" or "BEC classification" means the zone, subzone, variant and site series
  described in the most recent field guide published by the Ministry of Forests for the identification and
  interpretation of ecosystems, as applicable to a logged area.
- "MIN" or "Min" means minimum, "Max" means maximum.
- "p" means preferred, "a" means acceptable.
- Footnotes to Tables A1, A2, A3, A4, A5, A6, and A7 are provided in the table that follows Table A7.

Table A1. Regeneration and Free Growing Guide

				I	Regeneratio	n Guide				Free Growing Guide			
	BE( Classific	-		Species			<b>ocking</b> spaced		Regen Delay Guide	Latest assessment	Min. Heiç	ght	
I.D. #	Zone/SZ	Series	Preferred (p)	Acceptable (a)	Broadleaf (p) or (a), as per footnotes	Target	MIN pa	MIN p	(Suggest max yrs)	(yrs)	Species	Ht (m)	
1055479	CWHvm1	01	Hw <sup>30</sup> Ba <sup>18</sup> Cw Ss <sup>7,18,30,35, 56</sup>		Dr <sup>a,c</sup>	900	500	400	6	20	Hw, Ss Cw Others	2.00 1.50 1.40	
1055480	CWHvm1	02*	PI Cw Hw	Fd <sup>22</sup>		400	200	200	3	20	Hw, Pl Others	1.40 1.00	
1055481	CWHvm1	03	Cw Hw	PI Fd <sup>22</sup>	Dr <sup>a,c</sup>	800	400	400	6	20	Hw, Pl Others	1.40 1.00	
1055482	CWHvm1	04	Hw <sup>30</sup> Ba Cw Ss <sup>30,35,56</sup>		Dr <sup>a,c</sup>	900	500	400	3	20	Hw, Ss Cw Others	2.00 1.50 1.40	
1055843	CWHvm1	05	Hw <sup>30</sup> Ba Cw Ss <sup>30,35,56</sup>		Act <sup>b,c</sup> Dr <sup>b,c</sup>	900	500	400	3	20	Hw, Ss, Act Cw Others	2.00 1.50 1.40	
1055484	CWHvm1	06	Hw <sup>30</sup> Ba <sup>18</sup> Cw Ss <sup>7,18,30,35, 56</sup>		Dr <sup>b,c</sup>	900	500	400	6	20	Hw, Ss Cw Others	2.00 1.50 1.40	
N/a	CWHvm1	07	Not in	this area			•••••						
1055485	CWHvm1	08	Hw <sup>2,30</sup> Ba Cw Ss <sup>30,35,56</sup>		Act <sup>b,c</sup> Dr <sup>b,c</sup>	900	500	400	3	20	Hw, Ss, Act Cw Others	2.00 1.50 1.40	
1055486	CWHvm1	09	Ba Cw Ss <sup>1,30,35,56</sup>		Act <sup>b,c</sup> Dr <sup>b,c</sup>	900	500	400	3	20	Act Cw Others	2.00 1.50 1.40	
1055487	CWHvm1	10	Cw <sup>1</sup> Ss <sup>1,30,35,56</sup>	Ba <sup>1</sup>	Act <sup>b,c</sup> Dr <sup>b,c</sup>	900	500	400	3	20	Ss, Act Cw Others	2.00 1.50 1.40	
N/a	CWHvm1	11	no	conifers	Act <sup>b,c</sup> Dr <sup>b,c</sup>	-	-	-	-	-	All	1.40	
1055488	CWHvm1	12	Cw <sup>1</sup> Hw <sup>1,30</sup> Yc <sup>1</sup>	Pl <sup>1</sup>		800	400	400	3	20	Hw, Pl Others	1.40 1.00	
1055489	CWHvm1	13*	Cw <sup>1</sup> Pl <sup>1</sup> Yc <sup>1</sup>	Hw <sup>1,30</sup>		400	200	200	3	20	PI Others	1.40 1.00	
1055490	CWHvm1	14	Cw <sup>1</sup>	Hw <sup>1,30</sup> Ss <sup>1,30,56</sup> Yc <sup>1</sup>	Act <sup>a,c</sup> Dr <sup>a,c</sup>	800	400	400	3	20	Act Hw, Ss Others	2.00 1.40 1.00	
N/a	CWHvm1	31	non-	forested		-	-	-	-	-	-	-	
N/a	CWHvm1	32	non-	forested		-	-	-	-	-	-	-	

