

BC Timber Sales Kamloops Business Area



100 Mile House District
Forest Stewardship Plan
Effective Date:
Extension Date:

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1 INTERPRETATIONS

1.1 Definitions in this FSP

“BCTS Agreement Holder” means the holder of a Timber Sale License or Road Permit granted by the TSM to which this FSP applies;

“CHR” means Cultural Heritage Resource

“Effective Date” means the date the Term of this FSP begins;

“FDU” means the 12 forest development units identified under this FSP;

“FPC” means the Forest Practices Code Act which was replaced by FRPA in January 2004.

“FPPR” means the Forest Planning and Practices Regulation, consolidated to December 31, 2004;

“FRPA” means the Forest and Range Practices Act, SBC 2002, c. 69, as amended to December 28, 2011

“FSP” means this Forest Stewardship Plan;

“CCLUP” means the Cariboo-Chilcotin Land Use Plan approved by the government in 1995;

“CCLUP LUO or LUO” means the Cariboo-Chilcotin Land Use Plan Land Use Order approved by the government May 19, 2010 and as amended to April 18, 2011;

“MFLNRORD” means the Ministry of Forest, Lands, Natural Resource Operations, and Rural Development;

“OGMA” Old Growth Management Area;

“Polygon” refers to FDU;

“QRP” means Qualified Registered Professional;

“Term” means the period specified in Paragraph 1.4;

“TSL” means Timber Sale License;

“TSM” means the Timber Sales Manager for the BC Timber Sales Kamloops Business Area;

“Wildlife Tree Retention Area” or WTRA means an area occupied by a group of trees with special characteristics that provide valuable habitat for the conservation and enhancement of wildlife.

1.2 Definitions under Enactment

Unless otherwise expressly indicated, or indicated by context, terms used in this FSP have the definition given them, as of the Submission Date, in the FRPA and the Forest Act and the regulations under them.

2 SUBMISSION, TERM AND EFFECTIVE DATE OF THIS FSP

2.1 Submission

This FSP is submitted by the Kamloops business area Timber Sales Manager.

2.2 Term

The Term of this FSP is 5 years beginning on the Extension Date.

2.3 Effective Date

The original Effective Date of this FSP was March 31, 2007. The Timber Sales Manager requests that the Delegated Decision Maker (DDM) make approval of this FSP renewal effective on April 30, 2018.

3 APPLICATION OF THIS FSP

Subject to exceptions under the FRPA, this FSP applies to each of the following located within an identified FDU:

- timber sale licenses advertised or entered into by the TSM on or after the effective date,
- road permits granted by the TSM on or after the effective date and
- access roads constructed by the TSM on or after the effective date to areas to be harvested under a forestry license to cut, granted by the TSM.

The application of individual results and strategies is intended to be either an outcome of a forest practice, or to be something considered during the planning process when developing timber harvesting or road construction plans, respectively. Rather than repeating this in each result or strategy, the reader is encouraged to understand that this notion is implicit given the nature of the FSP.

Stocking standards will apply to individual stands, as per the FPPR s.44(1), as opposed to collectively across cutblocks.

4 FOREST DEVELOPMENT UNITS

A total of 12 FDUs have been identified in this FSP which incorporate the majority of the 100 Mile House district and correspond to polygons or subunits as defined in the Cariboo-Chilcotin Land Use Plan (CCLUP).

Table 1 Forest Development Units for the BCTS 100 Mile House TSA Forest Stewardship Plan

CCLUP polygon	FDU #	FDU Name
E8 Canim ERDZ ¹	1	Canim
E9 Rail ERDZ	2	Rail
E10 Gustafson ERDZ	3	Gustafson
E11 Loon ERDZ	4	Loon
E12 Bonaparte ERDZ	5	Bonaparte
I-F Grasslands IRMZ ²	6	Grasslands
I-G Clinton IRMZ	7	Clinton
A Boss/Deception SRDZ ³	8	Boss/Deception
D Flat Lake SRDZ	9	Flat Lake
E Interlakes SRDZ	10	Interlakes
G Lang Lake/Schoolhouse SRDZ	11	Lang Lake/Schoolhouse
I Marble Range SRDZ	12	Marble Range

¹ Enhanced Resource Development Zone

² Integrated Resource Management Zone,

³ Special Resource Management Zone

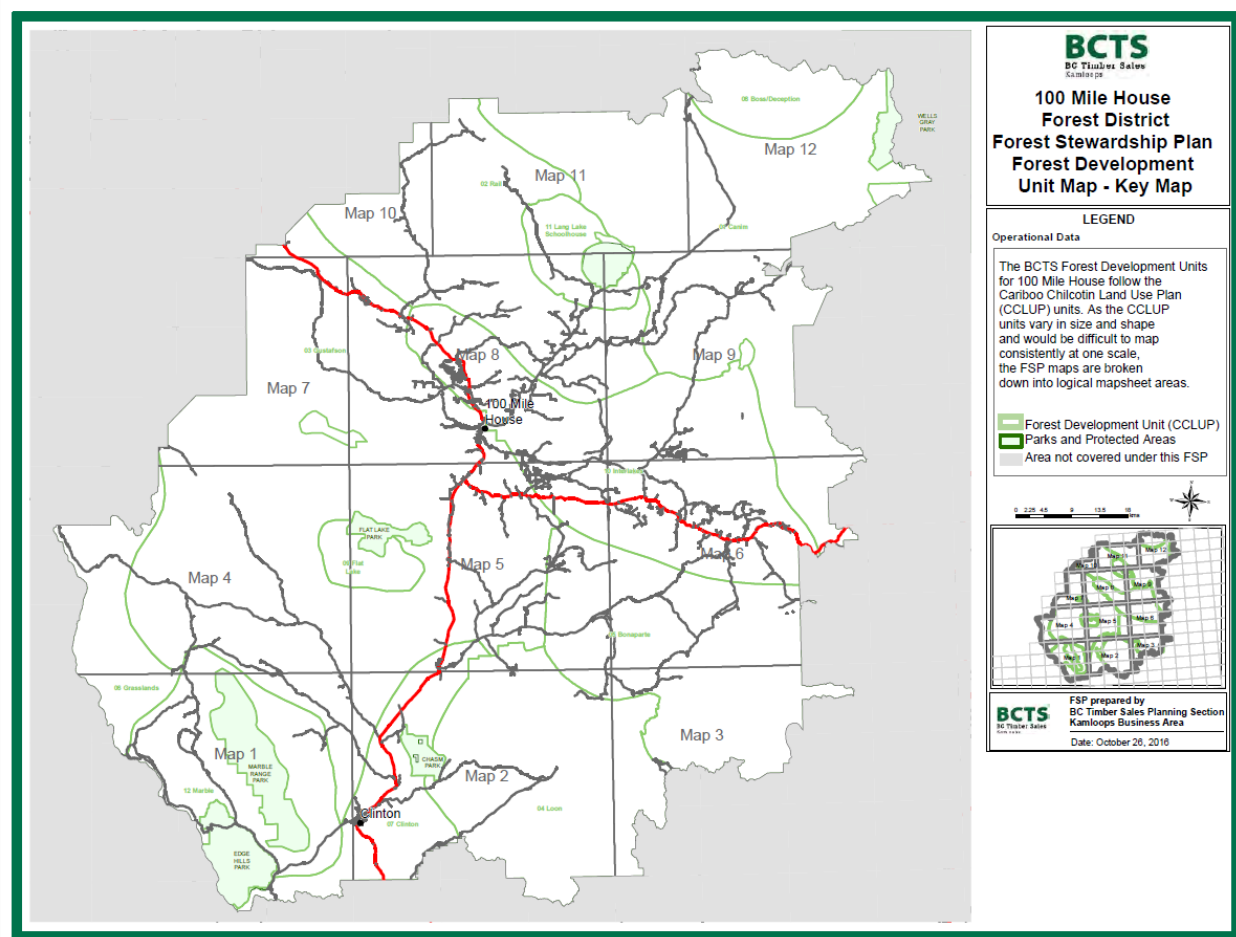


Figure 1 Forest Development Units and Key Map for the BCTS 100 Mile House District Forest Stewardship Plan.

4.1 Items Identified in the FDU

The Forest Stewardship Plan identifies the following items that were in effect on the Submission Date as per section 14(2) and (3) of the FPPR:

- Ungulate winter range areas, provide numbers wildlife habitat areas, provide numbers fisheries sensitive watersheds, ID lakeshore management zones, ID scenic areas, L1 lakes, community watersheds, old growth management areas, and areas where commercial timber harvesting is prohibited by an enactment.
- The areas within the FDU that are subject to a timber sale license, or a road permit granted by the TSM.

Table 2 Road Permits in Effect on the Submission Date.

Road Permit Number	Road Permit Number	Road Permit Number

5 100 MILE HOUSE DISTRICT RESULTS OR STRATEGIES

5.1 Incorporation of CCLUP Objectives into the FSP

The Cariboo-Chilcotin Land Use Plan was written in a way whereby objectives are intertwined with statements, comments, and other text. Included are various levels of objectives, some applying to certain agencies, some applying to licensees, and some applying to other parties or processes. This Forest Stewardship Plan only includes objectives which are tangibly affected by the TSM through their forest practice. Some CCLUP objectives have not been addressed in this plan due to one or more of the following:

- It is not the responsibility of the TSM to implement the objective;
- It is the responsibility of a government agency to implement the objective; or
- The objective has already been implemented since the CCLUP 90 Day Report was published in 1995.

In 2010, the Ministry of Agriculture and Lands Integrated Land Management Bureau legalized several Land Use Objectives for the CCLUP. These objectives are incorporated in this FSP.

5.2 Soils:

Objectives

1. The objective set by government for soils is, without unduly reducing the supply of timber from British Columbia's forests, to conserve the productivity and the hydrologic function of soils. FPPR s. 5.

Applicable Area:

- All FDUs

Result or Strategy

If the FSP Holder carries out or authorizes primary forest activities, the activities will conform to soil disturbance limits as specified in Sections 35 and 36 of the FPPR.

5.3 Biodiversity - Landscape Level

5.3.1 Landscape Biodiversity – Landscape connectivity, stand structure, species composition, temporal distribution of cutblocks, coarse woody debris, and patch size distribution

Objective

2. The objective set by government for wildlife and biodiversity at the landscape level is, without unduly reducing the supply of timber from British Columbia's forests and to the extent practicable, to design areas on which timber harvesting is to be carried out that resemble, both spatially and temporally, the patterns of natural disturbance that occur within the landscape. FPPR s.9

Applicable Area:

- All FDUs

Result or Strategy

If the FSP Holder carries out or authorizes primary forest activities, the activities will conform to Sections 64 and 65 of the FPPR. (FPPR remains default OSBG, DDM 2, p. 3)

5.3.2 Landscape Unit Boundaries

Objective

3. Maintain biodiversity in accordance with the landscape units and biodiversity emphasis shown on map 2 and defined by the spatial dataset, Cariboo-Chilcotin Landscape Units. (CCLUP LUO, LUO # 5)

Applicable Area:

- All FDUs

Results or Strategies

No Result or Strategy is required for this objective.

5.3.3 Old Seral Landscape Biodiversity

Objectives

4. LUO 8 - Retain old forest and natural successional processes by maintaining as no-harvest area the permanent OGMA-static, permanent OGMA-rotating, and transition OGMA as shown on map 3 and defined by the spatial dataset,
5. LUO 9 - Despite objective 8, harvesting and road-building are permitted in permanent OGMA-static or permanent OGMA-rotating for any of the following reasons:

Harvesting incursions of 10 hectares or less that better align OGMA boundaries with intended geographic features,

Where harvesting is essential for insect control to curtail severe damage to forest values at the landscape level in a beetle management unit (BMU) classified as suppression for that insect pest,

Road and fence construction where no other practicable location is available,

Thinning-from-below to enhance old forest attributes in OGMA located within Mule Deer Winter Range in the shallow and moderate snowpack zones,

Reduction of fine surface debris, ladder fuels and small diameter trees in intermediate and overtopped crown classes within interface fire management plan areas, where that does not diminish old growth characteristics.

Where permanent-rotating OGMA's on map 3 have:

- i. mature conifer mortality exceeding 50% by basal area >17.5 cm DBH or,
- ii. stand age exceeding 200 years for stands with 70% or greater Lodgepole Pine by basal area >17.5 cm DBH.

6. LUO 10 - Despite objective 8, primary forestry activities are permitted in transition old growth management areas for any the following reasons:

Harvesting incursions of 10 hectares or less that better align OGMA boundaries with intended geographic features,

Where harvesting is essential for insect control to curtail severe damage to forest values at the landscape level in a beetle management unit (BMU) classified as suppression for that insect pest,

Road and fence construction where no other practicable location is available,

Thinning-from-below to enhance old forest attributes in OGMA's located within Mule Deer

Winter Range in the shallow and moderate snowpack zones,

Reduction of fine surface debris, ladder fuels and small diameter trees in intermediate and overtopped crown classes within interface fire management plan areas, where that does not diminish old growth characteristics,

Equivalent old forest exists in locations contributing to the permanent OGMA target in the same LU-BEC unit,

Conifer mortality exceeds 50% of stand basal area in the transition OGMA.

Applicable Area:

- All FDU's

Result or Strategy

1. If the FSP Holder carries out or authorizes primary forest activities, the activities will conform to CCLUP Land Use Orders 8 to 10.
2. LUO 11 - Changes to OGMA's resulting from harvesting or road building will be reported by licensees to MFLNRORD upon completion.

5.3.4 Mature + Old Seral Landscape Biodiversity

Definitions

Beetle Management Unit: (BMUs) are a planning and reporting unit for operational beetle management. Its purpose is to facilitate the implementation of beetle management activities⁴.

Mature Plus Old: Mature stands are at least 120 years old in ESSF and 100 years old in all other BEC zones in the Cariboo⁵. Mature plus Old or (M+O) refers to a grouping of these two age classes.

⁴ Provincial Bark Beetle Management Technical Implementation Guidelines (Issue brief). (2003). Retrieved November 8, 2017, from Province of British Columbia website: <https://www.for.gov.bc.ca/hfp/health/fhdata/ProvBBStrategy.pdf>, p. 6

Seral Assessment Unit: Measured as a Landscape Unit (LU) - Natural Disturbance Type (NDT) – Biogeoclimatic Ecosystem Classification (BEC) combination as defined by the biodiversity updates #2, 3 and 8 and Schedule 2 BEC unit amalgamations table⁶.

Objective

7. The objective set by government for Mature plus Old seral landscape biodiversity is to manage for Mature + Old Seral targets set out in Table 7 of the CCLUP Biodiversity Conservation Strategy (BCS) according to the landscape units and biogeoclimatic subzone variant units within the plan area. CCLUP 90-Day Report p. 60-133.

Applicable Area:

- All FDUs

Result or Strategy

1. The FSP holder will carry out or authorize primary forest activities in a manner that is consistent meeting or exceeding the **mature plus old** seral targets outlined in Table 7 of the CCLUP Biodiversity Conservation Strategy in conjunction with the most recent seral analysis results provided by the Government. If alternative information is used, the TSM will provide a rationale. In addition, The FSP holder will coordinate planning with other licensees operating on the same LU-BEC assessment units.
2. Where the area of **Mature plus Old forest** is less than the seral targets for a **seral assessment unit**, and limited by the corresponding old seral targets in Tables 2 and 3 in Biodiversity Update #8, harvesting is permitted for the following reasons:
 - a. Where harvesting is essential for insect control to curtail severe damage to forest values at the landscape level in a beetle management unit (BMU) that is classified as suppression for that insect pest, or
 - b. Where pine represents 70% or more of the basal area of the stand and greater than 50% of the merchantable pine stems are red, grey, or green attacked mountain pine beetle, or
 - c. Where greater than 50% of the basal area of the stand is dead or red, grey, or green attacked bark beetle.
 - d. Draw down is limited to a level no lower than the corresponding old seral target as per Biodiversity Update #8.

⁵ Regional Biodiversity Conservation Strategy Update #8 Strategy for Management of Mature Seral Forest and Salvage of Mountain Pine Beetle Killed Timber, website:

https://www.for.gov.bc.ca/tasb/slrp/lrmp/williamslake/cariboo_chilcotin/plan/biodiv/biodiv8.pdf

⁶ Schedule 2 BEC Unit Amalgamations Applicable to Implementation of Mature + Old Seral Targets found at: https://www.for.gov.bc.ca/tasb/slrp/lrmp/williamslake/cariboo_chilcotin/plan/biodiv/schedule2_%20amalg_table_20080619.pdf

5.4 Biodiversity - Stand Level

5.4.1 Wildlife Tree Retention

Definitions:

High-value wildlife tree: A tree that has two or more of the characteristics listed in column 2 of table 1 in the Provincial Wildlife Tree Policy and Management Recommendations (MoF, 2000)⁷.

