

# **Bulkley Forest Stewardship Plan**

for

# B.C. Timber Sales Babine Business Area Operations

within the

# Bulkley Timber Supply Area in the Skeena Stikine Natural Resource District

# 2018-2023 Amendment #1

## B.C. Timber Sales - Babine Business Area

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## 1.0 Interpretation

### **1.1** Acronyms and Definitions

The acronyms and definitions used in this Forest Stewardship Plan are listed below:

<u>Agreement Holder</u> – means the holder of a Timber Sale Licence or Road Permit granted by the Timber Sales Manager to which this FSP applies

**Basal Area** – means the cross sectional area of a tree bole measured at diameter at breast height (1.3 metres at high side) and expressed as a ratio of bole area to land area

<u>BCTS</u> – means British Columbia Timber Sales, Babine Business Area, under the direction of the Timber Sales Manager

**<u>BEC</u>** – means Biogeoclimatic Ecosystem Classification

**DDM** – means the delegated decision maker appointed by the Minister

<u>Easily Seen</u> – means that when observed by an average individual, the applicable wildlife species (or facsimile of an individual of that species) would be easy to see, and the observer would have little to no difficulty in confirming what they are seeing is the applicable wildlife species.

**FDU(s)** – means the forest development unit(s) under this FSP

**FLNRORD** - means the Ministry of Forests, Lands, and Natural Resource Operations and Rural Development

FPC – means the Forest Practices Code of British Columbia Act, RSBC 1996, c.159

**FPPR** – means the Forest Planning and Practices Regulation, B.C. Reg. 14/2004

**FRPA** – means the Forest and Range Practices Act, RSBC 2002, c.69

**FSP** – means this Forest Stewardship Plan

**FSP Maps** – means the Forest Stewardship Plan Maps in this Forest Stewardship Plan.

<u>Four Wheel Drive Access Control (FWDAC)</u> – is defined as rendering a road, not easily passable to Four Wheel Drive vehicle traffic (excluding Off-Road Recreational Vehicles) near the junction of the nearest Long Term Road.

GAR – means the Government Action Regulation B.C. Reg. 582/2004

HLP – means Higher Level Plan

<u>Line of Sight</u> – is defined as how far forward a road user can see, along the running surface and ditch line of a road, before the line of sight is blocked by a hill crest or an obstacle on the inside of a horizontal curve.

**Long Term Road** – A road with a continuous raised sub-grade and ditch line (the raised sub-grade and ditch line may be interrupted for short section<100 m in length (e.g., when crossing a short section of rock or at the crest of a hill). In flat terrain the ditch line may simply be the depression created when sub-grade material is excavated to create a raised sub-grade.

**<u>LRMP</u>** – means Land and Resource Management Plan

<u>Minister</u> – the person who has, on behalf of the government, approved this Forest Stewardship Plan, or such other person as that person may delegate

MoE – means Ministry of Environment

NDT – means natural disturbance type

**Open Road Density** – means the kilometers of road, without FWDAC established, within a specified area, divided by the total area of that specified area in square kilometers.

<u>Qualified Person</u> – means a person who by experience and/or education is considered knowledgeable and able to provide expert advice on a given subject in a given situation

<u>Qualified Professional</u> – means a person who by education, experience and professional credentials is considered knowledgeable and able to provide expert advice on a given subject in a given situation

<u>Safety or Roadside hazard</u> – as defined by the *Workers Compensation Act* 

<u>Snow/Ice road</u> – A single lane seasonal winter road including turnouts, with a flat road profile that is built with a combination of snow, ice and dirt, on a surface that may or may not have been stumped. The driving surface is built up using multiple layers of snow and ice. A flat road profile means the side slope is less than or equal to 15% and there is minimal side cut. Minimal means that cuts into mineral or organic soil must not exceed 0.5 m in depth for distances up to 0.1 km.

<u>Short Term Road</u> – A road with the stumps removed and a bladed running surface. There may be elements of ditching and elevated grade, particularly around wet areas but these features are not continuous.

THLB – means the Timber Harvesting Land Base

<u>TSA</u> – means Timber Supply Area

<u>TSL</u> – means a Timber Sale Licence as authorized by the Timber Sales Manager for the BC Timber Sales Babine Business Area or other such person as that person may delegate

**<u>TSM</u>** – means the Timber Sales Manager for British Columbia Timber Sales Babine Business Area or other such person as that person may delegate

<u>UWR</u> – means ungulate winter range

VQO – means visual quality objective

## **1.2** Changes to Legislation

If legislation referred to in this Forest Stewardship Plan (FSP) is renamed or a provision of legislation referred to in this FSP is renumbered, the reference in this FSP is to be construed as a reference to the provision as renamed or renumbered, as the case may be.

## **1.3 Objectives Cancelled**

If an established objective for which a result or strategy is included under this FSP is cancelled, the result or strategy under this FSP pertaining to that objective is no longer applicable, effective on the date of cancellation of the objective.

## **1.4** Application of this FSP

This Forest Stewardship Plan (FSP) has been prepared for British Columbia Timber Sales (BCTS) Babine Timber Sales Office (TSO), as required under section 3(2) of *Forest and Range Practices Act* (FRPA). The area subject to this FSP is located within the identified FDU on the FSP map (see Figure 1) in the Bulkley Timber Supply Area (TSA) within the Skeena Stikine Natural Resource District.

Subject to exemption under FRPA, this FSP applies to:

- 1) a Timber Sale Licence advertised and entered into by the Timber Sale Manager (TSM) to which Section 3(1) of FRPA does not apply;
- a road permit granted by the TSM to a person holding a Timber Sale Licence referred to in subsection(1); and
- 3) an access road constructed by the TSM to an area to be harvested under a Timber Sale Licence referred to in subsection (1).

## 1.5 Date of Submission, Commencement of Term, and Term of FSP

#### 1.5.1 Submission Date

The submission date of this FSP is September 28, 2018

#### **1.5.2 Term and Effective Date**

The term of this Forest Stewardship Plan is five (5) years and commences on the date this plan is approved by the DDM.

## **1.6 Forest Development Units**

The Bulkley TSA within the Skeena Stikine Natural Resource District has been divided into fourteen (14) Forest Development Units (FDUs) (see Figure 1 Map). FDUs have been established to be consistent with existing Landscape Unit boundaries and names. Table 1 lists the FDUs in this FSP.

Forest Development Unit	Landscape Unit
Babine	Babine
Bulkley Valley	Bulkley Valley
Copper	Copper
Deep Creek	Deep Creek
Nilkitkwa	Nilkitkwa
Reiseter	Reiseter
Telkwa	Telkwa
Torkelson	Torkelson
Blunt	Blunt
Chapman	Chapman
Согуа	Согуа
Harold Price	Harold Price
Kitseguecla	Kitseguecla
Trout Creek	Trout Creek

Table 1. Forest Development Units with Corresponding Landscape Units in BCTS Bulkley FSP

A detailed FSP map(s) is available in Appendix B of this document.

Six new FDU's are being proposed as part of this amendment. The FDUs exclude areas with legally defined boundaries including, but not limited to, Indian Reserves, private land.

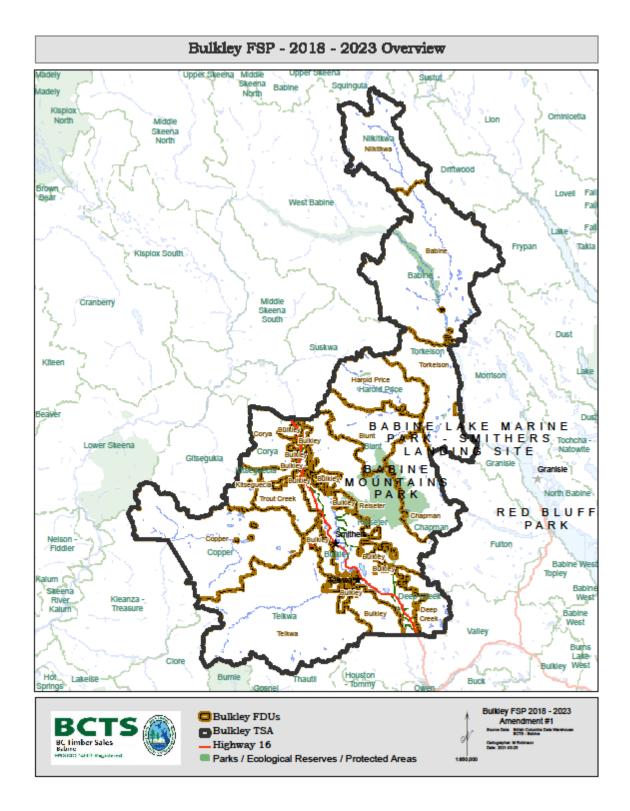


Figure 1. Overview Map of 2018-2023 Forest Stewardship Plan showing Forest Development Units for the BCTS Babine Business Area in the Bulkley TSA.

## 2.0 Results or Strategies for Objectives

For results, strategies, or practice requirements from the FPPR and/or FRPA, a footnote (explanation of intent by preparing Forester) is provided as a guide for the reader only; they have no legal standing in this FSP and do not form any part of the FSP.

## 2.1 Bulkley LRMP: Objectives Set by Government for Biodiversity

Objective #	Type of Objective	Category/Source of	Decision Creating	Effective Date of		
(in this FSP)		Objective	Objective	Objective		
1	Land Use Objective	Bulkley LRMP	Order of Minister of	November 6, 2006		
		Objective Set by	Agriculture and Lands			
		Government	pursuant to Section			
			93.4(1) of the Land Act			
			dated September, 2006			
2.1.1.1 Objective set by Government for Seral Stage						
"Maintain biodiversity by maintaining a natural seral-stage distribution"						

In section 2.1.1.1.1, Results or Strategies for Objective #1 of this FSP, the following definitions will apply:

**Old** is defined as > 250 years in all biogeoclimatic subzones and variants except for the SBSdk and SBSmc2, which are >140 years to be considered old.

**Mature** is defined as > 120 years in the MHmm2 and ESSFmc, ESSFmk, and ESSFwv; as >100 years in the ICHmc1, ICHmc2, SBSdk, and SBSmc2; and as > 80 years in the CWHws2.

**Young** is defined as  $\leq$  40 years in all biogeoclimatic subzones and variants.

#### 2.1.1.1.1 Results or Strategies for Objective #1

#### Applicable FDU(s): ALL FDUs

- 1. For the term of this FSP, harvesting and road construction authorized by the TSM will maintain:
  - a. the percentage of forest in an **Young** seral stage below the target levels indicated in Table 2 by BEC zone variant and landscape unit;
  - b. the percentage of forest in a **Mature** plus **Old** seral stage above the target levels indicated in Table 2 by BEC zone variant and landscape unit;
  - c. the percentage of forest in an **Old** seral stage above the target levels indicated in Table 2 by BEC zone variant and landscape unit
- 2. If the percentage of forest in an Young seral stage is above the target levels, or if the percentage of forest in a Mature plus Old seral stage is below the target levels, or if the percentage of forest in an Old seral stage is below the target levels, as specified in Table 2 by BEC zone variant and landscape unit at the commencement date of this FSP, the TSM will:
  - a. in the case of the **Young**, or **Mature** plus **Old**, not issue any new TSL's in those BEC zone variant and landscape unit combinations until the target levels as specified in Table 2 by BEC zone variant and landscape unit have been achieved;
  - b. in the case of the **Old** seral targets, not issue any new TSL's containing **Old** forest in those BEC zone variant and landscape unit combinations, and will maintain an area of **Mature** seral forest within those BEC zone variant and landscape unit combinations, equal to the area of **Old** seral forest in deficit until there is adequate **Old** forest to no longer be below the target level.

Table 2. Seral-Stage Targets for each FDU-Landscape Unit by BEC Subzone Varia	ant
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FDU	Landscape	BEC	Minimum	Minimum	Maximum
	Unit	Subzone	Old	Mature + Old (%)	Young
		and Variant	(%)		(%)
Nilkitkwa	Nilkitkwa	ESSFmc	13	42	27
		SBSmc2	16	34	40
Babine	Babine	ESSFmc	9	28	36
		SBSmc2	11	23	54
Copper	Copper	ESSFwv	19	36	22
		MHmm2	19	36	22
		CWHws2	9	34	36
		ESSFmc	9	28	36
		SBSmc2	11	23	54
		ICHmc1	9	31	36
		ICHmc2	9	31	36
Reiseter	Reiseter	ESSFmc	9	28	36
		ICHmc1	9	31	36
		ICHmc2	9	31	36
		SBSdk	11	23	54
		SBSmc2	11	23	54
Telkwa	Telkwa	ESSFmk	19	36	22
		ESSFwv	19	36	22
		CHWws2	9	34	36
		ESSFmc	9	28	36
		SBSdk	11	23	54
		SBSmc2	11	23	54
Deep Creek	Deep Creek	ESSFmc	9	14	N/A
		SBSdk	11	11	N/A
		SBSmc2	11	11	N/A
Torkelson	Torkelson	ESSFmc	9	14	N/A
		SBSmc2	11	11	N/A
Bulkley	Bulkley Valley	SBSdk	10	N/A	N/A
Valley		SBSmc2	10	N/A	N/A
Blunt	Blunt	ESSFmc	9	14	N/A
		SBSmc2	11	11	N/A
Chapman	Chapman	ESSFmc	9	14	N/A
		SBSmc2	11	11	N/A
Corya	Corya	ESSFwv	28	54	17
		ICHmc1	13	46	27
		ICHmc2	13	46	27
Harold	Harold Price	ESSFwv	19	36	22

Price		ESSFmc	9	28	36
		SBSmc2	11	23	54
		ICHmc1	9	31	36
Kitseguecla	Kitseguecla	ESSFwv	19	36	22
		ICHmc1	9	31	36
		ICHmc2	9	31	36
Trout Creek	Trout Creek	ESSFwv	19	36	22
		ICHmc1	9	31	36
		ICHmc2	9	31	36
		ESSFmc	9	28	36
		SBSdk	11	23	54
		SBSmc2	11	23	54

2.1.2 Ecosystem	<b>Representation:</b>	Core Ecosystem
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C	Dbjective #	Type of Objective	Category/Source of	Decision Creating	Effective Date of		
(i	n this FSP)		Objective	Objective	Objective		
	2	Land Use Objective	Bulkley LRMP	Order of Minister of	November 6, 2006		
			Objective Set by	Agriculture and Lands			
			Government	pursuant to Section			
				93.4(1) of the Land Act			
				dated September, 2006			
2.1	.2.1 Object	ive set by Government	for Ecosystem Repres	entation: Core Ecosystem			
1)	"Maintain b core ecosyst		ing a cross section of	naturally-occurring ecosyst	tems in identified		
2)	"Maintain b ecosystems'	• •	ng some areas with fo	prest interior conditions in	identified core		
3)		iodiversity by retaining s in identified core ecos		bles of rare and endangered	d plant		
	a) not expa	anding range use in core	e ecosystems; and,				
	b) not harv	esting timber in core ec	cosystems unless it is i	necessary for:			
	i) prot	ecting the integrity and	function of the ecosy	stem;			
	ii) mineral and energy exploration and development;						
	iii) providing access to timber outside the identified core ecosystem that would otherwise be isolated; or,						
	iv) fore	st health control where	there is a risk to oper	able timber outside of the	core ecosystem.		

In section 2.1.2.1.1, Results or Strategies for Objective #2 of this FSP, the following definition will apply:

"Rare and endangered plant communities" means indigenous plant species or plant communities that have been red or blue-listed by the British Columbia Ministry of Environment BC Species and Ecosystem Explorer website: <u>http://a100.gov.bc.ca/pub/eswp/</u> that are extirpated, endangered or threatened in British Columbia.

#### 2.1.2.1.1 Results or Strategies for Objective #2

#### Applicable FDU(s): All

- 1. Except for instances of strategies (2) below, during the term of this FSP, the TSM will not carry out or authorize any timber harvesting or road construction activities within identified Core Ecosystems (see **FSP maps**).
- 2. In respect of roads, the TSM:
  - a. will not carry out or authorize road construction within an identified Core Ecosystem (see FSP Maps) unless no other practicable option exists to access operable timber outside the Core Ecosystem; and,
  - will ensure that roads constructed under strategy (2)(a) are deactivated within one (1) year of planting completion, except where the road is accessing timber beyond the Core Ecosystem and is required for future access.
- Regardless of strategies (2) above, no road construction or harvesting will be authorized by the TSM within or over a *rare and endangered plant community(s)* within an identified Core Ecosystem (see FSP Maps).

Objective #	Type of Objective	Category/Source of	Decision Creating	Effective Date of
(in this FSP)		Objective	Objective	Objective
3	Land Use Objective	Bulkley LRMP	Order of Minister of	November 6, 2006
		Objective Set by	Agriculture and Lands	
		Government	pursuant to Section	
			93.4(1) of the Land Act	
			dated September, 2006	

#### 2.1.3 Connectivity: Landscape Corridors

2.1.3.1 Objective set by Government for Landscape Corridors

- 1) "Maintain, within a managed forest setting, habitat connectivity across the landscape by maintaining landscape corridors dominated by mature tree cover and containing most of the structure and function associated with old forest".
- 2) "Maintain, within a managed forest setting, movement and dispersal of organisms in landscape corridors".

In section 2.1.3.1.1, Results or Strategies for Objective #3 of this FSP, the following definition will apply:

**Old Forest** means coniferous or deciduous leading forests older than 80 years old on average.

#### 2.1.3.1.1 Results or Strategies for Objective #3

#### Applicable FDU(s): ALL FDUs

- During the term of this FSP, within each identified Landscape Corridor polygon within a FDU (see FSP Maps), harvesting and road construction authorized by the TSM will maintain a minimum of 70% of the forested area as Old Forest on crown land; and,
  - a. Individual harvest openings will be restricted to a maximum harvest area of three (3.0) hectares within the Landscape Corridor/FDU when utilizing a clearcut or clearcut with reserve silviculture system.<sup>1</sup>
- 2. During the term of this FSP, within each identified Landscape Corridor polygon within a FDU (see FSP Maps), the TSM will not authorize harvesting within a Landscape Corridor and adjacent to another cutblock within the Landscape Corridor, unless at least 70% of the net area to be reforested on the existing cutblock has developed attributes that area consistent with a mature seral condition.
- 3. During the term of this FSP, within each identified Landscape Corridor polygon within an FDU (see FSP Maps), the TSM will not authorize harvesting within a Landscape Corridor that would result in a condition where more than 30% of the width of the Landscape Corridor is younger than 80 years old.
- 4. If a Landscape Corridor polygon is below 70% of the area of **Old Forest** on crown land that is forested, the TSM will not authorize any new timber harvesting in an identified Landscape Corridor polygon within a **FDU** (see **FSP Maps**).
- 5. Despite 1 and 2 above, the TSM:
  - a. may authorize roads to be constructed within an identified Landscape Corridor polygon within a **FDU** (see **FSP Maps**) where no other practicable option exists for accessing or extracting timber within or outside the Landscape Corridor; and,
  - b. will ensure that roads constructed within a Landscape Corridor are deactivated within one (1) year of planting completion, except where the road is accessing timber beyond the Landscape Corridor and is required for future access.

<sup>&</sup>lt;sup>1</sup> The intent is for the Prescribing Forester to consider the Harvest Matrices in the applicable Landscape Unit Plan when proposing harvesting within a Landscape Corridor .