			Species Stocking De						Free	Growing Guide	9	
	BEC Classific			Species			ocking spaced/		Regen Delay Guide	Latest assessment	Min. Heig	ght
I.D. #	Zone/SZ	Series	Preferred (p)	Acceptable (a)	Broadleaf (p) or (a), as per footnotes	Target	MIN pa	MIN p	(Suggest max yrs)	(yrs)	Species	Ht (m)
1055658	CWHvm2	01	Hw <sup>30</sup> Ba Cw <sup>14</sup> Yc Ss <sup>7,30,56</sup>	Hm <sup>13,30</sup>	Dr <sup>a,c</sup>	900	500	400	6	20	Hw, Ss Cw, Yc Ba Hm	2.00 1.50 1.40 1.00
1055659	CWHvm2	02*	PI Cw Yc	Hw <sup>30</sup>		400	200	200	3	20	Hw Pl Others	1.80 1.40 1.00
1055660	CWHvm2	03	Cw <sup>14</sup> Hw <sup>30</sup>	Hm <sup>13,30</sup> PI Yc		800	400	400	6	20	Hw Pl Others	1.80 1.40 1.00
N/a	CWHvm2	04	Not in	this area								
1055661	CWHvm2	05	Hw <sup>30</sup> Ba Cw <sup>14</sup> Yc <sup>13</sup> Ss <sup>30,56</sup>	Hm <sup>13,30</sup>	Dr <sup>a,c</sup>	900	500	400	3	20	Hw, Ss Cw, Yc Ba Hm	2.00 1.50 1.40 1.00
1055662	CWHvm2	06	Hw <sup>30</sup> Ba Cw <sup>14</sup> Yc Ss <sup>7,30,56</sup>	Hm <sup>13,30</sup>	Dr <sup>a,c</sup>	900	500	400	6	20	Hw, Ss Cw, Yc Ba Hm	2.00 1.50 1.40 1.00
N/a	CWHvm2	07	Not in	this area							•	
1055663	CWHvm2	08	Hw <sup>2,30</sup> Ba Cw <sup>14</sup> Yc Ss <sup>30,35,56</sup>	Hm <sup>13,30</sup>	Dr <sup>a,c</sup>	900	500	400	3	20	Hw, Ss Cw, Yc Ba Hm	2.00 1.50 1.40 1.00
1055664	CWHvm2	09	Cw <sup>1</sup> Hw <sup>1,30</sup> Yc <sup>1</sup>	Pl <sup>1</sup> Hm <sup>1,30</sup>		800	400	400	3	20	Hw Pl Hm Others	1.80 1.40 0.80 1.00
1055665	CWHvm2	10*	Pl¹ Yc¹	Hm³0		400	200	200	3	20	PI Yc Hm	1.40 1.00 0.80
1055666	CWHvm2	11	Cw <sup>1</sup> Yc <sup>1</sup>	Hm <sup>1,30</sup> Hw <sup>1,30</sup> Ss <sup>1,30,56</sup>	Dr <sup>a,c</sup>	800	400	400	3	20	Hw Ss Others	1.80 1.40 1.00
	CWHvm2	31	non-	forested		-	-	-	-	-	-	-
	CWHvm2	32	non-	forested		-	-	-	-	-	-	-
	CWHvm2	51	non-	forested		-	-	-	-	-	-	-
1055667	CWHwm	01	Ba <sup>16,50</sup> Hw <sup>30</sup> Ss <sup>30,56</sup>	Cw Hm <sup>12,13,30</sup> Yc <sup>12,13</sup>	Dr <sup>a,c</sup>	900	500	400	6	20	Hw, Ss Hm Others	2.00 1.00 1.40
1055668	CWHwm	02	Cw <sup>16,50</sup> Hw <sup>30</sup> Pl	Hm <sup>12,13,30</sup>	Dr <sup>a,c</sup>	900	500	400	6	20	Hw, PI Hm Others	2.00 1.00 1.40
1055669	CWHwm	03	Ba <sup>16,50</sup> Ss <sup>30,56</sup> Hw <sup>30</sup>	Cw Yc <sup>12,13</sup>	Act <sup>a,c</sup> Dr <sup>a,c</sup>	900	500	400	3	20	Hw, Ss, Act Others	2.00 1.40
1055670	CWHwm	04	Ss <sup>30,56</sup> Hw <sup>30</sup>	Ba Cw Yc <sup>12,13</sup>	Act <sup>a,c</sup> Dr <sup>b,c</sup>	900	500	400	3	20	Hw, Ss, Act Others	2.00 1.40
1055671	CWHwm	05	Ba <sup>16,50</sup> Ss <sup>30,56</sup> Hw <sup>30</sup>	Cw	Act <sup>b,c</sup> Dr <sup>b,c</sup>	900	500	400	3	20	Hw, Ss, Act Others	2.00 1.40
1055672	CWHwm	06	Ba <sup>1,16,50</sup> Ss <sup>1,30,56</sup>	Cw <sup>1</sup>	Act <sup>b,c</sup> Dr <sup>b,c</sup>	900	500	400	3	20	Ss, Act Others	2.00 1.40
N/a	CWHwm	07*	no	conifers		-	-	-	-	-	-	-
1055674	CWHwm	08*	Cw <sup>1,16</sup> Pl <sup>1</sup> Yc <sup>1</sup> Hw <sup>1,30</sup>	Hm <sup>12,13,30</sup>	Act <sup>a,c</sup> Dr <sup>a,c</sup>	900	500	400	6	20	Hw, PI, Act Others	2.00 1.40