Medium-value wildlife tree: A large, stable trees that will likely develop two or more of the attributes in column 2 of Table 1 of the Provincial Wildlife Tree Policy and Management Recommendations.

Objectives

8. LUO 6: Where harvesting removes >50% of the pre-harvest stand basal area or where the harvest is part of a shelterwood silvicultural system, meet or exceed the minimum areas for wildlife tree retention for each harvest area (cutblock or cutting permit) as set out in CCLUP LUO schedule 1 Wildlife Tree Retention Targets.
9. LUO 7: Where practicable, in partially cut stands, where harvesting removes <50% of the pre-harvest basal area, retain high-value wildlife trees up to the limits in schedule 1.

Applicable Area:

- All FDUs

Results or Strategies

1. The FSP Holder will comply with CCLUP LUOs 6 and 7, subject to (2), (3), and (4) below.
2. The FSP Holder will, in partially cut stands, where harvesting removes <50% of the pre-harvest basal area, retain high-value wildlife trees up to the limits in schedule 1, unless:
 - a. There are no high-value wildlife trees, in which case the FSP Holder will retain medium-value wildlife trees;
 - b. The retention causes a concern for public safety, or
 - c. The location of the retention trees significantly limit access to future harvest, or
 - d. The condition of the proposed wildlife trees represent a significant forest health risk to surrounding stands.
3. The FSP Holder will not carry out or authorize timber harvesting within a WTRA, except where:
 - a. The trees on the Net Area to be Reforested (NAR) of the cutblock to which the WTRA relates have developed attributes that are consistent with a mature seral condition; or
 - b. A QRP has determined that:
 - i. The WTRA causes a concern for public safety;

⁷ Forest Practices Branch, MoF, (2000), *Provincial Wildlife Tree Policy and Management Recommendations*, accessed on Nov 16, 2017, from <https://www.for.gov.bc.ca/hfp/publications/00034/wltpolicyfinalmay15-00.pdf>, p. 5.

- ii. The ecological value of the WTRA has been lost due to windfall, blowdown or another disturbance;
 - iii. That the condition of the stand within the WTRA represents a significant forest health risk to the surrounding stands; or
 - iv. Access to future harvest is severely limited by the WTRA.
- 4. Where the FSP Holder carries out or authorizes timber harvesting within an existing WTRA, then the harvested WTR will be replaced with other suitable WTRA.
- 5. Prior to the carrying out or authorizing primary forest activities within those areas identified in section (2), the FSP Holder will ensure that a windthrow assessment has been completed by a Qualified Registered Professional (QRP) and that the assessment provides recommendations regarding the retention of windfirm lower-risk tree species and ensure that primary forest activities are planned and conducted in a manner that is consistent with the assessment recommendations.

5.4.2 Riparian areas:

5.4.2.1 Riparian – General

Definitions

Percent Retention: The percentage of the basal area (equal to or greater than 12.5 cm dbh) within the Riparian Management Zone that are retained.

Machine Free Zone: An area where the tracks or wheels of ground-based machinery are not permitted.

Significant Wildlife Trees: High-Value wildlife trees.

Major wildlife features: No wildlife habitat features have been established by order as of the date of this FSP. Major wildlife features for the purposes of LUO 22 are interpreted to be Key wildlife features which trigger IWMS as per objectives (Species at Risk), (Moose), (Grizzly Bear), (Bighorn Sheep), (Salmon) and (Critical Fish Habitat).

Direct Tributary: As described in the Riparian Management Guidebook.

Objectives

- 10. The objective set by government for water, fish, wildlife and biodiversity within riparian areas is, without unduly reducing the supply of timber from British Columbia's forests, to conserve, at the landscape level, the water quality, fish habitat, wildlife habitat and biodiversity associated with those riparian areas. FPPR s. 8.
- 11. LUO 20: Maintain riparian reserve zones as no harvest areas except where harvesting is essential for insect control to curtail severe damage to forest values at the landscape level in a beetle management unit (BMU) classified as suppression for that insect pest.
- 12. LUO 21: Except at road crossings, retain windfirm trees and other vegetation in riparian management zones on all S4 streams, sufficient to:
 - i). maintain streambank stability and channel processes, and
 - ii). minimize adverse changes to stream shade and organic input to the stream.

13. LUO 22: In riparian management zones on W3 and W4 wetlands and L3 and L4 lakes retain deciduous patches, significant wildlife trees and major wildlife features.
14. LUO 23: For L3 lakes and selected L1 lakes shown in map 6c and defined by the spatial dataset, Cariboo-Chilcotin L3/L1 Lakes, maintain a 10 meter riparian reserve zone.

Applicable Area:

- All FDU's

Result or Strategy

1. The FSP holder will, as per Section 12.1(2) of the FPPR, adopt as a Strategy, Sections 47 to 51, 52(2), 53 and 55 to 57 of the FPPR as written on the date of FSP approval and Practice Requirements as presented in Legislation, during the term of this plan. (Covers LUO 20)
2. If the FSP holder carries out or authorizes primary forest activities, the activities will conform to CCLUP LUO orders 16 to 23.
3. For the purposes of section 12(3) of the FPPR, the result or strategy for retention of trees in riparian management zones that apply under this FSP to the Holder of this FSP, is described in Table 1. (Covers LUO 21)
4. If the FSP Holder carries out or authorized primary forest activities within the RMA of S4, S5 or S6 streams, the FSP Holder will establish a **5 meter machine free zone** adjacent to all S4, S5 and S6 streams for the purpose of retaining brush species, advanced regeneration and non-merchantable/ commercial stems, except where the FSP Holder is:
 - a. Establishing stream crossings;
 - a. Carrying out hand falling;
 - b. Carrying out cable or aerial yarding across or adjacent to the stream;
 - c. Removing trees to address a safety concern; or
 - d. Carrying out vegetation management treatments to meet free growing requirements.

Table 3 Riparian Retention

Riparian Class	Windthrow Risk	RMZ width	Retention Range in RMZ, % of Basal area, or area
S1-A	All	As per FPPR	>25%*
S1-B, S2, S3, unclassified L1,	Moderate or High	As per FPPR	>25%*
	Low	As per FPPR	0-50
W1, W3, W5, S4	Moderate or High	As per FPPR	≥30% of pre-harvest basal area or 30% of the RMZ area (approx. 10m buffer for S4 and 15m for W1 and W5). Variance for Moderate or High Windthrow hazard may be 0% but average for block will be
	Low	As per FPPR	

			30%.
unclassified L3	Moderate or High	As per FPPR	Variance may be 0% but average retention within RMZ to be 10% of pre-harvest basal area. Retain 75% of deciduous stems where available within the RMA in windfirm patches. High or Medium wildlife trees and wildlife habitat features where available. Influenced RMA may include portions within retention areas.
	Low	As per FPPR	
S5, S6		As per FPPR	0-30%**
High Value Wetlands [†]	All	As per map 11	50%
Classified Lakes	All	As per FSP s. (Lakeshore Management)	As per FSP s. (Lakeshore Management)
<p>*The primary objectives for retention in the management zone for streams with RRZs is to retain vegetation to provide shade, reduce bank microclimate changes, maintain natural channel and bank stability and wildlife attributes where they occur. If Windthrow Risk is Low, retention will be $\geq$ 25% of the RMZ, if Windthrow Risk is Moderate or High, retention will be between 0 and 50% as per QRP recommendation.</p>			
<p>**The primary objectives for retention in the management zone for non-fish bearing streams is to retain vegetation to provide shade, reduce bank microclimate changes, maintain natural channel and bank stability and wildlife attributes where they occur.</p>			
<p>[†] The primary objectives for retention in the management zone for wetland riparian classes including High Value Wetlands for Moose are to maintain security and thermal cover for moose and other wildlife and minimize impacts of windthrow risk on reserve zones where they occur.</p>			

5. For retention strategies within harvested portions of the Riparian Management Zones for lakes will be implemented as listed in Table 3 and section (Lakeshore management) of this FSP.
6. The FSP Holder will:
 - a. For L3 lakes and selected L1 lakes shown on map 6c and defined by the spatial dataset, Cariboo-Chilcotin L3/L1 Lakes, maintain a 10 meter riparian reserve zone.
 - b. For W1 to W5 wetlands classified as Key Wetlands for moose, apply the results and strategies for objective (Moose).[†]

5.4.2.2 Riparian – Lakeshore Management Zones

Definitions

Refugium Lake: are ecologically unique or important for ecosystem representation and contain rare or endangered species or habitats, have unique ecological or physiographic associations (e.g. karst formations) or maintain ecosystem integrity and representation⁸.

Wilderness Fisheries Lake: provide natural features in undisturbed areas generally having non-motorized access. Users must hike, canoe, kayak, or fly in. The setting is primitive with pristine surroundings and unmodified natural environment⁹.

Quality Lake: These lakes provide quality natural features. Access may be limited. There are pristine surroundings and natural appearing environment. Commercial land development is limited or non-existent.

General Lake: These lakes provide public recreation in a predominantly rural or natural setting. Access is generally good (2 wheel drive). Land development is variable and the natural environment may be substantially modified¹⁰.

Key Lake: These lakes have visual objectives and other values important to the tourism industry and related recreation opportunities. They can also be classified as one of the above mentioned Refugium, Wilderness Fisheries, Quality, or General lakes¹¹.

Objectives

15. LUO 16: For the lakeshore management zones shown on map 6a and defined by the spatial dataset Cariboo-Chilcotin Lake Management Classes, manage the lakes in accordance with schedule 2.
16. LUO 17: For the lakes shown on map 6b and defined by the spatial dataset Cariboo-Chilcotin Lake Management Classes, manage to the lakes in accordance with Schedule 3.
17. LUO 18: Despite objectives 16 and 17, variance from the VQO and the maximum disturbance limits in schedule 2 and the lake management intent in schedule 3 is permitted in lakeshore management zones for any of the following reasons:
 - i). Where harvesting is essential for insect control to curtail severe damage to forest values at the landscape level in a beetle management unit classified as suppression for that insect pest,
 - ii). Road and fence construction in Class A lakeshore management classes where there is no other practicable location available,
 - iii). Reduction of fine surface debris, ladder fuels and small diameter trees in intermediate and overtopped crown classes within interface fire management plan areas, where that does not diminish old growth characteristics.
18. LUO 19: For refugia and wilderness fisheries lakes, locate new roads away from the lakeshore, sufficient to protect the existing character of the lake, unless no other practicable route exists.
CCLUP LUO

Applicable Area:

⁸ Williams Lake SRMP, (2005), Accessed on Nov 7, 2017 from https://www.for.gov.bc.ca/tasb/slrp/srmp/north/williams_lk/pdfs/Williams_Lake_SRMP_Final.pdf. P. 51.

⁹ Ibid.

¹⁰ Ibid, p. 52.

¹¹ Ibid.

- Lakeshore management Zones shown on map 6a, 6b, and defined by the spatial dataset Cariboo-Chilcotin Lakeshore Management Classes

Results and Strategies

1. If the FSP Holder carries out or authorizes primary forest activities within the Lakeshore Management Zones shown on map 6a and 6b, and defined by the spatial dataset, Cariboo-Chilcotin Lakeshore Classes, the FSP Holder adopts as a result or strategy the VQO and maximum forest disturbance limits in Schedule 2 (Table 6).
2. The TSM will comply with CCLUP LUOs 16 to 19.

Table 4 Schedule 2 Lakeshore Management Classes

Lakeshore Management Classes	Visual Quality Objective in the Lakeshore Management Zone (LMZ)	Forest Disturbances and Retention in the LMZ	
All		Conserve deciduous patches, significant wildlife trees, major wildlife features, and moist under-story habitats	
		Partial Cutting	Clearcutting
A	Preservation	No Harvest	No harvest
B	Retention	Maximum disturbed area is 20% of the LMZ every 20 years with a minimum basal area retention of 50%	Maximum disturbed area is 10% of the LMZ every 20 years with openings smaller than 5 ha.
C	Partial Retention	Maximum disturbed area is 40% of the LMZ every 20 years with a minimum basal area retention of 50%	Maximum disturbed area is 20% of the LMZ every 20 years with openings smaller than 10 ha.
D	Modification	Maximum disturbed area is 60% of the LMZ every 20 years with a minimum basal area retention of 50%	Maximum disturbed area is 30% of the LMZ every 20 years.
E	Modification	Maximum disturbed area is 100% of the LMZ every 20 years with a minimum basal area retention of 50% in the LMZ	Maximum disturbed area is 10% of the LMZ every 20 years.

Table 5 Schedule 3 Lake Management Classes

General Lake	Manage the area around the lake to maintain a predominantly rural or natural setting. Road access includes 2-wheel drive roads.
Quality Lake	Manage the area around the lake to provide quality natural features with pristine surroundings and a natural appearing environment. Minimize road access and land development.
Refugium Lake	Manage the area around the lake to conserve the special ecological or physiographic features or habitats.
Wildness Fisheries Lake	Manage the area surrounding the lake to maintain natural features in an undisturbed, wilderness setting.

5.5 Water Objectives

5.5.1 Water in Community Watersheds:

5.5.1.1 Clinton Creek Community Watershed

Objectives

19. The objective set by government for water being diverted for human consumption through a licensed waterworks in a community watershed is to prevent to the extent described in subsection (3) the cumulative hydrological effects of primary forest activities within the community watershed from resulting in:

a material adverse impact on the quantity of water or the timing of the flow of the water to the waterworks, or

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.

20. The objective set by government under subsection (2) applies only to the extent that it does not unduly reduce the supply of timber from British Columbia's forests.

If satisfied that the objective set out in subsection (2) is not required to provide special management the minister responsible for the Wildlife Act must exempt a person from the requirement to specify a result or strategy in relation to the objective.

If satisfied that the objective set out in subsection (2) is addressed, in whole or in part, by an enactment, the minister responsible for the Wildlife Act must exempt a person from the requirement to specify a result or strategy in relation to the objective set out in subsection (2) to the extent that the objective is already addressed. (FPPR s. 8.2)

Applicable Area:

- Marble Range, Gustafson and Clinton FDUs:

Results or Strategies

Prior to the carrying out or authorizing primary forest activities within Designated Community Watersheds, the FSP Holder will:

1. Ensure that an assessment has been completed by a Qualified Registered Professional (QRP) and that the assessment provides recommendations regarding primary forest activities that could result in:
 - a. a material adverse impact on the quantity of water or the timing of the flow of the water from the waterworks, damage to a licensed 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. Ensure that primary forest activities are planned and conducted in a manner that is consistent with the assessment recommendations.

5.6 Wildlife

5.6.1 Wildlife (General)

Objectives

21. Manage for grizzly bear, moose, furbearer, species at risk and other sensitive habitats within the areas identified as riparian buffers, recreation areas, mule deer winter range and lakeshore management zones and throughout the polygon under the biodiversity conservation strategy. CCLUP 90-Day report p. 69
22. The objective set by government for wildlife is, without unduly reducing the supply of timber from British Columbia's forests, to conserve sufficient wildlife habitat in terms of amount of area, distribution of areas and attributes of those areas, for
 - i). the survival of species at risk,
 - ii). the survival of regionally important wildlife, and
 - iii). the winter survival of specified ungulate species. (FPPR S. 7)

Applicable Area:

- All FDUs

Results and Strategies

The FSP Holder adopts the results and strategies for objectives (Landscape Biodiversity), (Stand Level Biodiversity), and (Wildlife) as results and strategies for this objective and will consult with the Ministry of Environment on regionally important wildlife or habitat issues.

5.6.2 Species at Risk

Definitions

Species at Risk: Those species listed under GAR (B.C. Reg. 17/04), GAR Addendum (B.C. Reg. 582/04), and as identified on the B.C. Conservation Data Centre as red or blue-listed. Red listed species are endangered or threatened, and blue listed species are “considered to be of Special Concern [and] have characteristics that make them particularly sensitive or vulnerable”. All red and blue listed species are “species at risk” (SAR) to which the CCLUP objectives listed in 4.17.1 apply.