Objective #	Type of Objective	Category/Source of	Decision Creating	Effective Date of			
(in this FSP)		Objective	Objective	Objective			
4	Land Use Objective	Bulkley LRMP	Order of Minister of	November 6, 2006			
		Objective Set by	Agriculture and Lands				
		Government	pursuant to Section				
			93.4(1) of the Land Act				
			dated September, 2006				
2.1.4.1 Objective set by Government for Tree Species Diversity							
-	<ol> <li>"Maintain a diversity of coniferous and deciduous species representing the natural species composition for each biogeoclimatic subzone".</li> </ol>						

#### 2.1.4 Tree Species Diversity

#### 2.1.4.1.1 Results or Strategies for Objective #4

#### Applicable FDU(s): ALL FDUs

- During the term of this FSP, the TSM will ensure that Wildlife Tree Retention within all new harvested Timber Sales Licence(s) will contain the natural tree species composition, unless Wildlife Tree Retention Areas have been selected for the protection of riparian areas, large live trees, large snags, stand types with greater than 20% deciduous component (based on timber cruising data), identified wildlife habitat and known habitat for species at risk.
- 2. Results or strategies specified in section 2.1.5.1.1 (stand structure) and section 4.0 (stocking standards) of this FSP also apply to this objective.

#### 2.1.5 Stand Structure

Objective #	Type of Objective	Category/Source of	Decision Creating	Effective Date of		
(in this FSP)		Objective	Objective	Objective		
5	Land Use Objective	Bulkley LRMP	Order of Minister of	November 6, 2006		
		Objective Set by	Agriculture and Lands			
		Government	pursuant to Section			
			93.4(1) of the Land Act			
			dated September, 2006			
2.1.5.1 Objective set by Government for Stand Structure						

"Maintain a diversity of attributes of old forest, such as coarse woody debris and standing dead and live trees, in managed stands in the percentages" identified in Table 3.

In section 2.1.5.1.1 Results or Strategies for Objective #5 of this FSP, the following definition will apply:

**Old Forest** means coniferous leading forests older than 80 years old on average, and deciduous-leading forests in which the deciduous component is older than 60 years old.

#### 2.1.5.1.1 Results or Strategies for Objective #5

#### Applicable FDU(s): ALL FDUs

- 1. For the term of this FSP, the TSM will maintain stand level structural diversity by ensuring:
  - a. where timber is harvested in a cutblock less than 100 ha, at the completion of harvesting the total amount of WTR areas of **Old Forest** within each cutblock will be a minimum of 7%, except for SBSmc2 in the Chapman FDU, which will be a minimum of 11%.
  - b. where timber is harvested in a cutblock greater than or equal to 100 ha, at the completion of harvesting the total amount of WTR areas of **Old Forest** within each cutblock will be a minimum of 10%, except for SBSmc2 in the Chapman FDU, which will be a minimum of 13%.
  - c. where timber is harvested in a cutblock greater than or equal to 200 ha, at the completion of harvesting the total amount of WTR areas of **Old Forest** within each cutblock will be a minimum of 15%
- 2. Result 1 specified in section 2.1.4.1.1 (tree species diversity) of this FSP and the mandatory practice requirement, FPPR section 68 (retain coarse wood debris) also apply to this objective.

## 2.2 Bulkley LRMP: Objectives set by Government for Wildlife

The results or strategies for the purposes of the Bulkley LRMP Objectives set by government objective:

"Provide for wildlife habitat and populations by implementing and timing road location, development and maintenance activities in a manner that minimizes the effects on these values",

are specified in sections 2.2.1.1.1, 2.2.2.1.1, 2.2.3.1, 2.2.4.1.1, 2.2.5.1.1 by wildlife species below. Table 3 is a summary of the applicable Bulkley LRMP Objectives set by government (Approved November 6, 2006) spatially identified wildlife habitat areas cross referenced with each FDU for this FSP.

FDU	Moose	Mountain Goat	Grizzly Bear	Deer	Woodland Caribou
Babine	-	-	YES	-	-
Bulkley Valley	YES	YES	-	YES	-
Copper	YES	YES		-	-
Deep Creek	YES	-	-	YES	-
Nilkitkwa	-	YES	YES	-	-

Table 3. Spatially Identified Wildlife Habitat in Applicable FDUs (see FSP Map)

Reiseter	YES	YES	-	YES	-
Telkwa	YES	YES	-	YES	YES
Torkelson	YES	YES	YES	-	-
Blunt	YES	YES	-	-	-
Chapman	YES	YES	-	-	-
Corya	YES	YES	YES	YES	-
Harold Price	YES	YES	YES	-	-
Kitseguecla	YES	YES	-	-	-
Trout Creek	YES	YES	-	YES	-

#### 2.2.1 Moose

Objective #	Type of Objective	Category/Source of	Decision Creating	Effective Date of
(in this FSP)		Objective	Objective	Objective
6	Land Use Objective	Bulkley LRMP	Order of Minister of	November 6, 2006
		Objective Set by	Agriculture and Lands	
		Government	pursuant to Section	
			93.4(1) of the Land Act	
			dated September, 2006	
	1	<u> </u>	1	

#### 2.2.1.1 Objective set by Government for Moose

1) "Provide woody browse in moose winter habitat".

2) "Provide visual screening, security, thermal and snow-interception cover in moose winter habitat".

#### 2.2.1.1.1 Results or Strategies for Objective #6

Applicable FDU(s): Bulkley Valley, Copper, Deep Creek, Reiseter, Telkwa, Torkelson, Blunt, Chapman, Corya, Harold Price, Kitseguecla, Trout Creek

When authorizing harvesting, road construction and silviculture treatments, during the term of this FSP, in or within 200m of identified moose winter habitat (see **FSP Maps**), the TSM will:

- 1. Retain woody browse (i.e. willow, dogwood, saskatoon, highbush cranberry, balsam, etc.) for moose by:
  - a. only prescribing vegetation treatment where an individual crop tree needs a treatment to meet stocking standard requirements; and,
  - b. not prescribing chemical brush treatments.
- 2. Maintain visual screening for moose by:
  - a. Ensuring that during harvest operations, adequate vegetative cover is retained parallel to Long Term Roads that run adjacent to or thought a new cutblock, in a manner that prevents moose from being easily seen at a distance of 100m or greater into the cutblock as measured perpendicularly from the road centerline.

- b. Ensuring that **Long Term Roads** constructed under this FSP in or within 200m of identified moose habitat will have a maximum **Line of Sight** of 200m, except where a longer sight line is required for safe use of the road.
- 3. Maintain security for moose by:
  - a. Establishing **FWDAC** on **Short Term Roads** within, or accessing a new cutblock, within one (1) year of planting the cutblock.
- Provide thermal and snow-interception cover by the results or strategies specified in sections
   2.1.1.1.1 (seral stage), 2.1.2.1.1 (core ecosystem), 2.1.3.1.1 (landscape corridors), 2.1.5.1.1 (stand structure), and 2.10.1.1.1, (landscape level biodiversity) of this FSP also apply to this objective.

### 2.2.2 Mountain Goat

Objective #	Type of Objective	Category/Source of	Decision Creating	Effective Date of		
(in this FSP)		Objective	Objective	Objective		
7	Land Use Objective	GAR S.9, GAR S.12	UWR Order U-6-007	July 17, 2019		
2.2.2.1 Mountain Goat UWR Order						
Maintain the Ungulate Winter Range Area requirements for mountain goat as identified on UWR U-6-007 Order (see <b>FSP Maps</b> ).						

#### 2.2.3 Woodland Caribou

Objective #	Type of Objective	Category/Source of	Decision Creating	Effective Date of	
(in this FSP)		Objective	Objective	Objective	
8	Land Use Objective	GAR s.9	WHA Order #6-333:		
		GAR s.10	Northern Caribou-	Nov 30, 2015	
			Telkwa Herd		
2.2.3.1 Caribou WHA Order					
Maintain the Wildlife Habitat Area requirements for the Telkwa caribou as identified on WHA-6-333 Order (see <b>FSP Maps</b> ).					

#### 2.2.4 Grizzly Bear

Objective #	Type of Objective	Category/Source of	Decision Creating	Effective Date of
(in this FSP)		Objective	Objective	Objective
9	Land Use Objective	Bulkley LRMP	Order of Minister of	November 6, 2006
		Objective Set by	Agriculture and Lands	
		Government	pursuant to Section	

	93.4(1) of the <i>Land Act</i>	
	dated September, 2006	
	And	
	Bulkley Land and	
	Resource Management	
	Plan, Higher Level Plan	
	Order: 2000	

#### 2.2.4.1 Objective set by Government for Grizzly Bear:

- 1) "Provide high-value habitat buffered for security and bedding for grizzly bears".
- 2) "Provide diverse understory within high-value, mixed forest habitat".
- 3) "Limit road development and the number and duration of entries within moderate-value grizzly bear habitat".
- 4) "Avoid human-bear conflicts in high-value grizzly bear habitat".
- 5) "Provide opportunities for movement with minimal disturbance from humans between important landscape features in the Boucher Creek Wetlands management unit, the Nichyeskwa South management unit and the Nichyeskwa North management unit".

In section 2.2.4.1.1, Results or Strategies for Objective #9 of this FSP, the following definitions will apply:

**Cluster planting** is defined as per section 4.2.6 (Cluster Planting) of the Stocking Standards.

#### 2.2.4.1.1 Results or Strategies for Objective #9

#### Applicable FDU(s): Babine, Nilkitkwa, Torkelson, Corya, Harold Price

- During the term of this FSP, adjacent to a contiguous area greater than two (2) hectares in size that is identified at the site level by a qualified person as a riparian flood plain, meadow, fen, wetland, bog, deciduous leading polygon with south facing aspect, or avalanche chute, in identified high-value grizzly bear habitat (see FSP Maps), the TSM will not authorize:
  - a. harvesting within 100 meters of the area edge (200 meters if the forest cover adjacent to the area edge is less than 70% mature live conifers) ; and/or,
  - b. road construction within 150 meters of the area edge, unless:
    - i. no other practicable option exists, and,
    - ii. the road(s) constructed under (1)(b) above has a maximum right-of-way width of 20 metres, except on sections requiring a wider right-of-way to maintain road safety.
- 2. During the term of this FSP, if the TSM authorizes road construction under 1(b), the TSM will establish **FWDAC** on the road within one (1) year of planting completion of the cutblock(s) accessed

by the road.

- 3. Road construction under 1(b) will have a maximum **Line of Sight** of 200m, except where roads require longer straight sections due to safety reasons.
- 4. During the term of this FSP, in a cutblock that is partly or entirely in moderate value grizzly bear habitat or within 200m of identified high-value grizzly bear habitat (see FSP Map 3), if prescribed by a qualified person, all new Timber Sale License(s) approved by the TSM may use cluster planting to regenerate part or all of the harvested opening, on those site series with cluster planting stocking standards (see Table 8).
- 5. During the term of this FSP, within identified moderate-value grizzly bear habitat (see FSP Maps), the TSM will:
  - a. Only authorize new road construction for a maximum right-of-way width of 20 meters (except on sections requiring a wider right-of-way to maintain road safety).
  - b. Ensure **FWDAC** is established on **Short Term Roads** accessing one or more cutblocks in identified moderate value grizzly bear habitat within one (1) year of planting of the block(s).
  - c. Ensure new roads constructed in moderate value grizzly habitat will have a maximum **Line of Sight** of 200m, unless longer straight sections of road are required for safety reasons.
- During the term of this FSP, within the Nickyeskwa North, Nickyeskwa South and Boucher Creek Management Units, the TSM will not authorize harvesting, hauling and decking operations between May 1st to November 1st.
- 7. Despite 6 above, the TSM may authorize decking and hauling in the Nickyeskwa North, Nickyeskwa South and Boucher Creek Management Units between July 1st and August 14th if required to remove beetle-infested logs. A condition of the decking and hauling during this period will be that the gate will be locked each night during this period.
- 8. When authorizing harvesting, road construction and silviculture treatments, during the term of this FSP, in or within 200m of high-value grizzly bear habitat or moderate-value grizzly bear habitat (see FSP Maps), the TSM will maintain visual screening for grizzly bear by:
  - a. Ensuring that during harvest operations, adequate vegetative cover is retained parallel to Long Term Roads that run adjacent to or through a new cutblock, in a manner that prevents grizzly bear from being **easily seen** at a distance of 100m or greater into the cutblock as measured perpendicularly from the road centerline.
- 9. Visual screening as described in Section 8 is not required on new cutblocks averaging <200m width.
- 10. Areas grass-seeded for erosion control in the Babine, Nilkitkwa, Torkelson, Corya and Harold Price Forest Development Units will be seeded with certified seed (as per section 3.1) that does not

include clover species.

11. During the term of this FSP, the TSM will not authorize new road construction within the Nickyeskwa North, Nickyeskwa South or Boucher Creek Management Units, the high-value grizzly bear habitat area, the moderate-value grizzly bear habitat area, if the **open road density** within the applicable Management Unit/Habitat Area is greater than 0.6 km/km<sup>2</sup>.

#### 2.2.5 Deer

Objective #	Type of Objective	Category/Source of	Decision Creating	Effective Date of		
(in this FSP)		Objective	Objective	Objective		
10	Land Use Objective	Bulkley LRMP	Order of Minister of	November 6, 2006		
		Objective Set by	Agriculture and Lands			
		Government	pursuant to Section			
			93.4(1) of the Land Act			
			dated September, 2006			
2.2.5.1 Objective set by Government for Deer						
1) "Provide woody browse during winter in deer habitat".						
2) "Provide visual screening, security, thermal and snow-interception cover in deer habitat".						
3) "Provide mature cover adjacent to steep, south facing slopes within deer habitat".						

#### 2.2.5.1.1 Results or Strategies for Objective #10

Applicable FDU(s): Bulkley Valley, Deep Creek, Telkwa, Reiseter, Corya, Trout Creek

When authorizing harvesting, road construction and silviculture treatments, during the term of this FSP, in or within 200m of identified **deer habitat** (see **FSP Maps**), the TSM will:

- 1. Retain woody browse (i.e. willow, dogwood, saskatoon, highbush cranberry, etc.) for deer by:
  - a. only prescribing vegetation treatment where an individual crop tree needs a treatment to meet stocking standard requirements; and,
  - b. not prescribing chemical brush treatments.
- 2. Maintain visual screening for deer by:
  - a. Ensuring that during harvest operations, adequate vegetative cover is retained parallel to Long Term Roads that run adjacent to or thought a new cutblock, in a manner that prevents deer from being **easily seen** at a distance of 100m or greater into the cutblock as measured perpendicularly from the road centerline.
  - b. Ensuring that Long Term Roads constructed under this FSP in or within 200m of identified deer habitat will have a maximum Line of Sight of 200m, except where a longer sight line is required for safe use of the road.
- 3. Maintain security for deer by:
  - a. Establishing **FWDAC** on **Short Term Roads** within, or accessing a new cutblock, within one (1) year of planting completion of the cutblock .
- 4. Provide mature cover, adjacent to south facing slopes greater than 50%, by not authorizing harvesting within 30 metres of these arease.
- The TSM will provide thermal and snow-interception cover by applying results or strategies specified in sections 2.1.1.1.1 (seral stage), 2.1.2.1.1 (core ecosystem), 2.1.3.1.1 (landscape corridors), 2.1.5.1.1 (stand structure), 2.10.1.1.1 (landscape level biodiversity) of this FSP.

## 2.3 Bulkley LRMP: Objectives Set by Government for Fish Habitat

Objective #	Type of Objective	Category/Source of	Decision Creating	Effective Date of	
(in this FSP)		Objective	Objective	Objective	
11	Land Use Objective	Bulkley LRMP	Order of Minister of	November 6, 2006	
		Objective Set by	Agriculture and Lands		
		Government	pursuant to Section		
			93.4(1) of the Land Act		
			dated September, 2006		
2.3.1.1 Object	2.3.1.1 Objective set by Government for Fish Habitat:				
1) "Provide for lakes containing high-value fish habitat by maintaining lakes in a full spectrum of settings including semi-primitive and primitive."					

#### 2.3.1 Fish Habitat: Wilderness Lakes

In section 2.3.1.1.1, Results or Strategies for Objective #11 of this FSP, the following definitions will apply:

Wilderness Lakes are lakes with High Value Fish Habitat and include the following lakes:

Bud Lake

- Mero Lake
- North Mulwain Lake

- Cerber Lake
- Coppermine Lake
- Elliot Lake
- Farewell Lake
- Four Lakes West
- Hilary Lake
- Little Joe Lake West
- McQuarrie Lake

- Mooseskin Johnny Lake
- Natazul Meadow
   Lake
- Netalzul Lake
- Nichyeskwa Lake1
- Nichyeskwa Lake2
- North Farewell Lake
- North Lake

- Onerka Lake
- Silvern Lake North
- Silvern Lake South
- South Lake
- Touhy Lake
- Two Bridges Lake East
- Two Bridges Lake West

#### 2.3.1.1.1 Results or Strategies for Objective #11

Applicable FDU(s): Copper, Deep Creek, Nilkitkwa, Reiseter, Telkwa, Chapman, Harold Price, Trout Creek

- 1. During the term of this FSP, the TSM will not authorize harvesting and/or road construction within 200 meters of an identified **wilderness lakes**.
- 2. During the term of this FSP, the TSM will only authorize timber harvesting from 200m to one (1) kilometre of an identified **wilderness lake**:
  - a. utilizing clearcut silviculture systems for harvesting with less than five (5.0) hectares of net area to be reforested;or,
  - b. utilizing clearcut with reserve silviculture systems for harvesting areas less than fifteen (15.0) hectares of net areas to be reforested; or,
  - c. utilizing non-clearcut silviculture systems for harvesting areas greater than fifteen (15.0) hectares of net areas to be reforested; and,
  - d. The TSM will ensure that harvest openings utilizing a clearcut, or a clearcut with reserve silviculture system will retain a minimum 100m of unharvested timber between adjacent harvest openings, until the clearcut or clearcut with reserve harvest openings have met the requirements of **FPPR 65(3)**.
- 3. During the term of this FSP the TSM will ensure that the alteration resulting from timber harvesting and road construction activities, authorized by the TSM, that are located within one (1) kilometre of an identified **wilderness lake**, will be consistent with a **Partial Retention** visual quality objective (VQO), when evaluated from a viewpoint on the lake.
- Except for instances in (5) below, for identified wilderness lakes (see FSP Maps), the TSM will not authorize any new permanent access structure within one (1) kilometre of an identified wilderness lake during the term of this FSP. Snow/Ice roads may be constructed from 200m to one (1) kilometre from the identified wilderness lakes.
- 5. Where it is not practicable to construct **Snow/Ice roads** under 4 above, the TSM may authorize road construction, suitable for dry summer conditions subject to the following:
  - a. The maximum right-of-way width for these roads will be 20 meters, except where wider road right-of-ways are required for safety reasons.
  - b. These roads will have a maximum Line of Sight of 200m, unless longer straight sections of road are required for safety reasons.
  - c. These roads will be deactivated within one (1) year of planting completion.
- Despite 4 and 5 above, the TSM will not authorize any new road construction activities within one (1) kilometre of Coppermine Lake, Mooseskin Johnny Lake, and Nichyeskwa Lake2

## 2.4 Bulkley LRMP: Objectives Set by Government for Outdoor Recreation

Objective #	Type of Objective	Category/Source of	Decision Creating	Effective Date of		
(in this FSP)		Objective	Objective	Objective		
12	Land Use Objective	Bulkley LRMP	Order of Minister of	November 6, 2006		
		Objective Set by	Agriculture and Lands			
		Government	pursuant to Section			
			93.4(1) of the Land Act			
			dated September, 2006			
2.4.1.1 Object	ive set by Government	for Recreation Opport	tunities			
1) "Maintain o	1) "Maintain or enhance a diverse range of recreational values and opportunities".					

#### 2.4.1 Recreation Opportunities

In sections 2.4.1.1.1, Results or Strategies for Objective #12 and 2.4.2.1.1, Results or Strategies for Objective #13 of this FSP, the following definitions will apply:

**Established Recreational Site** means a recreation site identified within the BC Government Warehouse recreation data layers.