				n Guide				Free Growing Guide				
	BE( Classific	-		Species			ocking spaced	•	Regen Delay Guide	Latest assessment	Min. Heiç	ght
I.D. #	Zone/SZ	Series	Preferred (p)	Acceptable (a)	Broadleaf (p) or (a), as per footnotes	Target	MIN pa	MIN p	(Suggest max yrs)	(yrs)	Species	Ht (m)
1055673	CWHwm	09	Cw <sup>1,16,50</sup> Ss <sup>1,30,56</sup>	Yc <sup>1</sup> Hw <sup>1,30</sup> Hm	Act <sup>a,c</sup> Dr <sup>a,c</sup>	800	400	400	3	20	Act Hw, Ss Others	2.00 1.40 1.00
1055675	CWHwm	10*	Pl <sup>1</sup> Yc <sup>1</sup>	Cw <sup>1</sup> Hw <sup>30</sup>		400	200	200	3	20	PI Others	1.40 1.00
N/a	CWHwm	31	non-	forested		-	-	-	-	-	-	-
N/a	CWHwm	32	non-	forested		-	-	-	-	-	-	-
N/a	CWHwm	51	non-	forested		-	-	-	-	-	-	-
1055680	CWHws1	01	Hw <sup>30</sup> Ba Cw	PI Sxs <sup>30,35,56</sup>	Ep <sup>c</sup> , Act <sup>c</sup> , At <sup>c</sup> , Dr <sup>a,c</sup>	900	500	400	6	20	Hw, Pl, Act Sxs Others	2.00 2.00 1.40
1055681	CWHws1	02*	PI Hw <sup>30</sup>	Cw		600	400	400	6	20	Hw, Pl Others	1.40 1.00
1055682	CWHws1	03	Hw Pl	Cw	Ep <sup>c</sup> , At <sup>c</sup>	900	500	400	6	20	Hw, Pl Others	2.00 1.40
1055683	CWHws1	04	Hw <sup>2,30</sup> Ba Cw	Sxs <sup>30,35,56</sup>	Ep <sup>c</sup> , At <sup>c</sup> Act <sup>a,c</sup> Dr <sup>a,c</sup>	900	500	400	3	20	Hw, Act Sxs Others	2.00 2.00 1.40
1055684	CWHws1	05	Hw <sup>30</sup> Ba Cw	Sxs <sup>7,30,35,56</sup>	Ep <sup>c</sup> , At <sup>c</sup> , Dr <sup>a,c</sup>	900	500	400	6	20	Hw,Sxs Others	2.00 1.40
1055685	CWHws1	06	Hw <sup>2,30</sup> Ba Cw	Sxs <sup>30,35,56</sup>	Ep <sup>c</sup> , At <sup>c</sup> Act <sup>a</sup> Dr <sup>b</sup>	900	500	400	3	20	Hw,Sxs, Act Others	2.00 1.40
1055686	CWHws1	07	Hw <sup>30</sup> Ba Cw	Sxs <sup>30,35,56</sup>	Act <sup>b</sup>	900	500	400	3	20	Hw,Sxs, Act Others	2.00 1.40
1055687	CWHws1	08	Ba¹ Cw¹	Hw <sup>30</sup> Sxs <sup>1,30,35,56</sup>	Act <sup>b</sup> Dr <sup>b</sup>	900	500	400	3	20	Sxs, Act Others	2.00 1.40
N/a	CWHws1	09*	no	conifers	Act <sup>b</sup> Dr <sup>b</sup>	-	-	-	-	-	All	1.40
1055688	CWHws1	10*	Pl <sup>1</sup>	Cw <sup>1</sup> Hw <sup>30</sup>		400	200	200	3	20	Hw, Pl Cw	1.40 1.00
1055689	CWHws1	11	Cw <sup>1</sup> Sxs <sup>1,30,56</sup>	Ba¹ Hw¹ <sup>,30</sup>	Act <sup>b,c</sup> Dr <sup>b,c</sup>	800	400	400	3	20	Act Hw,Sxs Others	2.00 1.40 1.00
N/a	CWHws1	31	non-	forested		-	-	-	-	-	-	-
N/a	CWHws1	32	non-	forested		-	-	-	-	-	-	-
1055690	CWHws2	01	Sxs <sup>30,56</sup> Hw <sup>30</sup> Ba Cw <sup>14</sup>	Bl <sup>12</sup> Pl Hm <sup>13,30,50</sup>	Ep <sup>c</sup> , Act <sup>c</sup> , At <sup>c</sup> , Dr <sup>a</sup>	900	500	400	6	20	PI, Act Hw Others	2.00 1.30 1.00
1055691	CWHws2	02*	PI Hw <sup>30</sup>	Cw Hm <sup>13,30</sup>		600	400	400	6	20	PI Others	1.40 0.80
1055692	CWHws2	03	Hw Pl	Hm <sup>13,30</sup> Cw	Ep <sup>c</sup> , At <sup>c</sup> Dr <sup>a,c</sup>	900	500	400	6	20	PI Hw Others	2.00 1.30 1.00
1055693	CWHws2	04	Sxs <sup>30,56</sup> Hw <sup>30</sup> Ba Cw <sup>14</sup>	BI <sup>12</sup> Hm <sup>13,30</sup>	Ep <sup>c</sup> , Act <sup>c</sup> At <sup>c</sup> Dr <sup>a</sup>	900	500	400	3	20	Act Hw Others	2.00 1.30 1.00
1055694	CWHws2	05	Sxs <sup>7,30,56</sup> Hw <sup>30</sup> Ba Cw <sup>14</sup>	Bl <sup>12</sup>	Ep <sup>c</sup> , At <sup>c</sup> Dr <sup>a,c</sup>	900	500	400	6	20	Hw Others	1.30 1.00
1055695	CWHws2	06	Sxs <sup>30,56</sup> Hw <sup>30</sup> Ba Cw <sup>14</sup>	Bl <sup>12</sup>	Ep <sup>c</sup> , At <sup>c</sup> Act <sup>c</sup> Dr <sup>a</sup>	900	500	400	3	20	Act Hw Others	2.00 1.30 1.00