Key habitat features: Nests, Dens, Tunnels, Leks, and Breeding Locations

Objectives

23. Manage for grizzly bear, moose, furbearer, **species at risk** and other sensitive habitats within the areas identified as riparian buffers, recreation areas, mule deer winter range and lakeshore management zones and throughout the polygon under the biodiversity conservation strategy. CCLUP 90-day report (p. 60-134)

Applicable Area:

- All FDU's

Results and strategies

1. For Species at risk and Sensitive Habitats for which there are WHAs established under GAR, the FSP Holder adopts as a result or strategy the general wildlife measures specified under specific species in this FSP as these orders were on the date the FSP was submitted for approval.
 - a. **Mountain Caribou (Eastern):** GAR orders 5-115, 5-116, 5-117.
 - b. **Badger:** In 2010, 10 WHA were established under GAR for Badger in the Cariboo region, 21 of which are within the 100 Mile House Forest District: GAR orders 5-073 to 5-085, 5-874 to 5-883.
 - c. **Spadefoot Toad:** In 2010, 14 WHA were established under GAR for Spadefoot Toad in Cariboo region, all of which are located within the 100 Mile House Forest District: GAR orders 5-884 to 5-897.
 - d. **Data Sensitive:** GAR order 5-073.
2. In the absence of General Wildlife Measures specified under FRPA, The FSP Holder will manage for Species at Risk and Sensitive habitats consistent with Identified Wildlife Management Strategies (2004) *Accounts and Measures for Managing Identified Wildlife*, the results and strategies in objective (Sensitive Habitats), and will:
 - a. Record the geographic location of the occurrence of **key habitat features** identified by the FSP holder during forest management activities and upon reasonable request make attribute information available, and

- c. Ensure that an assessment has been completed by a Qualified Registered Professional (QRP) and that the assessment provides recommendations regarding primary forest activities that could result in adverse impacts to the species at risk, and
- d. Ensure that primary forest activities are planned and conducted in a manner that is consistent with the assessment recommendations.
- e. Commit to review the MoE website annually for changes in status of SAR. Endangered Species and Ecosystems/BC Species and Ecosystems Explorer.

5.6.3 Sensitive Habitats

Objectives

24. LUO 25: Implement silvicultural practices that facilitate restoration of open grassland condition when harvesting forest in the grassland benchmark area shown on map 8 and defined by the spatial dataset Cariboo-Chilcotin Grassland Benchmark Area. CCLUP 90-day Report, p. 159. CCLUP LUO.

Applicable Area:

- Grasslands Ecosystems – Grasslands, Interlakes, Gustafson, Bonaparte, Loon, Clinton, Marble Range, and Rail FDU

Results and Strategies

If the FSP Holder carries out or authorizes primary forest activities within the applicable area, the FSP Holder will:

1. Not attempt to reforest the area;
2. Retain all live conifer stems greater than 65 cm dbh except where they:
 - a. contain active bark beetle,
 - b. have been damaged by fire and
 - c. are unlikely to survive, or require felling due to safety concerns; and
3. Retain 1-4 live conifer stems >12.5cm dbh per each stem >65cm dbh retained for recruitment into large diameter trees valuable for wildlife trees, and
4. Retain all live deciduous stems greater than 12.5 cm dbh except where they, have been damaged by fire and are unlikely to survive, or require felling due to safety concerns.
5. The FSP holder commits to review the MoE website annually for changes in status of SAR. Endangered Species and Ecosystems/BC Species and Ecosystems Explorer.

5.6.4 Fish

Definitions

Equivalent Clearcut Area: is a forest management term used to describe the total area within a watershed which functions in a similar fashion hydrologically to a clearcut opening, accounting for a recovery factor based on the stage(s) of forest regeneration¹².

Disturbance Levels: for the purposes of this FSP objectives from the CCLUP that define “Disturbance Levels” shall be taken to mean equivalent clearcut area.

Key Watershed: Horsefly River, Bridge Creek and Bonaparte River Watersheds.

5.6.4.1 Hydrologic Stability

Objectives

25. As required under the FPC when disturbance levels exceed 25% and in key watersheds, a watershed assessment should be undertaken to ensure the maintenance of critical fish and wildlife habitat and hydrological stability. CCLUP 90 day report, p. 161.
26. Development within watersheds or portions of watersheds in the SRDZ should be consistent with the watershed assessment prescriptions of the FPC designed to avoid detrimental cumulative impacts. Complete watershed assessments for high priority fisheries watersheds in the SRDZ, notably the Horsefly and Bonaparte. CCLUP (p. 179-180). (Boss/Deception, Flat Lake, Interlakes, Lang Lake/Schoolhouse, and Marble Range FDU).
27. Manage the Horsefly River watershed for hydrologic stability through watershed assessment and monitoring programs. CCLUP 90-day. P. 62. (Boss/Deception and Canim FDU).
28. Manage the Bonaparte River watershed for hydrologic stability through watershed assessment and monitoring programs. CCLUP 90-day. P. 106. (Bonaparte, Clinton, Loon FDU).
29. Manage the Bridge Creek watershed for hydrologic stability through watershed assessment and monitoring programs. CCLUP 90-Day Report, p. 70. (Interlakes FDU).

Applicable Area:

- Key Watersheds

Results or Strategies

Prior to the carrying out or authorizing primary forest activities within a **Key watershed** that has an ECA of greater than 25%, the FSP Holder will:

1. Utilize a QRP to advise as to the appropriate level of assessment that may be required within the watershed;
2. Where identified in (1) as required, ensure that an assessment has been completed by a Qualified Registered Professional (QRP) and that the assessment provides recommendations regarding primary forest activities that could impact hydrologic stability as it relates to fish and fish habitat, specific to:
 - a. water quantity and timing of flows

¹² Rowland, D. E., & MacDonald, L. B. (1996). *Salmon Watershed Planning Profiles for the Fraser River Basin within the Cariboo-Chilcotin Land Use Plan (CCLUP) Area* (Rep.). Retrieved November 7, 2017, from <http://www.dfo-mpo.gc.ca/Library/211330%20Main%20report.pdf>, p. 10.

- b. sediment production and delivery, and
 - c. riparian function
- 3. Ensure that primary forest activities are planned and conducted in a manner that is consistent with the assessment recommendations.

5.6.4.2 Critical Fish Habitat

Objectives

- 30. LUO 12: Maintain critical habitat for fish shown on map 4 and defined by the spatial dataset, Cariboo-Chilcotin Critical Habitat for Fish as no-harvest areas.
- 31. LUO 13: Despite objective 12, primary forest activities are permitted in areas classified as critical habitat for fish for the following reasons:
 - a. Where harvesting is essential for insect control to curtail severe damage to forest values at the landscape level in a beetle management unit (BMU) classified as suppression for that insect pest, or
 - b. Road and fence construction where there is no other practicable location available.
CCLUP LUO

Applicable Area:

- All FDU's

Results or Strategies

- 1. The TSM will apply CCLUP Land Use Orders 12 and 13 as results or strategies for this objective.

5.6.4.3 Salmon

Objectives

- 32. Manage the Bonaparte River watershed for salmon stocks (approximately 10 % of the polygon), through riparian area protection and controls on the rate of harvest. CCLUP 90-Day Report (p. 60-134)
- 33. Manage the Horsefly River watershed within the Canim FDU for salmon stocks (approximately 35 % of the polygon), through riparian area protection and controls on the rate of harvest. CCLUP 90-Day Report, p.120.
- 34. Manage the Horsefly River watershed within the Boss/Deception FDU for salmon stocks (approximately 90 % of the polygon), through riparian area protection and controls on the rate of harvest. CCLUP 90-Day Report, p.60.
- 35. To manage the Bonaparte River tributaries and Fraser River mainstem banks for salmon stocks (approximately 25 % of the polygon), through riparian area protection and controls on rate of harvest.

Applicable Area:

- Interlakes, Canim, Boss/Deception, Clinton, Grasslands, and Marble Range FDUs:

Results or Strategies

1. To manage key watersheds for salmon stocks, the FSP Holder will apply the result or strategy for objectives (Hydrologic Stability), (Riparian), (Critical Fish), and (Species at Risk), and
2. Utilize a QRP to advise as to the appropriate level of assessment that may be required within the watershed;
3. Where identified in (1) as required, ensure that an assessment has been completed by a Qualified Registered Professional (QRP) and that the assessment provides recommendations regarding primary forest activities that could impact hydrologic stability as it relates to fish and fish habitat, specific to:
 - c. water quantity and timing of flows
 - d. sediment production and delivery, and
 - e. riparian function
4. Ensure that primary forest activities are planned and conducted in a manner that is consistent with the assessment recommendations.

5.6.4.4 Bull Trout

Definitions:

CCLUP refers to Bull trout as “Dolly Varden”.

Objective

36. To manage for grizzly bear, moose, furbearer, **species at risk** and other sensitive habitats within the areas identified as riparian buffers, recreation areas, caribou habitat and lakeshore management zones and throughout the polygon under the biodiversity conservation strategy. CCLUP 90-Day Report (p. 60-134), LUOs 12-13

Applicable Area:

- All FDUs

Result or Strategy

1. The TSM will maintain critical habitat for fish by applying the results and strategies listed under (Hydrologic Stability), (Critical Fish), and (Species at Risk). (Riparian) and (Riparian management zone retention), (Lakeshore Management),
2. Where primary forest activities are proposed within drainages that include known Bull Trout occurrences, the FSP Holder will:
 - a. Ensure that an assessment has been completed by a Qualified Registered Professional (QRP) and that the assessment provides recommendations regarding primary forest activities that could result in adverse impacts to known or suspected Bull Trout habitat, and
 - b. Ensure that primary forest activities are planned and conducted in a manner that is consistent with the assessment recommendations.

5.6.5 Caribou

5.6.5.1 Mountain Caribou – Eastern Herds

Objectives

37. Maintain habitat as per the Quesnel Highlands caribou strategy. CCLUP 90- day report pg 156-157.
38. Maintain habitat for regionally significant wildlife species, including mule deer and **Caribou**, consistent with the Forest Practices Code and the application of the polygon-specific resource targets. CCLUP 90-day report p. 178
39. Manage for grizzly bear, moose, furbearer, **species at risk** and other sensitive habitats within the areas identified as riparian buffers, recreation areas, **caribou habitat** and lakeshore management zones and throughout the polygon under the biodiversity conservation strategy. CCLUP 90-Day Report, p. 156-157.
40. Manage lower elevation habitats including winter ranges and travel corridors as they are identified. Where possible and where compatible with other conservation needs, they may be met through the Forest Ecosystem Network (FEN) and old growth reserve requirements within each Landscape unit. CCLUP 90-Day Report, p. 156-158.

Applicable Area:

- All FDUs

Results and strategies

1. For Mountain Caribou the FSP Holder adopts as a result or strategy the general wildlife measures specified in the GAR orders 5-115, 5-116 and 5-117 as these orders were on the date the FSP was submitted for approval.

5.6.6 Mule Deer

Objectives

41. Maintain mule deer winter range values through modified harvest regimes over the appropriate percentage of the forest polygon by CCLUP subzone. CCLUP 90-day. P. 60-133.
42. Maintain mule deer winter range values in a condition that will support the regional population during critical winter conditions. CCLUP 90-Day Report, p. 155.

Applicable Area:

All FDUs, within Ungulate Winter Range U-5-003.

Results or Strategies

As per Section 7(3) FPPR, a result or strategy is not required for this species as the objectives, in whole or in part, are addressed by a General Wildlife Measure. Concerning Mule Deer Winter Range, refer to GAR Order of December 23, 2004 U-5-003 and as replaced on December 7, 2006 and February 20, 2007 the FSP holder will adhere to these WHAs/GWMs.

5.6.7 Moose

Definitions:

Extended Use Roads: Newly constructed roads that are planned for more than 4 years of use for forestry activities.

Moose Forage: Palatable species of plants that are a food source for Moose. These plants include *Salix* spp., red-osier dogwood and *Betula* spp.

High-Value wetlands for Moose: Areas identified in map 11 and defined by the spatial dataset, Cariboo-Chilcotin High-Value wetlands for Moose.

Thermal Cover: Conifer leading stands that are equal to or greater than 15 meters in height, and equal to or greater than 5 hectares in size.

Visual Screening: Vegetation and/or topography providing visual obstruction that makes it difficult to see into adjacent areas from the roadbed.

Shrub-carr: As described in Wetlands of British Columbia. These are classified as:

- Scrub birch – Kinnikinnick, *Betula nana*- *Arctostaphylos uva-ursi*, (Sc01),
- Grey-leaved willow – Glow moss, *Salix glauca* – *Aulacomnium palustre* (Sc02), or
- Barclay's willow – Arrow-leaved groundsel, *Salix barclayi* – *Senecio triangularis* (Sc03).

Objective

43. LUO 32: Retain sufficient vegetation to provide security and thermal cover for wintering moose adjacent to high-value wetlands shown on map 11 and defined by the spatial dataset, Cariboo-Chilcotin High Value Wetlands for Moose, and adjacent to W1, W3, or W5 wetlands including shrub-carrs. CCLUP LUO, LUO 32. CCLUP 90-day. P. 155.

Applicable Area:

In All FDUs,

- Key Wetlands and their applicable Riparian Management Zones, and
- W1, W3, wetlands or W5 Wetland Complexes including shrub-carrs and their applicable management zones.

Results or Strategies

1. Except where a QRP has determined that proposed screening or thermal cover retention:
 - a. Will cause a concern for public safety or forest health risk to the surrounding stands, or
 - b. Has had its screening or thermal cover value lost due to windfall, blowdown or another disturbance; or
 - c. Severely limits access to future development, or
 - d. Is not available pre-harvest,

The FSP Holder commits to retaining until green-up is achieved:

- a. 50% of the basal area or 50% of the RMZ area of High-value wetlands for moose, and

- b. $\geq 30\%$ of pre-harvest basal area or 30% of the RMZ area for W1, W3, or W5 wetlands including shrub-carrs. Variance for Moderate or High Windthrow hazard may be 0% but average for block will be 30%.
2. If the FSP Holder carries out or authorizes primary forest activities within 200m of High Value Wetlands for Moose including shrub-carrs, the FSP holder will retain 40% of preferred or acceptable immature conifers and deciduous vegetation, preferably greater than 5 m in height and in patches greater than 50 m wide, to provide security and thermal cover for wintering moose.
3. The FSP holder will incorporate access controls in the vicinity of High-value wetlands for moose as well as W1, W3 or W5 wetlands including shrub-carrs. Access controls may include:
 - a. Where present, the FSP Holder will retain **Visual Screening** along those **Extended Use Roads** that are located within 20 m to either side of open main haul roads except for safety considerations within 500 linear meters of a defined High Value Wetland for Moose; and
 - b. Deactivation of roads that are under the authority of the FSP Holder or a BCTS Licensee, and that are not required for timber harvesting or silviculture treatments.
 - c. The FSP Holder will not authorize the construction of roads between moose high value wetlands that are within 1km of each other, unless there are no other location options for the road.

Objectives

44. Manage for grizzly bear, **moose**, furbearer, species at risk and other sensitive habitats within the areas identified as riparian buffers, recreation areas, mule deer winter range and lakeshore management zones and throughout the polygon under the biodiversity conservation strategy. CCLUP 90-day report. P. 69 (all FDU's)
45. Manage access to limit permanent access and road crossings of wetlands. CCLUP 90-day. P 155-156
46. Manage for moose calving and summer habitat. CCLUP 90-day. P 155-156

Applicable area:

- All FDU's

Results or Strategies

The FSP Holder will apply the results and strategies for Objectives (Landscape Biodiversity), (Stand Level Biodiversity), and (Backcountry) of this FSP.

Objective

47. Retain sufficient vegetation to provide security and thermal cover for wintering moose adjacent to Upland habitats (ERDZ polygons 3,4,5,8, and SRDZ polygon M). CCLUP 90-day report p. 156. (define upland habitats) (Canim FDU)

Applicable Area:

- Canim FDU

Result or Strategy

The FSP Holder will apply the results and strategies for Objectives (Landscape Biodiversity), (Stand Level Biodiversity), and (Backcountry) of this FSP.

5.6.8 Furbearers

5.6.8.1 Furbearers – General

Objectives

48. Manage for grizzly bear, moose, **furbearer**, species at risk and other sensitive habitats within the areas identified as riparian buffers, recreation areas, mule deer winter range and lakeshore management zones and throughout the polygon under the biodiversity conservation strategy. CCLUP 90-day report (p. 60-133)
49. Maintain habitat requirements for key regional species, including white pelicans, moose, caribou, mule deer, **furbearers** and Dolly Varden trout. CCLUP 90-day report p. 13.

Applicable Area:

- All FDUs

Result or Strategy

1. The FSP Holder will apply the results and strategies of objectives (Wildlife Tree Retention), (Landscape Level Biodiversity) and (Stand Level Biodiversity) of this FSP.

5.6.8.2 Furbearers – Fisher & Wolverine

Objective

50. Manage for grizzly bear, moose, furbearer, **species at risk** and other sensitive habitats within the areas identified as riparian buffers, recreation areas, mule deer winter range and lakeshore management zones and throughout the polygon under the biodiversity conservation strategy. CCLUP 90-day report (p. 60-133)

Applicable Area:

- All FDUs

Result or Strategy

1. The FSP Holder will manage wildlife habitat areas (WHAs) when established, according to the direction provided for each WHA.
2. For known occurrences, the FSP Holder will manage for Fisher and Wolverine consistent with the results and strategies for objective (Species at Risk) in this FSP.

5.6.9 California Bighorn Sheep

Objectives

51. Manage for **bighorn sheep**, moose, furbearer, **species at risk** and other sensitive habitats within the areas identified as riparian buffers, recreation areas, mule deer winter range and lakeshore management zones and throughout the polygon under the biodiversity conservation strategy. CCLUP 90-day report, p. 78.