**Established Recreational Trail** means a trail identified within the BC Government Warehouse recreation data layers.

#### 2.4.1.1.1 Results or Strategies for Objective #12

#### Applicable FDU(s): All FDUs

- 1. During the term of this FSP, BCTS will maintain the integrity of recreational sites and trails, by working in consultation with the District Recreation Officer. When the TSM proposes a cutblock or road within 100m of an established recreation site or established recreational trail, as identified on the BC Government Warehouse recreation data layers for the Bulkley TSA, BCTS will contact the District Recreation Officer for the Bulkley TSA. A plan will be developed between the TSM and the Recreation Officer to prevent damage from occurring to established recreation sites and established recreation officer in minor maintenance and enhancement of identified recreation access roads, established recreation sites and established recreation trails.
- 2. During the term of this FSP, in the event that any physical damage to an **established recreational trail** is caused by timber harvesting or road construction carried out or authorized by the TSM, the TSM will repair or mitigate damage to the trail if any physical damage has occured by:
  - a. relocating the original trail route through the Timber Sale Licence back to the original trail head within one (1) year following harvest completion, or, establishing an alternate trail route through the Timber Sale Licence if relocation of the original route is not practicable due to safety concerns
  - b. if a trail is not easily identifiable following harvesting completion or road building, a sign will be installed and the trail will be marked within one (1) year after the completion of timber harvesting or road building, so that the trail can be followed through the Timber Sale Licence back to the original trail; and,
  - c. removing all harvesting debris that crosses the established recreational trail.

3. During the term of this FSP, any physical damage to an **established recreation site** caused by timber harvesting or road construction activities carried out or authorized by the TSM will be repaired or mitigated and all harvesting debris will be cleared.

#### 2.4.2 Recreation Access

Objective #	Type of Objective	Category/Source of	Decision Creating	Effective Date of	
(in this FSP)		Objective	Objective	Objective	
13	Land Use Objective	Bulkley LRMP	Order of Minister of	November 6, 2006	
		Objective Set by	Agriculture and Lands		
		Government	pursuant to Section		
			93.4(1) of the Land Act		
			dated September, 2006		
2.4.2.1 Object	ive set by Government	for Recreation Access			
1) "Maintain reasonable access to a diverse range of recreational values and opportunities".					

#### 2.4.2.1.1 Results or Strategies for Objective #13

#### Applicable FDU(s): All FDUs

1. During the term of this FSP, the TSM will repair, within one (1) year, any existing motorized access to an **established recreational trail** or **established recreational site** in the event that it is damaged by a primary forest activity by Timber Sale Licence holder or BCTS.

## 2.5 Bulkley LRMP: Objectives Set by Government for Agriculture/Wildlife Zone

The decision creating the Objective for Agriculture/Wildlife Zone in section 2.5 of this FSP came from an Order by the Minister of Forests, Minister of Energy and Mines, and Minister of Environment, Lands and Parks, December 19, 2000 establishing Resource Management Zones and Resource Management Zone Objectives within the area covered by the Bulkley LRMP, March 1998 Pursuant to Sections 3(1) and 3(2) of the *Forest Practices Code of British Columbia Act.* 

#### 2.5.1 Agriculture/Wildlife Zone

Objective # (in this FSP)	Type of Objective	Category/Source of Objective	Decision Creating Objective	Effective Date of Objective
14	Land Use Objective	Bulkley LRMP –	See section 2.5 for full	December 29,
		Higher Level Plan	decision	2000
		Order		
	•	•	•	•

2.5.1.1 Objective set by Government for Agriculture/Wildlife Zone

1) Enhance agriculture capacity and protect identified high value wildlife habitat (see FSP Maps) by developing forest resources in a manner that minimizes conflicts between agriculture and wildlife.

#### 2.5.1.1.1 Results or Strategies for Objective #14

Applicable FDU(s): Bulkley Valley, Deep Creek, Reiseter, Telkwa, Corya, Trout Creek

- During the term of this FSP, BCTS will develop forest resources in a manner that minimizes conflicts between agriculture and wildlife, by working in consultation with the District Range Officer and/or Regional Ecosystem Specialist, as appropriate. When the TSM proposes a cutblock or road within an Agriculture/Wildlife Zone, BCTS will contact the District Range Officer and/or Regional Ecosystem Specialist for the Bulkley TSA. A plan will be developed, between the TSM and the District Range Officer and/or Regional Ecosystem Specialist, and implemented to ensure that any harvesting or road construction minimizes the impact to agriculture/wildlife.
- 2. Results or strategies specified in section 2.2.1.1.1 (moose), 2.2.5.1.1 (deer), and 2.2.2.1.1 (mountain goat) of this FSP also apply to this objective where they overlap within the identified high value wildlife habitat areas (Wildlife Habitat Management Areas) (see FSP Maps).

## 2.6 Bulkley LRMP: Objectives Set by Government for Special Management Zones

The decision creating the Objective for all Special Management Zones in section 2.6 of this FSP came from an Order by the Minister of Forests, Minister of Energy and Mines, and Minister of Environment, Lands and

Parks, December 19, 2000 establishing Resource Management Zones and Resource Management Zone Objectives within the area covered by the *Bulkley LRMP*, March 1998 Pursuant to Sections 3(1) and 3(2) of the *Forest Practices Code of British Columbia Act*.

#### 2.6.1 Special Management Zones 1 (SMZ1)

Objective # (in this FSP)	Type of Objective	Category/Source of Objective	Decision Creating Objective	Effective Date of Objective
			,	,
15	Land Use Objective	Bulkley LRMP –	See section 2.6 for full	December 29,
		Higher Level Plan	decision	2000
		Order		

2.6.1.1 Objective set by Government for Barbeau Creek Resource Management Zone (SMZ1)

1) Maintain water quality; mountain goat habitat; grizzly bear habitat, especially travel corridors and denning areas; wilderness recreational opportunities, especially around remote lakes; and watershed in a primitive state by: harvesting timber only where required for approved mineral and energy exploration and development in the Barbeau Creek Resource Management Zone (see FSP Maps).

#### 2.6.1.1.1 Results or Strategies for Objective #15

Applicable FDU(s): Nilkitkwa

1. During the term of this FSP, the TSM will not award any new Timber Sales Licence(s) and/or authorize road construction activities within the identified Barbeau Creek Resource Management Zone (see **FSP Maps**).

Objective #	Type of Objective	Category/Source of	Decision Creating	Effective Date of
(in this FSP)		Objective	Objective	Objective
16	Land Use Objective	Bulkley LRMP –	See section 2.6 for full	December 29,
		Higher Level Plan	decision	2000
		Order		

2.6.1.2 Objective set by Government for Big Onion Mountain Resource Management Zone (SMZ1)

1) Maintain recreational snowmobiling opportunities; water quality in creeks and tributaries that serve as domestic water supplies; hiking trails; and visual quality by: harvesting timber only where required for approved mineral and energy exploration and development in the Big Onion Mountain Resource Management Zone (see FSP Maps).

#### 2.6.1.2.1 Results or Strategies for Objective #16

Applicable FDU(s): **Reiseter, Chapman** 

1. During the term of this FSP, the TSM will not award any new Timber Sales Licence(s) and/or authorize road construction activities within the identified Big Onion Mountain Resource Management Zone (see **FSP Maps**).

Objective #	Type of Objective	Category/Source of	Decision Creating	Effective Date of	
(in this FSP)		Objective	Objective	Objective	
17	Land Use Objective	Bulkley LRMP –	See section 2.6 for full	December 29,	
		Higher Level Plan	decision	2000	
		Order			
2.6.1.3 Objective set by Government for Old Cronin Mine Area Resource Management Zone (SMZ1)					
1) Maintain recreational and visual quality of alpine areas; and hiking trails into the Babine Mountains					
by: harvesting timber only where required for approved mineral and energy exploration and					
developmer	development in the Old Cronin Mine Area Resource Management Zone (see FSP Maps).				

#### 2.6.1.3.1 Results or Strategies for Objective #17

Applicable FDU(s): Chapman

 During the term of this FSP, the TSM will not award any new Timber Sales Licence(s) and/or authorize road construction activities within the identified Old Cronin Mine Area Resource Management Zone (see FSP Maps).

Objective # (in this FSP)	Type of Objective	Category/Source of Objective	Decision Creating Objective	Effective Date of Objective
18	Land Use Objective	Bulkley LRMP –	See section 2.6 for full	December 29,
		Higher Level Plan	decision	2000
		Order		

2.6.1.4 Objective set by Government for Cronin Alpine Resource Management Zone (SMZ1)

## 1) Maintain recreational and visual quality of alpine areas; and hiking trails into the Babine Mountains by: harvesting timber only where required for approved mineral and energy exploration and development in the Cronin Alpine Resource Management Zone (see FSP Maps).

#### 2.6.1.4.1 Results or Strategies for Objective #18

Applicable FDU(s): Chapman

 During the term of this FSP, the TSM will not award any new Timber Sales Licence(s) and/or authorize road construction activities within the identified Cronin Alpine Resource Management Zone (see FSP Maps).

Objective #	Type of Objective	Category/Source of	Decision Creating	Effective Date of
(in this FSP)		Objective	Objective	Objective
19	Land Use Objective	Bulkley LRMP –	See section 2.6 for full	December 29,
		Higher Level Plan	decision	2000
		Order		
2.6.1.5 Objective set by Government for Howson Range Resource Management Zone (SMZ1)				

1) Maintain caribou and goat habitat, especially winter habitat; visual quality, especially views from

Highway 16 and the ski hill; and opportunities for wilderness recreation and backcountry tourism by: harvesting timber only where required for approved mineral and energy exploration and development in the Howson Range Resource Management Zone (see FSP Maps).

#### 2.6.1.5.1 Results or Strategies for Objective #19

Applicable FDU(s): Telkwa

 During the term of this FSP, the TSM will not award any new Timber Sales Licence(s) and/or authorize road construction activities within the identified Howson Range Resource Management Zone (see FSP Maps).

Objective # (in this FSP)	Type of Objective	Category/Source of Objective	Decision Creating Objective	Effective Date of Objective
20	Land Use Objective	Bulkley LRMP –	See section 2.6 for full	December 29,
		Higher Level Plan	decision	2000
		Order		

2.6.1.6 Objective set by Government for Hankin Plateau Resource Management Zone (SMZ1)

1) Maintain caribou and goat habitat; and visual quality, especially views from Highway 16 and the ski hill by: harvesting timber only where required for approved mineral and energy exploration and development in the Hankin Plateau Resource Management Zone (see FSP Maps).

#### 2.6.1.6.1 Results or Strategies for Objective #20

#### Applicable FDU(s): **Telkwa**

 During the term of this FSP, the TSM will not award any new Timber Sales Licence(s) and/or authorize road construction activities within the identified Hankin Plateau Resource Management Zone (see FSP Maps).

Objective # (in this FSP)	Type of Objective	Category/Source of Objective	Decision Creating Objective	Effective Date of Objective
21	Land Use Objective	Bulkley LRMP – Higher Level Plan Order	See section 2.6 for full decision	December 29, 2000
2.6.1.7 Objective set by Government for Silvern Lakes Resource Management Zone (SMZ1)				

1) Maintain backcountry recreational opportunities; and visual quality by: harvesting timber only where required for approved mineral and energy exploration and development in the Silvern Lakes Resource Management Zone (see FSP Maps).

#### 2.6.1.7.1 Results or Strategies for Objective #21

#### Applicable FDU(s): **Copper, Trout Creek**

 During the term of this FSP, the TSM will not award any new Timber Sales Licence(s) and/or authorize road construction activities within the identified Silvern Lakes Resource Management Zone (see FSP Maps).

#### 2.6.2 Special Management Zones 2 (SMZ2)

Objective # (in this FSP)	Type of Objective	Category/Source of Objective	Decision Creating Objective	Effective Date of Objective	
22	Land Use Objective	Bulkley LRMP –	See section 2.6 for full	December 29,	
		Higher Level Plan	decision	2000	
		Order			
1) Maintain the following river-based resource values adjacent to the Babine River Provincial Park: wilderness recreation opportunities; water clarity and hydrological stability for fish habitat in the tributaries of the Babine River; visual quality within view of the Babine River; and travel and denning habitat for grizzly bears by: developing timber in a manner which minimizes the effects of these values; not constructing new, permanent, unrestricted road access north of the Babine River corridor boundary; and by logging by selection harvesting or small clearcuts only in the Babine River Resource					
Managemer	nt Zone (see FSP Maps).				

#### 2.6.2.1.1 Results or Strategies for Objective #22

Applicable FDU(s): **Babine** 

1. During the term of this FSP, the TSM will only authorize timber harvesting within the identified

Babine River Special Management Zone 2 (see FSP Maps):

- a. utilizing clearcut silviculture systems for harvesting with less than five (5.0) hectares of net area to be reforested; or,
- b. utilizing clearcut with reserve silviculture systems for harvesting areas less than fifteen (15.0) hectares of net areas to be reforested; or,
- c. utilizing non-clearcut silviculture systems for harvesting areas greater than fifteen (15.0) hectares of net areas to be reforested; and,
- d. The TSM will ensure that harvest openings utilizing a clearcut, or a clearcut with reserve silviculture system will retain a minimum 100m of unharvested timber between adjacent harvest openings, until the clearcut or clearcut with reserve harvest openings have met the requirements of **FPPR 65(3)**.
- 2. During the term of this FSP, within the Babine River Special Management Zone 2 (see **FSP Maps**), the TSM will not authorize harvesting, hauling or decking operations between May 1st to November 1st.
- 3. Despite 2 above, the TSM may authorize, decking and/or hauling in the Babine River Special Management Zone 2 (see **FSP Maps**) between July 1st and August 14th if required to remove beetle-infested logs. A condition of the decking and hauling during this period will be that the gate will be locked each night during this period.
- 4. During the term of this FSP, the TSM will not authorize any new roads within 300 metres of the identified Babine River Protected Area (see **FSP Maps**).
- 5. During the term of this FSP, within the Babine River Special Management Zone 2 (see **FSP Maps**), the TSM will ensure that **FWDAC** is established on all **Short Term Roads** constructed under this FSP that access one or more cutblock(s) within 1(one) year of planting completion of the cutblock(s).
- 6. During the term of this FSP, within the Babine River Special Management Zone 2 (see **FSP Maps**), the TSM will:
  - c. Only authorize new road construction for a maximum right-of-way width of 20 meters, except on sections requiring a wider right-of-way to maintain road safety.
  - d. Ensure new roads will have a maximum **Line of Sight** of 200m, unless longer straight sections of road are required for safety reasons.
- 7. During the term of this FSP, the TSM will not construct a new, permanent, unrestricted road access north of the Babine River Bridge.
- 8. Results or strategies in section 2.8.1.1.1 (water, fish, wildlife and biodiversity in riparian areas) of this FSP above also apply to this objective and along with the small clearcut sizes specified in 1 above will maintain water clarity and hydrological stability for fish habitat.

Objective #	Type of Objective	Category/Source of	Decision Creating	Effective Date of
(in this FSP)		Objective	Objective	Objective
23	Land Use Objective	Bulkley LRMP –	See section 2.6 for full	December 29,

		Higher Level Plan	decision	2000	
		Order			
2.6.2.2 Objective set by Government for Reiseter Creek Resource Management Zone (SMZ2)					
1) Maintain visual quality within view of major river and highway corridors and recreation focus points; water quality for domestic consumption; and recreational hiking trails to the Babine Mountains in the Reiseter Creek Resource Management Zone (see FSP Maps).					

# 2.6.2.2.1 Results or Strategies for Objective #23

Applicable FDU(s): **Bulkley Valley, Reiseter** 

- The objective of maintaining visual quality within view of major river and highway corridors and recreation focus points will be accomplished by following the Results and Strategies in 2.11.2.1.1 (visual quality).
- 2. The objective of maintaining water quality for domestic consumption and fish habitat will be accomplished by following the Results and Strategies in 2.8.1.1.1 (water, fish, wildlife and biodiversity in riparian areas) and 2.8.1.2.1 (water in a community watershed).
- 3. The objective of maintaining recreational hiking trails will be accomplished by following the Results and Strategies in 2.4.1.1.1 (recreation opportunities) and 2.4.2.1.1 (recreation access).

Objective #	Type of Objective	Category/Source of	Decision Creating	Effective Date of
(in this FSP)		Objective	Objective	Objective
24	Land Use Objective	Bulkley LRMP –	See section 2.6 for full	December 29,
		Higher Level Plan	decision	2000
		Order		

2.6.2.3 Objective set by Government for Upper Corya Creek Resource Management Zone (SMZ2)

1) Maintain visual quality within view of major river and highway corridors and recreation focus points; and recreational opportunities and access in the Upper Corya Creek Resource Management Zone (see FSP Maps).

#### 2.6.2.3.1 Results or Strategies for Objective #24

Applicable FDU(s): Corya, Kitseguecla, Trout Creek

- The objective of maintaining visual quality within view of major river and highway corridors and recreation focus points will be accomplished by following the Results and Strategies in 2.11.2.1.1 (visual quality).
- 2. The objective of maintaining recreational opportunities and access will be accomplished by following

the Results and Strategies in 2.4.1.1.1 (recreation opportunities) and 2.4.2.1.1 (recreation access).

Objective # (in this FSP)	Type of Objective	Category/Source of Objective	Decision Creating Objective	Effective Date of Objective	
25	Land Use Objective	Bulkley LRMP –	See section 2.6 for full	December 29,	
		Higher Level Plan	decision	2000	
		Order			
2.6.2.4 Objective set by Government for Jack Mould Lake Resource Management Zone (SMZ2)					
1) Maintain connectivity of mature forest between Kitseguecla and Jack Mould lakes; recreational opportunities, and visual quality within view of Jack Mould Lake and Kitseguecla Lake by: developing timber in a manner which minimizes the effects of these values, and maintaining walk-in only status to Jack Mould Lake in the Jack Mould Lake Resource Management Zone (see FSP Maps).					

#### 2.6.2.4.1 Results or Strategies for Objective #25

Applicable FDU(s): Kitseguecla

- 1. The objective of maintaining connectivity of mature forest between Kitseguecla and Jack Mould lakes will be accomplished by following the Results and Strategies in 2.1.3.1.1 (Objective set by Government for Landscape Corridors).
- 2. The objective of maintaining recreational opportunities will be accomplished by following the Results and Strategies in 2.4.1.1.1 (recreation opportunities).
- 3. The objective of maintaining visual quality within view of recreation focus points will be accomplished by following the Results and Strategies in 2.11.2.1.1 (visual quality).
- 4. The objective of maintaining walk-in only status to Jack Mould Lake will be accomplished by following the Results and Strategies in 2.1.2.1.1 (Ecosystem Representation: Core Ecosystem).

Objective #	Type of Objective	Category/Source of	Decision Creating	Effective Date of
(in this FSP)		Objective	Objective	Objective
26	Land Use Objective	Bulkley LRMP –	See section 2.6 for full	December 29,
		Higher Level Plan	decision	2000
		Order		

2.6.2.5 Objective set by Government for Glacier Gulch Resource Management Zone (SMZ2)

1) Maintain visual quality within view of major river and highway corridors and recreation focus points; rare ecosystems; and water quality for domestic consumption and fish habitat in the Glacier Gulch Resource Management Zone (see FSP Maps).

#### 2.6.2.5.1 Results or Strategies for Objective #26

Applicable FDU(s): Bulkley Valley, Copper, Trout Creek

The objective of maintaining visual quality within view of major river and highway corridors and recreation focus points, will be accomplished by following the Results and Strategies in 2.11.2.1.1 (visual quality).

- 1. The objective of maintaining water quality for domestic consumption and fish habitat will be accomplished by following the Results and Strategies in 2.8.1.1.1 (water, fish, wildlife and biodiversity in riparian areas) and 2.8.1.2.1 (water in a community watershed).
- 2. No new road construction or harvesting will be authorized by the TSM within a red-listed **rare and endangered plant community** identified by a **qualified person**.