				Regeneratio	n Guide				Free	Growing Guide	е	
	BE( Classific	-		Species			ocking spaced		Regen Delay Guide	Latest assessment	Act 2.0 Hw 1.3 Others 1.0 Act 2.1 Others 1.1 Act 2.1 Other 1.1 All 1.4 Pl 1.5 Others 0.3 Act 2.0 Others 0.3 Act 2.1 Act 2.1 Others 0.3 Act 2.1 Act 2.1 Others 0.3 Act 2.1	ght
I.D. #	Zone/SZ	Series	Preferred (p)	Acceptable (a)	Broadleaf (p) or (a), as per footnotes	Target	MIN pa	MIN p	(Suggest max yrs)	(yrs)	Species	Ht (m)
1055696	CWHws2	07	Sxs <sup>30,56</sup> Hw <sup>30</sup> Ba Cw	BI <sup>12</sup>	Act <sup>b</sup> Dr <sup>b</sup>	900	500	400	3	20	Hw	2.00 1.30 1.00
1055697	CWHws2	08	Sxs <sup>30,56</sup> Hw <sup>30</sup> Ba <sup>1</sup> Cw <sup>1</sup>	BI <sup>12</sup>	Act <sup>b</sup> Dr <sup>b</sup>	900	500	400	3	20		2.00 1.00
N/a	CWHws2	09	no	conifers	Act <sup>b</sup> Dr <sup>b</sup>	-	-	-	-	-	All	1.40
1055698	CWHws2	10*	Pl <sup>1</sup>	Cw <sup>1</sup> Hm <sup>30</sup> Hw <sup>30</sup>		400	200	200	3	20		1.40 0.80
1055699	CWHws2	11	Cw <sup>1</sup> Sxs <sup>1,30,56</sup>	Hw <sup>1,30</sup> Ba <sup>1</sup>	Act <sup>a,c</sup> Dr <sup>a,c</sup>	800	400	400	3	20		2.00 0.80
N/a	CWHws2	31	non-	forested		-	-	-	-	-	-	-
N/a	CWHws2	32	non-	forested		-	-	-	-	-	-	-
N/a	CWHws2	51	non-	forested		-	-	-	-	-	-	-
1055777	ESSFmk	01	BI Se	Ba <sup>17</sup> Hm Pl <sup>34</sup>		1200	700	600	7	20	Others	1.60 0.80
1055700	ESSFmk	02*	Pa Pl	BI Hm Se		1000	500	400	7	20		1.20 0.60
1055701	ESSFmk	03*	Pa Pl	BI Hm Se Ba <sup>17</sup>		1200	700	600	7	20		1.60 0.80
1055702	ESSFmk	04	Bl Se	Ba <sup>17</sup> Hm Pl <sup>34</sup>		1200	700	600	4	20		1.60 0.80
1055703	ESSFmk	05	BI Se <sup>32</sup>	Hm Ba <sup>17</sup>		1200	700	600	4	20	All	0.80
1055704	ESSFmk	06	Bl <sup>1</sup> Se <sup>1,32</sup>	Hm Ba		1000	500	400	4	20	All	0.80
1055705	ESSFmk	07	Bl <sup>1</sup> Se <sup>1,32</sup>	Ва		1000	500	400	4	20	All	0.80
N/a	ESSFmk	31	non-	forested		-	-	-	-	-	-	-
N/a	ESSFmk	51	non-	forested		_	-	-	-	-	-	-
1055706	ESSFwv	01	BI Se	Hm Hw Pl <sup>34</sup>		1200	700	600	7	20	PI Others	1.60 0.80
1055707	ESSFwv	02*	Pl	BI Hm Se		1000	500	400	7	20	PI Others	1.20 0.60
1055708	ESSFwv	03*	Pl	BI Hm Se Hw		1200	700	600	7	20	PI Others	1.60 0.80
1055709	ESSFwv	04	PI BI	Se Hm		1200	700	600	7	20	PI Others	1.60 0.80
1055710	ESSFwv	05	Bl Se	Hm Hw Pl <sup>34</sup>		1200	700	600	4	20	PI Others	1.60 0.80
1055711	ESSFwv	06	Bl Se <sup>32</sup>	Hm Hw		1200	700	600	4	20	All	0.80
1055712	ESSFwv	07*	Bl Se <sup>32</sup>	Hm Hw		1000	500	400	4	20	All	0.60
1055713	ESSFwv	80	Bl <sup>1</sup> Se <sup>1,32</sup>			1000	500	400	4	20	All	0.60
1055713	ESSFwv	09	Bl <sup>1</sup> Se <sup>1,32</sup>			1000	500	400	4	20	All	0.60
N/a	ESSFwv	31	non-	forested		-	-	-	-	-	-	-
N/a	ESSFwv	51	non-	forested		-	-	-	-	-	-	-
1055714	ICHmc1	01	Bl <sup>29</sup> Ba <sup>50</sup> Hw <sup>32</sup> Sx <sup>56</sup>	Pl	At <sup>a,c</sup> Ep <sup>a,c</sup>	1200	700	600	4	20	PI Others	2.00 1.00
1055715	ICHmc1	02*	Pl	BI Hw <sup>32</sup>	At <sup>a,c</sup>	1000	500	400	7	20	PI Others	1.40 0.80