Applicable Area:

- Marble Range FDU

Results and strategies

1. The TSM will apply the results and strategies for (Wildlife), (Stand Level Biodiversity), (Landscape Biodiversity), and (Species at Risk).
2. For known occurrences, the FSP Holder will manage for Bighorn Sheep consistent with the results and strategies for objective (Species at Risk) in this FSP.

5.6.10 Grizzly Bear

Definitions

Grizzly Bear Capability Areas: means an area defined in the spatial file, for the LUO Order, Objective 2 and Map 2, as either “high” or “high – mod” habitat suitability for grizzly bear;

Security Cover: Security cover for grizzly consists of dense vegetation next to the foraging area. Large trees within the security cover may be used for daybeds¹³.

Visual Screening: Vegetation and/or topography providing visual obstruction that makes it difficult to see into adjacent areas from the roadbed.

Objective

52. Manage for **grizzly bear**, moose, furbearer, **species at risk** and other sensitive habitats within the areas identified as riparian buffers, recreation areas, mule deer winter range and lakeshore management zones and throughout the polygon under the biodiversity conservation strategy. CCLUP 90-day report, p. 60-134.

Applicable Area:

- All FDUs, Critical fish habitat areas;
- Very High, High and Moderate Grizzly Bear Capability Areas as defined in the LUO 2011 spatial dataset Cariboo-Chilcotin Grizzly Bear Capability map 12. There are no Identified Grizzly Bear Habitat zones within the 100 MH Forest District.

Result or strategy

1. The FSP Holder will manage designated WHAs according to the associated orders where they exist.

¹³ CCLUP Land Use Order Implementation Direction June 21, 2011 pg. 14
https://www.for.gov.bc.ca/tasb/slrp/legal-direction/Plan104_documents/LUO%20Implementation%20Direction_Companion%20final%20June%2021-11.pdf

2. The FSP Holder will apply the results and strategies for (Landscape Biodiversity), (Stand Level Biodiversity), (Backcountry), and (Wildlife-General), in order to maintain or restore Grizzly Bear foraging opportunities and habitat effectiveness across the landscape and over time.
3. If an active Grizzly Bear den is found, the FSP holder will¹⁴:
 - a. establish a 250m winter only light machine use work zone reserve around the den,
 - b. Establish a 500m high machine activity only zone around the den
 - c. Anchor WTRA of ≥ 1 ha to known den sites.
 - a. Plan road construction and harvesting within 500m of known important Grizzly Bear foraging or den sites in consultation with a QRP to minimize potential disturbance to the bears and reduce human-grizzly interactions.
 - b. Ensure that primary forest activities are planned and conducted in a manner that is consistent with the assessment recommendations.
4. Where a denning site is found to be active during post-harvest activities and is associated with a permanent geographic feature, the FSP holder will establish a no work zone/no treatment area of a minimum 2 hectares in size, incorporating the denning site, and

Objective

53. LUO 33: Apart from existing Wildlife Habitat areas, **retain security cover adjacent to critical grizzly bear foraging habitats** which include:

- a. salmon and trout spawning reaches or shoals, and
- b. herb-dominated avalanche track and run-out zones on southerly and westerly aspects,

in **very high, high and moderate capability grizzly bear units** shown on map 12 and defined by the spatial dataset, Cariboo-Chilcotin Grizzly Bear Capability.

Applicable Area:

- All FDUs, Critical fish habitat areas;
- In Very High, High and Moderate Grizzly Bear Capability Areas as defined in the LUO 2011 spatial dataset Cariboo-Chilcotin Grizzly Bear Capability map 12. There are no Identified Grizzly Bear Habitat zones within the 100 MH Forest District.

Result or strategy

1. The FSP Holder will apply the results or strategies for objective (Critical Fish), and (Riparian), and
2. The FSP Holder will retain 80% of mature forest as security or thermal cover within 200m of **herb-dominated** avalanche tracks and run-out zones on southerly and westerly aspects in VH, H, and M capability grizzly bear units, except where a QRP has determined that proposed screening or thermal cover retention:
 - a. Will cause a concern for public safety or forest health risk to the surrounding stands, or

¹⁴ https://www.for.gov.bc.ca/bcts/areas/tcc/Species_OMC_Manual.pdf

- b. Has had its screening or thermal cover value lost due to windfall, blowdown or another disturbance; or
 - c. Severely limits access to future development, or
 - d. Is not available pre-harvest,
3. The FSP holder will incorporate access controls within Very high, High and moderate capability Grizzly Bear units including access barriers and deactivation of roads that are not required for timber harvesting or silviculture treatments.
4. If the FSP Holder carries out or authorizes primary forest activities, subject to exclusions for 2. a) to d), the FSP Holder will retain **Visual Screening** along those **Extended Use Roads** that are located within 500 meters of:
 - a. critical fish habitat as shown on map 4 and defined by the spatial dataset, Cariboo-Chilcotin Critical Habitat for Fish, and
 - b. south and west aspect avalanche and run-out zones in **VH, H, or M capability grizzly habitat units**.

Objective

54. LUO 34: In very high, high and moderate capability grizzly bear units shown on map 12 and defined by the spatial dataset, Cariboo-Chilcotin Grizzly Bear Capability, conduct silvicultural treatments on cutblocks to retain as much existing natural berry production as practicable. CCLUP LUO, LUOs 33 & 34.

Applicable Area:

- In very high, high and moderate capability grizzly bear units shown on map 12 and defined by the spatial dataset, Cariboo-Chilcotin Grizzly Bear Capability.

Result or strategy

1. The FSP Holder will apply the Results and Strategies for (Landscape Biodiversity).
2. If the FSP Holder carries out or authorizes silviculture treatments within VH, H, or Moderate grizzly bear capability areas, the FSP will adopt the Variation to General Standard, as outlined in the FSP Stocking Standards - Appendix A.
3. The FSP holder will not authorize the use of sheep, domestic goats, or cattle for vegetation management in occupied Grizzly Bear habitat to reduce direct and indirect conflicts with bears.

5.6.11 White Pelicans

Objectives

55. Maintain habitat requirements for key regional species, including white pelicans, moose, caribou, mule deer, furbearers and Dolly Varden trout. CCLUP 90-day report p. 13. Will comply with GAR

Applicable Area:

- All FDU's

Results or Strategies

To maintain habitat requirements for American white pelican, the FSP Holder will:

1. Apply the results and strategies in objectives (Riparian), (Lakeshore Management), (Visual Quality), (Mule Deer), (Backcountry), and (Landscape Biodiversity) of this FSP, and
2. If White Pelican habitat is identified outside of WHAs for this species and within 200m of proposed primary forest activities, the FSP Holder will:
 - a. Ensure that an assessment has been completed by a Qualified Registered Professional (QRP) and that the assessment provides recommendations regarding primary forest activities that could result in adverse impacts to the foraging, loafing and roosting habitat of the species at risk, and
 - b. Ensure that primary forest activities are planned and conducted in a manner that is consistent with the assessment recommendations.

5.6.12 Spadefoot Toad

Objectives

56. Manage for grizzly bear, moose, furbearer, **species at risk** and other sensitive habitats within the areas identified as riparian buffers, recreation areas, caribou habitat and lakeshore management zones and throughout the polygon under the biodiversity conservation strategy.

Applicable Area:

- All FDUs

Results and Strategies

1. The FSP Holder adopts as a result or strategy the general wildlife measures specified under GAR orders 5-884 to 5-897 as these orders were on the date the FSP was submitted for approval.
2. In the absence of General Wildlife Measures specified under FRPA, The FSP Holder will manage for Species at Risk consistent with the results and strategies for objective (Species at Risk) in this FSP.

5.6.13 Great Blue Heron

Objectives

57. Manage for grizzly bear, moose, furbearer, **species at risk** and other sensitive habitats within the areas identified as riparian buffers, recreation areas, caribou habitat and lakeshore management zones and throughout the polygon under the biodiversity conservation strategy.

Applicable Area:

- All FDUs

Results and Strategies

1. The FSP holder will obtain from regional MoE the location of known nest sites.

2. In the absence of General Wildlife Measures specified under FRPA, The FSP Holder will manage for Species at Risk consistent with the results and strategies for objective (Species at Risk) in this FSP.

5.6.14 Sandhill Crane

Objectives

58. Manage for grizzly bear, moose, furbearer, **species at risk** and other sensitive habitats within the areas identified as riparian buffers, recreation areas, caribou habitat and lakeshore management zones and throughout the polygon under the biodiversity conservation strategy.

Applicable Area:

- All FDUs

Results or Strategies

1. In the absence of General Wildlife Measures specified under FRPA, the FSP Holder will manage for Species at Risk consistent with objective (Species at Risk) of this FSP.

5.6.15 American Badger

Objectives

59. Manage for grizzly bear, moose, furbearer, **species at risk** and other sensitive habitats within the areas identified as riparian buffers, recreation areas, caribou habitat and lakeshore management zones and throughout the polygon under the biodiversity conservation strategy.

Applicable Area:

- All FDUs

Results or Strategies

1. The FSP Holder adopts as a result or strategy the general wildlife measures specified under GAR orders 5-073 to 5-085, 5-874 to 5-883 as these orders were on the date the FSP was submitted for approval.
2. In the absence of General Wildlife Measures specified under FRPA, the FSP Holder will manage for Species at Risk consistent with objective (Species at Risk) of this FSP.

5.6.16 Prairie Falcon

Objective

60. Manage for grizzly bear, moose, furbearer, **species at risk**, and other sensitive habitats within the areas identified as riparian buffers, recreation areas, mule deer winter range and lakeshore management zones and throughout the polygon under the biodiversity conservation strategy.
CCLUP 90-day report (p. 60-134)

Applicable Area:

- All FDUs

Results and Strategies

1. In the absence of General Wildlife Measures specified under FRPA, The FSP Holder will manage for Species at Risk consistent with the results and strategies for objective (Species at Risk) in this FSP.

5.6.17 Access Management for Wildlife

Objective

61. Plan and manage **forest development activities** so as to avoid, minimize or mitigate impacts to significant commercial and non-commercial values and opportunities that occur in association with forest lands, **including wildlife**, fish, water, range, recreation and tourism. CCLUP 90-Day Report P. 68, 179.

Applicable Area:

- All FDUs

Results or Strategies

The FSP Holder carries out or authorizes primary forest activities, the FSP Holder will apply the results and strategies for objectives (Species at Risk), (Backcountry), (Moose), (Grizzly Bear), (Mule deer), (Lakeshore management), and (Riparian).

5.7 Cultural Heritage Resources:

Definitions

Affected Cultural Heritage Resource: means a cultural heritage resource to which the objective set by government in section 10 of the FPPR pertains;

Cultural Heritage Resource Evaluation: means a process conducted by an authorized member of the affected First Nation or qualified professional to assess the existence and significance of an affected cultural heritage resource;

Cultural Heritage Resource (CHR): as defined in the Forest Act Definitions, means an object, a site or the location of a traditional societal practice that is of historical, cultural or archaeological significance to British Columbia, a community or an aboriginal people;

Potentially Affected First Nations: as those First Nations who have identified areas of interest (as defined by the Consultative Areas Database or equivalent government system) within the 100 Mile House district.

Objective

62. The objective set by government for cultural heritage resources is to conserve, or, if necessary, protect cultural heritage resources that are the focus of a traditional use by an aboriginal people that is of continuing importance to that people, and not regulated under the Heritage Conservation Act

Applicable Area:

- All FDUs

Result or Strategy

The FSP Holder will

1. Follow any specific or general protocols that are developed and agreed to with First Nations.
2. In the absence of specific or general protocols, and prior to carrying out or authorizing primary forest activities,
 - a) Refer the areas identified for proposed forest harvesting, road construction or site preparation to **Potentially Affected First Nations**, when these proposed activities fall within their identified area of interest, requesting specific information regarding CHR values;
 - b) Complete a **CHR Evaluation** where requested by the **Potentially Affected First Nation**.
 - c) If a **CHR Evaluation** identifies an **Affected CHR** in or adjacent to a proposed cutblock or road, work with **Potentially Affected First Nations** to develop and implement strategies to mitigate the direct impact of the proposed forest harvesting, site preparation or road construction on the affected CHR, based on:
 - i. The relative value or importance of the affected CHR to a traditional use by a First Nation;
 - ii. The relative abundance or scarcity of the affected CHR;
 - iii. The historical extent of the traditional use of the affected CHR and
 - iv. Options for mitigating the impact of the proposed primary forest activities on the CHR;
 - v. The impact that conserving or protecting the CHR has on the FSP Holder's ability to implement the proposed primary forest activities¹⁵.
 - d) In the event that an agreement cannot be reached regarding the **Affected CHR**, the holder of this FSP will develop and implement management strategies (based on the FPPR Schedule 1 Section 4 Factors) that will ensure that the **Affected CHR** is conserved or if necessary, protected and the management strategies are communicated back to the **Potentially Affected First Nation**.
 - e) If a specific previously unidentified **Affected CHR** is identified during forest harvesting, road construction or site preparation activities, modify or stop work to the extent necessary to protect the **Affected CHR**, then complete 2, c and d.

¹⁵ Paraphrased from FPPR Schedule 1 Section 4 Factors

5.8 Recreation & Tourism

5.8.1 Backcountry

Definitions:

Backcountry: is defined as a combination of the following Recreation Opportunity Spectrum (ROS) experiences: Semi-Primitive Motorized, Semi-Primitive Non-Motorized and Primitive. The actual proportion of each ROS category will be subject to the targets for other resources¹⁶.

Key Wilderness Lakes: The CCLUP Higher Level Plan Order declaration states that the term "key lakes" as used in the CCLUP corresponds to "quality lakes" as used in the Draft Cariboo Forest Region Lakeshore Guidebook¹⁷.

Key Lakes: These lakes have visual objectives and other values important to the tourism industry and related recreation opportunities. They can also be classified as one of the lakes identified in objective (Lakeshore management) as Refugium, Wilderness Fisheries, Quality, or General lakes¹⁸.

Objectives

63. Maintain percentages of FDUs as indicated in the table below in a backcountry condition. CCLUP 90-Day Report p. 60-134.

Table 6 Backcountry Thresholds by FDU

FDU	% to maintain in a backcountry condition	Suitability for Backcountry condition
Boss/Deception	50%	All of the area above 5000 feet, the area surrounding key wilderness lake and some trail networks connecting these areas.
Flat Lake	20 %	In order to be compatible with the timber targets, this includes the riparian area surrounding the entire Flat Lake chain of lakes.
Interlakes	30%	In order to be compatible with the timber targets, this includes the immediate surroundings of key wilderness lakes and the areas covered by mule deer winter ranges.
Lang Lake/Schoolhouse	30%	In order to be compatible with the timber targets, includes the mule deer winter ranges, the area adjacent to the Protected Area and the area adjacent to Lang Lake.
Marble Range	40%	In order to be compatible with the timber targets, this includes high elevation portions of the Marble Range and the area adjacent to the Fraser River.
Grasslands	10%	Along the Chilcotin and Fraser river corridors.
Clinton	n/a	
Canim	3%	In the area of Big Timothy Mountain and around key lakes.

¹⁶ Summary of CCLUP Legal Requirements and Selected Non-Legal Direction, (2005), http://ftp.for.gov.bc.ca/DMH/external!/publish/Type%20IV%20Silviculture%20Strategy/cclup_hlp_legal_direction.pdf, p. 60.

¹⁷ CCLUP Integration Information Sessions – Questions and Answers, (1999), https://www.for.gov.bc.ca/tasb/slrp/lrmp/williamslake/cariboo_chilcotin/news/files/reports/Cariboo-Chilcotin-Land-Use-Plan-Integration-Sessions-Questions-and-Answers.pdf. P. 6

¹⁸ Ibid.

Rail	3%	Adjacent to Lang and Timothy lakes
Gustafson	2%	South of Green Lake.
Loon	5%	Adjacent to Loon and Hihium lakes
Bonaparte	4%	Adjacent to key lakes.

Applicable Area:

- All FDUs

Results or Strategies

The FSP Holder will:

1. Apply the results or strategies for objectives (Riparian), and (Lakeshore management) and (Visual Quality).
2. Not carry out or authorize road construction if the backcountry thresholds in the areas identified as suitable in as listed in Table 6 will be exceeded.
3. Coordinate with other licensees operating in the FDUs listed in Table 6 to track backcountry threshold amounts.

5.8.2 Recreation Sites, Trails and Interpretive Forests

Definitions:

Recreation Sites, Recreation Trails and Interpretive Forests: are areas of Crown land within or outside of Provincial Forests that area established by the Minister under Section 56 (1) of the Forest and Range Practices Act [or previously under Section 6(1) of the Forest Practices Code] for managing their recreation values.