Objective #	Type of Objective	Category/Source of	Decision Creating	Effective Date of	
(in this FSP)		Objective	Objective	Objective	
27	Land Use Objective	Bulkley LRMP –	See section 2.6 for full	December 29,	
		Higher Level Plan	decision	2000	
		Order			
2.6.2.6 Objective set by Government for Hudson Bay Mountain Resource Management Zone (SMZ2)					
<ol> <li>Maintain visual quality within view of recreational focus points; and recreational opportunities and access by developing timber in a manner, which minimizes the effects on these values in the Hudson Bay Mountain Resource Management Zone (see FSP Maps).</li> </ol>					

# 2.6.2.6.1 Results or Strategies for Objective #27

#### Applicable FDU(s): Bulkley Valley, Copper, Telkwa, Trout Creek

- 1. The objective of maintaining visual quality within view of recreation focus points will be accomplished by following the Results and Strategies in 2.11.2.1.1 (visual quality).
- 2. The objective of maintaining recreational opportunities will be accomplished by following the Results and Strategies in 2.4.1.1.1 (recreation opportunities) and 2.4.2.1.1 (recreation access).

Objective #	Type of Objective	Category/Source of	Decision Creating	Effective Date of	
(in this FSP)		Objective	Objective	Objective	
28	Land Use Objective	Bulkley LRMP –	See section 2.6 for full	December 29,	
		Higher Level Plan	decision	2000	
		Order			
2.6.2.7 Objective set by Government for Ski Smithers Resource Management Zone (SMZ2)					
1) Maintain visual quality within view of major river and highway corridors and recreation focus points; and recreational opportunities and access by developing timber in a manner which minimizes the effects on these values in the Ski Smithers Resource Management Zone (see FSP Maps).					

# 2.6.2.7.1 Results or Strategies for Objective #28

Applicable FDU(s): Bulkley Valley, Telkwa

- The objective of maintaining visual quality within view of major river and highway corridors and recreation focus points, will be accomplished by following the Results and Strategies in 2.11.2.1.1 (visual quality).
- 2. The objective of maintaining recreational opportunities will be accomplished by following the Results and Strategies in 2.4.1.1.1 (recreation opportunities) and 2.4.2.1.1 (recreation access).

Objective # (in this FSP)	Type of Objective	Category/Source of Objective	Decision Creating Objective	Effective Date of Objective
29	Land Use Objective	Bulkley LRMP –	See section 2.6 for full	December 29,
		Higher Level Plan	decision	2000
		Order		

#### 2.6.2.8 Objective set by Government for Community Forest Resource Management Zone (SMZ2)

1) Maintain water quality for domestic consumption; the diversity and abundance of existing species, a desired mix of habitat for biodiversity; recreational and educational opportunities; and visual quality within view of highway 16 and recreational focus points by developing timber in a manner which minimizes the effects on these values in the Community Forest Resource Management Zone (see FSP Maps).

# 2.6.2.8.1 Results or Strategies for Objective #29

Applicable FDU(s): Bulkley Valley, Telkwa

- 1. The objective of maintaining water quality for domestic consumption will be accomplished by following the Results and Strategies in 2.8.1.1.1 (water, fish, wildlife and biodiversity in riparian areas) and 2.8.1.2.1 (water in a community watershed).
- 2. The objective of maintaining the diversity and abundance of existing species will be accomplished by following the Results and Strategies in 2.1.4.1.1 (tree species diversity).
- 3. The objective of maintaining a desired mix of habitat for biodiversity will be accomplished by following the Results and Strategies in 2.1.1.1.1 (seral stage), 2.1.3.1.1 (landscape corridors), and 2.1.5.1.1 (stand structure).
- 4. The objective of maintaining recreational and educational opportunities will be accomplished by:
  - a) following the Results and Strategies in 2.4.1.1.1 (recreation opportunities) and 2.4.2.1.1 (recreation access).
  - b) during the term of this FSP, within each new Timber Sale Licence (TSL), the TSM commits to posting a sign detailing the Timber Sale Licence and history of forest management activities, within 2 years following completion of reforestation activities.
- 5. The objective of maintaining visual quality within view of highway 16, will be accomplished by following the Results and Strategies in 2.11.2.1.1 (visual quality).

Objective #	Type of Objective	Category/Source of	Decision Creating	Effective Date of
(in this FSP)		Objective	Objective	Objective

30	Land Use Objective	Bulkley LRMP –	See section 2.6 for full	December 29,
		Higher Level Plan	decision	2000
		Order		

2.6.2.9 Objective set by Government for Mooseskin Johnny Lake Resource Management Zone (SMZ2)

 Maintain existing commercial backcountry tourism opportunities; caribou and goat habitat; shallow lakes and wetlands; visual quality within view of Mooseskin Johnny Lake; and forest connectivity between the Howson Range SMZ1 and Hankin Plateau SMZ1 by: developing timber in a manner which minimizes the effects on these values, and restricting motorized access on roads in the Mooseskin Johnny Lake Resource Management Zone (see FSP Maps).

#### 2.6.2.9.1 Results or Strategies for Objective #30

#### Applicable FDU(s): **Telkwa**

 The objective of maintaining existing commercial backcountry tourism opportunities; caribou and goat habitat; shallow lakes and wetlands; visual quality within view of Mooseskin Johnny Lake; and forest connectivity between the Howson Range SMZ1 and Hankin Plateau SMZ1; restricting motorized access on roads in the Mooseskin Johnny Lake RMZ will be accomplished by following section 2.2.3.1 (Objective set by Government for Caribou) as the RMZ is within the No Harvest Zone for WHA-6-333.

Objective # (in this FSP)	Type of Objective	Category/Source of Objective	Decision Creating Objective	Effective Date of Objective
31	Land Use Objective	Bulkley LRMP –	See section 2.6 for full	December 29,
		Higher Level Plan	decision	2000
		Order		

2.6.2.10 Objective set by Government for Telkwa River Resource Management Zone (SMZ2)

1) Maintain water quality and hydrological stability for fish habitat; structural diversity of the riparian area; wetlands; and, corridors for deer and grizzly bears by developing timber in a manner, which minimizes the effects on these values in the Telkwa River Resource Management Zone (see FSP Maps).

# 2.6.2.10.1 Results or Strategies for Objective #31

Applicable FDU(s): **Telkwa** 

- The objective of maintaining water quality and hydrological stability for fish habitat; structural diversity of the riparian area; and wetlands will be accomplished by following the Results and Strategies in 2.8.1.1.1 (water, fish, wildlife and biodiversity in riparian areas).
- 2. The objective of maintaining corridors for deer and grizzly bears will be accomplished by following the Results and Strategies in 2.1.2.1.1 (core ecosystem) and 2.1.3.1.1 (landscape corridors).

Objective # (in this FSP)	Type of Objective	Category/Source of Objective	Decision Creating Objective	Effective Date of Objective
32	Land Use Objective	Bulkley LRMP –	See section 2.6 for full	December 29,
		Higher Level Plan	decision	2000
		Order		

2.6.2.11 Objective set by Government for Copper River Resource Management Zone (SMZ2)

1) Maintain visual quality within view of the Copper River and recreational focus points; water quality for fish habitat; high value fish habitat; important riparian ecosystems; red and blue-listed plant communities; and steelhead fishing opportunities in an uncrowded natural setting along the Copper River by: developing timber in a manner which minimizes the effects on these values; not constructing new roads within 1 kilometre of the Copper River; not expanding existing range use; and including the majority of the corridor within the core ecosystem in the Copper River Resource Management Zone (see FSP Maps).

In section 2.6.2.11.1, Results or Strategies for Objective #32 of this FSP, the following definitions will apply:

**Red-listed plant communities** - means plant communities that are rare, threatened or extirpated in British Columbia and are set out by the British Columbia Ministry of Environment BC Species and Ecosystem Explorer website: <u>http://a100.gov.bc.ca/pub/eswp/</u>

**Blue-listed plant communities -** means plant communities that are of special concern in British Columbia and are set out by the British Columbia Ministry of Environment BC Species and Ecosystem Explorer website: <a href="http://a100.gov.bc.ca/pub/eswp/">http://a100.gov.bc.ca/pub/eswp/</a>

# 2.6.2.11.1 Results or Strategies for Objective #32

Applicable FDU(s): **Copper** 

- 1. The objective of maintaining visual quality within view of the Copper River and recreational focus points will be accomplished by following the Results and Strategies in 2.11.2.1.1 (visual quality).
- 2. The objective of maintaining water quality for fish habitat; high value fish habitat; and important riparian ecosystems will be accomplished by following the Results and Strategies in 2.8.1.1.1 (water, fish, wildlife and biodiversity in riparian areas)
- 3. The objective of maintaining **red and blue-listed plant communities** will be accomplished by:
  - a. During the term of this FSP, the TSM will not authorize harvesting within a **red-listed plant community**, unless there is no alternative for access or stream crossings, or if harvesting is required to address safety concerns.
  - b. During the term of this FSP, the TSM will not authorize harvesting that will result in greater than 30% of each occurrence of a **blue-listed plant community** being harvested.
  - c. The identification, size and location of red and blue-listed plant communities will be verified by a qualified professional (R.P. Bio.).
- 4. The objective of not constructing new roads within 1 kilometre of the Copper River will be accomplished by:
  - a. During the term of this FSP, the TSM will not authorize any new permanent access structure within one (1) kilometre of the Copper River.

Objective # (in this FSP)	Type of Objective	Category/Source of Objective	Decision Creating Objective	Effective Date of Objective
33	Land Use Objective	Bulkley LRMP –	See section 2.6 for full	December 29,
		Higher Level Plan	decision	2000
		Order		

2.6.2.12 Objective set by Government for Serb Resource Management Zone (SMZ2)

 Maintain grizzly bear habitat; water quality for fish habitat; fish habitat; visual quality as seen from the Serb Creek, Copper River, and recreational focus points; and the integrity of the watershed by: not constructing road crossings on Serb Creek and by developing timber in a manner which minimizes the effects on these values for the Serb Resource Management Zone (see FSP Maps).

# 2.6.2.12.1 Results or Strategies for Objective #33

#### Applicable FDU(s): **Copper, Telkwa**

- 1) The objective of maintaining grizzly bear habitat will be accomplished by:
  - a. following the Results and Strategies in 2.1.2.1.1 (core ecosystem) and 2.1.3.1.1 (landscape corridors).
  - Except for instances in ii below, during the term of this FSP, adjacent to a contiguous area greater than two (2) hectares in size that is identified at the site level by a **qualified person** as a riparian flood plain, meadow, fen, wetland, bog, deciduous leading polygons with south facing aspect, or avalanche chute in the identified Serb Resource Management Zone (see FSP Maps), the TSM will not authorize:
    - i. harvesting within 100 meters of the area edge; and/or
    - ii. road construction within 150 meters of the area edge, unless
      - a) no other practicable option exists, and
      - b) roads constructed under this section are to have a maximum right-ofway width of 20 metres, unless a wider right-of-way is required for safety reasons, and
      - c) if the roads are **Short Term Roads**, they will have **FWDAC** established within one (1) year following planting completion, and
      - d) roads will be constructed to have a maximum **Line of Sight** of 200m, except on portions of road requiring longer straight sections due to safety reasons.
- 2) The objective of maintaining water quality for fish habitat, and fish habitat will be accomplished by following the Results and Strategies in 2.8.1.1.1 (water, fish, wildlife and biodiversity in riparian areas).
- 3) The objective of maintaining visual quality as seen from the Serb Creek, Copper River and recreation focus points will be accomplished by following the Results and Strategies in 2.11.2.1.1 (visual quality).
- 4) The objective of not constructing crossings on Serb Creek will be accomplished by:
  - a) During the term of this FSP, the TSM will not approve any new constructed road crossings on Serb Creek.

Objective #	Type of Objective	Category/Source	Decision Creating	Effective Date of
(in this FSP)		of Objective	Objective	Objective
34	Land Use Objective	Bulkley LRMP –	See section 2.6 for full	December 29,
		Higher Level Plan	decision	2000
		Order		

2.6.2.13 Objective set by Government for Mulwain Creek Resource Management Zone (SMZ2)

1) Maintain water quality for fish in the Copper River; visual quality for viewscapes from the Seven Sisters and Copper River; forest connectivity within the Copper River SMZ2; and primitive recreational opportunities for the Seven Sisters protected area by: developing timber in a manner which minimizes the effects on these values; restricting non-industrial, motorized access to the Seven Sisters Protected Area; and designing cutblocks with strategic placement of leave trees and patches, feathered edges and lines from natural landscapes in the Mulwain Creek Resource Management Zone (see FSP Maps).

# 2.6.2.13.1 Results or Strategies for Objective #34

Applicable FDU(s): Copper

- 1. The objective of maintaining visual quality for viewscapes from the Seven Sisters and Copper River will be accomplished by following the Results and Strategies in 2.11.2.1.1 (visual quality).
- 2. The objective of maintaining forest connectivity within the Copper River SMZ2 will be accomplished by following the Results and Strategies in 2.1.2.1.1 (core ecosystem) and 2.1.3.1.1 (landscape corridors).
- 3. The objective of maintaining primitive recreational opportunities for the Seven Sisters protected area will be accomplished by following the Results and Strategies in 2.4.1.1.1 (recreation opportunities) and 2.4.2.1.1 (recreation access).
- 4. The objective of restricting non-industrial, motorized access to the Seven Sisters Protected Area will be accomplished by:
  - a. During the term of this FSP, when the TSM authorizes a new permanent or temporary access structure in the identified Mulwain Creek Resource Management Zone, the TSM will ensure it will be deactivated within one (1) year of planting completion.
- 5. The objective of designing cutblocks with strategic placement of leave trees and patches, feathered edges and lines from natural landscapes in the Mulwain Creek Resource Management Zone will be accomplished by following the Results and Strategies in 2.8.1.1.1 (water, fish, wildlife and biodiversity in riparian areas), 2.1.2.1.1 (core ecosystem), 2.1.3.1.1 (landscape corridors) section 2.1.5.1.1 (stand structure) and 2.10.1.1.1 (wildlife and biodiversity).

# 2.7 Soils

Objective # (in this FSP)	Type of Objective	Category/Source of Objective	Decision Creating Objective	Effective Date of Objective	
35	Act s.149	FPPRs.5	N/A	January 31, 2004	
2.7.1.1 Objective set by Government for Soils         1) Without unduly reducing the supply of timber from B.C.'s forests, to conserve the productivity and hydrologic function of soils.					

# 2.7.1.1.1 Results or Strategies for Soils Objective #35

Applicable FDU(s): All FDUs

1. For the term of this FSP, the TSM undertakes to comply, in all FDU's, with the default practice requirements of sections 35 and 36 of the FPPR. The TSM will notify each holder of a timber sale licence or road permit entered into that sections 35 and 36 of the FPPR apply to the holder.

# 2.8 Water

Objective # (in this FSP)	Type of Objective	Category/Source of Objective	Decision Creating Objective	Effective Date of Objective	
36	Act s.149	FPPRs.8, 12.3	N/A	January 31, 2004	
2.8.1.1 Objective set by Government for Water, Fish, Wildlife, and Biodiversity in Riparian Areas					
-	2) Without unduly reducing the supply of timber from BC's forests, to conserve, at the landscape level, the water quality, fish habitat, wildlife habitat and biodiversity associated with those riparian areas.				
Mandatory Prac	tice Requirements for	FPPR s.54 Fan destabi	lization		
Water, Fish, Wil	dlife and Biodiversity	FPPR s.55 Stream cros	sings		
in Riparian Area	in Riparian Areas Objective: FPPR s.56 Fish passage				
	-	FPPR s.57 Protection of fish habitat			
		FPPR s.58 Use of livestock in riparian areas			

# 2.8.1.1.1 Results or Strategies for Water, Fish, Wildlife, and Biodiversity in Riparian Areas Objective #36

#### Applicable FDU(s): All FDUs

- During the term of this FSP, the TSM undertakes to comply in all FDU's, with the default practice requirements of sections 47 to 51, 52(2) and 53 of the FPPR, excluding sections 47(4), 48(3), and 49(2). Table 4 replaces these excluded sections. Furthermore, the TSM will notify each holder of a timber sale licence or road permit that these sections are applicable to the holder's primary forest activities carried out during the term of this FSP.
- 2. During the term of this FSP, and in order to meet the requirements of FPPR sections 8 and 12(3), the TSM will implement the following strategy in all FDU's with regard to the retention of trees in riparian management zones (RMZ) for streams, lakes, and wetlands: to comply with the default practice requirements of sections 47 to 51, 52(2) and 53 of the FPPR, excluding sections 47(4), 48(3), and 49(2). The minimum width of Riparian Reserve Zones (RRZ's) and RMZ's will be applied as per Table 4 to the excluded sections.

The expansion of portions of the riparian reserves into the riparian management zones will adequately address tree retention requirements within the RMZ for streams, lakes, and wetlands within a timber sale license.

# Table 4. Minimum Slope Distance Widths and Basal Area Retention Objectives within Riparian Management Areas for Streams, Wetlands and Lakes (FPPR s 47(4-6), 48(3-5), & 49(2-3)).

Riparian	Stream Width	(RMA)	(RRZ)	(RMZ)
Class	(metres*)	Riparian	Riparian Reserve Zone	Riparian Management Zone
	or Area Size	Management Area	(metres*)	(metres*)
	(hectares)	(metres*)		
Fish Strea	ims:		·	
S1-A	> 100	100	50	50
S1-B	20-100	70	50	20
S2	5 - 20	50	35	15
S3	1.5-5	40	25	15
S4	< 1.5	30	10	20
Non-Fish	Streams:			
S5	> 3	30	10	20
S6	>=1 or within 500m of a downstream fish-bearing waterbody	20	10	10
S6 <sup>2</sup>	<1 and not within 500m of a downstream fish- bearing waterbody	20	0	20
Wetland	s:			
W1	> 5 ha	50	15	35
W2			Not Applicable	
W3	1 - 5 ha	30	15	15
W4			Not Applicable	
W5	Complex > 5 ha	50	15	35
Lakes:				
L1-A	> 1000 ha, or designated	10	10	0
L1-B	5 - 1000 ha	10	10	0
L2			Not Applicable	
L3	1 – 5 ha	30	10	20
L4			Not Applicable	

\* meter distances are in slope distance

 $<sup>^{2}</sup>$  BCTS's intent to is manage S6 streams less than 1m in width, the same as S6 streams >1m (with a 10m RRZ and a 10m RMZ), however it is recognised that there will be situations, given the nature of where these small streams often occur as well as operational considerations (terrain, stream proximity and density, etc.) that would be overly limiting to operations and timber supply. Where a RRZ cannot be established, BCTS will employ other management strategies, as appropriate, to manage the stream.

Objective # (in this FSP)	Type of Objective	Category/Source of Objective	Decision Creating Objective	Effective Date of Objective
37	Act s.149	FPPRs.8.2	N/A	February 25, 2005
2.8.1.2 Objective set by Government for Water in a Community Watershed				

- 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 (2) the cumulative hydrological effects of primary forest activities with the community watershed from resulting in:
  - a) A material adverse impact on the quality of water or the timing of the flow of the water for 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.
- 2) The objective set by government under subsection (1) applies only to the extent that it does not unduly reduce the supply of timber from British Columbia's forests.