				ı	Regeneratio	n Guide				Free	Growing Guide	)
	BE( Classific	-		Species			ocking spaced		Regen Delay Guide	Latest assessment	Min. Heiç	ght
I.D. #	Zone/SZ	Series	Preferred (p)	Acceptable (a)	Broadleaf (p) or (a), as per footnotes	Target	MIN pa	MIN p	(Suggest max yrs)	(yrs)	Species	Ht (m)
1055716	ICHmc1	03	Bl <sup>29</sup> Ba <sup>50</sup> Hw <sup>32</sup> Sx <sup>35,56</sup>	PI	Act <sup>a,c</sup> At <sup>b,c</sup> Ep <sup>b,c</sup>	1200	700	600	4	20	PI, Act Others	2.00 1.00
1055716	ICHmc1	04	Bl <sup>29</sup> Ba <sup>50</sup> Sx <sup>35,56</sup> Hw <sup>32</sup>	Pl	Act <sup>a,c</sup> At <sup>b,c</sup> Ep <sup>b,c</sup>	1200	700	600	4	20	PI, Act Others	2.00 1.00
1055717	ICHmc1	05	Ba <sup>50</sup> Sx <sup>1,35,56</sup> Bl <sup>1,29</sup>		Act <sup>b,c</sup> At <sup>b,c</sup> Ep <sup>b,c</sup>	1200	700	600	4	20	Act Others	2.00 1.00
1055718	ICHmc1	06	Ba <sup>50</sup> Sx <sup>1,56</sup> Bl <sup>1,29</sup>	Hw <sup>1,32</sup>	Act <sup>a,c</sup>	1000	500	400	4	20	Act Others	2.00 0.80
N/a	ICHmc1	31	non-	forested		-	-	-	-	-	-	-
1055719	ICHmc1a	01	Ba <sup>7</sup> Hw <sup>32</sup> Sx <sup>56</sup>	Bl <sup>50</sup> Pl	At <sup>a,c</sup> Ep <sup>a,c</sup>	1200	700	600	4	20	PI Others	2.00 1.00
1055720	ICHmc1a	02	Hw <sup>32</sup> Ba Sx <sup>35,56</sup>	Bl <sup>50</sup> Pl	Act <sup>a,c</sup> At <sup>b,c</sup> Ep <sup>b,c</sup>	1200	700	600	4	20	PI, Act Others	2.00 1.00
1055721	ICHmc1a	03	Hw <sup>32</sup> Ba Sx <sup>35,56</sup>	Bl <sup>50</sup> Pl		1200	700	600	4	20	PI Others	2.00 1.00
1055722	ICHmc2	01	Hw <sup>32</sup> Sx <sup>56</sup> Cw <sup>32</sup>	Ba <sup>50</sup> PI BI <sup>29</sup> Lw <sup>7,32</sup> Fd <sup>32</sup>	At <sup>a,c</sup> Ep <sup>a,c</sup>	1200	700	600	4	20	PI Others	2.00 1.00
1055723	ICHmc2	02*	Pl	BI Hw Ba <sup>50</sup>	At <sup>a,c</sup>	1000	500	400	7	20	PI Others	1.40 0.80
1055724	ICHmc2	03	Cw <sup>32</sup> Hw <sup>32</sup> Sx <sup>35,56</sup>	Bl <sup>29</sup> Pl Ba <sup>50</sup> Lw <sup>7,32</sup> Fd <sup>32</sup>	Act <sup>b,c</sup> At <sup>a,c</sup> Ep <sup>a,c</sup>	1200	700	600	4	20	PI, Act Others	2.00 1.00
1055724	ICHmc2	04	Cw <sup>32</sup> Sx <sup>35,56</sup> Hw <sup>32</sup>	Bl <sup>29</sup> Pl Ba <sup>50</sup> Lw <sup>7,32</sup> Fd <sup>32</sup>	Act <sup>b,c</sup> At <sup>a,c</sup> Ep <sup>a,c</sup>	1200	700	600	4	20	PI, Act Others	2.00 1.00
1055725	ICHmc2	05	Cw <sup>1,32</sup> Sx <sup>1,35,56</sup>	Ba <sup>50</sup> Bl <sup>1,29</sup> Hw <sup>1,32</sup> Pl <sup>1</sup>	Act <sup>b,c</sup> At <sup>a,c</sup> Ep <sup>a,c</sup>	1200	700	600	4	20	PI, Act Others	2.00 1.00
1055726	ICHmc2	06	Cw <sup>1,32</sup> Sx <sup>1,35,56</sup>	Ba <sup>50</sup> Bl <sup>1,29</sup> Hw <sup>1,32</sup>	Act <sup>a,c</sup> At <sup>a,c</sup> Ep <sup>a,c</sup>	1200	700	600	4	20	Act Others	2.00 1.00
1055727	ICHmc2	07	Ba <sup>50</sup> Bl <sup>1,29</sup> Sx <sup>1,56</sup> Cw <sup>1,32</sup>	Hw <sup>1,32</sup>	Act <sup>b,c</sup> At <sup>b,c</sup> Ep <sup>b,c</sup>	1000	500	400	4	20	Act Others	2.00 1.00
1055728	ICHmc2	08*	Sb <sup>1</sup> Sx <sup>1,32,56</sup>	Pl <sup>1</sup>		400	200	200	4	20	PI Others	1.40 0.80
N/a	ICHmc2	31	non-	forested		-	-	-	-	-	-	-
N/a	ICHmc2	32	non-	forested		-	-	-	-	-	-	-
1055729	ICHmc2	51	Pl <sup>71</sup> Hw	Bl <sup>28,29</sup> Sx <sup>28,56</sup> Ba <sup>50</sup>	At <sup>a,c</sup> Ep <sup>a,c</sup>	1200	700	600	4	20	PI Others	2.00 1.00
1055730	ICHmc2	52	Hw <sup>32</sup> Sx <sup>56</sup> Cw <sup>32</sup>	PI Bl <sup>29</sup> Ba <sup>50</sup>	Act <sup>a,c</sup> At <sup>b,c</sup> Ep <sup>b,c</sup>	1200	700	600	4	20	PI, Act Others	2.00 1.00
1055730	ICHmc2	53	Hw <sup>32</sup> Sx <sup>56</sup> Cw <sup>32</sup>	PI Bl <sup>29</sup> Ba <sup>50</sup>	Act <sup>a,c</sup> At <sup>b,c</sup> Ep <sup>b,c</sup>	1200	700	600	4	20	PI, Act Others	2.00 1.00
1055731	ICHmc2	54	Cw <sup>32</sup> Sx <sup>56</sup>	Bl <sup>29</sup> Hw <sup>32</sup> Pl Ba <sup>50</sup>	Act <sup>a,c</sup> At <sup>b,c</sup> Ep <sup>b,c</sup>	1200	700	600	4	20	PI, Act Others	2.00 1.00
1055732	MHmm1	01	Ba Hm Yc			900	500	400	7	20	All	1.00
1055733	MHmm1	02*	Hm Yc	Ва		800	400	400	4	20	All	0.80
1055735	MHmm1	03	Ba Hm Yc			900	500	400	4	20	All	1.00
1055732	MHmm1	04	Ba Hm Yc			900	500	400	7	20	All	1.00
1055735	MHmm1	05	Ba Yc Hm			900	500	400	4	20	All	1.00
1055736	MHmm1	06*	Hm <sup>1</sup> Yc <sup>1</sup>			800	400	400	7	20	All	0.80