Objective

64. Manage established recreation sites, trails and interpretive forests in accordance with established objectives. (Original Objective, no legal link to CCLUP or FPPR).

Applicable Area:

- All FDUs

Results or Strategies

1. When the TSM carries out or authorizes primary forest activities in areas within 100m of designated Recreation Sites, Trails or Interpretive Forests with established Objectives, the TSM will ensure that the activities are designed and carried out in a manner that is consistent with the following:
 - a. Consultation and Referral to the District Recreation Officer, including the development of a strategy that aligns with the established objectives of the rec site.
 - c. Secure written authorization under S.16 of the Forest Recreation Regulation of the proposed priority activity.
 - d. Repair or mitigate physical damage to the recreation site or trail caused by road construction or harvest activities.

2. When the TSM retains maintenance responsibility for a Forest Service Road that is the only access to an established Recreation Site or Trail, the TSM will ensure that summer access is not restricted except for temporary closures to repair or replace roads and stream crossings.

5.8.3 Buffered Trails

Definitions:

Buffered Trails: are trails that have been identified in Objective 30 of the Cariboo Chilcotin Land Use Order (map 10).

Objectives

65. LUO 30. For buffered trails shown on LUO map 10, maintain 50 meter management zones on either side, with the treed area inside the management zone managed to the combined minimum basal area retention of 85 percent, except where roads cross trails.
66. LUO 31. Despite CCLUP Land use Order Objective 30, primary forest activities that remove more than 15% percent of the basal area within the management zones are permitted for any of the following reasons:
 67. Where harvesting is essential for insect control to curtail severe damage to forest values at the landscape level in a beetle management unit (BMU) classified as suppression for that insect pest,
 68. Where harvesting is necessary to manage for blowdown where that helps to maintain the recreational value of the trail.

Applicable Area:

- All FDUs

Results or Strategies

When authorizing primary forest activities that may impact buffered trails, the FSP Holder will comply with LUO 30 and 31.

5.8.4 Visual Quality:

Objectives

69. LUO 26: Maintain the visual quality objectives for scenic areas as shown on map 9a and defined by the spatial dataset, Cariboo-Chilcotin Scenic Areas.
70. LUO 27: Despite objective 26, harvesting is permitted where it is essential for insect control to curtail severe damage to forest values at the landscape level in a beetle management unit (BMU) classified as suppression for that insect pest.
71. LUO 28: Along the scenic corridors shown on map 9b and defined by the spatial dataset, Cariboo-Chilcotin Scenic Corridors, design harvest areas to mimic existing natural openings, vegetation patterns and natural features.

72. LUO 29: Design harvest areas to mimic existing natural openings, vegetation patterns, and natural features when viewed from the high elevation viewpoints shown on map 9c and defined by the spatial dataset, Cariboo-Chilcotin High Elevation Viewpoints. CCLUP LUOs 26-29.

Applicable Area:

- All FDUs

Results or Strategies

1. If the FSP Holder carries out or authorizes primary forest activities within:
 - a. Scenic Areas shown on map 9a and defined by the spatial dataset Cariboo-Chilcotin Scenic areas, or
 - b. Scenic Corridors shown on map 9b and defined by the spatial datasets Cariboo-Chilcotin Scenic Corridors, or
 - c. when visible from High Elevation Viewpoints as shown on map 9c and defined by the spatial dataset Cariboo-Chilcotin High Elevation Viewpoints,
2. The FSP Holder will ensure a QRP designs cutblock harvesting and road construction such that the visual alteration that will result from the design is consistent with:
 - a. CCLUP LUOs 26 to 29,
 - b. The results and strategies for objective (Lakeshore management), and
 - c. The applicable category of Visual Quality described in *FPPR Sec 1.1 Categories of Visually Altered Forest Landscapes*, and
3. The FSP Holder will ensure that harvesting and road construction is consistent with the professional design.

5.8.5 Tourism

Objectives

73. Plan and manage forest development activities so as to avoid, minimize or mitigate impacts to significant commercial and non-commercial values and opportunities that occur in association with forest lands, including wildlife, fish, water, range, recreation and **tourism**. CCLUP 90-Day Report P. 68, 179.
74. Minimize or mitigate impacts to significant other commercial and non-commercial values and opportunities that occur in association with forest lands, including wildlife, fish, water, range, recreation and **tourism**. CCLUP 90-Day report p. 179

Applicable Area:

- All FDUs

Results or Strategies

1. When carrying out or authorizing primary forest activities, the FSP Holder will gather input from potentially affected parties, including but not limited to owners of tourism operations that are

lodges, resorts, licensed users of crown land for recreation and tourism purposes, guide outfitters, and outdoor recreationists, in regards to cutblock and roads proposed by the TSM.

2. Input from those parties will be recorded, evaluated and incorporated into site specific plans where practicable.

5.9 Range/Grazing

Definitions

Natural Range Barrier: a river, a rock face, dense timber or other naturally occurring feature that stops or significantly impedes livestock movement to and from an adjacent area.

5.9.1 Range Conflicts

Objectives

75. Plan and manage forest development activities so as to avoid, minimize or mitigate impacts to significant other commercial and non-commercial values and opportunities that occur in association with forest lands, including wildlife, fish, water, **range**, recreation and tourism. CCLUP 90-Day Report P. 68, 179.

Applicable Area:

- All FDUs

Result or Strategy

Before carrying out or authorizing primary forest activities, the FSP Holder will:

1. Inform the range tenure holder of primary forest activities within or adjacent to (within 500m) their range tenure;
2. Where a range tenure holder indicates that conflict between timber and range management may arise, work with the potentially impacted range tenure holder(s) to develop strategies to minimize or mitigate the potential impact of the proposed activities on the range tenure through integrated management practices.
3. In the event that agreement cannot be reached in (2), communicate back to the range tenure holder and District Range Staff what management strategies, developed by a QRP, will be undertaken in response to the potential conflict.

5.9.2 Natural Range Barriers

Objectives

76. For the purpose of section 48 [natural range barriers] of the Act, a person who prepares a forest stewardship plan must specify **measures** to mitigate the effect of removing or rendering ineffective natural range barriers. FPPR s. 18

Applicable Area:

- All FDUs

Measures:

Before carrying out or authorizing primary forest activities, the FSP Holder will:

1. Inform the range tenure holder of primary forest activities within or adjacent to (within 500m) their range tenure and request that the range tenure holder identify the location of **Natural Range Barriers** that may be rendered ineffective by the proposed primary forest activities;
2. Where a range tenure holder indicates that primary forest activities may remove or render ineffective a **Natural Range Barrier**, work with the potentially impacted range tenure holder(s) to develop strategies to minimize or mitigate the potential impact of the proposed activities on the **Natural Range Barrier**.
3. In the event that agreement cannot be reached in (2), communicate back to the range tenure holder and District Range Staff what management strategies, developed by a QRP, will be undertaken in response to the potential impact.

5.9.3 Agricultural Management Units

Objectives

77. Maintain the current authorized level of AUMs in the polygon and maintain the existing proportion of AUMs by Range Unit. CCLUP 90-Day report, p. 60-134.

Applicable Area:

- All FDUs

Result or Strategy

The TSM will apply the results, strategies and measures for objectives (Range) and (Invasive Plants).

5.10 Invasive Plants

Definitions

Invasive Plant Species: those plants defined in the Invasive Plants Regulation (January 31, 2004) as amended from time to time.

Applicable Area:

- All FDUs

Requirement

78. **Requirement:** A person who prepares a forest stewardship plan must specify measures in the plan to prevent the introduction or spread of species of plants that are invasive plants under the Invasive Plants Regulation, if the introduction is likely to be a result of the person's forest practices.

Applicable Area:

- All FDUs

Measures:

The FSP holder will:

1. Consult the Invasive Alien Plant Program (IAPP) Application¹⁹ database to determine known invasive plant sites.
2. Where machinery will be working in known invasive plant sites, advise the operator of the machinery to remove any observed plant material, or significant accumulations of soil which may contain plant material, from the machinery prior to that machinery being relocated outside of the cutblock or road.
3. During cutblock and road design, avoid infested sites when determining staging, parking and log sorting areas.
4. Advise the operators of machinery that primary forest activities should occur in uninfested sites before moving to infested sites
5. Prior to carrying out or authorizing primary forest activities that will result in creating contiguous areas of disturbed soil ≥ 0.1 ha, the FSP holder will ensure that, within one year of the completion of the activities, the portions of the area occupied by ditch-lines, cut-or fill slopes, and deactivated roads (which are not reforested and not including active road running surfaces) will be seeded using:
 - a. seed or forage mixture that meets or exceeds Canada Common Number 1 Forage Mixture as defined by the *Canada Seeds Act* and Regulation, or
 - b. native forbs or shrubs.
6. Where areas have been seeded, inspect the areas within 24 months of seeding to ensure successful establishment and repeat one additional seeding if not successfully established.

Within one year of discovery, report new invasive plant infestation sites through the provincial Invasive Alien Plant Program (IAPP) Application²⁰.
7. If the FSP Holder carries out or authorizes forest practices that will result in creating contiguous areas of disturbed soil ≥ 0.1 ha, the FSP Holder will ensure that, within one year of their completion, the portions of the area occupied by ditch-lines, cut-or fill slopes, and deactivated roads which are not reforested (except for active running surface), are revegetated.

6 STOCKING STANDARDS

All stocking requirements are applicable across the entire FSP area (all FDUs).

Scale of Measurement: FPPR s.44 will apply to all areas harvested under the authority of this FSP.

Map Reference: N/A.

Where the FSP Holder is required under FRPA to establish a free growing stand with respect to timber harvesting governed by this FSP, the FSP Holder will do so in accordance with the stocking standards in Appendix A.

¹⁹ <https://www.for.gov.bc.ca/hra/Plants/application.htm>

²⁰ <https://www.for.gov.bc.ca/hra/Plants/application.htm>

6.1 General Discussion

6.1.1 Minimum Inter-Tree Distance

Despite the distances specified in the stocking standards tables, the minimum inter-tree distance may be reduced on hydric and subhydric sites to allow for micro-site selection. Minimum inter-tree distance can be reduced on mechanically site prepared sites where target planting density is at least 20% greater than TSS.

6.1.2 Uneven-aged Stocking Standards

Uneven-aged stocking standards will apply in circumstances where the forest professional preparing site specific plans for individual blocks determines that uneven-aged management is the preferred approach to manage the stand.

6.1.3 Regeneration Delay

Regeneration delay will be 4 years unless the site plan identifies natural regeneration for the block or standards unit, then regeneration delay will be set up to a maximum of 7 years.

6.1.4 Damage Criteria

BCTS will use damage criteria for regeneration and free growing surveys specified in FS 660, 2016 Silviculture Surveys Procedures Manual or equivalent future guidelines.

6.1.5 Crop vs. Competition Ratio

Crop vs. competition ratio will be followed as per Appendix A: General Standards Section 4

6.1.6 Maximum Density

Maximum density will be followed as per Appendix A: General Standards Section 5

6.1.7 Broadleaf Species and Mixed Stands

Broadleaf species will be utilized in stocking standards for mixed stands. The only commercially acceptable broadleaf species will be aspen. Mixed stand management must only occur on sites where aspen is shown as a productive, reliable and feasible regeneration option. The post-harvest, regenerated conifer composition must be representative of the pre-harvest stand composition.

7 APPENDIX A – STOCKING STANDARDS

Section 44(1) of the Forest Planning and Practices Regulation apply to all areas harvested under the Forest Stewardship Plan except where exempted from the requirement of Section 29(1) or (2) of the Forest and Range Practices Act.

The stocking standards detailed in Tables 9-12 shall apply to areas harvested under the Forest Stewardship Plan (FSP). These stocking standards may also be applied to areas previously harvested under a Forest Development Plan or FSP. An FSP stocking standard will apply to a previously harvested area when the stocking standard identification number applicable to a Standard Unit (SU) is submitted to RESULTS.

DEFINITIONS

Broadleaf: balsam poplar, black cottonwood, trembling aspen, and common paper birch.

Hydric: poorly drained sites; water table or seepage or gleyed soils within 80 cm of mineral soil surface.

Subhydric: very poorly drained sites; water table or persistent seepage or strongly gleyed soils within 30 cm of mineral soil surface.

Shrubs: alder, willow, scrub birch, soopalallie, common juniper, rose, and saskatoon.

Snowcreep: The slow, continuous downhill movement of snow. This can result in snowpress on regenerating crop trees.

Snowpress: The deformation and potential mortality of regenerating trees due to continuous exposure to overtopping snow.

GENERAL STANDARDS

1) Crop Tree Assessment

Regeneration and free growing surveys will be conducted under the oversight of a Forest Professional and/or Accredited Surveyor. Survey methodologies and tree acceptability criteria are as specified in the Resource Practices Branch, Silviculture Survey Procedures Manual, unless specified or varied through provisions of this FSP.

2) District Policies

Where a District approves a policy that varies the standards or procedures described in the Resource Practices Branch, Silviculture Survey Procedures Manual, the policy may be applied at the discretion of the obligation holder.

3) Minimum Inter-tree Distance

A 2.0 m minimum inter-tree distance (MITD) applies for each standard in Table 9. Variations from this standard are outlined in the “Variations from General Standards” section.

4) Crop vs. Competition Ratio

Crop vs. competition ratio must be a minimum of 125% in the BG, ESSF, IDF, MS and PP biogeoclimatic subzones. Crop vs. competition ratio must be a minimum of 150% in all other biogeoclimatic subzones not listed above.

5) Maximum Density

Maximum density will be 25,000 countable stems per hectare where stands are greater than 80% pine by stem count. Otherwise, maximum density will be 10,000 countable stems per hectare.

Table 7 Stocking Standards for Even Aged Stands

Reference Guide for FDP Stocking Standards**

Cariboo Forest Region

BGC			Regeneration Guide										Free Growing Guide			
Classification			Species					Stocking(i)			Regen	Assessment		Min. Height(ii)		
Zone/SZ	Series	Standards ID	Conifer				Broadleaf	Target	MIN pa	MIN p	Delay	Earliest	Latest	Species	Ht	
			Primary	Preferred (p)	Secondary	Acceptable (a)		Tertiary	(well-spaced/ha)	(Max yrs)	(yrs)	(yrs)	(m)			
ESSFdc ²	01	80000	PI Se	PI Se	BI	BI		1200	700	600	4	12	20	PI Others	1.6 0.8	
	02*	-	PI ⁶²	PI ⁶²		BI ¹³ Se BI ¹³ Pa ^{9,17} Se	BI ¹³ Se BI ¹³ Pa ^{9,17} Se	-	-	-	-	-	-	-	-	
	03	80001	PI	PI		BI ¹³ Se BI ¹³ Pa ^{9,17} Se	BI ¹³ Se BI ¹³ Pa ^{9,17} Se	1000	500	400	7	15	20	PI Others	1.2 0.6	
	04	80002	PI	PI		BI ¹³ Se	BI ¹³ Se	1000	500	400	7	15	20	PI Others	1.2 0.6	
	05	80003	PI Se	PI Se	BI ^{10,13}	BI ^{10,13}		1000	500	400	7	15	20	PI Others	1.2 0.6	
	06	80004	PI Se	PI Se	BI	BI		1200	700	600	4	12	20	PI Others	1.6 0.8	
	07	80005	PI Se ³²	PI Se ³²	BI	BI		1200	700	600	4	12	20	PI Others	1.6 0.8	
	08	80006	PI ¹ Se ^{1,32}	PI ¹ Se ^{1,32}	BI ^{1,32}	BI ^{1,32}		1000	500	400	4	12	20	PI Others	1.2 0.6	
	09	-	non-forested	non-forested				-	-	-	-	-	-	-	-	
ESSFmv1	01	80007	BI Se	BI Se	PI	PI		1200	700	600	4	12	20	PI Others	1.6 0.8	
	02	80008	PI	PI		BI	BI	1000	500	400	7	12	15	PI BI	1.2 0.6	
	03	80009	BI PI Se	BI PI Se				1000	500	400	7	15	20	PI Others	1.2 0.6	
	04	80010	BI Se	BI Se	PI	PI		1000	500	400	7	15	20	PI Others	1.2 0.6	
	05	80011	BI ^{1,32} Se ^{1,32}	BI ^{1,32} Se ^{1,32}	PI ¹	PI ¹		1000	500	400	4	12	20	PI Others	1.2 0.6	
ESSFwc3	01	80012	BI Se	BI Se	PI ³⁴	PI ³⁴		1200	700	600	4	12	20	PI Others	1.6 0.8	
	02	80013	BI Se	BI Se PI ³⁴	PI ³⁴			1000	500	400	7	15	20	PI Others	1.2 0.6	
	03*	80014	BI ^{1,32,34} Se ^{1,32,34}	BI ^{1,32,34} Se ^{1,32,34}				600	400	400	7	15	20	All	0.6	
ESSFwk1	01	80015	BI Se	BI Se PI ³⁴	PI ³⁴			1200	700	600	4	12	20	PI Others	2.0 1.0	
	02*	80016	BI PI Se	BI PI Se				1000	500	400	7	15	20	PI Others	1.4 0.8	
	03	80017	PI ³⁴ Se	PI ³⁴ Se	BI	BI		1200	700	600	4	12	20	PI Others	2.0 1.0	
	04	80018	BI ³² Se ³²	BI ³² Se ³²	PI ³⁴	PI ³⁴		1200	700	600	4	12	20	PI Others	2.0 1.0	
	05	80019	BI Se	BI Se	PI ³⁴	PI ³⁴		1200	700	600	4	12	20	PI Others	2.0 1.0	
	06	80020	BI ^{1,32} Se ^{1,32}	BI ^{1,32} Se ^{1,32}				1000	500	400	4	12	20	All	0.8	
	07	80021	BI ^{1,32} Se ^{1,32}	BI ^{1,32} Se ^{1,32}				1000	500	400	4	12	20	All	0.8	
ESSFxc	01	80022	PI Se ³²	PI Se ³²	BI ^{10,13}	BI ^{10,13}		1200	700	600	4	12	20	PI Others	1.6 0.8	
	02	80023	PI	PI		BI ¹³ Se	BI ¹³ Se	600	400	400	7	15	20	PI Others	1.2 0.6	
	03	-	non-forested	non-forested				-	-	-	-	-	-	-	-	
	04	-	non-forested	non-forested				-	-	-	-	-	-	-	-	
	05	80024	PI	PI		BI ¹³ Se	BI ¹³ Se	1000	500	400	7	15	20	PI Others	1.2 0.6	
	06	80025	PI Se	PI Se	BI ¹³	BI ¹³		1200	700	600	7	15	20	PI Others	1.6 0.8	