Mandatory Practice Requirements for	FPPR s.58 Use of livestock in riparian areas	
Water in a Community Watersheds	FPPR s.62 Roads in a community watershed	
Objective:	FPPR s.63 Use of fertilizers	

In section 2.8.1.2.1, Results or Strategies for Water in a Community Watershed Objective #37 of this FSP, the following definitions apply:

**Community Watershed** means the following community watersheds on the **FSP Maps**:

- 1. Canyon Creek Community Watershed, created June 15, 1995.
- 2. Corya Community Watershed, created June 15, 1995.
- 3. John Brown Community Watershed, Created Jun 15, 1995.
- 4. Kathlyn Creek Community Watershed, proposed community watershed.
- 5. Seymour Lake Community Watershed, proposed community watershed.
- 6. Tyhee Lake Community Watershed, proposed community watershed.

# 2.8.1.2.1 Results or Strategies for Water in a Community Watershed Objective #37

#### Applicable FDU(s): Bulkley Valley, Deep Creek, Reiseter

- For the term of this FSP, the TSM undertakes to comply with the default practice requirements of section 59 (protect water quality), section 60 (licensed waterworks), and section 61 (excavated or bladed trails) of the FPPR in identified Community Watersheds (see FSP Maps). Furthermore, the TSM will notify each holder of a timber sale licence or road permit that these sections are applicable to the holder's primary forest activities carried out during the term of this FSP.
- 2. For the term of this FSP, the TSM undertakes to comply with the default practice requirements of section 55 (stream crossings), section 56 (fish passage), and section 57 (protection of fish and fish habitat) of the FPPR identified Community Watersheds (see FSP Maps). Furthermore, the TSM will notify each holder of a timber sale licence or road permit that these sections are applicable to the holder's primary forest activities carried out during the term of this FSP.

# **2.9 Fisheries Sensistive Watersheds**

Objective	#	Type of Objective	Category/Source of	Decision Creating	Effective Date of
(in this FS	P)		Objective	Objective	Objective
38		Act s.149	GAR 14	Fisheries Sensitive	December 28, 2005
				Watershed Order (F-6-	
				001 to F-6-005)	
2.9.1.1 0	bjective	e set by Government	for Fisheries Sensitive	Watersheds	
-	n, speci		•	tive is to provide, within distribution of primary for	
i.	i. Conserve the natural hydrological conditions, natural stream bed dynamics and integrity of stream channels,				
ii.	ii. Conserve the quality, quantity and timing of water flows required by fish, and				
iii.	iii. Prevent the cumulative hydrological effects of primary forest activities, from resulting in a material adverse impact on the fish habitat.				

In section 2.9.1.1.1, Results or Strategies for Fisheries Sensitive Watersheds Objective #38 of this FSP, the following definitions apply:

Fisheries Sensitive Watershed means the following fisheries sensitive watersheds on the FSP Maps:

- 1. Cumming Creek Fisheries Sensitive Watershed.
- 2. Gramaphone Creek Fisheries Sensitive Watershed.
- 3. Jonas Creek Fisheries Sensitive Watershed.
- 4. Toboggan Creek Fisheries Sensitive Watershed.

5. Five Mile Creek Fisheries Sensitive Watershed.

#### 2.9.1.1.1 Results or Strategies for Fisheries Sensitive Watersheds Objective #38

#### Applicable FDU(s): Bulkley Valley, Reiseter, Telkwa, Torkelson, Trout Creek

- 1. For the term of this FSP the TSM, before authorizing harvesting or road construction in any of the applicable FSW's, will:
  - a. have a Qualified Professional complete a watershed assessment and determine appropriate targets for ECA, Peak Flow, Open Road Density and Stream Crossing Density, applicable to that FSW, and
  - b. will not authorize any harvesting or road construction, that would cause those targets to be exceeded.

# 2.10 Wildlife and Biodiversity

Objective # (in this FSP)	Type of Objective	Category/Source of Objective	Decision Creating Objective	Effective Date of Objective
39	Objective set in Regulation	FPPRs.9	N/A	January 31, 2004
2) Without und design areas	duly reducing the supply	y of timber from BC's f sting is to be carried o	versity at the Landscape l forests and to the extent out that resemble, both s r within the landscape.	practicable, to

#### 2.10.1.1.1 Results or Strategies for Wildlife and Biodiversity at the Landscape Level Objective #39

Applicable FDU(s): All FDUs

The TSM undertakes to notify each holder of a timber sale licence or road permit that sections 64 and 65 of the FPPR are applicable to the holder's primary forest activities carried out during the term of this FSP.<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> BCTS's intent is to continue to manage towards achieving and maintaining the patch size targets specified in the Biodiversity Guidebook, by utilizing FPPR 64 (2) and 65 (4) . Given the concerns raised by the Forest Practices Board with regards to

# 2.11 Visual Quality

Objective #	Type of Objective	Category/Source of	Decision Creating	Effective Date of	
(in this FSP)		Objective	Objective	Objective	
40	FPC grandparented	Section 181	Order Establishing	December 29, 2000.	
			Resource Management		
			Zone Objectives within		
			the area covered by		
			the Bulkley LRMP		
			under FPC of BC Act		
			s. 3(1) & (2). Appendix		
			3 & 4. December 19,		
			2000		
2.11.2.1 Objective set by Government for Visual Quality					
-	<ol> <li>Maintain identified viewpoints and associated scenic areas as mapped (see FSP Map) and made available at the Landscape level.</li> </ol>				

Within this section of the FSP, the following definitions apply:

An **alteration** means changing or making something different as a result of conducting harvesting or road construction.

A **significant public viewpoint (SPV)** means on-the-ground or water based locations accessible to the Public, from which the surrounding landscape can be viewed or observed.

# 2.11.2.1.1 Results or Strategies for Visual Quality Objective #40

Applicable FDU(s): **All FDUs** 

wording such as "trend towards", it was felt that it would be difficult to create a result/strategy that would be measurable and verifiable and still meet the natural disturbance/patch requirements. The approach taken by this FSP is the same as what has been utilized in the Nadina FSP since 2015.

- 1. For the term of this FSP the TSM will ensure that the alteration resulting from timber harvesting and road construction activities, authorized by the TSM, that are located in known scenic areas, will be consistent with the established visual quality objective (VQO), when evaluated from a **significant public viewpoint**.
  - a) Known scenic areas are identified on *Map 2– Bulkley FSP Resource Management* with information being sourced from DataBC.
  - b) In the event of a discrepancy between Map 1 and DataBC, the DataBC visual landscape inventory data takes precedence.
  - c) The established visual quality objective specified in DataBC visual landscape inventory data that are associated with scenic areas, are described in Table 5.
  - d) In the case of a known scenic area for which there is no established visual quality objective, the altered forest landscape for the scenic area resulting from timber harvesting and road construction will be:
    - i) in visual sensitivity class 1 is equal to the retention category;
    - ii) in visual sensitivity class 2 is equal to the partial retention category;
    - iii) in visual sensitivity class 3 is equal to the modification category;
    - iv) in visual sensitivity class 4 is equal to the modification category; and
    - v) in visual sensitivity class 5 is equal to the maximum modification category.

Visual Quality Objective	Description of Altered Forest Landscape	
Preservation	(i) very small in scale; and	
Preservation	(ii) not easily distinguishable from pre-harvest landscape	
	(i) difficult to see;	
Retention	(ii) small in scale; and	
	(iii) natural in appearance	
	(i) easy to see;	
Partial Retention	(ii) small to medium in scale; and	
	(iii) natural and not rectilinear or geometric in shape	
	(i) very easy to see; and	
Modification	(ii) is (a) large in scale and natural appearance, or	
Modification	(b) small to medium in scale, but with some angular	
	characteristics	
	(i) is very easy to see; and	
Maximum Modification	(ii) is (a) very large in scale	
	(b) rectilinear or geometric in shape, or	
	(c) both	

# Table 5. Characteristics of Alteration

# 2.12 Cultural Heritage Resources

Objective # (in this FSP)		Category/Source of Objective	Decision Creating Objective	Effective Date of Objective		
41	Act s.149	FPPRs.10	N/A	January 31, 2004		
	<ul><li>2.12.1.1 Objective set by Government for Cultural Heritage Resources</li><li>1) To conserve, or, if necessary, protect cultural heritage resources that are:</li></ul>					
i) the focus of a traditional use by an aboriginal people that is of continuing importance to that people; and,						
ii) r	ii) not regulated under the Heritage Conservation Act.					

In section 2.12.1.1.1, Results or Strategies for Cultural Heritage Resources Objective #41 of this FSP, the following definitions will apply:

**Applicable First Nation** means any First Nation claiming an aboriginal right, aboriginal title or a treaty right to the area under consideration.

**Cultural Heritage Resource** means those cultural heritage resources that are the focus of a traditional use by an aboriginal people that are of continuing importance to that people, and not regulated under the *Heritage Conservation Act.* 

*Cultural Heritage Resource Evaluation* is a process conducted by a qualified person and consisting of the following steps:

- (a) Record the location of the cultural heritage resource;
- (b) Evaluate the direct impact of the planned development on the cultural heritage resource;
- (c) If necessary, prepare recommendations in order to conserve, mitigate, or if necessary protect, the applicable cultural heritage resource at the location, considering:
  - (i) the relative value or importance of the cultural heritage resource to a traditional use by an aboriginal people;
  - (ii) the relative abundance or scarcity of the cultural heritage resource;
  - (iii) the historical extent of the traditional use of the cultural heritage resource; and,
- (d) Communicate the results of (a) (c) back to the affected aboriginal group or individual that provided the information.

**Reasonable Efforts** means at least one written communication with a follow-up communication and an offer to meet.

# 2.12.1.1.1 Results or Strategies for Cultural Heritage Resources Objective #41

#### Applicable FDU(s): All FDUs

- 1. Before the TSM carries out or authorizes forest practices, the TSM will ensure that a *cultural heritage resource evaluation* is conducted within areas:
  - a. That contain previously located or made known cultural heritage resources;
  - b. That are identified as moderate and/or high on the Bulkley TSA's Cultural Heritage and Archaeological Resources Inventory (C.H.A.R.I.); and/or,
  - c. For which site-specific information regarding applicable cultural heritage resources is brought forward or made available to the TSM.
- 2. If, during timber harvesting or road construction operations carried out or authorized by the TSM, a previously unidentified cultural heritage resource feature is encountered on an area, the TSM will ensure that operations will be modified or cease on the area to the extent necessary to protect the feature, until a *cultural heritage resource evaluation* is completed.
- 3. The TSM will ensure that forest practices carried or authorized by the TSM will be consistent with the recommendations given in a *cultural heritage resource evaluation*.
- 4. During the term of this FSP, when preparing planned harvesting and road development within an FDU, the TSM will have a map(s) sent of the proposed development and make **reasonable efforts** to communicate and meet with the **applicable First Nation(s)** on a yearly basis.

# 2.13 Public Review and Comment

Objective # (in this FSP)	Type of Objective	Category/Source of Objective	Decision Creating Objective	Effective Date of Objective	
42	N/A	FRPA Sec 18	N/A	Jan 31, 2004	
2.13.1.1 Object	2.13.1.1 Objective set by Government for Public Review and Comment				
Making FSP available to the public for review and comment					

# 2.13.1.1.1 Results or Strategies for Objective #42

Applicable FDU(s): All

What follows is a result and strategy that expands upon the default requirement of making the FSP available for review and comment.

During the term of this FSP, the TSM will, on at least an annual basis, provide an opportunity for the public to review and comment on BCTS's proposed cutblocks and roads.<sup>4</sup>

# 3.0 Measures

# 3.1 Invasive Plants

Measure # (in this FSP)	Type of Objective	Category/Source of Objective	Decision Creating Objective	Effective Date of Objective
1	Act s.47	FPPRs.17	N/A	January 31, 2004
	rrying out a forest pract	•	must carry out measure	es that are:
i) spec	cified in the applicable o	operational plan; or,		
-	orized by the Minister sive plants under the Ir	•	ction or spread of speci	es of plants that are

Applicable FDU(s): **All FDUs** 

<sup>&</sup>lt;sup>4</sup> BCTS's plan is to use a variety of tools to accomplish this, including the multi-licencee online mapping tool <u>https://maps.forsite.ca/bml\_infoshare/</u>, but this may change over time.

For purposes of this measure, the following definitions apply:

**"Seed (ed or ing)**" means seed that meets or exceeds Canada Common Number 1 Forage Mixture (or better) or Canada No. 1 Ground Cover Mixture specifications as defined by the *Canada Seeds Act Regulation* in effect when this FSP is approved, and certified to be free of seeds of invasive species listed under the Weed Control Regulation or the Invasive Plants Regulation based on a Certificate of Seed Analysis.

**"Re-vegetate"** means the establishment of non-invasive plants over the entire individual exposed productive mineral soil meeting an estimated overall percent foliage cover of 50% of the area.

- 1. During the term of this FSP, the TSM will ensure that, on areas where the TSM carries out or authorizes timber harvesting and/or road building activities within BCTS FDUs that result in exposed mineral soils exceeding 0.1 hectares in a contiguous area:
  - a. the areas are **seeded** within one (1) year of completion of harvesting or road building as the case may be;
  - b. the **seeded** areas will be monitored for two (2) years following seeding to ensure they are revegetated; and,
  - c. if monitoring determines that an area is not re-vegetated, the area will be re-**seeded** within one (1) year and further monitored and re-seeded until the area is re-vegetated.
- 2. During the term of this FSP, the TSM will ensure that all BCTS field staff, as well as contractors conducting field work for BCTS, have appropriate training to identify invasive plants, and will ensure that they follow the notification requirements in section 3, below.
- 3. During the term of this FSP, the TSM will notify the Northwest Invasive Plant Council<sup>5</sup> of all new invasive plant sites found as a result of BCTS primary forest activities.

<sup>&</sup>lt;sup>5</sup> Note: The phone number for the Northwest Invasive Plant Council is 1-866-449-3337

# **3.2** Natural Range Barriers

Measure # (in this FSP)	Type of Objective	Category/Source of Objective	Decision Creating Objective	Effective Date of Objective
2	Act s.48	FPPR.s.18	N/A	January 31, 2004
3.2.1.1 Measu	res to Mitigate the Loss	of Natural Range Bar	riers	
	icable, the FSP will spec Natural Range Barriers.	ify measures to mitiga	te the effect of removing	g or rendering

#### 3.2.1.1.1 Results or Strategies to Mitigate the Loss of Natural Range Barriers Measure #39

#### Applicable FDU(s): **All FDUs**

For purposes of this measure, the following definitions apply:

#### Natural Range Barrier means:

- a river, rock face, dense timber, or any other naturally occurring feature that impedes **livestock** movement and;
- is located in an area that is subject to a **Range Tenure** and;
- it is reasonably foreseeable that the holder of the Range Tenure will rely on it to control the movement of livestock.

**Range Tenure** means an existing or advertised agreement under the Range Act four months before the date that this FSP is submitted for approval.

**Livestock** means animals that are defined as livestock by the Range Act as of the date this FSP is approved.

- During the term of this FSP, the TSM will inform the District Range Officer and holders of range tenures who may be affected by proposed BCTS timber harvesting and road construction activities within BCTS FDUs before the TSM carries out or authorizes the timber harvesting or road construction. A 60 day period will be provided to allow written comments to be provided to the TSM regarding timber harvesting or road construction activities, and
- 2. If a range tenure holder, or other qualified person, indicates that the planned BCTS development will remove or render ineffective a natural range barrier, the TSM will:
  - a. work to reach an agreement with the range tenure holder on mitigative measures; and,
  - b. implement the agreed upon mitigative measure within one (1) season of harvest completion, unless an alternative timeframe is agreed upon by the TSM and the range tenure holder.
  - c. if the TSM and the range tenure holder cannot come to an agreement, the TSM will work with the District Range Officer to develop a mitigative measure and will implement the mitigative measure within one (1) season of harvest completion, unless an alternative timeframe is agreed upon.

# 4.0 Stocking Requirements

# 4.1 Stocking Standards

- 1. Section 44 (1) of the FPPR applies to all FDUs where the TSM is required to establish a free growing stand under this FSP.
- 2. The applicable stocking standards and applicable regeneration date referred to in section 44(1)(a) of the FPPR are those described in:
  - a. Section 4.2 in this FSP includes the specified special circumstances; and,
  - b. Appendix A Silviculture Stocking Standards.
  - 3. The applicable stocking standards and free growing height referred to in sec. 44 (1) (b) of the FPPR are those described in:
    - a. Section 4.2 in this FSP includes the specified special circumstances; and,
    - b. Appendix A Silviculture Stocking Standards.
  - 4. For the purpose of section 16(4) of the FPPR, section 44(4) does not apply to this FSP. The TSM does not propose to carry out harvesting activities listed in section 44(3) (h)(i) of the FPPR.

# 4.1.1 Basis for Stocking Standards

Stocking standards tables are consistent with the June 2018 Reference Guide for Forest Development Stocking Standards, Prince Rupert Region. However, this Guide provides less species diversity and does not manage for Forest Health issues as thoroughly as the 2013 Nadina District Reference Guide for FSP Stocking Standards, particularly in the SBSmc2. Therefore, BCTS has chosen to more closely follow the Nadina District guide with regards to SBSmc2 stocking standards, to increase species diversity and stocking density. This will mitigate losses to forest health issues, due to Rusts and Dothistroma, and provide more resilience to the effects of climate change. In addition, the proposed FSP stocking standards limit the percent Pine in the planting species mix to 40% on SBS and ESSF site series on which lodgepole pine is a preferred species, to reduce the risk of rust damage and mortality.

BCTS has also tailored its standards to include Hw as a minor species on mesic and wetter site series in the SBS as it occurs naturally there.

The 2018 Prince Rupert Region Standards include climate change- influenced updates to the SBSdk, which BCTS has included in its FSP standards.

BCTS has also added Fd as an acceptable species on suitable site series in the ICHmc2, as per the 2018 Reference Guide.

BCTS has reviewed the current Skeena Stikine District Forest Health Strategy.

Dothistroma management has been addressed in the past by limiting Pl to 40% of the planting mix in the SBS. The District strategy notes Dothistroma is occurring in the ESSF due to climate change. In the proposed standards, BCTS has therefore also limited Pl to a maximum of 40% of the planting mix in the ESSF.

# 4.2 Special Circumstances

# 4.2.1 Preferred and Acceptable Species - Uneven-Aged (Partial Cut) Stocking Standards

For each **BEC** site series or phase being managed as an Uneven-Aged stand, the "Preferred" and "Acceptable" species listed in Table 9 (Uneven-Aged Stocking Standards) are considered "Preferred" for all layers except for Layer 4 where the specified "Preferred" and "Acceptable" will apply, except that the shade-intolerant species, Lodgepole pine (PI), is limited as "Acceptable" only.

# 4.2.2 Upper Density Limit

Upper Density Limits means 10,000 countable coniferous trees per hectare, for even-aged stocking standards for all BEC site series with the following criteria:

For a coniferous tree to be considered as a countable conifer for determining upper density limits, it must be taller than 50 percent if greater than 2.0 meters tall or it must be taller than 30 percent if less than 2.0 meters tall of the height of the median well-spaced tree selected in the plot.

The TSM will, more than one year before free growing date, reduce stocking in stands that exceed the upper density limit to a post-spacing density range where Post Spacing (stems per hectare) have a range between:

Minimum = Targets Stocking Standards (in Appendix A), Maximum = Target Stocking Standard (in Appendix A) x 3

# 4.2.3 Height of Trees Relative to Competing Deleterious Brush

In addition to meeting the minimum height, crop trees must be equal to or greater than the specified percentage of crop tree height relative to competing deleterious brush within a one-meter radius of the stem as defined in Table 6 and/or by using the free from brush Free Growing criteria in Appendix 9 (quadrant method) of the *Establishment to Free Growing Guidebook: Prince Rupert Region,* May 2000 to be assessed Free Growing.