				ı	Regeneratio	n Guide				Free (	Growing Guide	)
	BE( Classific	_		Species	Species		ocking spaced		Regen Delay Guide	Latest assessment	Min. Height	
I.D. #	Zone/SZ	Series	Preferred (p)	Acceptable (a)	Broadleaf (p) or (a), as per footnotes	Target	MIN pa	MIN p	(Suggest max yrs)	(yrs)	Species	Ht (m)
1055735	MHmm1	07*	Hm¹ Ba¹ Yc¹			900	500	400	4	20	All	1.00
1055734	MHmm1	08*	Hm <sup>1</sup> Yc <sup>1</sup>	Hw <sup>1,14</sup> Ba <sup>1</sup>		400	200	200	4	20	All	0.80
1055737	MHmm1	09*	Yc1 Hm1	Ba <sup>1</sup> Hw <sup>1,14</sup>		800	400	400	4	20	All	0.80
N/a	MHmm1	31	non-	forested		-	-	-	-	-	-	-
N/a	MHmm1	51	non-	forested		-	-	-	-	-	-	-
1055738	MHmm2	01	Ba Hm	Yc <sup>17,50</sup> Bl <sup>50</sup> Hw <sup>14,30,50</sup>		900	500	400	7	20	All	1.00
1055739	MHmm2	02*	Hm	Yc <sup>17,50</sup> Ba Bl <sup>50</sup>		800	400	400	4	20	All	0.80
1055740	MHmm2	03	Ba Hm	Yc <sup>17,50</sup> Bl <sup>50</sup> Hw <sup>14,30,50</sup>		900	500	400	4	20	All	1.00
1055741	MHmm2	04	Ba Hm	Yc <sup>17,50</sup> Bl <sup>50</sup>		900	500	400	7	20	All	1.00
1055742	MHmm2	05	Ba Hm	Yc <sup>17,50</sup> Bl <sup>50</sup>		900	500	400	4	20	All	1.00
1055743	MHmm2	06*	Hm <sup>1</sup>	Yc <sup>17,50</sup>		800	400	400	7	20	All	1.00
1055744	MHmm2	07*	Ba <sup>1</sup>	Yc <sup>1,17,50</sup> Hm <sup>1</sup>		900	500	400	4	20	All	1.00
1055745	MHmm2	08*	Hm <sup>1</sup>	Ba Bl <sup>1,50</sup> Yc <sup>1,17,50</sup>		400	200	200	4	20	All	0.80
1055746	MHmm2	09*	Hm¹	Ba <sup>1</sup> Yc <sup>1,17,50</sup>		800	400	400	4	20	All	0.80
N/a	MHmm2	31	non-	forested		-	-	-	-	-	-	-
N/a	MHmm2	51	non-	forested		-	-	-	-	-	-	-

<sup>\*</sup> Advisory note: These site series are sensitive to logging – avoid targeting them for harvest

Table A2. Stocking Standards for Wildlife Forage Site Series

	BEC Classi	fication	Speci	es		Stocking I-spaced/	ha)	Regen Delay Guide	Free Growing	Maxim	num De	nsity
I.D. #	Zone/SZ	Series	Preferred	Accep t-able	Target	MIN	MIN	(Suggest	Latest	Pre Space*		Spacing spaced)
			(p)	(a)		ра	р	max yrs)	(yrs)	MAX	MIN	MAX
Wildlife F	orage - Devil'	s club						_				
1055747	CWHvm1	08	As per equiva classification in		600	400	400	3	20	660	400	660
1055748	CWHvm2	08	As per equiva classification in		600	400	400	3	20	660	400	660
Wildlife 1	055749Forage	e - Devil's	club									
1055749	CWHws1	06	As per equiva classification in		600	400	400	3	20	660	400	660
1055752	CWHws2	06	As per equiva classification in		600	400	400	3	20	660	400	660
Wildlife F	orage - Skunl	k cabbag	e					•		•		
1055750	CWHvm1	14	As per equiva		400	200	200	3	20	440	200	440
1055751	CWHvm2	11	As per equiva		400	200	200	3	20	440	200	440
Wildlife F	orage - Skunl	k cabbag	e					l .		<u> </u>	:	
1055753	CWHws1	11	As per equiva		400	200	200	3	20	440	200	440
1055754	CWHws2	11	As per equiva		400	200	200	3	20	440	200	440
Wildlife F	orage - Salmo	onberry 8	red-osier	dogwood	d			I .		<u> </u>		
1055755	CWHvm1	09	As per equiva		500	200	200	3	20	550	200	550
1055756	CWHvm1	10	As per equiva		500	200	200	3	20	550	200	550
Wildlife F	Wildlife Forage - Salmonberry & red-osier dogwood											
1055757	CWHws1	07	As per equiva	lent BEC	500	200	200	3	20	550	200	550
1055758	CWHws1	08	As per equiva		500	200	200	3	20	550	200	550
1055759	CWHws2	07	As per equiva		500	200	200	3	20	550	200	550
1055760	CWHws2	08	As per equiva		500	200	200	3	20	550	200	550

#### Notes:

Free-growing assessment, Tree Height: Same as the stocking standards for the ecosystem as described in Table A1.

Minimum Inter-tree Spacing: As per Section 3.2.5

**Well-Spaced stems:** "Well spaced" does not apply to forage gaps when cluster management is identified as a stand level strategy in the site plan.

Target post-spacing density: The target post spacing density is 100 stems/ha less than the post spacing maximum density.

<sup>\*</sup> If a stand exceeds the maximum density set in the prescription at free growing but does not exceed 4000 conifer stems per hectare (sph) (excluding germinants), the stand will be assessed to ensure there are sufficient gaps to provide forage for Grizzly Bears or Moose. Sufficient forage gaps are considered to be greater than 20% gaps across the Standards Unit. To test if adequate gap creation exists, 20% (per Standards Unit) of the established plots (50 square meters) may only contain conifers greater than 50 centimeters in height in one of four quadrants. For example, if five plots were assessed, four out of five plots could have conifers in more than one quadrant that are equal to or taller than 50 centimeters. If the results of the Free Growing survey show maximum density is exceeded without sufficient forage gaps or that total conifers (other than germinants) exceeds 4000 sph, a spacing treatment to meet the forage objective will be implemented.