1,2 etc - see "Footnotes"

*Avoid logging

** Additional information or recommended standards are contained in the text portion of the reference guide.

Reference Guide for FDP Stocking Standards**

Cariboo Forest Region

BGC			Regeneration Guide								Free Growing Guide					
Classification			Species					Stocking(I)			Regen	Assessment		Min. Height(II)		
Zone/SZ	Series	Standards ID	Conifer					Broadleaf	Target	MIN pa	MIN p	Delay	Earliest	Latest	Species	Ht
			Primary	Preferred (p)	Secondary	Acceptable (a)	Tertiary		(well-spaced/ha)							
	07	80026	PI Se ³²	PI Se ³²	BI ³²	BI ³²		1200	700	600	4	12	20	PI	1.6	
	08	80027	PI ¹	PI ¹ Se ^{1,32}	BI ^{1,32} Se ^{1,32}	BI ^{1,32}		1000	500	400	4	12	20	Others	0.8	
	09	-	non-forested	non-forested				-	-	-	-	-	-	-	PI	1.2
	10	-	non-forested	non-forested				-	-	-	-	-	-	-	Others	0.6
ESSFxv1	01	80028	PI ³² Se ³² BI ^{32,50}	PI ³² Se ³²	Pa	BI ^{32,50} Pa		1200	700	600	7	12	15	PI	1.0	
	02*	80029	PI Pa	PI Pa		BI ²⁸	BI ²⁸	800	500	400	7	12	15	Others	0.8	
	03*	80030	PI	PI Pa	Pa			800	500	400	7	12	15	PI	0.8	
	04	80031	PI Pa	PI Pa		BI ²⁸ Se ²⁸	BI ²⁸ Se ²⁸	1000	600	500	7	12	15	Pa	0.6	
	05	80032	PI Pa	PI Pa	BI ²⁸ Se ²⁸	BI ²⁸ Se ²⁸		1200	700	600	7	12	15	PI	0.8	
	06	80033	PI	PI Se ³²	BI ³² Se ³²	BI ³²	Pa	1200	700	600	7	12	15	Others	0.6	
	07	80034	PI ³² BI ³² Se ³²	PI ³² Se ³²		BI ³²	Pa	1200	700	600	4	12	15	PI	1.0	
	08	80035	PI ^{1,32} Se ^{1,32} BI ^{1,32}	PI ^{1,32} Se ^{1,32}		BI ^{1,32}		600	400	300	4	12	15	Others	0.8	
	09	80036	Se ^{1,32} BI ^{1,32}	Se ^{1,32} BI ^{1,32}	PI ¹	PI ¹		800	500	400	4	12	15	PI	0.8	
														Others	0.6	
ESSFxv2	01	80037	PI Se ³² BI ³²	PI Se ³²		BI ³² Pa	Pa	1200	700	600	7	12	15	PI	1.0	
	02*	80038	PI	PI Pa	Pa	BI ^{28,53}	BI ^{28,53}	800	500	400	7	12	15	Others	0.8	
	03*	80039	PI	PI	Pa	Pa		600	400	300	7	12	15	PI	0.8	
	04	80040	PI	PI	BI ²⁸ Pa	BI ²⁸ Pa		1200	700	600	7	12	15	Pa	0.6	
	05	80041	PI	PI Se	PaSeBI	Pa BI		1200	700	600	7	12	15	PI	1.0	
	06	80042	PI	PI Se	SeBI	BI	Pa	1200	700	600	7	12	15	Others	0.8	
	07	80043	PI Se ³² BI ³²	PI Se ³²		BI ³²		1200	700	600	4	12	15	PI	1.0	
	08	80044	Se ^{1,32} BI ^{1,32}	Se ^{1,32} BI ^{1,32}	PI ¹	PI ¹		600	400	300	4	12	15	Others	0.8	
	09	80045	Se ^{1,32} BI ^{1,32}	Se ^{1,32} BI ^{1,32}	PI ^{1,32}	PI ^{1,32}		600	400	300	4	12	15	PI	0.8	
	10	80046	Se ^{1,32} BI ^{1,32}	Se ^{1,32} BI ^{1,32}	PI ^{1,32}	PI ^{1,32}		600	400	300	4	12	15	Others	0.6	
														PI	0.8	
														Others	0.6	
ICHdk	01	80047	Fd PI Sx	Fd PI Sx	BI	BI Cw ³⁷	Cw ³⁷	At ⁸ Ep ⁸	1200	700	600	4	9	15	PI	2.0
	02	80048	Fd ²⁸ PI	Fd ²⁸ PI		Cw ^{28,37,53} Sx ²⁸	BI ²⁸ Cw ^{28,37,53} Sx ²⁸	At ^b	1000	500	400	7	12	15	Fd	1.4
	03	80049	Fd ²⁸ PI	Fd ²⁸ PI		Cw ^{28,37,53} Sx ^{28,53}	Cw ^{28,37,53} Sx ^{28,53}	At ^b	1200	700	600	7	12	15	Others	1.0
	04	80050	Fd PI Sx ²⁸	Fd PI Sx ²⁸	BI ²⁸	Cw ^{28,37,53} BI ²⁸	Cw ^{28,37,53}	At ⁸ Ep ⁸	1200	700	600	4	9	15	PI	2.0
														Fd	1.4	
														Others	1.0	
														PI	2.0	
														Fd	1.4	
														Others	1.0	
														PI	2.0	
														Fd	1.4	
														Others	1.0	

1,2 etc - see "Footnotes"

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Cariboo Forest Region

BGC			Regeneration Guide										Free Growing Guide			
Classification			Species					Stocking(I)			Regen	Assessment		Min. Height(II)		
Zone/SZ	Series	Standards ID	Conifer					Broadleaf	Target	MIN pa	MIN p	Delay	Earliest	Latest	Species	Ht
			Primary	Preferred (p)	Secondary	Acceptable (a)	Tertiary		(well-spaced/ha)			(Max yrs)				
	05	80051	Fd PI Sx	Fd PI Sx	BI Cw ³⁷	BI Cw ³⁷		Act ^a At ^a Ep ^a	1200	700	600	4	9	15	PI Fd Others	2.0 1.4 1.0
	06	80052	Fd PI Sx	Fd PI Sx	BI Cw ³⁷	BI Cw ³⁷		Act ^a At ^a Ep ^a	1200	700	600	4	9	15	PI Fd Others	2.0 1.4 1.0
	07	80053	Fd ^{1,32} PI Sx	Fd ^{1,32} PI Sx	BI	BI		Act ^a At ^b	1200	700	600	4	9	15	PI Fd Others	2.0 1.4 1.0
	08	80054	Fd ³² Sx	Fd ³² Sx	BI Cw ^{32,37} PI	BI Cw ^{32,37} PI		Act ^a At ^a Ep ^a	1000	500	400	4	9	15	PI Fd Others	1.4 1.0 0.8
	09	80055	Sx ³²	Sx ³²	BI ³² PI	BI ³² PI		Act ^a	1000	500	400	4	9	15	PI Others	1.4 0.8
ICHmk3	01	80056	Fd PI Sx	Fd PI Sx	BI Cw ³⁷	BI Cw ³⁷		Act ^a At ^a Ep ^a	1200	700	600	4	9	15	PI Fd Others	2.0 1.4 1.0
	02*	80057	Fd PI	Fd PI		Sx ²⁸	BI Sx ²⁸	At ^b	1000	500	400	7	12	15	PI Fd Others	1.4 1.0 0.8
	03	80058	Fd PI	Fd PI		Cw ²⁸ Sx ²⁸	BI ²⁸ Cw ²⁸ Sx ²⁸	At ^b	1000	500	400	7	12	15	PI Fd Others	1.4 1.0 0.8
	04	80059	Fd ³² Sx	Fd ³² Sx	BI Cw ^{32,37} PI	BI Cw ^{32,37} PI		Act ^a At ^a Ep ^a	1200	700	600	4	9	15	PI Fd Others	2.0 1.4 1.0
	05	80060	Sx ³² PI	Sx ³² PI	Cw ^{32,37} BI ³²	Cw ^{32,37} BI ³²		Act ^a At ^b	1200	700	600	4	9	15	PI Others	2.0 1.0
	06	80061	Fd ^{32,34} Sx ³⁴	Fd ^{32,34} Sx ³⁴ Cw ^{32,34,37}	BI ³⁴ Cw ^{32,34,37} PI ³⁴	BI ³⁴ PI ³⁴		Act ^a At ^b Ep ^a	1200	700	600	4	9	15	PI Fd Others	2.0 1.4 1.0
	07	80062	Sx ^{1,32}	Sx ^{1,32} Cw ^{1,32,37}	BI ^{1,32} Cw ^{1,32,37} PI ¹	BI ^{1,32} PI ¹		Act ^a	1000	500	400	4	9	15	PI Others	1.4 0.8
ICHmw3	01	80063	Fd	Fd Sx ^{10,13}	PI Sx ^{10,13}	PI Cw ^{10,13}	BI ^{10,13} Cw ^{10,13} Hw ^{10,13}	Act ^a At ^a Ep ^a	1200	700	600	4	9	15	PI, Pw Lw Fd Others	2.0 2.0 1.4 1.0
	01-YC	80064	Fd	Fd Sx ^{10,13}	PI Sx ^{10,13}	PI Cw ^{10,13}	BI ^{10,13} Cw ^{10,13} Hw ^{10,13}	Act ^b At ^a Ep ^a	1200	700	600	4	9	15	PI, Pw Lw Fd Others	2.0 2.0 1.4 1.0
	02	80065	Fd PI	Fd PI		Cw ^{10,13}	Cw ^{10,13}	Ep ^b	1000	500	400	7	12	15	PI, Pw Fd Others	1.4 1.0 0.8
	03	80066	Fd ³² PI	Fd ³² PI		Cw ^{10,13} Hw Sx ^{10,13}	BI ^{10,13} Cw ^{10,13} Hw Sx ^{10,13}	At ^{53,a} Ep ^{53,a}	1000	500	400	7	12	15	PI, Pw Lw Fd Others	1.4 1.4 1.0 0.8
	04	80067	Fd PI	Fd PI		Cw ^{10,13} Sx ^{10,13}	BI Cw ^{10,13} Hw ^{10,13} Sx ^{10,13}	At ^a Ep ^a	1200	700	600	7	12	15	PI, Pw Lw Fd Others	2.0 2.0 1.4 1.0
	05	80068	Fd	Fd Sx ^{10,13}	BI ^{10,13} Hw ^{10,13} PI Sx ^{10,13}	BI ^{10,13} Hw ^{10,13} PI Cw ^{10,13}	Cw ^{10,13}	Act ^b At ^a Ep ^a	1200	700	600	7	12	15	PI, Pw Lw Fd Others	2.0 2.0 1.4 1.0
	06	80069	Cw Fd ¹⁴ Hw Sx	Cw Fd ¹⁴ Hw Sx	BI ^{10,13} PI	BI ^{10,13} PI		Act ^a At ^a Ep ^a	1200	700	600	4	9	15	PI, Pw	2.0

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Cariboo Forest Region

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Classification			Species					Stocking(I)			Regen	Assessment		Min. Height(II)		
Zone/SZ	Series	Standards ID	Conifer					Broadleaf	Target	MIN pa	MIN p	Delay	Earliest	Latest	Species	Ht
			Primary	Preferred (p)	Secondary	Acceptable (a)	Tertiary		(well-spaced/ha)			(Max yrs)	(yrs)	(yrs)		(m)
	07	80070	Cw ³² Sx	Cw ³² Sx Fd ^{1,32}	Bl Fd ^{1,32} Hw ³² Pl	Bl Hw ³² Pl	Act ^a At ^a Ep ^a	1200	700	600	4	9	15	Lw Fd Others Pl, Pw Lw Fd Others	2.0 1.4 1.0 2.0 2.0 1.4 1.0	
	08	80071	Cw ^{1,32} Hw ^{1,32} Pl ¹ Sx ¹	Cw ^{1,32} Pl ¹ Sx ¹ Hw ^{1,32}	Bl ¹	Bl ¹	Act ^a At ^b Ep ^b	1000	500	400	4	9	15	Pl Others	1.4 0.8	
	09	-	non-forested	non-forested				-	-	-	-	-	-	-	-	-
ICHwk2	01	80072	Fd Pl Sx	Fd Pl Sx	Bl Cw ³⁷ Hw ³⁷	Bl Cw ³⁷ Hw ³⁷	Act ^a At ^a Ep ^a	1200	700	600	4	9	15	Pl Fd Others	2.0 1.4 1.0	
	02*	80073	Fd Pl	Fd Pl		Bl ²⁸ Hw ^{28,37}	Bl ²⁸ Cw ^{28,37,53} Hw ^{28,37}	At ^b	1000	500	400	7	12	15	Pl Fd Others	1.4 1.0 0.8
	03*	80074	Fd Pl	Fd Pl		Bl ²⁸	Bl ²⁸ Cw ^{28,37,53} Hw ^{28,37}	At ^b	1000	500	400	7	12	15	Pl Fd Others	1.4 1.0 0.8
	04	80075	Fd Pl	Fd Pl	Hw ³⁷	Hw ³⁷	Bl ²⁸ Cw ^{28,37} Sx	At ^a Ep ^a	1200	700	600	4	9	15	Pl Fd Others	2.0 1.0 1.0
	05	80076	Pl Sx	Pl Sx	Bl Cw ³⁷	Bl Cw ³⁷	Act ^a	1200	700	600	4	9	15	Pl Others	2.0 1.0	
	06	80077	Sx ³²	Sx ³² Pl	Bl ³² Pl	Bl ³²	Act ^a	1200	700	600	4	9	15	Pl Others	2.0 1.0	
	07	80078	Fd ^{1,32} Sx	Fd ^{1,32} Sx Cw ^{32,37}	Bl Cw ^{32,37} Hw ^{32,37} Pl	Bl Hw ^{32,37} Pl	Act ^a At ^b Ep ^a	1200	700	600	4	9	15	Pl Fd Others	2.0 1.4 1.0	
	08	80079	Sx ^{1,32}	Sx ^{1,32} Cw ^{1,32,37}	Bl ^{1,32} Cw ^{1,32,37}	Bl ^{1,32}	Hw ^{1,32,37}	Act ^a	1000	500	400	4	9	15	All	0.8
ICHwk4	01	80080	Fd Pl Sx	Fd Pl Sx	Bl Cw ³⁷ Hw ³⁷	Bl Cw ³⁷ Hw ³⁷	Act ^a At ^a Ep ^a	1200	700	600	4	9	15	Pl Fd Others	2.0 1.4 1.0	
	02*	80081	Fd Pl	Fd Pl		Bl ²⁸ Hw ^{28,37}	Bl ²⁸ Hw ^{28,37}	At ^b	1000	500	400	7	12	15	Pl Fd Others	1.4 1.0 0.8
	03*	80082	Fd Pl	Fd Pl		Sx ²⁸	Hw ^{28,37} Sx ²⁸	At ^b	1000	500	400	7	12	15	Pl Fd Others	1.4 1.0 0.8
	04	80083	Fd ³² Pl Sx ²⁸	Fd ³² Pl Sx ²⁸	Bl ²⁸ Hw ³²	Bl ²⁸ Hw ³²	At ^b	1200	700	600	4	9	15	Pl Fd Others	2.0 1.4 1.0	
	05	80084	Fd Pl	Fd Pl	Hw ³⁷	Hw ³⁷	Bl ²⁸ Cw ^{28,37} Sx ²⁸	At ^a Ep ^a	1200	700	600	4	9	15	Pl Fd Others	2.0 1.4 1.0
	06	80085	Sx ³²	Sx ³² Pl	Bl ³² Pl	Bl ³²	Hw ^{32,37,53}	Act ^a	1200	700	600	4	9	15	Pl Others	2.0 1.0
	07	80086	Fd ^{1,32} Sx	Fd ^{1,32} Sx Cw ^{32,37}	Bl Cw ^{32,37} Hw ^{32,37} Pl	Bl Hw ^{32,37} Pl	Act ^a At ^b Ep ^a	1200	700	600	4	9	15	Pl Fd Others	2.0 1.4 1.0	
	08	80087	Sx ^{1,32}	Sx ^{1,32} Cw ^{1,32,37}	Bl ^{1,32} Pl ¹ Cw ^{1,32,37}	Bl ^{1,32} Pl ¹	Act ^a	1000	500	400	4	9	15	Pl Others	1.4 0.8	
IDFdk1	01	80088	Fd ³² Pl	Fd ³² Pl		Sx ^{10,13}	Sx ^{10,13}	At ^a	1000	500	400	7	12	15	Pl Lw Fd Sx	1.0 1.0 0.8 0.6