Biogeoclimatic Zone	Crop Tree Height % above Competing Deleterious Brush
СШН	150%
ESSF and MH	125%
ICH and SBS	150%

Table 6. %Height above Competing Deleterious Brush for Each Biogeoclimatic Zone at Free Growing

Brush species within **ten** (**10.0**) **meters slope distance** (starting at the outer edge of the eroded banks for streams and outer edge of lakes and wetlands) of a classified riparian feature are not considered deleterious brush competition when conducting a free growing survey.

# 4.2.4 Stocking and Free Growing Surveys

Free growing status will be evaluated using the *FLNRO Silviculture Survey Procedures Manual*, dated April 1, 2016. In addition, for crop trees to be acceptable at the Free Growing date they must meet the:

- a. Dothistroma assessment (50% defoliation in the ICH and CWH) for Pine trees from the *FPC General Bulletin #44*, October 6, 2003;
- b. Damage criteria in Appendix 5 of the *Establishment to Free Growing Guidebook: Prince Rupert Region*, May 2000; and,
- c. Advanced regeneration requirements of Appendix 10 of the *Establishment to Free Growing Guidebook: Prince Rupert Region*, May 2000.

# 4.2.5 M Value for Stocking and Free Growing Surveys

The "M" value for a Free Growing survey is the maximum number of healthy, well-spaced trees that may be tallied in a single plot is calculated by dividing the target stocking standard for the **BEC** subzone-variant and site series by the plot multiplier, and is rounded off to the nearest higher whole number if necessary.

# 4.2.6 Cluster Planting

Where cluster planting is prescribed for part or all of a cutblock by a **qualified person** to enhance identified wildlife habitat management areas, identified moose winter habitat, identified deer habitat, or identified high-value and moderate-value grizzly bear habitat located adjacent to or within 200m of the cutblock (see **FSP Maps**), stocking standards for a standards unit shall conform to Table 8: *Even Aged Stocking Standards for Cluster Planting*.

# 4.2.7 Minimum Inter-tree Horizontal Distances for Well-spaced Stems

Inter-tree distances may be reduced within a standards unit and crop trees will be considered acceptably well-spaced:

1. **0.0 meters** in Layer 1 of uneven-aged stocking standards (Table 9);

- 1.0 meters when cluster management is prescribed by a qualified person for stand level strategies for areas utilized for wildlife habitat in identified wildlife management habitat area(s), identified high-value and moderate-value grizzly bear habitat, identified deer habitat, and identified moose winter habitat (see FSP Maps);
- 3. 1.6 meters when planting on:
  - a. the outer edge of dispersed Non-Commercial Brush (NCBr),
  - b. the outer edge or within frost prone sites,
  - c. within colluvial sites (>25% coarse fragments),
  - d. within hygric and sub-hygric sites,
  - e. sites with stump avoidance strategy prescribed for root rots, and
  - f. mechanically site prepared areas; and,
- 4. 2.0 meters for all other areas.

# 4.2.8 Complexes

On standards units comprised of dispersed, non-mappable complexes of differing **BEC** subzone-variants and/or site series:

- the "Preferred" and "Acceptable" species for the standards unit will include all the "Preferred" and "Acceptable" species for all of the BEC subzone-variant and/or site series comprising the standards unit;
- 2. the "Preferred" and "Acceptable" species will only be planted where they are ecologically suited within the standards unit;
- 3. the target stocking standards, minimum preferred stocking standards, and minimum preferred and acceptable stocking standards shall be based on the dominant **BEC** subzone-variant and site series; and,
- 4. the minimum height at Free Growing will be based on the dominant **BEC** subzone-variant and site series.

# 4.2.9 Minor Acceptable Species

To promote biodiversity and timber productivity and recognize the unforeseeable, a coniferous species not listed in the tables for a site series may be deemed "acceptable" up to a limit of 5% of the target stocking if the height is greater than the lowest minimum height listed among the preferred and acceptable tree species for that site series at free growing.

# 4.2.10 Broadleaf Species Management

In site series where broadleaf species are included in the stocking standards, they are generally included as "acceptable" species only, to be counted as stocking on no more than 5% of a cutblock area. However, in site-specific cases, site plans may be prepared on a trial basis, on not more than 5% of cutblock area subject to the obligation to establish a free growing stand with stocking standards that promote broadleaf species to

"preferred" status to manage for commercial timber objectives, wildlife, or to reduce the risk of flood damage in or near floodplains.

# 4.2.11 Forest Health

For SBS and ESSF site series in which Pli is a preferred species, the impact of Rusts will be reduced by including non-host species in the planting mix:

- 1. Planting densities will be to a range of 1600-1800 stems/ha (except on sites where cluster planting is conducted, or on sites where mounding or a similar mechanical site preparation treatment is conducted).
- 2. Where Lodgepole pine is not the only preferred species, no more than 40% of the planted species mix in a standards unit will be Lodgepole pine. When Rust surveys are conducted, they will occur in May July when rust spores are most visible.

All pine-leading (>30%) plantations infected with Dothistroma will be surveyed and managed as per the "2005/2006 Dothistroma Needle Blight Strategic Plan". The stocking standard for plantations infected with Dothistroma will be modified as follows:

- 1. Target stocking = 1200 stems/ha
- Minimum stocking = 700 stems/ha of preferred and acceptable species for the given site series, of which 300 stems/ha can be deciduous acceptable, with a minimum of 400 stems/ha coniferous preferred.
- 3. Non-pine conifers of preferred and acceptable species for the site series will be considered preferred.
- 4. Deciduous species and pine with > 50% live crown will be considered acceptable.

# Appendix A – Silviculture Stocking Standards

Biogeoclimatic	-	R	egeneration	and Free	growing	stand	lards		Free Growing Standards				
Ecosystem Classification	Site Series		Species		<u> </u>	tocking		Regen Delay	Latest		um Height		
Classification	Series	Preferred (p)	Acceptable (a)	Broadleaf (a)	Target	Min (p&a)	Min (p)	Delay					
Subzone		(F)	(-)	(-)	(well-sp	aced /ha)	(F)	(Max yrs)	(yrs)	Species	(m)		
CWHws2		Sxs <sup>30</sup> Hw <sup>30</sup>											
	01	Ba Cw <sup>14</sup>	Bl <sup>12</sup> Pl Hm <sup>13,30</sup>	Dr <sup>b</sup>	900	500	400	6	20	Pl	2.0		
										Hw	1.3		
								-		Others	1.0		
	02	Pl Hw <sup>30</sup>	Cw Hm <sup>13,30</sup>		600	400	400	6	20	Pl	1.4		
			12.20	- 1						Others	0.8		
	03	Hw Pl	Hm <sup>13,30</sup> Cw Ba	Dr <sup>b</sup>	900	500	400	6	20	P1	2.0		
										Hw	1.3		
		Sxs <sup>30</sup> Hw <sup>30</sup>								Others	1.0		
	04	Ba Cw <sup>14</sup>	Bl <sup>12</sup> Hm <sup>13,30</sup>	Act <sup>b</sup> Dr <sup>b</sup>	900	500	400	3	20	Hw	1.3		
										Others	1.0		
		Sxs <sup>7,30</sup>											
	0.5	Hw <sup>30</sup> Ba	D112	D h	000	500	100	-	20		1.2		
	05	Cw <sup>14</sup>	B1 <sup>12</sup>	Dr <sup>b</sup>	900	500	400	6	20	Hw	1.3		
		Sxs <sup>30</sup> Hw <sup>30</sup>								Others	1.0		
	06	Ba Cw <sup>14</sup>	B1 <sup>12</sup>	Act <sup>b</sup> Dr <sup>b</sup>	900	500	400	3	20	Hw	1.3		
										Others	1.0		
		Sxs <sup>30</sup> Hw <sup>30</sup>											
	07	Ba Cw	Bl <sup>12</sup>	Act <sup>a</sup> Dr <sup>a</sup>	900	500	400	3	20	Hw	1.3		
										Others	1.0		
		Sxs <sup>30</sup> Hw <sup>30</sup>	- 112						• •				
	08	Ba <sup>1</sup> Cw <sup>1</sup>	B1 <sup>12</sup> Cw <sup>1</sup> Hm <sup>30</sup>	Act <sup>a</sup> Dr <sup>a</sup>	900	500	400	3	20	All	1.0		
	10	$\mathbf{Pl}^1$	Hw <sup>30</sup>		400	200	200	3	20	P1	1.4		
	10	11	11.		100	200	200	5	20	Others	0.8		
	11	Cw1 Sxs1,30	Hw <sup>1,30</sup> Ba <sup>1</sup>	Act <sup>b</sup> Dr <sup>b</sup>	800	400	400	3	20	All	0.8		
ESSFmc	01	Bl Sx	P1 <sup>34</sup>		1200	700	600	7	20	P1	1.6		
										Others	0.8		
	02	P1	Bl Sx Pa		1000	500	400	7	20	Pl	1.2		
										Others	0.6		
	03	Pl	Bl Sx Pa		1000	500	400	7	20	Pl	1.2		
										Others	0.6		
	04	Pl Bl Sx			1200	700	600	7	20	P1	1.6		
							L			Others	0.8		
	05	Bl Sx	P1 <sup>34</sup>		1200	700	600	4	20	Pl	1.6		
	01	D1 C	D124		1000	700	(00		20	Others	0.8		
	06	Bl Sx	P1 <sup>34</sup>		1200	700	600	4	20	Pl Othors	1.6		
					1200	700	600	4	20	Others Pl	0.8		
					1200	/00	600	4	20	Others	<u>1.6</u> 0.8		
	08	Bl Sx <sup>32</sup>			1000	500	400	4	20	All	0.8		
	08	$B1^{3}X$ $B1^{1}Sx^{1,32}$			1000	500	400	4	20	All	0.6		
	10	$Bl^3Sx^{1,32}$			1000	500	400	4	20	All	0.6		
ESSFmk	01	BI Se	Ba <sup>17</sup> Hm Pl <sup>34</sup>		1200	700	600	7	20	Pl	1.6		

# Table 7. Even-aged Stocking Standards

Biogeoclimatic		R	egeneration (	and Free	growing	stana	lards		Free Growing Standards		
Ecosystem Classification	Site Series		Species			tocking		Regen Delay	Latest		um Height
	Series	Preferred (p)	Acceptable (a)	Broadleaf (a)	Target	Min (p&a)	Min (p)	Delay			
Subzone					(well-sp	aced /ha)	I	(Max yrs)	(yrs)	Species	(m)
										Others	0.8
	02	Pa Pl	Bl Hm Se		1000	500	400	7	20	P1	1.2
										Others	0.6
	03	Pa Pl	Bl Hm Se Ba <sup>17</sup>		1200	700	600	7	20	P1	1.6
										Others	0.8
	04	Bl Se	Ba <sup>17</sup> Hm Pl <sup>34</sup>		1200	700	600	4	20	Pl	1.6
	0.5	D1 C 22	U D 17		1200	700	(00		20	Others	0.8
	05	Bl Se <sup>32</sup>	Hm Ba <sup>17</sup>		1200	700	600	4	20	Pl	1.6
	06	Bl <sup>1</sup> Se <sup>1,32</sup>	Hm Ba		1000	500	400	4	20	Others All	0.8
	00	$\frac{B1}{B1} \frac{Se^{3/2}}{Se^{1,32}}$	Ba		1000	500	400	4	20	All	0.8
ESSFwv	01	BI Se	Hm Hw Pl <sup>34</sup>		1200	700	600	7	20	Pl	1.6
1001	01	DISC	111111111111		1200	700	000	/	20	Others	0.8
	02	P1	Bl Hm Se		1000	500	400	7	20	Pl	1.2
			Di tim 55		1000	200		,		Others	0.6
			Bl Hm Se Hw								
	03	Pl	Pa		1200	700	600	7	20	P1	1.6
										Others	0.8
	04	Pl Bl	Se Hm Pa		1200	700	600	7	20	Pl	1.6
		D1 G	11 II D124		1000		(0.0		•	Others	0.8
	05	Bl Se	Hm Hw Pl <sup>34</sup>		1200	700	600	5	20	Pl	1.6
	06	D1 C - 32	II II		1200	700	(00	4	20	Others Pl	0.8
	06	Bl Se <sup>32</sup>	Hm Hw		1200	700	600	4	20	Others	1.6 0.8
	07	Bl Se <sup>32</sup>	Hm Hw		1000	500	400	4	20	All	0.6
	08	Bl <sup>1</sup> Se <sup>1,32</sup>	1111 11w		1000	500	400	4	20	All	0.6
	09	Bl <sup>1</sup> Se <sup>1,32</sup>			1000	500	400	4	20	All	0.6
ICHmc1 and	01	Hw <sup>32</sup> Sx <sup>56</sup> Ba <sup>50</sup>	Bl <sup>29</sup> Pl Lw <sup>9,32</sup> Cw, Fd <sup>9,32</sup>	At <sup>b</sup> Ep <sup>b</sup>	1200	700	600	4	20	P1	2.0
ICHmc2	01	Du	0,14	ni Lp	1200	700	000		20	Others	1.0
	02	P1	Bl Hw <sup>32</sup>	At <sup>b</sup>	1000	500	400	7	20	Pl	1.4
										Others	0.8
		Ba <sup>50</sup> Hw <sup>32</sup>	Bl <sup>29</sup> Pl Lw <sup>9,32</sup>	Act <sup>b</sup> At <sup>a</sup>							
	03	Sx <sup>56, 35</sup>	Cw Fd <sup>9,32</sup>	Ep <sup>a</sup>	1200	700	600	4	20	P1	2.0
		Ba <sup>50</sup> Hw <sup>32</sup>	B1 <sup>29</sup> P1 Lw <sup>9,32</sup>	Act <sup>b</sup> At <sup>a</sup>						Others	1.0
	04	Sx <sup>56, 35</sup>	Cw Fd <sup>9,32</sup>	Ep <sup>a</sup>	1200	700	600	4	20	P1	2.0
	01	5A	Cwru	Цр	1200	700	000		20	Others	1.0
		Ba <sup>50, 29</sup> Sx <sup>1,</sup>		Act <sup>b</sup> At <sup>a</sup>							
	05	56,35	Pl Cw Bl <sup>1</sup>	Ep <sup>a</sup>	1200	700	600	4	20	Pl	2.0
										Others	1.0
		Ba <sup>50, 29</sup> Sx <sup>1,</sup>		. 1							
MII 2	06	56	Cw Bl <sup>1</sup> Hw <sup>1, 32</sup> Yc <sup>17,50</sup> Bl <sup>50</sup>	Act <sup>b</sup>	1000	500	400	4	20	All	0.8
MHmm2	01	Ba Hm	$Yc^{17,50} Bl^{50}$ Hw <sup>14</sup> Cw <sup>14</sup>		900	500	400	7	20	All	1.0
	01	Hm	Yc <sup>17,50</sup> Ba Bl <sup>50</sup>		800	400	400	4	20	All	0.8
	02	Ba Hm	Yc <sup>17,50</sup> Bl <sup>50</sup>		900	500	400	4	20	All	1.0
	04	Ba Hm	Yc <sup>17,50</sup> Bl <sup>50</sup>		900	500	400	7	20	All	1.0
	05	Ba Hm	Yc <sup>17,50</sup> Bl <sup>50</sup>		900	500	400	4	20	All	1.0
	06	Hm <sup>1</sup>	Yc <sup>17,50</sup>		800	400	400	7	20	All	1.0

Biogeoclimatic		R	egeneration	and Free	growing	g Stand	lards		Free Growing Standards			
Ecosystem Classification	Site Series		Species			, tocking		Regen Delay	Latest		um Height	
		Preferred (p)	Acceptable (a)	Broadleaf (a)	Target	Min (p&a)	Min (p)					
Subzone					(well-sp	aced /ha)	1	(Max yrs)	(yrs)	Species	(m)	
	07	Ba <sup>1</sup>	Yc <sup>1,17,50</sup> Hm <sup>1</sup>		900	500	400	4	20	All	1.0	
	08	I Ima 1	$\begin{array}{c} \text{Ba Bl}^{1,50} \\ \text{Yc}^{1,17,50} \end{array}$		400	200	200	4	20	A 11	0.8	
	08 09	Hm <sup>1</sup> Hm <sup>1</sup>	$\frac{Y c^{1,17,50}}{Ba^1 Y c^{1,17,50}}$		400 800	200 400	200 400	4	20 20	All All	0.8	
SBSdk	09	Pl Sx Lw <sup>32</sup>	Hw,		1400	800	700	7	20	Pl/Lw	2.0	
<b>SD</b> Sur	01	Fd <sup>9,32</sup>	11w,		1400	800	700	/	20	Fd	1.6	
		14								Sx	1.0	
	02	P1	Sx <sup>28</sup>		1000	500	400	7	20	P1	1.4	
										Others	0.8	
			$Sx^{28}Sb^{28}$					_		- 4 (-	• •	
	03	Pl	Lw <sup>9,32</sup> Fd <sup>9,32</sup>		1200	700	600	7	20	Pl/Lw	2.0	
										Fd	1.6	
		Lw <sup>32</sup> Fd <sup>9,32</sup>								Others	1.0	
	04	Pl Sx <sup>28</sup>	Ру		1200	700	600	7	20	Pl/Lw	2.0	
										Fd	1.6	
										Others	1.0	
		Pl Sx <sup>28</sup>						_		- 4 (-		
	05	Lw <sup>32</sup> Fd <sup>9,32</sup>			1400	800	800	7	20	Pl/Lw	2.0	
										Fd	1.6	
		Pl Sx Fd <sup>932</sup>								Others	1.0	
	06	Lw <sup>32</sup>	Hw,Cw		1400	800	700	4	20	Pl/Lw	2.0	
			,							Fd	1.6	
										Others	1.0	
	06	Pl Sx Fd <sup>932</sup>										
	MSP	Lw <sup>32</sup>	Hw,Cw		1200	700	600	4	20	Pl/Lw	2.0	
										Fd	1.6	
		Lw <sup>32</sup> Sx <sup>1,32</sup>								Others	1.0	
	07	Fd <sup>9,32</sup>	Hw, Cw Pl <sup>1</sup>		1000	500	400	4	20	Pl/Lw	1.4	
										Fd	1.6	
										Others	0.8	
	08	Sx <sup>1,32</sup>	Pl		1200	700	600	4	20	P1	2.0	
										Others	1.0	
	09	Sx1 Pl <sup>1</sup> Sb <sup>1</sup>			400	200	200	4	20	P1	1.4	
		Pl <sup>1</sup> Sb <sup>1</sup>								Others	0.80	
	10	Sx <sup>1,32</sup>			400	200	200	4	20	P1	1.40	
										Others	0.80	
SBSmc2		P1										
	0.1	SxLw <sup>9,32</sup> , Fd <sup>9,32</sup>	Py,Cw <sup>32</sup> ,Hw <sup>32</sup> ,		1.400	000	700		20	<b>D</b> 1	1.6	
	01	Fd <sup>9,32</sup>	,Bl <sup>29</sup>		1400	800	700	4	20	Pl L	1.6	
								-		Lw Ed	2.0	
										Fd Others	1.6 0.8	
	02	Pl	Bl Sx <sup>32</sup> Pa		1000	500	400	4	20	Pl	1.20	
	02	11			1000	500	-100	- T	20	Others	0.60	
	03	Pl Sx <sup>32</sup>	Bl <sup>29</sup> Sb Pa		1200	700	600	4	20	Pl	1.60	
			Lw <sup>9,32</sup> Fd <sup>9,32</sup>		-200	,				Others	0.80	