Table A3. Stocking Standards for Sites Heavily Infected with Annosus

			Regeneration Guide						Free Growing Guide			
BEC Classification			Species	Stocking (well-spaced/ha)			Regen Delay Guide	Latest Assess ment	Min. Height			
	Zone/SZ	Series	Preferred (p)	Acceptable (a)	Broadleaf	Target	MIN pa	MIN p	(Suggest max yrs)	(yrs)	Species	Ht (m)
1055761	CWHws1	01	Cw Hw <sup>30,57</sup>	Ba PI Sxs <sup>30,35,56</sup>	Ep <sup>a,c</sup> , Act <sup>c</sup> , At <sup>c</sup> , Dr <sup>a,c</sup>	900	500	400	6	20	Plc, Cw Others	2.00 3.00
1055762	CWHws1	02*	PI Cw Hw <sup>30,57</sup>			600	400	400	6	20	Plc, Cw Others	1.40 2.00
1055763	CWHws1	03	PI Cw Hw <sup>30,57</sup>		Ep <sup>a,c</sup> , At <sup>c</sup>	900	500	400	6	20	Plc, Cw Others	2.00 3.00
1055764	CWHws1	04	Cw Hw <sup>30,57</sup>	Ba Sxs <sup>30,35,56</sup>	Act <sup>a,c</sup> Dr <sup>b,c,</sup> Ep <sup>b,c</sup> , At <sup>c</sup>	900	500	400	3	20	Cw Others	2.00 3.00
1055765	CWHws1	05	Cw Hw <sup>30,57</sup>	Ba PI Sxs <sup>30,35,56</sup>	Dr <sup>a,c</sup> , Ep <sup>a,c</sup> , At <sup>c</sup>	900	500	400	6	20	Cw Others	2.00 3.00
1055766	CWHws1	06	Cw Hw <sup>2,30,57</sup>	Ba Sxs <sup>30,35,56</sup>	Act <sup>b</sup> Dr <sup>b</sup> Ep <sup>b,c</sup> , At <sup>c</sup>	900	500	400	3	20	Cw Others	2.00 3.00
1055767	CWHws1	07	Cw Hw <sup>30,57</sup>	Ba Sxs <sup>30,35,56</sup>	Act <sup>b</sup>	900	500	400	3	20	Cw Others	2.00 3.00
1055768	CWHws1	08	Cw <sup>1</sup>	Ba <sup>1</sup> Hw <sup>1,30</sup> Sxs <sup>1,30,35,56</sup>	Act <sup>b</sup> Dr <sup>a</sup>	900	500	400	3	20	Cw Others	2.00 3.00
N/a	CWHws1	09*	no	conifers	Act <sup>b</sup> Dr <sup>b</sup>	-	-	-	-	-	All	1.40
1055769	CWHws1	10*	Pl <sup>1</sup>	Cw <sup>1</sup> Hw <sup>1,30</sup>		400	200	200	3	20	Plc, Cw Others	1.40 2.00
1055770	CWHws1	11	Cw <sup>1</sup> Sxs <sup>1,30,56</sup>	Ba <sup>1</sup> Hw <sup>1,30</sup>	Act <sup>b,c</sup> Dr <sup>b,c</sup>	800	400	400	3	20	Cw Others	1.40 2.00
N/a	CWHws1	31	non-	forested		-	-	-	-	-	-	-
N/a	CWHws1	32	non-	forested		-	-	-	-	-	-	-

<sup>\*</sup> Advisory note: These site series are sensitive to logging – avoid targeting them for harvest

Table A4. Multiple-layer Stocking Standards

	Target from		Layer**		Stocking I-spaced/ha)	١	Regeneration delay Guide*
I.D. #	Table A1 standards	Species		Target	MIN	MIN	
	(atama //b a)			pa	pa	р	(Suggest max
	(stems/ha)						years)
1055771	1200	As per	1	600	300	250	7
		Table A1 for the	2	800	400	300	7
		ecosyste	3	1000	500	400	7
		m	4	1200	700	600	7
1055772	1000	As per	1	400	200	200	7
		Table A1 for the ecosyste	2	600	300	250	7
			3	800	400	300	7
		m	4	1000	500	400	7
1055773	900	As per	1	400	200	200	7
		Table A1	2	500	300	250	7
		for the ecosyste	3	700	400	300	7
		m	4	900	500	400	7
1055774	800	As per	1	300	150	150	7
		Table A1	2	400	200	200	7
		for the ecosyste	3	600	300	300	7
		m	4	800	400	400	7
1055775	600	As per	1	300	150	150	7
		Table A1	2	400	200	200	7
		for the ecosyste	3	500	300	300	7
		m	4	600	400	400	7
1055776	400	As per	1	200	100	100	7
		Table A1 for the	2	300	125	125	7
			3	300	150	150	7
		ecosyste m	4	400	200	200	7

#### \* Regeneration Delay Guidance:

Maximum regen delay for uneven-aged management is 7 years. Regen delay can be met <u>immediately following logging</u> if the residual stand has no significant damage or pest problems and meets minimum stocking standards. If regeneration is achieved immediately following harvest, <u>earliest</u> Free-Growing date is 12 months after completion of logging.

### \*\*Stand Layer Definition

Layer 1Maturetrees >= 12.5 cm dbhLayer 2Poletrees 7.5 cm to 12.4 cm dbhLayer 3Saplingtrees >= 1.3 m height to 7.4 cm dbh

Layer 4 Regeneration trees < 1.3 m height

Section 3.2.5 applies to multi-layer stands for minimum inter-tree distance

### Table A5. Single Entry Dispersed Retention Stocking Standards

Potentially applies to: CWHvm1 01,05,06,08,09 CWHvm2 01,05,06,08

		Reg	Free Gro	wing Guide				
		Acceptable Layer 1		t <b>ocking</b> spaced/h	a)	Regen Delay Guide	Latest assessment	Min. Height
I.D. #	Species	Residual Basal Area (m²/ha)	Layer 2, 3 and 4 Target pa	MIN pa	MIN p	(Suggest max yrs)	(yrs)	Ht (m)
Tba-701 Moderate Retention	As per Table A1 for the ecosystem	9-15	800	400	300	See note	See note 1	As per Table A1 for the ecosystem
Tba-702 Moderate Retention	As per Table A1 for the ecosystem	16-22	700	300	200	See note	See note 1	As per Table A1 for the ecosystem
Tba-703 High Retention	As per Table A1 for the ecosystem	23-28	500	200	100	See note	See note 1	As per Table A1 for the ecosystem
Tba-704 High Retention	As per Table A1 for the ecosystem	29-39	400	100	0	See note	See note 1	As per Table A1 for the ecosystem

#### Notes:

### 2. Minimum Inter-Tree Distance:

- Between L1 and other layers = dripline\*
- Between L2, L3 and L4 = 2.0m

<sup>1.</sup> **Regeneration Delay and Free Growing:** Recommended Regeneration Delay guidance of at least two years after the completion of harvest for Layer 1 and 2 trees. Free Growing obligations are as per the due dates in <u>Table A1</u>.