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Classification			Species					Stocking(I)			Regen	Assessment		Min. Height(II)		
Zone/SZ	Series	Standards ID	Conifer					Broadleaf	Target	MIN pa	MIN p	Delay	Earliest	Latest	Species	Ht
			Primary	Preferred (p)	Secondary	Acceptable (a)	Tertiary		(well-spaced/ha)	(Max yrs)	(yrs)	(yrs)				
	02	80089	Fd ²⁷	Fd ²⁷				At ^b	600	400	400	7	12	15	Py	0.6
	03	80090	Fd Pl	Fd Pl				At ^b	600	400	400	7	12	15	Pl	1.0
	04	80091	Fd Pl	Fd Pl		Sx ^{10,13}	Sx ^{10,13}	At ^b	1000	500	400	7	12	15	Fd	0.8
	05	80092	Fd ^{9,14,32} Sx	Fd ^{9,14,32} Sx	Pl	Pl	Bl ^{10,13}	Act ^a At ^a Ep ^b	1000	500	400	7	12	15	Py	0.6
	06	80093	Pl ¹ Sx ¹	Pl ¹ Sx ¹ Fd ^{1,32}	Fd ^{1,32}		Bl ¹	Act ^a At ^a Ep ^b	1000	500	400	4	9	15	Fd	0.8
	07	-	non-forested	non-forested					-	-	-	-	-	-	Others	0.6
	07	-	non-forested	non-forested					-	-	-	-	-	-	Others	0.6
IDFdk3	01	80094	Fd ^{27,32} Pl	Fd ^{27,32} Pl		Sx ^{13,28}	Sx ^{13,28}	At ^a	1200	700	600	7	12	15	Pl	1.4
	02*	80095	Fd ^{27,28} Pl	Fd ^{27,28} Pl					800	500	400	7	12	15	Fd	1.0
	03*	80096	Fd ^{27,28} Pl ²⁸	Fd ^{27,28} Pl ²⁸					800	500	400	7	12	15	Sx	0.8
	04	80097	Fd ^{27,28} Pl ²⁸	Fd ^{27,28} Pl ²⁸					800	500	400	7	12	15	Pl	1.0
	05	80098	Fd ^{27,28} Pl ²⁸	Fd ^{27,28} Pl ²⁸			At ^b	1000	500	400	7	12	15	Fd	0.8	
	06	80099	Fd ²⁷ Pl	Fd ²⁷ Pl			At ^b	1200	700	600	7	12	15	Pl	1.0	
	07	80100	Fd ^{27,28} Pl	Fd ^{27,28} Pl			At ^b	1200	700	600	7	12	15	Fd	0.8	
	08	80101	Fd ³² Pl Sx ²⁸	Fd ³² Pl Sx ²⁸			At ^a Ep ^b	1200	700	600	4	9	15	Pl	1.4	
	09	80102	Fd ^{1,32} Pl Sx	Fd ^{1,32} Pl Sx			Act ^a At ^a Ep ^b	1200	700	600	4	9	15	Fd	1.0	
IDFdk4	01	80103	Sx ^{1,32}	Sx ^{1,32}	Pl ¹	Pl ¹	Act ^a	1000	500	400	4	9	15	Sx	0.8	
	01	80103	Fd ^{27,32} Pl	Fd ^{27,32} Pl		Sx ^{13,28}	Sx ^{13,28}	At ^a	1200	700	600	7	12	15	Pl	1.4
	02*	80104	Fd ^{27,28} Pl ²⁸	Fd ^{27,28} Pl ²⁸					800	500	400	7	12	15	Fd	1.0
	03*	80105	Fd ^{27,28}	Fd ^{27,28}					800	500	400	7	12	15	Sx	0.8
	04*	80106	Fd ^{27,28} Pl ²⁸	Fd ^{27,28} Pl ²⁸			At ^b	1000	500	400	7	12	15	Pl	1.0	
	05	80107	Fd ^{27,28} Pl	Fd ^{27,28} Pl			At ^b	1200	700	600	7	12	15	Fd	0.8	
	06	80108	Pl	Pl		Sx ^{28,32}	Sx ^{28,32}	At ^b	1000	500	400	7	12	15	Pl	1.4
	07	80109	Fd ²⁷ Pl	Fd ²⁷ Pl			At ^b	1200	700	600	7	12	15	Fd	1.0	
	08	80110	Pl Sx ³²	Pl Sx ³²			At ^b	1000	500	400	4	9	15	Sx	0.6	
09	80111	Fd ^{1,32} Pl Sx	Fd ^{1,32} Pl Sx			Act ^a At ^a	1200	700	600	4	9	15	Pl	1.4		

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Zone/SZ	Series	Standards ID	Conifer					Broadleaf	Target	MIN pa	MIN p	Delay	Earliest	Latest	Species	Ht
			Primary	Preferred (p)	Secondary	Acceptable (a)	Tertiary		(well-spaced/ha)	(Max yrs)	(yrs)	(yrs)				
IDFdw	10	80112	Sx ^{1,32}	Sx ^{1,32}	PI ¹	PI ¹		Act ^a At ^a	1000	500	400	4	9	15	Sx PI Sx	0.8 1.0 0.6
	Insufficient data to develop species selection and stocking guidelines by site series. (Contact Forest Practices Section, Cariboo Forest Region for further information.)															
IDFmw2	01	80113	Fd PI	Fd PI		Cw ^{10,13} Sx ^{10,13}	Cw ^{10,13} Sx ^{10,13}	At ^a Ep ^a	1200	700	600	7	12	15	PI, Lw Fd Others	1.6 1.0 0.8
	01-YC	80114	Fd PI	Fd PI		Cw ^{10,13} Sx ^{10,13}	Bl ^{10,13} Cw ^{10,13} Sx ^{10,13}	At ^a Ep ^a Act ^b	1200	700	600	7	12	15	PI, Lw Fd Others	1.6 1.0 0.8
	01-YS	80115	Fd	Fd PI	PI	Sx ^{10,13}	Sx ^{10,13}	At ^a Ep ^a	1200	700	600	7	12	15	PI, Lw Fd Sx	1.6 1.0 0.8
	02	80116	Fd ²⁷	Fd ²⁷				At ^b	600	400	400	7	12	15	PI Fd Py	1.2 0.8 0.6
	03	80117	Fd ¹⁴ PI	Fd ¹⁴ PI		Cw ^{10,13} Sx ^{10,13}	Cw ^{10,13} Sx ^{10,13}	At ^b Ep ^b	1000	500	400	7	12	15	PI, Lw Fd Others	1.6 1.0 0.8
	04	80118	Fd ³² Sx	Fd ³² Sx	PI	PI Cw ^{32,37}	Bl ¹³ Cw ^{32,37}	Act ^a At ^a Ep ^a	1200	700	600	4	9	15	PI, Lw Fd Others	1.6 1.0 0.8
	05*	80119	Sx ¹ PI ¹	Sx ¹ PI ¹		Cw ^{1,32}	Bl ¹ Cw ^{1,32}	Act ^a At ^b Ep ^b	400	200	200	4	9	15	PI Others	1.2 0.6
IDFxm	01a	80120	Fd ^{27,28}	Fd ^{27,28}				At ^a	1200	700	600	7	12	15	All	0.8
	01b	80121	Fd ^{27,28} PI	Fd ^{27,28} PI				At ^a	1200	700	600	7	12	15	All	0.8
	02*	80122	Fd ^{27,28}	Fd ^{27,28}					1000	500	400	7	12	15	Fd	0.6
	03	80123	Fd ^{27,28} PI	Fd ^{27,28} PI					1000	500	400	7	12	15	PI Fd	0.8 0.6
	04	80124	Fd ^{27,28}	Fd ^{27,28}				At ^b	1000	500	400	7	12	15	Fd	0.6
	05	80125	Fd ²⁷	Fd ²⁷				At ^b	1200	700	600	7	12	15	Fd	0.8
	06	80126	Fd ³²	Fd ³²				At ^a	1200	700	600	7	12	15	Fd	0.8
	07	80127	Fd	Fd				At ^a Ep ^a	1200	700	600	7	12	15	Fd	0.8
	08	80128	Fd ³² Sx	Fd ³² Sx		PI	PI	Act ^a At ^a	1200	700	600	4	9	15	PI, Fd, Sx	0.8
	09	80129	PI ¹ Sx ¹	PI ¹ Sx ¹				Act ^a At ^b	1000	500	400	4	9	15	PI Sx	0.8 0.6
IDFwx	01	80130	Fd ²⁷ Py	Fd ²⁷ Py				At ^b	1200	700	600	7	12	15	Fd, Py	0.8
	02*	80131	Fd ^{27,28} Py ²⁸	Fd ^{27,28} Py ²⁸					600	400	400	7	12	15	Fd, Py	0.6
	03*	80132	Fd ^{27,28} Py ²⁸	Fd ^{27,28} Py ²⁸					600	400	400	7	12	15	Fd, Py	0.6
	04	80133	Fd ^{27,28} Py ²⁸	Fd ^{27,28} Py ²⁸				At ^b	800	500	400	7	12	15	Fd, Py	0.6
	05	80134	Fd ²⁷	Fd ²⁷				At ^b	1200	700	600	7	12	15	Fd	0.8
	06	80135	Fd Sx	Fd Sx				Act ^a At ^a Ep ^a	1200	700	600	4	9	15	Fd, Sx	0.6
	07	80136	Fd Sx	Fd Sx				Act ^a At ^a Ep ^a	1000	500	400	4	9	15	Fd, Sx	0.6
MHmm2 Insufficient data to develop species selection and stocking guidelines by site series. (Contact Forest Practices Section, Cariboo Forest Region for further information.)																
MSdc2	01	80137	PI Sx ²⁸	PI Sx ²⁸	Bl ²⁸ Fd ³²	Bl ²⁸ Fd ³²	Pa ⁵³		1200	700	600	7	12	15	PI Others	1.0 0.8
	02*	80138	Fd ²⁸ PI	Fd ²⁸ PI		Bl ²⁸ Pa ⁵³	Bl ²⁸ Pa ⁵³		1000	500	400	7	12	15	PI Others	0.8 0.6
	03	80139	Fd PI	Fd PI		Bl ²⁸ Pa ⁵³	Bl ²⁸ Pa ⁵³		1000	500	400	7	12	15	PI Others	0.8 0.6

1,2 etc - see "Footnotes"

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Cariboo Forest Region

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Classification			Species					Stocking(I)			Regen	Assessment		Min. Height(II)		
			Conifer					Broadleaf	Target	MIN pa	MIN p	Delay	Earliest	Latest	Species	Ht
Zone/SZ	Series	Standards ID	Primary	Preferred (p)	Secondary	Acceptable (a)	Tertiary		(well-spaced/ha)			(Max yrs)	(yrs)	(yrs)		(m)
	04	80140	PI	PI Sx ²⁸	Sx ²⁸ BI ²⁸	BI ²⁸	Pa ³³	1200	700	600	7	12	15	PI	1.0	
	05	80141	Sx ³² PI ¹	Sx ³² PI ¹	BI ³²	BI ³²		1200	700	600	7	12	15	Others	0.8	
	06	80142	Sx ³² BI ³² PI ¹	Sx ³² PI ¹		BI ³²		1200	700	600	4	9	15	PI	1.0	
	07	80143	Sx BI	Sx BI	PI ¹	PI ¹		1200	700	600	4	9	15	Others	0.8	
	08	80144	Sx ^{1,32}	Sx ^{1,32}	BI ^{1,32} PI ^{1,32}	BI ^{1,32} PI ^{1,32}		1000	500	400	4	9	15	PI	0.8	
														Others	0.6	
MSdv	01	80145	PI Sx ³²	PI Sx ³²	BI ³²	BI ³²		1200	700	600	7	12	15	PI	1.0	
	02*	80146	PI ²⁸	PI ²⁸				1000	500	400	7	12	15	Others	0.8	
	03	80147	PI	PI		Sx ^{28, 32} BI ^{28, 32}	Sx ^{28, 32} BI ^{28, 32}	1200	700	600	7	12	15	PI	1.0	
	04	80148	PI	PI		Sx ²⁸ BI ²⁸	Sx ²⁸ BI ²⁸	1200	700	600	7	12	15	Others	0.8	
	05	80149	PI	PI		Sx ²⁸ BI ²⁸	Sx ²⁸ BI ²⁸	1200	700	600	7	12	15	PI	1.0	
	06	80150	PI Sx ³²	PI Sx ³²	BI ³²	BI ³²		1200	700	600	7	12	15	Others	0.8	
	07	80151	PI Sx ³²	PI Sx ³²	BI ³²	BI ³²		1200	700	600	7	12	15	PI	1.0	
	08	80152	Sx ³²	Sx ³² PI ^{1,32}	BI ³² PI ^{1,32}	BI ³²		1000	500	400	4	9	15	Others	0.8	
	09	80153	Sx ^{1,32}	Sx ^{1,32}	PI ³² BI ³²	PI ³² BI ³²		1000	500	400	4	9	15	PI	0.8	
														Others	0.6	
MSxv	01	80154	PI Sx ^{28,32}	PI Sx ^{28,32}		BI ^{16,28,32}	BI ^{16,28,32}	1200	700	600	7	12	15	PI	1.0	
	02	80155	PI ³²	PI ³²				1000	500	400	7	12	15	Others	0.8	
	03	80156	PI	PI				1000	500	400	7	12	15	PI	0.8	
	04	80157	PI Sx ³²	PI Sx ³²		BI ^{16,28,32}	BI ^{16,28,32}	1200	700	600	7	12	15	PI	1.0	
	05	80158	PI Sx ³²	PI Sx ³²		BI ³²	BI ³²	1200	700	600	7	12	15	Others	0.8	
	06	80159	PI Sx ³²	PI Sx ³²		BI ^{16,32}	BI ^{16,32}	1200	700	600	7	12	15	PI	1.0	
	07	80160	PI Sx ³²	PI Sx ³²		BI ^{16,32}	BI ^{16,32}	1000	500	400	4	9	15	Others	0.8	
	08	80161	Sx ³²	Sx ^{1,32}	PI	PI BI ^{1,16,32}	BI ^{16,32}	1000	500	400	4	9	15	PI	0.8	
	09	80162	Sx ^{1,32}	Sx ^{1,32}		BI ^{1,32} PI ¹	BI ^{1,32} PI ¹	400	200	200	4	9	15	Others	0.6	
														PI	0.8	
														Others	0.6	
SBPSdc	01	80163	PI Sx ²⁸	PI Sx ²⁸		Sb ²⁸	Sb ²⁸	At ^a	1200	700	600	7	12	15	PI	1.4
	Climate Change 2013	01	PI Sx ²⁸	PI Sx ²⁸	Sx ²⁸	Sb ²⁸ Fd Sx ²⁸	Sb ²⁸ Fd							Others	0.8	
	02*	80164	PI ²⁸	PI ²⁸				At ^b	1000	500	400	7	12	15	PI	1.0
	03	80165	PI	PI		Sb ^{4,15,28} Sx ^{4,28}	Sb ^{4,15,28} Sx ^{4,28}	At ^b	1200	700	600	7	12	15	PI	1.4
	04	80166	PI Sx	PI Sx		Sb ¹⁵	Sb ¹⁵	At ^b	1200	700	600	7	12	15	Others	0.8
	05	80167	PI Sx	PI Sx		Sb ¹⁵	Sb ¹⁵	At ^b	1000	500	400	4	9	15	PI	1.0
	06	80168	PI Sx ³²	PI Sx ³²		Sb ¹⁵	Sb ¹⁵	Act ^a At ^a	1000	500	400	4	9	15	Others	0.6
														PI	1.0	