Biogeoclimatic		R	egeneration	and Free	growing	Stand	lards		Free Growing Standards			
Ecosystem	Site		Species			tocking		Regen	Latest			
Classification	Series	Preferred	Acceptable	Broadleaf	Target	Min	Min	Delay				
		(p)	(a)	(a)	C	(p&a)	(p)					
Subzone					(well-sp	aced /ha)		(Max yrs)	(yrs)	Species	(m)	
		Pl Sx	D G 22 T 22									
	05	Lw <sup>9,32</sup> Fd <sup>9,32</sup>	Py Cw <sup>32</sup> Hw <sup>32</sup> Bl <sup>29</sup>		1400	800	700	4	20	Pl/Fd	1.6	
	05	14	DI		1400	000	700		20	Lw	2.0	
										Others	0.8	
	05	Pl Sx Lw <sup>9,32</sup>	Py Cw <sup>32</sup> Hw <sup>32</sup>									
	MSP	Fd <sup>9,32</sup>	Bl <sup>29</sup>		1200	700	600	4	20	Pl/Fd	1.6	
										Lw	2.0	
										Others	0.8	
		Pl Sx Lw <sup>9,32</sup>	Py Cw Hw									
	06	Fd <sup>9,32</sup>	Bl <sup>29</sup>		1400	800	700	4	20	Pl/Fd	1.6	
										Lw	2.0	
		PL Sx								Others	0.8	
	06	$Lw^{9,32}$										
	MSP	Fd <sup>9,32</sup>	Py Cw HwBl <sup>29</sup>		1200	700	600	4	20	Pl/Fd	1.6	
										Lw	2.0	
										Others	0.8	
	07	Pl Sb Sx <sup>32</sup>	Bl		1000	500	400	4	20	P1	1.2	
			Py Cw Hw							Others	0.6	
	09	Sx	Bl <sup>29</sup> Pl		1200	700	600	4	20	P1	1.6	
										Others	0.8	
	10	Sx <sup>1,32</sup>	Bl <sup>1,29</sup> Pl <sup>1</sup>		1000	500	400	4	20	Pl	1.2	
										Others	0.6	

**MSP** – Where mechanical site preparation has been prescribed.

<b>Table 8</b> : Even aged Stocking Standards for Cluster Planting:	

Biogeoclimatic Ecosystem Classification			ion and Free For Cluster	e Grow		Stana	lards	Free Growing Standards					
	Site Series	Spec	ies	St	ockin	g	Regen Delay	Latest	Minimum He	eight			
		Preferred (p)	Acceptable (a)	Target	Min (p&a)		2 cmg						
Subzone				(well	(well-spaced /ha) (N		(well-spaced /ha) (l		(Max yrs)	(yrs)	Species	(m)	
CWHws2		Sxs <sup>30</sup> Hw <sup>30</sup> Ba	10										
	01	Cw <sup>14</sup>	Bl <sup>12</sup> Pl Hm	540	300	240	6	20	Pl	2.0			
									Hw	1.3			
		Sxs <sup>30</sup> Hw <sup>30</sup> Ba							Others	1.0			
	04	Cw <sup>14</sup>	Bl <sup>12</sup> Hm <sup>13,30</sup>	540	300	240	3	20	Hw	1.3			
									Others	1.0			
	0.6	Sxs <sup>30</sup> Hw <sup>30</sup> Ba		5.40	200	240		20					
	06	Cw <sup>14</sup>	Bl <sup>12</sup>	540	300	240	3	20	Hw	1.3			
		g 20 to 20 o							Others	1.0			
	07	Sxs <sup>30</sup> Hw <sup>30</sup> Ba	Bl <sup>12</sup>	540	300	240	3	20	Hw	1.3			
	07	Cw	DI	540	300	240	3	20	Others	1.0			
		Sxs <sup>30</sup> Hw <sup>30</sup>							Others	1.0			
	08	Ba <sup>1</sup> Cw <sup>1</sup>	Bl <sup>12</sup>	540	300	240	3	20	All	1.0			
ESSFmc	01	Bl Sx	Pl <sup>34</sup>	720	420	360	7	20	Pl	1.6			
									Others	0.8			
	05	Bl Sx	Pl <sup>34</sup>	720	420	360	4	20	Pl	1.6			
									Others	0.8			
	06	Bl Sx	P1 <sup>34</sup>	720	420	360	4	20	Pl	1.6			
									Others	0.8			
	07	Bl Sx <sup>32</sup>		720	420	360	4	20	P1	1.6			
									Others	0.8			
	08	Bl Sx <sup>32</sup>		600	300	240	4	20	All	0.6			
	09	$Bl^{1}Sx^{1,32}$		600	300	240	4	20	All	0.6			
	10	Bl <sup>1</sup> Sx <sup>1,32</sup>	D 17 FT	600	300	240	4	20	All	0.6			
ESSF mk	01	Bl Se	Ba <sup>17</sup> Hm Pl <sup>34</sup>	720	420	360	7	20	Pl	1.6			
	0.4		D-1711 D134	720	420	200	4	20	Others	0.8			
	04	Bl Se	Ba <sup>17</sup> Hm Pl <sup>34</sup>	720	420	360	4	20	Pl Others	1.6 0.8			
	05	Bl Se <sup>32</sup>	Hm Ba <sup>17</sup>	720	420	360	4	20	Pl	1.6			
	03	DI 30		720	420	300	4	20	Others	0.8			
	06	Bl <sup>1</sup> Se <sup>1,32</sup>	Hm Ba	600	300	240	4	20	All	0.8			
	00	$\frac{B1}{B1} \frac{3e^{1}}{Se^{1,32}}$	Ba	600	300	240	4	20	All	0.8			
ESSFwv	01	BI Se	Hm Hw Pl <sup>34</sup>			360	7	20	Pl	1.6			
		2150		, 20	120	200	,	20	Others	0.8			
	05	Bl Se	Hm Hw Pl <sup>34</sup>	720	420	360	4	20	Pl	1.6			
				120 420 500				Others	0.8				
	06	Bl Se <sup>32</sup>	Hm Hw	720	420	360	4	20	Pl	1.6			
									Others	0.8			
	07	Bl Se <sup>32</sup>	Hm Hw	600	300	240	4	20	All	0.6			

Biogeoclimatic Ecosystem Classification		Regenerat	ion and Free For Cluster		-	Stand	lards	Free G	rowing Standa	rds
	Site Series	Spec Preferred (p)	ies Acceptable (a)	St Target	Min (p&a)	Min	Regen Delay	Latest	Minimum H	eight
Subzone		(1)	(-)	(well	l-space		(Max yrs)	(yrs)	Species	(m)
Suctor	09	Bl <sup>1</sup> Se <sup>1,32</sup>		600	300	240	4	20	All	0.6
ICHmc1 and ICHmc2	01	Hw <sup>32</sup> Sx <sup>56</sup> Ba <sup>50</sup>	Bl <sup>29</sup> Pl Fd <sup>9,32</sup> Lw <sup>9,32</sup>	720	420	360	4	20	P1	2.0
	03	Ba <sup>50</sup> Hw <sup>32</sup> Sx <sup>56,</sup>	Bl <sup>29</sup> Pl Fd <sup>9,32</sup> Lw <sup>9,32</sup>	720	420	360	4	20	Others Pl	1.0
	04	Ba <sup>50</sup> Hw <sup>32</sup> Sx <sup>56, 35</sup>	B1 <sup>29</sup> P1 Fd <sup>9,32</sup> Lw <sup>9,32</sup>	720	420	360	4	20	Others Pl	1.0 2.0
Milliona	06	Ba <sup>50 29</sup> Sx <sup>1, 56</sup>	Bl <sup>1,</sup> Hw <sup>1, 32</sup> Yc <sup>17,50</sup>	600	300	240	4	20	Others All	1.0 0.8
MHmm2	01	Ba Hm	${Bl^{50}Hw^{14}\over Cw^{14}}$	540	300	200	7	20	All	1.0
	03 05	Ba Hm Ba Hm	Yc <sup>17,50</sup> Bl <sup>50</sup> Yc <sup>17,50</sup> Bl <sup>50</sup>	540 540	300 300	200 200	4	20 20	All All	1.0 1.0
SBSdk	07	Ba <sup>1</sup> Pl Sx Lw <sup>32</sup>	Yc <sup>1,17,50</sup> Hm <sup>1</sup>	540 720	300 420	200 360	4	20 20	All Pl/Lw	1.0 2.0
<b>SDSuk</b>	01	Fd <sup>9,,32</sup>		720	420	300	4	20	Fd Sx	1.6 1.0
	06	P1 Sx,Lw <sup>32</sup> Fd <sup>9</sup> , 32		720	420	600	4	20	Pl/Lw	2.0
	07	,Sx <sup>1,32</sup> Lw <sup>32</sup> Fd <sup>9,32</sup>	Pl <sup>1</sup>	600	300	240	4	20	Others Pl/Lw	1.0
	08	Sx <sup>1,32</sup>	Pl	720	420	360	4	20	Others Pl Others	0.8 2.0 1.0
SBS mc2	01	Pl Sx,Lw <sup>32</sup> Fd <sup>9,32</sup>	,Bl <sup>29</sup>	720	420	360	4	20	Pl/Fd/Lw Others	1.6 0.8
	05	Pl Sx, Lw <sup>32</sup> ,Fd <sup>9,32</sup>	,Bl <sup>29</sup>	720	420	360	4	20	Pl/Fd/Lw Others	1.6
	06	Pl Sx,Lw <sup>32</sup> Fd <sup>9,32</sup>	,Bl <sup>29</sup>	720	420	360	4	20	Pl/Fd/Lw	1.6
	09	Sx Py	B1 <sup>29</sup> P1	720	420	360	4	20	Others Pl Others	0.8 1.6 0.8
	10	Sx <sup>1,32</sup>	Bl <sup>1,29</sup> Pl <sup>1</sup>	600	300	240	4	20	Pl Others	1.2 0.6

 Table 9: Uneven-Aged (Partial Cut) Stocking Standards:

Biogeoclimatic Ecosystem	Ū		,			eration	and F	ree gro	wing St	tandara	ls: Part	tial Cut	ting					e Grow andard	
Classification	Site Series	Sp	ecies						Stoc	king						Regen Delay	Latest	Miniı Hei	mum
	Series	Preferred (p)	Acceptable (a)		Layer 1			Layer 2			Layer 3			Layer 4		Delay		ner	gnt
Subzone		Ψ	(a)	Target	Min (p&a)	Min (p)	Target	Min (p&a)	Min (p)	Target	Min (p&a)	Min (p)	Target	Min (p&a)	Min (p)	(Max yrs)	(yrs)	Species	(m)
CWHws2		Sxs <sup>30</sup> Hw <sup>30</sup> Ba	B1 <sup>12</sup> P1																
	1	Cw <sup>14</sup>	Hm	400	200	200	500	300	250	700	400	300	900	500	400	6	20	Pl	2.0
																		Hw	1.3
			C															Others	1.0
	2	Pl Hw <sup>30</sup>	Cw Hm <sup>13,30</sup>	300	150	150	400	200	200	500	300	300	600	400	400	6	20	Pl	1.4
																		Others	0.8
	3	Hw Pl	Hm <sup>13,30</sup> Cw Ba	400	200	200	500	300	250	700	400	300	900	500	400	6	20	Pl	2.0
	3	IIW F1	Cw Da	400	200	200	300	300	230	/00	400	300	900	500	400	0	20	Hw	1.3
																		Others	1.0
		Sxs <sup>30</sup> Hw <sup>30</sup> Ba	Bl <sup>12</sup>																
	4	Cw <sup>14</sup>	$Hm^{13,30}$	400	200	200	500	300	250	700	400	300	900	500	400	3	20	Hw	1.3
																		Others	1.0
	5	Sxs <sup>7,30</sup> Hw <sup>30</sup> Ba Cw <sup>14</sup>	Bl <sup>12</sup>	400	200	200	500	300	250	700	400	300	900	500	400	6	20	Hw	1.3
	5	Cw	DI	400	200	200	500	300	230	/00	400	300	900	500	400	0	20	Others	1.0
		Sxs <sup>30</sup> Hw <sup>30</sup> Ba																	
	6	Cw <sup>14</sup>	Bl <sup>12</sup>	400	200	200	500	300	250	700	400	300	900	500	400	3	20	Hw	1.3
		Sxs <sup>30</sup>																Others	1.0
	7	Hw <sup>30</sup> Ba Cw	Bl <sup>12</sup>	400	200	200	500	300	250	700	400	300	900	500	400	3	20	Hw	1.3
																	-	Others	1.0
	8	$\begin{array}{c} Sxs^{30}\\ Hw^{30}\\ Ba^1Cw^1 \end{array}$	B1 <sup>12</sup>	400	200	200	500	300	250	700	400	300	900	500	400	3	20	All	1.0
			Cw1 Hm <sup>30</sup>																
	10	$\mathbf{Pl}^1$	Hw <sup>30</sup>	200	100	100	300	125	125	300	150	150	400	200	200	3	20	Pl	1.4

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Biogeoclimatic Ecosystem					Regen	neration	and F	ree gro	wing St	tandara	ls: Part	tial Cut	ting					e Grow andard	
Classification	Site	Sp	ecies						Stoc	king						Regen	Latest	Mini	
	Series	Preferred (p)	Acceptable (a)		Layer 1			Layer 2			Layer 3			Layer 4		Delay		Hei	ght
Subzone		<b>u</b> /		Target	Min (p&a)	Min (p)	Target	Min (p&a)	Min (p)	Target	Min (p&a)	Min (p)	Target	Min (p&a)	Min (p)	(Max yrs)	(yrs)	Species	(m)
																		Others	0.8
	11	Cw <sup>1</sup> Sxs <sup>1,30</sup>	Hw <sup>1,30</sup> Ba <sup>1</sup>	300	150	150	400	200	200	600	300	300	800	400	400	3	20	All	0.8
ESSFmc	1	Bl Sx	Pl <sup>34</sup>	600	300	250	800	400	300	1000	500	400	1200	700	600	7	20	Pl	1.6
																		Others	0.8
	2	Pl	Bl Sx Pa	400	200	200	600	300	250	800	400	300	1000	500	400	7	20	Pl	1.2
																		Others	0.6
	3	Pl	Bl Sx Pa	400	200	200	600	300	250	800	400	300	1000	500	400	7	20	Pl	1.2
																		Others	0.6
	4	Pl Bl Sx		600	300	250	800	400	300	1000	500	400	1200	700	600	7	20	P1	1.6
																		Others	0.8
	5	Bl Sx	P1 <sup>34</sup>	600	300	250	800	400	300	1000	500	400	1200	700	600	4	20	Pl	1.6
			24															Others	0.8
	6	Bl Sx	P1 <sup>34</sup>	600	300	250	800	400	300	1000	500	400	1200	700	600	4	20	Pl	1.6
	7	D1 C 32		(00	200	250	000	400	200	1000	500	400	1200	700	(00	4	20	Others	0.8
	7	Bl Sx <sup>32</sup>		600	300	250	800	400	300	1000	500	400	1200	700	600	4	20	Pl	1.6
	8	Bl Sx <sup>32</sup>		400	200	200	600	300	250	800	400	300	1000	500	400	4	20	Others All	0.8
		$Bl^3 Sx^{1,32}$		400	200	200	600	300	250	800	400	300	1000	500	400	4	20	All	0.6
		$Bl^1Sx^{1,32}$		400	200	200	600	300	250	800	400	300	1000	500	400	4	20	All	0.6
ESSFmk	10	DIDA	Ba <sup>17</sup> Hm	100	200	200	000	500	230	000	100	500	1000	500	-00	- <del>-</del>	20	ЛП	0.0
Lost int	1	Bl Se	Pl <sup>34</sup>	600	300	250	800	400	300	1000	500	400	1200	700	600	7	20	Pl	1.6
																		Others	0.8
	2	Pa Pl	Bl Hm Se	400	200	200	600	300	250	800	400	300	1000	500	400	7	20	Pl	1.2
																		Others	0.6
	3	Pa Pl	Bl Hm Se Ba <sup>17</sup>	600	300	250	800	400	300	1000	500	400	1200	700	600	7	20	Pl	1.6
																	-	Others	0.8
	4	Bl Se	Ba <sup>17</sup> Hm Pl <sup>34</sup>	600	300	250	800	400	300	1000	500	400	1200	700	600	4	20	Pl	1.6
	4	DI 50	PT <sup></sup>	000	300	230	800	400	300	1000	300	400	1200	/00	000	4	20	Others	0.8
	5	Bl Se <sup>32</sup>	Hm Ba <sup>17</sup>	600	300	250	800	400	300	1000	500	400	1200	700	600	4	20	Pl	1.6
	5	DISC		000	300	230	000	400	300	1000	300	400	1200	/00	000	4	20	Others	

Biogeoclimatic Ecosystem		Regeneration and Free growing Standards: Partial Cutting								Free St									
Classification	Site	Sp	ecies						Stoc	king						Regen	Latest Minim		
	Series	Preferred A (p)	Acceptable (a)		Layer 1			Layer 2			Layer 3			Layer 4		Delay		Hei	ght
Subzone				Target	Min (p&a)	Min (p)	Target	Min (p&a)	Min (p)	Target	Min (p&a)	Min (p)	Target	Min (p&a)	Min (p)	(Max yrs)	(yrs)	Species	(m)
	(	$Bl^1$	II D	100	200	200	(00	200	250	000	400	200	1000	500	100	4	20	4 11	0.0
	6	Se <sup>1,32</sup> Bl <sup>1</sup>	Hm Ba	400	200	200	600	300	250	800	400	300	1000	500	400	4	20	All	0.8
	7	Se <sup>1,32</sup>	Ba	400	200	200	600	300	250	800	400	300	1000	500	400	4	20	All	0.8
ESSFwv			Hm Hw																
	1	Bl Se	P1 <sup>34</sup>	600	300	250	800	400	300	1000	500	400	1200	700	600	7	20	Pl	1.6
																		Others	0.8
	2	Pl	Bl Hm Se	400	200	200	600	300	250	800	400	300	1000	500	400	7	20	Pl	1.2
			Bl Hm Se															Others	0.6
	3	P1	Hw Pa	600	300	250	800	400	300	1000	500	400	1200	700	600	7	20	Pl	1.6
	5		110 14	000	500	200	000	100	500	1000	200	100	1200	,00	000	,	20	Others	0.8
	4	Pl Bl	Se Hm	600	300	250	800	400	300	1000	500	400	1200	700	600	7	20	Pl	1.6
																		Others	0.8
	5	Bl Se	Hm Hw Pl <sup>34</sup>	600	300	250	800	400	300	1000	500	400	1200	700	600	4	20	Pl	1.6
																		Others	0.8
	6	Bl Se <sup>32</sup>	Hm Hw	600	300	250	800	400	300	1000	500	400	1200	700	600	4	20	Pl	1.6
																		Others	0.8
	7	Bl Se <sup>32</sup>	Hm Hw	400	200	200	600	300	250	800	400	300	1000	500	400	4	20	All	0.6
	8	Bl <sup>1</sup> Se <sup>1,32</sup>		400	200	200	600	300	250	800	400	300	1000	500	400	4	20	All	0.6
	9	Bl <sup>1</sup> Se <sup>1,32</sup>		400	200	200	600	300	250	800	400	300	1000	500	400	4	20	All	0.6
ICHmc1		Bl <sup>29</sup> Hw <sup>32</sup> Sx <sup>56</sup>	Pl Fd <sup>9,32</sup>																
	1	5x <sup>50</sup> Ba <sup>50</sup>	$Lw^{9,32}$	600	300	250	800	400	300	1000	500	400	1200	700	600	4	20	Pl	2.0
	-	24	2	000	200	200	000	100	200	1000	000		1200	,00	000		20	Others	1.0
	2	Pl	Bl Hw <sup>32</sup>	400	200	200	600	300	250	800	400	300	1000	500	400	7	20	Pl	1.4
																		Others	0.8
		Ba <sup>50</sup> Bl <sup>29</sup> Hw <sup>32</sup>	Pl Fd <sup>9,32</sup>																
	3	Sx <sup>56, 35</sup>	Lw <sup>9,32</sup>	600	300	250	800	400	300	1000	500	400	1200	700	600	4	20	Pl	2.0
																		Others	1.0