<sup>\*</sup>Dripline is defined as 'the vertical boundary of the outside of the outer live foliage of the overstory tree.' An understory tree is considered outside the dripline if 'the main stem pith of the understory stem is outside of the dripline as defined above.' Overstory Layer 1 trees (regardless if counted as a crop tree) inside and outside of survey plots are used to determine the dripline.

Table A6. Spruce Leader Weevil Hazard Ratings by BEC

Hazard Rating	BEC Classification Zone/SZ	Modifier	
	ICHmc1	>350 m elevation	
1	ICHmc1a	n/a	
Low	ICHmc2	>350 m elevation	
	CWHwm	n/a	
	ICHmc1	0-350 m elevation	
	ICHmc2	0-350 m elevation	
Moderate	CWHws1	>400 m elevation	
Moderate	CWHws2	n/a	
	CWHvm1 North*	n/a	
	CWHvm2 North*	n/a	
High	CWHws1	0-400 m elevation	

Table A7. Maximum % of spruce by Hazard

	Natural or non-	Resistant stock type planted***				
Hazard Rating	resistant stock type planted	"A"* Class Stock	B+*, Sxs or identified provenances			
Low	50% 40%**	No restriction <600m	No restriction			
Moderate	30%	No restriction <600m	50%			
High	20%	50% <600m	30%			

<sup>\* &</sup>quot;A" is A class orchard seed and B+ is naturally genetic improved seed

\*\*Ss

\*\*\*Generally beyond current transfer guidelines but due to high performance in the IUFRO and EP 1072 Hybrid Transition Trials<sup>iv</sup> it is anticipated the Seed Transfer Guidelines will be amended at a future date.

#### Standards\* footnotes to "Preferred", "Acceptable" or "Broadleaf" species within Table A1, Table A2, and Table A3

- a Species is limited in productivity, reliability and/or feasibility, and subject to <u>Section 3.2.10</u> of this FSP, may only be considered as "acceptable"
- b Species constitutes a productive, reliable, and feasible regeneration option, and subject to <u>Section 3.2.10</u> of this FSP, may be considered as "preferred"
- c Will be considered preferred and contributing to minimum stocking when Fire Management Stocking Standards (FMSS) or Ksi Gahlt'in Deciduous Stocking Standards are applied. FMSS and Ksi Gahlt'in Deciduous Stocking Standards remove minimum coniferous stocking and replace it with minimum deciduous stocking.
- 16 Restrict to maximum of 20% of preferred well-spaced stocking
- 19 Restrict to maximum of 50% of preferred well-spaced stocking
- 56 Spruce content restricted based on leader weevil hazard and stock susceptibility. Limits on the amount of well- spaced and free growing spruce (Ss, Sxs, Sx and Se) on a standards unit due to leader weevil are calculated in <u>Table A6</u> Spruce Weevil Hazard Ratings by BEC and <u>Table A7</u> Maximum % Spruce by Hazard
- 57 Hemlock is considered preferred but is limited to a maximum of 30% of well-spaced and free growing trees
- \*These footnotes are to be interpreted as a measurable, verifiable, and enforceable part of the Stocking Standards.

#### Advisory\*\* footnotes to "Preferred" or "Acceptable" species within Table A1, Table A2, and Table A3

- 1 Elevated microsites are preferred
- 2 Suitable on thick forest floors
- 7 Restricted to nutrient-medium sites
- 12 Suitable on cold air drainage sites
- 13 Restricted to upper elevations of biogeoclimatic unit
- 14 Restricted to lower elevations of biogeoclimatic unit
- 17 Restricted to western portion of biogeoclimatic unit in region
- 18 Suitable as a minor species (e.g., less than 30%) in salal-dominated sites
- 22 Restricted to southern Gardner Canal Kitlope area (i.e., where Fd could occur naturally)
- 28 Limited by moisture deficit
- 29 Risk of heavy browsing by moose
- 30 Risk of porcupine damage
- 32 Limited by growing-season frosts
- 34 Risk of snow damage
- 35 Risk of weevil damage
- 50 Restricted to sites where the species occurs as a major species in a pre-harvest, natural stand

Note: The following do not exist as footnotes in this FSP: 3-6, 8-11, 15-16, 19-21, 23-27, 31, 33, 36-49

#### **BEC - Biogeoclimatic Ecosystem Classification** Coastal Western Hemlock zone Interior Cedar-Hemlock zone ICH vm1 very wet maritime subzone, submontane variant mc1 moist cold subzone, Nass variant vm2 very wet maritime subzone, montane variant m1a moist cold subzone, Nass variant, Amabilis fir phase wm wet maritime subzone mc2 moist cold subzone, Hazelton variant ws1 wet submaritime subzone, submontane variant Mountain Hemlock zone ws2 wet submaritime subzone, montane variant mm1 moist maritime subzone, windward variant **Engelmann Spruce Subalpine Fir zone** mm2 moist maritime subzone. leeward variant mk moist cool subzone wv wet very cold subzone

Conifer Tree Species		Broadleaf Tree Species
"Ba" means amabilis fir	"PI" means Lodgepole pine;	"Act" means black cottonwood;
"BI" means subalpine fir;	"Sb" means black spruce;	"At" means trembling aspen;
"Cw" means western red cedar;	"Sw" means white spruce;	"Dr" means alder
"Fd" means Douglas-fir;	"Se" means Engelmann spruce;	"Ep" means common paper birch;
"Hm" means mountain hemlock;	"Sx" means hybrid or interior spruce;	
"Hw" means western hemlock;	"Yc" means yellow cedar.	
"Lw" means western larch;		

In all BEC zones except the ESSF, the terms Ss, Sx and Sxs are used interchangeably; in the ESSF BEC zone, the terms Se, Sx and Sxs are used interchangeably. The terms reflect the seed registration and are not indicative of the genetic material.

<sup>\*\*</sup>These footnotes are provided as advice to a prescribing Forest Professional, and are not to be interpreted as a measurable, verifiable, or enforceable part of the Stocking Standards.