Biogeoclimatic Ecosystem					Regen	eration	and F	ree gro	wing S	tandard	ls: Part	tial Cut	ting					e Growi andard	0
Classification	Site	Sp	ecies						Stoc	king						Regen	Latest		
	Series	Preferred	Acceptable		Layer 1			Layer 2			Layer 3		1	Layer 4		Delay		Hei	ght
		(p)	(a)		5									5					
Subzone				Target	Min (p&a)	Min (p)	Target	Min (p&a)	Min (p)	Target	Min (p&a)	Min (p)	Target	Min (p&a)	Min (p)	(Max yrs)	(yrs)	Species	(m)
		Ba <sup>50</sup> Bl <sup>29</sup>	Pl Fd <sup>9,32</sup>																
	4	$Hw^{32}$	Lw <sup>9,32</sup>	600	300	250	800	400	300	1000	500	400	1200	700	600	4	20	Pl	2.0
																		Others	1.0
		Ba <sup>50</sup> Bl <sup>1,</sup> <sup>29</sup> Sx <sup>1,</sup>																	
	5	56,35		600	300	250	800	400	300	1000	500	400	1200	700	600	4	20	Pl	2.0
																		Others	1.0
	6	Ba <sup>50</sup> Bl <sup>1,</sup> <sup>29</sup> Sx <sup>1, 56</sup>	Hw <sup>1, 32</sup>	400	200	200	600	300	250	800	400	300	1000	500	400	4	20	All	0.8
ICHmc2	-	Hw <sup>32</sup>	Ba <sup>50</sup> Pl																
	1	Sx <sup>56</sup> Cw <sup>32</sup>	Bl <sup>29</sup> Fd <sup>9,32</sup> Lw <sup>9,32</sup>	600	300	250	800	400	300	1000	500	400	1200	700	600	4	20	Pl	2.0
	1	Cw	LW	000	300	230	800	400	300	1000	500	400	1200	/00	000	4	20	Others	1.0
			Bl Hw								-								
	2	Pl	Ba <sup>50</sup>	400	200	200	600	300	250	800	400	300	1000	500	400	7	20	Pl	1.4
		Cw <sup>32</sup>	Bl <sup>29</sup> Pl															Others	1.0
		Hw <sup>32</sup>	${ m Ba^{50}Fd^{9,32}}$																
	3	Sx <sup>35,56</sup>	Lw <sup>9,32</sup>	600	300	250	800	400	300	1000	500	400	1200	700	600	4	20	Pl	2.0
			Bl <sup>29</sup> Hw <sup>32</sup>															Others	1.0
			Pl Ba <sup>50</sup>																
	4	Cw <sup>32</sup> Sx <sup>35,56</sup>	Fd <sup>9,32</sup> Lw <sup>9,32</sup>	600	300	250	800	400	300	1000	500	400	1200	700	600	4	20	Pl	2.0
	4	SX	LW	000	300	230	800	400	300	1000	500	400	1200	/00	000	4	20	Others	1.0
		Cw <sup>1,32</sup>	Ba <sup>50</sup> Bl <sup>1,29</sup>																
	5	Sx <sup>1,35,56</sup>	Hw <sup>1,32</sup> Pl <sup>1</sup>	600	300	250	800	400	300	1000	500	400	1200	700	600	4	20	Pl	2.0
		Cw <sup>1,32</sup>	Bl <sup>1,29</sup> Hw <sup>1,</sup>															Others	1.0
	6	Sx <sup>1,35,56</sup>	32 Ba <sup>50</sup>	600	300	250	800	400	300	1000	500	400	1200	700	600	4	20	Pl	2.0
		<b>D</b> 50																Others	1.0
		Ba <sup>50</sup> Bl <sup>31,29</sup>																	
		Sx <sup>1,56</sup>																	
	7	Cw <sup>1,32</sup>	Hw <sup>1,32</sup>	400	200	200	600	300	250	800	400	300	1000	500	400	4	20	Pl	1.4

Biogeoclimatic Ecosystem		Regeneration and Free growing Standards: Partial Cutting													Free Growing Standards				
Classification	Site	Sp	ecies													Regen	Latest	Minimum Height	
	Series	Preferred (p)	Acceptable (a)		Layer 1			Layer 2			Layer 3		Layer 4			Delay		Her	ght
Subzone				Target	Min (p&a)	Min (p)	Target	Min (p&a)	Min (p)	Target	Min (p&a)	Min (p)	Target	Min (p&a)	Min (p)	(Max yrs)	(yrs)	Species	(m)
																		Others	1.0
	8	Sb <sup>1</sup> Sx <sup>1,32,56</sup>	$\mathbf{Pl}^1$	200	100	100	300	125	125	300	150	150	400	200	200	4	20	Pl	1.4
	0	5X-,,	PI	200	100	100	300	123	123	300	130	130	400	200	200	4	20	Others	0.8
			Bl <sup>28,29</sup>															Oulers	0.0
			Sx <sup>28,56</sup>																
	51	Pl <sup>71</sup> Hw	Ba <sup>50</sup>	600	300	250	800	400	300	1000	500	400	1200	700	600	4	20	Pl	2.0
		Hw <sup>32</sup>																Others	1.0
		Sx <sup>56</sup>	Pl B1 <sup>29</sup>																
	52	Cw <sup>32</sup>	Ba <sup>50</sup>	600	300	250	800	400	300	1000	500	400	1200	700	600	4	20	P1	2.0
		22																Others	1.0
		Hw <sup>32</sup> Sx <sup>56</sup>	Pl Bl <sup>29</sup>																
	53	$Cw^{32}$	Ba <sup>50</sup>	600	300	250	800	400	300	1000	500	400	1200	700	600	4	20	P1	2.0
																		Others	1.0
		Cw <sup>32</sup>	Bl <sup>29</sup> Hw <sup>32</sup>																
	54	Sx <sup>56</sup>	Pl Ba <sup>50</sup>	600	300	250	800	400	300	1000	500	400	1200	700	600	4	20	Pl	2.0
			Yc <sup>17,50</sup>															Others	1.0
MHmm2			$Y c^{17,50}$ Bl <sup>50</sup> Hw <sup>14</sup> ,																
	1	Ba Hm	$Cw^{14}$	400	200	200	500	300	250	700	400	300	900	500	400	7	20	All	1.0
			Yc <sup>17,50</sup> Ba																
	2	Hm	Bl <sup>50</sup> Yc <sup>17,50</sup>	300	150	150	400	200	200	600	300	300	800	400	400	4	20	All	0.8
	3	Ba Hm	Bl <sup>50</sup>	400	200	200	500	300	250	700	400	300	900	500	400	4	20	All	1.0
	5	Du IIII	Yc <sup>17,50</sup>	100	200	200	200	200	200	700	100	500	200	200	100		20	7111	1.0
	4	Ba Hm	B1 <sup>50</sup>	400	200	200	500	300	250	700	400	300	900	500	400	7	20	All	1.0
	5	De II	Yc <sup>17,50</sup> Bl <sup>50</sup>	400	200	200	500	300	250	700	400	300	900	500	400	4	20	All	1.0
	5 6	Ba Hm Hm <sup>1</sup>	B1 <sup>50</sup> Yc <sup>17,50</sup>	300	150	150	400	200	250 200	600	300	300	800	400	400	4	20 20	All	1.0 1.0
	U	11111	Yc <sup>1,17,50</sup>	500	150	150	00	200	200	000	500	500	000	-00	-00	/	20	ліі	1.0
	7	Ba <sup>1</sup>	$Hm^1$	400	200	200	500	300	250	700	400	300	900	500	400	4	20	All	1.0
	0	TT 1	Ba Bl <sup>1,50</sup>	200	100	100	200	105	105	200	1.50	1.50	400	200	200		20	. 11	0.0
	8	Hm <sup>1</sup>	Yc <sup>1,17,50</sup>	200	100	100	300	125	125	300	150	150	400	200	200	4	20	All	0.8

Biogeoclimatic Ecosystem		Regeneration and Free growing Standards: Partial Cutting												e Grow andard					
Classification	Site	Sp	ecies						Stoc	king						Regen	Latest		
	Series		Acceptable		Layer 1			Layer 2			Layer 3			Layer 4		Delay		Hei	ght
Subzone		(p)	(a)	Target	Min (p&a)	Min (p)	Target	Min (p&a)	Min (p)	Target	Min (p&a)	Min (p)	Target	Min (p&a)	Min (p)	(Max yrs)	(yrs)	Species	(m)
	9	Hm <sup>1</sup>	Ba <sup>1</sup> Yc <sup>1,17,50</sup>	300	150	150	400	200	200	600	300	300	800	400	400	4	20	All	0.8
SBSdk	)	Pl Sx	10	500	150	150	400	200	200	000	500	500	000	400	100		20	7 111	0.0
		Fd <sup>9,32</sup>																	
	1	Lw <sup>32</sup>		600	300	250	800	400	300	1000	500	400	1200	700	600	7	20	Pl	2.0
																		Fd Others	1.4 1.0
	2	P1	Sx <sup>28</sup>	400	200	200	600	300	250	800	400	300	1000	500	400	7	20	Pl	1.0
	2	11	57	400	200	200	000	500	230	800	400	500	1000	500	400	/	20	Others	0.8
	3	P1	Sx <sup>28</sup> Sb <sup>28</sup>	600	300	250	800	400	300	1000	500	400	1200	700	600	7	20	Pl	2.0
			Fd <sup>9,32</sup>																
		Fd <sup>9,32</sup> Lw	Lw <sup>9,32</sup>															Others	1.0
		<sup>32</sup> Pl																	
	4	Sx <sup>28</sup>		600	300	250	800	400	300	1000	500	400	1200	700	600	7	20	P1	2.0
																		Fd	1.4
																		Others	1.0
	5	Pl Sx <sup>28</sup>		600	300	250	800	400	300	1000	500	400	1200	700	600	7	20	Pl	2.0
		Fd <sup>9,32</sup> Lw																Fd	1.4
																		Others	1.4
	6	Pl Sx		600	300	250	800	400	300	1000	500	400	1200	700	600	4	20	Pl	2.0
		Fd <sup>9,32</sup> Lw																	
		32 Sx <sup>1,32</sup>																Others	1.0
		$Sx^{1,32}$ Fd <sup>9,32</sup> Lw																	
	7	32	P11	400	200	200	600	300	250	800	400	300	1000	500	400	4	20	P1	1.4
																		Others	0.8
	8	Sx <sup>1,32</sup>		600	300	250	800	400	300	1000	500	400	1200	700	600	4	20	Pl	2.0
																		Others	1.0
-	9	Pl <sup>1</sup> Sb <sup>1</sup>	$Sx^1$	200	100	100	300	125	125	300	150	150	400	200	200	4	20	Pl	1.4
		Pl <sup>1</sup> Sb <sup>1</sup>																Others	0.8
	10	Sx <sup>1,32</sup>		200	100	100	300	125	125	300	150	150	400	200	200	4	20	Pl	1.4
																		Others	0.8

Biogeoclimatic Ecosystem			Regeneration and Free growing Standards: Partial Cutting															Free Growing Standards	
Classification	Site Series	-	Species						Stoc	king						Regen Delay	Latest	Minii Hei	
		Preferred (p)	Acceptable (a)		Layer 1			Layer 2			Layer 3		Layer 4						
Subzone				Target	Min (p&a)	Min (p)	Target	Min (p&a)	Min (p)	Target	Min (p&a)	Min (p)	Target	Min (p&a)	Min (p)	(Max yrs)	(yrs)	Species	(m)
SBSmc2	1	Pl Sx	Bl <sup>29</sup>	600	300	250	800	400	300	1000	500	400	1200	700	600	4	20	Pl	1.6
		Fd <sup>9,32</sup> Lw																Others	0.8
	2	P1	Bl Sx <sup>32</sup>	400	200	200	600	300	250	800	400	300	1000	500	400	4	20	Pl	1.2
																		Others	0.6
	3	Pl Sx <sup>32</sup>	Bl <sup>29</sup> Sb	600	300	250	800	400	300	1000	500	400	1200	700	600	4	20	Pl	1.6
			Fd <sup>9,32</sup> Lw <sup>32</sup>															Others	0.8
	5	Pl Sx	Bl <sup>29</sup>	600	300	250	800	400	300	1000	500	400	1200	700	600	4	20	P1	1.6
		Fd <sup>9,32</sup> Lw																Others	0.8
	6	Pl Sx	Bl <sup>29</sup>	600	300	250	800	400	300	1000	500	400	1200	700	600	4	20	Pl	1.6
		Fd <sup>9,32</sup> Lw																Others	0.8
	7	Pl Sb Sx <sup>32</sup>	Bl	400	200	200	600	300	250	800	400	300	1000	500	400	4	20	Pl	1.2
																		Others	0.6
	8	Pl Sx	Bl <sup>29</sup>	600	300	250	800	400	300	1000	500	400	1200	700	600	4	20	Pl	1.6
																		Others	0.8
	9	Sx Bl <sup>29</sup>	P1	600	300	250	800	400	300	1000	500	400	1200	700	600	4	20	Pl	1.6
		Sx <sup>1,32</sup>																Others	0.8
	10	Bl <sup>1,29</sup>	P11	400	200	200	600	300	250	800	400	300	1000	500	400	4	20	Pl	1.2
		Sb1																Others	0.6
	12	Sx <sup>1,32</sup>	$Pl^1 Bl^1$	200	100	100	300	125	125	300	150	150	400	200	200	4	20	Pl	1.2
																		Others	0.6
								L	I						L	L			

# Table 10: Stocking Standards Footnote Table

	Footnote #	Footnote	Footnote #	Footnote
Conifer Tree Species	1	elevated microsites are preferred	46	restricted to area north of the Dean Channel
"Ba" means amabilis fir:	2	suitable on thick forest floors	47	risk of balsam wooly adelgid
"Bg" means grand fir;	3	restricted to coarse-textured soils	48	risk of heavy browsing by deer
"BI" means subalpine fir;	4	restricted to medium-textured soils	49	applies only to rust resistant, planted stock.
"Bp" means noble fir;	5	footnote retired	50	restricted to sites where the species occurs as a
"Cw" means western red cedar;	6	restricted to nutrient-very-poor sites		major species in a pre-harvest, natural stand
"Fd" means Douglas-fir;	7	restricted to nutrient-medium sites	51	severe risk of needle blight, snow press and bear damage
"Hm" means mountain hemlock;	8	restricted to steep slopes	52	restricted to sheltered microsites with deep soil
"Hw" means western hemlock;	9	restricted to southerly aspects	53	minor component
"Lt" means tamarack;	10	restricted to northerly aspects	54	risk of unsuccessful release of advance regeneration
"Lw" means western larch;	11	restricted to crest slope positions	55	acceptable in sx-sm portion of site series
"Pa" means whitebark pine;	12	suitable on cold air drainage sites		
"PI" means lodgepole pine;	13	restricted to upper elevations of biogeoclimatic unit	#	Broadleaf Management Constraints
"Pw" means white pine;	14	restricted to lower elevations of biogeoclimatic unit		
		(species not acceptable within 200m of units max elevation)		
"Py" means ponderosa pine;	15	restricted to northern portion of biogeoclimatic unit in region	а	productive, reliable, and feasible regeneration option
"Sb" means black spruce;	16	restricted to southern portion of biogeoclimatic unit in region	b	limited in productivity, reliability and/or feasibility
"Se" means Engelmann spruce;	17	restricted to western portion of biogeoclimatic unit in region		
"Ss" means Sitka spruce;	18	restricted to eastern portion of biogeoclimatic unit in region	#	Localized Footnotes
"Sw" means white spruce;	19	restricted, not in Queen Charlotte Islands		
"Sx" means hybrid spruce or interior spruce;	20	restricted, not near outer coast	56	Kalum forest district - spruce content restricted to < 20%
"Sxs" means hybrid Sitka spruce;	21	restricted to mainland		spaced and free growing trees on a standards unit due to
"Sxw" means hybrid white spruce;	22	restricted to southern Gardner Canal-Kitlope area	57	Columbia forest district - Pw rust-resistant stock may be
"Yc" means yellow cedar.	23	restricted to trial use, max 20% of well spaced P&A		a max 50% of preferred and acceptable well-spaced sterr
	24	suitable (as a major species) in wetter portion of	58	Arrow forest district - Fd limited to a max 50% of preferre
Broadleaf Tree Species		biogeoclimatic unit		and acceptable well-spaced stems due to root rot.
"Acb" means balsam poplar;	25	suitable on sites lacking salal	59	Prince George region - max 1,400 total sph of aspen an
"Act" means black cottonwood;	26	suitable minor species on salal-dominated sites		Treat as 'ghost' trees in surveys.
"At" means trembling aspen;	27	partial canopy cover required for successful establishment	60	Squamish forest district - species is acceptable in Squan
"Dr" means red alder;	28	limited by moisture deficit	61	Squamish forest district only - acceptable on cold air dra
"Ep" means common paper birch;	29	risk of heavy browsing by moose	62	S. Island forest district - may only be used as acceptable
"Mb" means bigleaf maple;	30	risk of porcupine damage		balsam woolly adelgid quarantine zone.
"Qg" means garry oak;	31 32	risk of white pine blister rust	63	Queen Charlotte Islands forest district - must meet distr
"Ra" means arbutus;	32	limited by growing-season frosts footnote retired and replaced with footnote 'a'		minimum well-spaced preferred stems per hectare and m
"Bi	33 34	risk of snow damage	64	requirements for Cw and/or Yc
"Biogeoclimatic unit" or "BGC classification" means the zone, subzone, variant and site series described	34	risk of snow damage risk of weevil damage	65	North Coast forest district - species is preferred in North North Coast forest district - species is acceptable in Nort
in the most recent field guide published by the Ministry	36	suitable major species on salal-dominated sites	66	Mackenzie forest district - may be preferred where risk of
of Forests for the identiication and interpretation of	37	risk of heart rots	00	or where risk of frost damage is excessive on spruce
ecosystems, as applicable to a harvested area.	38	footnote retired	67	Chilliwack forest district - species is acceptable in Chilliw
ecosystems, as applicable to a narvested area.	39	avoid exposed and windy sites	68	Chilliwack forest district - species is acceptable in Chilliwa
Where a Biogeoclimatic unit is listed twice in the Table,	40	risk of redheart	69	Species is restricted to upper elevations when used in the
"Okanagan" applies to FDUs located within Okanagan	40	limited by poorly drained soils	05	of the biogeoclimatic unit.
TSA. TFL 15. TFL 33 and TFL 49	41	restricted to fresh soil moisture regimes	70	Restricted to a maximum of 20% of preferred and accept
"Columbia" applies to FDUs located within Revelstoke	42	suitable on mainland coast only (QCI only)	70	stems on northerly aspects.
TSA, Golden TSA, TFL 23, TFL 55 and TFL 56	44	suitable in areas with stronger maritime influence	71	Restricted to a maximum of 50% of preferred and accept
,	45	suitable in areas with stronger continental influence	t t	only applies to those portions of the site series that are or
"MIN or "Min" means minimum.			-	level ground (as per blue book)

"p" means Preferred, "a" means Acceptable

# 5.0 Signatures of Preparing Forester and Person Required to Prepare the Plan

#### **Preparing Forester**

I certify that I have reviewed this document and, while I did not personally supervise the work described, I have determined that this work has been done to the standards expected of a member of the Association of British Columbia Forest Professionals.

Glenn McIntosh, RPF Planning Officer Babine Timber Sales Office Babine Business Area



gen mo Signature: Date: March 26, 2121

Person Required to Prepare the Plan

Debbie Janning-Stewart, RPF Timber Sales Manager Babine Timber Sales Office Babine Business Area

Signature Date: \_\_\_\_\_ April 7, 2021

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