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Cariboo Forest Region

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Classification			Species					Stocking(i)			Regen	Assessment		Min. Height(ii)		
			Conifer					Broadleaf	Target	MIN pa	MIN p	Delay	Earliest	Latest	Species	Ht
Zone/SZ	Series	Standards ID	Primary	Preferred (p)	Secondary	Acceptable (a)	Tertiary		(well-spaced/ha)			(Max yrs)	(yrs)	(yrs)		(m)
	07	80169	Sx ^{1,32}	Sx ^{1,32} Pi ¹	Pi ¹	Sb ¹	Sb ¹		400	200	200	4	9	15	Others	0.6
	08	80170	Sx ^{1,32}	Sx ^{1,32}	Pi ¹	Pi ¹ Sb ¹⁵	Sb ¹⁵	Act ^a	1000	500	400	4	9	15	Pi	1.0
															Others	0.6
SBPSmc	01	80171	Pi	Pi		Sb Sx	Sb Sx	At ^b	1200	700	600	7	12	15	Pi	1.6
	02*	80172	Pi	Pi		Sb Sx	Sb Sx	At ^b	1000	500	400	7	12	15	Others	0.8
	03	80173	Pi	Pi		Sb Sx	Sb Sx	At ^b	1200	700	600	7	12	15	Pi	1.2
	04	80174	Pi Sb Sx ³²	Pi Sx ³²		Sb		At ^b	1000	500	400	4	9	15	Others	0.6
	05	80175	Sx ^{1,32}	Sx ^{1,32}	Pi ¹	Pi ¹ Sb ⁵³	Sb ⁵³	Act ^a	1000	500	400	4	9	15	Pi	1.2
	06	80176	Sx ^{1,32}	Sx ^{1,32} Pi ¹	Pi ¹	Sb ⁵³	Sb ⁵³	Act ^b	1000	500	400	4	9	15	Others	0.6
	07*	80177	Pi ¹ Sb ¹ Sx ^{1,32}	Pi ¹ Sx ^{1,32}		Sb ¹			400	200	200	4	9	15	Pi	1.2
															Others	0.6
SBPSmk	01	80178	Fd ^{14,32} Pi Sx	Fd ^{14,32} Pi Sx				At ^a	1200	700	600	7	12	15	Pi	1.6
	02*	80179	Fd ^{14,28} Pi	Fd ^{14,28} Pi		Sx ²⁸	Sx ²⁸		1000	500	400	7	12	15	Fd	1.0
	03	80180	Fd ²⁸ Pi	Fd ²⁸ Pi				At ^a	1200	700	600	7	12	15	Sx	0.8
	04	80181	Fd ^{14,28,32} Pi Sx ²⁸	Fd ^{14,28,32} Pi Sx ²⁸		Sb ^{14,15}		At ^a	1200	700	600	7	12	15	Pi	1.6
	05	80182	Fd ^{14,28} Pi Sx ²⁸	Fd ^{14,28} Pi Sx ²⁸				At ^b	1200	700	600	7	12	15	Fd	1.0
	06	80183	Pi Sx	Pi Sx				Act ^a At ^a	1200	700	600	4	9	15	Others	0.8
	07	80184	Sx ^{1,32}	Sx ^{1,32}	Bi ^{1,32} Pi ¹	Pi ¹ Bi ^{1,32}		Act ^a At ^a	1000	500	400	4	9	15	Pi	1.6
	08	80185	Sx ^{1,32}	Sx ^{1,32} Pi ¹	Pi ¹	Sb ¹	Sb ¹		400	200	200	4	9	15	Sx	0.8
															Others	0.6
SBPSxc Climate Change 2013	01	80186	Pi	Pi				At ^a	1200	700	600	7	12	15	Pi	1.4
	01		Pi	Pi		Fd	Fd									
	02a	80187	Fd ^{9,11,16,28} Pi	Fd ^{9,11,16,28} Pi				At ^b	1000	500	400	7	12	15	Pi	1.0
	02b	80188	Pi	Pi				At ^b	1000	500	400	7	12	15	Fd	0.6
	02c*	80189	Fd ^{9,11,16,28} Pi	Fd ^{9,11,16,28} Pi				At ^b	1000	500	400	7	12	15	Pi	1.0
	03	80190	Pi Sw ³²	Pi Sw ³²				At ^b	1000	500	400	4	9	15	Fd	0.6
	04	80191	Pi Sw ³²	Pi Sw ³²				At ^a	1200	700	600	4	9	15	Pi	1.0
	05	80192	Pi ¹ Sw ^{1,32}	Pi ¹ Sw ^{1,32}				Act ^a At ^a	1000	500	400	4	9	15	Sw	0.6
	06	80193	Pi Sw ³²	Pi Sw ³²				Act ^a At ^a	1000	500	400	4	9	15	Pi	1.0
														Sw	0.6	

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Classification			Species					Stocking(I)			Regen	Assessment		Min. Height(II)		
Zone/SZ	Series	Standards ID	Conifer					Broadleaf	Target	MIN pa	MIN p	Delay	Earliest	Latest	Species	Ht
			Primary	Preferred (p)	Secondary	Acceptable (a)	Tertiary									
SBSdw1	01	80194	Fd PI Sx ²⁸	Fd PI Sx ²⁸		Bl ^{28,53}	Bl ^{28,53}	At ^a Ep ^a	1200	700	600	7	12	15	PI	2.0
	02*	80195	Fd ²⁸ PI	Fd ²⁸ PI				At ^b	1000	500	400	7	12	15	Fd	1.4
	03	80196	Fd ²⁷ PI	Fd ²⁷ PI				At ^a	1200	700	600	7	12	15	Others	1.0
	04	80197	Fd ³² PI Sx ²⁸	Fd ³² PI Sx ²⁸				At ^a Ep ^b	1200	700	600	7	12	15	PI	1.4
	05	80198	Fd PI Sx	Fd PI Sx				At ^a Ep ^a	1200	700	600	7	12	15	Fd	2.0
	06	80199	Fd PI Sx	Fd PI Sx	Bl	Bl		Act ^a At ^a Ep ^a	1200	700	600	7	12	15	Sx	1.4
	07	80200	Fd ^{1,32} PI Sx	Fd ^{1,32} PI Sx	Bl	Bl		Act ^a At ^a Ep ^b	1200	700	600	4	9	15	Others	1.0
	08	80201	Fd ^{1,32} PI Sx	Fd ^{1,32} PI Sx	Bl ³²	Bl ³²		Act ^a At ^a Ep ^a	1200	700	600	4	9	15	PI	1.4
	09	80202	Sx ^{1,32}	Sx ^{1,32}	Bl ^{1,32} PI ¹	Bl ^{1,32} PI ¹		Act ^a	1000	500	400	4	9	15	Others	1.0
SBSdw2	01	80203	Fd ³² PI Sx	Fd ³² PI Sx				At ^a Ep ^a	1200	700	600	7	12	15	PI	2.0
	02*	80204	Fd ²⁸ PI	Fd ²⁸ PI					1000	500	400	7	12	15	Fd	1.4
	03	80205	Fd ^{28,32} PI	Fd ^{28,32} PI				At ^b	1200	700	600	7	12	15	Sx	1.0
	04	80206	Fd ²⁷ PI	Fd ²⁷ PI				At ^b	1200	700	600	7	12	15	PI	1.4
	05	80207	Fd PI Sx	Fd PI Sx				At ^a Ep ^{28,b}	1200	700	600	7	12	15	Fd	2.0
	06	80208	Fd ³² PI Sx ²⁸	Fd ³² PI Sx ²⁸				At ^a Ep ^b	1200	700	600	7	12	15	PI	1.4
	07	80209	PI Sx	PI Sx		Sb	Sb	At ^a	1200	700	600	7	12	15	Sx	1.0
	08	80210	Fd ^{1,32} PI Sx	Fd ^{1,32} PI Sx	Bl	Bl		Act ^a At ^a Ep ^b	1200	700	600	4	9	15	Fd	2.0
	09	80211	Fd PI Sx	Fd PI Sx	Bl	Bl		Act ^a At ^a Ep ^a	1200	700	600	4	9	15	Others	1.0
	10	80212	Sx ^{1,32}	Sx ^{1,32}	Bl ^{1,32} PI ¹	Bl ^{1,32} PI ¹		Act ^a	1000	500	400	4	9	15	PI	1.4
	11*	80213	Sx ^{1,32}	Sx ^{1,32} PI ¹	PI ¹	Sb ¹	Sb ¹		400	200	200	4	9	15	Others	0.8
SBSmc1	01	80214	Fd ^{15,32} PI Sx ²⁸	Fd ^{15,32} PI Sx ²⁸	Bl ²⁸	Bl ²⁸		Act ^b	1200	700	600	7	12	15	PI	1.6
	02*	80215	PI	PI		Bl ²⁸ Sx ²⁸	Bl ²⁸ Sx ²⁸		1000	500	400	7	12	15	Fd	1.0

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Classification			Species					Stocking(I)			Regen	Assessment		Min. Height(II)		
Zone/SZ	Series	Standards ID	Conifer					Broadleaf	Target	MIN pa	MIN p	Delay	Earliest	Latest	Species	Ht
			Primary	Preferred (p)	Secondary	Acceptable (a)	Tertiary		(well-spaced/ha)	(Max yrs)	(yrs)	(yrs)		(m)		
	03	80216	Fd PI	Fd PI				At ^b	1200	700	600	7	12	15	Others	0.6
	04	80217	PI Sx ³²	PI Sx ³²	BI ³²	BI ³²			1200	700	600	7	12	15	PI	1.6
	05	80218	PI Sx ³²	PI Sx ³²	BI ³²	BI ³²			1200	700	600	7	12	15	Fd	1.0
	06	80219	Fd ^{15,32} PI Sx	Fd ^{15,32} PI Sx	BI	BI			1200	700	600	4	9	15	PI	1.6
	07	80220	Fd ^{15,32} PI Sx	Fd ^{15,32} PI Sx	BI	BI			1200	700	600	4	9	15	Others	0.8
	08	80221	Sx ^{1,32}	Sx ^{1,32}	BI ^{1,32} PI ¹	BI ^{1,32} PI ¹			1000	500	400	4	9	15	PI	1.6
	08	80221	Sx ^{1,32}	Sx ^{1,32}	BI ^{1,32} PI ¹	BI ^{1,32} PI ¹			1000	500	400	4	9	15	Fd	1.0
SBSmc2	01	80222	PI Sx	PI Sx	BI	BI			1200	700	600	7	12	15	PI	1.6
	02	80223	PI	PI		BI ²⁸ Sx ²⁸	BI ²⁸ Sx ²⁸		1000	500	400	7	12	15	Others	0.8
	03†	80224	PI	PI Sx ³²	BI ²⁹ Sb Sx ³²	BI ²⁹ Sb		At ^b	1200	700	600	7	12	15	PI	1.2
	04	80225	PI Sx	PI Sx	BI	BI			1200	700	600	4	9	15	Others	0.6
	05†	80226	PI Sx	PI Sx	BI ²⁹	BI ²⁹		Act ^a At ^a	1200	700	600	4	9	15	PI	1.6
	06	80227	PI Sx	PI Sx	BI	BI		Act ^b	1200	700	600	4	9	15	Others	0.8
	07†	80228	PI Sb Sx ³²	PI Sx ³²		Sb	BI ⁵³	At ^b	1000	500	400	4	9	15	PI	1.6
	08	80229	Sx	Sx PI	BI PI	BI		Act ^b	1200	700	600	4	9	15	Others	0.6
	09†	80230	Sx	Sx PI	BI ²⁹ PI	BI ²⁹		Act ^b At ^a	1200	700	600	4	9	15	PI	1.6
	10†	80231	Sx ^{1,32}	Sx ^{1,32} PI ¹	BI ^{1,29,32} PI ¹	BI ^{1,29,32}		Act ^b At ^b	1000	500	400	4	9	15	Others	0.8
	11	80232	Sx ^{1,32}	Sx ^{1,32}	BI ^{1,32} PI ¹	BI ^{1,32} PI ¹		Act ^b	1000	500	400	4	9	15	PI	1.2
	12†‡	80233	PI ¹ Sb ¹ Sx ^{1,32}	PI ¹ Sx ^{1,32}		Sb ¹			400	200	200	4	9	15	Others	0.6
SBSmh	01	80234	Fd Sx	Fd Sx	BI ¹⁵	BI ¹⁵		Act ^a At ^a Ep ^a	1200	700	600	7	12	15	Fd	1.4
	02*	80235	Fd ²⁸ PI	Fd ²⁸ PI				At ^b Ep ^b	1000	500	400	7	12	15	Others	1.0
	03	80236	Fd PI Sx ²⁸	Fd PI Sx ²⁸	BI ¹⁵	BI ¹⁵		At ^a Ep ^b	1200	700	600	7	12	15	PI	1.4
	04	80237	Fd ²⁸	Fd ²⁸		BI ^{15,28} Sx ²⁸	BI ^{15,28} Sx ²⁸	At ^a Ep ^a	1200	700	600	7	12	15	Fd	1.4
	05	80238	Fd ³² Sx	Fd ³² Sx	BI ¹⁵	BI ¹⁵		Act ^b At ^a Ep ^a	1200	700	600	7	12	15	Others	1.0
	06	80239	Fd ³² PI Sx	Fd ³² PI Sx	BI ¹⁵	BI ¹⁵		Act ^a At ^a Ep ^a	1200	700	600	7	12	15	Fd	1.4
	07	80240	Fd Sx	Fd Sx	BI	BI		Act ^a At ^a Ep ^a	1200	700	600	4	9	15	PI	2.0
	08	80241	Fd Sx	Fd Sx	BI ¹⁵	BI ¹⁵		Act ^a At ^a Ep ^a	1200	700	600	4	9	15	Others	1.0

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Classification			Species					Stocking(I)			Regen	Assessment		Min. Height(II)		
Zone/SZ	Series	Standards ID	Conifer				Broadleaf	Target	MIN pa	MIN p	Delay	Earliest	Latest	Species	Ht	
			Primary	Preferred (p)	Secondary	Acceptable (a)		Tertiary	(well-spaced/ha)							(Max yrs)
	09	80242	Sx ^{1,32}	Sx ^{1,32}	Bl ¹	Bl ¹		Act ^a	1000	500	400	4	9	15	Others All	1.0 0.8
SBSmm	01	80243	PI Sx	PI Sx Fd ^{9,14,32}	Bl ^{10,13} Fd ^{9,14,32}	Bl ^{10,13}		Act ^b At ^a	1200	700	600	7	12	15	PI, Lw Fd Others	2.0 1.4 1.0
	02	80244	PI	PI Fd ^{9,13,32}	Fd ^{9,13,32}	Bl ^{10,13} Sx ^{10,13}	Bl ^{10,13} Sx ^{10,13}	At ^b	1000	500	400	7	12	15	PI Fd Others	1.4 1.0 0.8
	03	80245	Fd ^{9,14,32} PI	Fd ^{9,14,32} PI		Bl ^{10,13} Sx ^{10,13}	Bl ^{10,13} Sx ^{10,13}		1000	500	400	7	12	15	PI Fd Others	1.4 1.0 0.8
	04	80246	PI	PI Fd ^{9,14,32}	Fd ^{9,14,32}	Bl ^{10,13} Sx ^{10,13}	Bl ^{10,13} Sx ^{10,13}	At ^b	1000	500	400	7	12	15	PI Fd Others	1.4 1.0 0.8
	05	80247	PI	PI Fd ^{9,14,32} Sx	Bl ^{10,13} Fd ^{9,14,32} Sx	Bl ^{10,13}		At ^a	1200	700	600	7	12	15	PI, Lw Fd Others	2.0 1.4 1.0
	06	80248	PI Sx	PI Sx	Bl ^{10,13} Fd ^{9,14,32}	Bl ^{10,13} Fd ^{9,14,32}		At ^a	1200	700	600	7	12	15	PI, Lw Fd Others	2.0 1.4 1.0
	07	80249	PI Sx	PI Sx Fd ^{9,14,32}	Bl Fd ^{9,14,32}	Bl Cw ³²	Cw ³²	Act ^a At ^a	1200	700	600	4	9	15	PI Fd Others	2.0 1.4 1.0
	08	80250	PI ¹ Sx ¹	Sx ¹	Bl ¹	PI ¹ Bl ¹		Act ^a At ^b Ep ^b	1000	500	400	4	9	15	PI Others	1.4 0.8
	09	-	Non-forested	Non-forested												
SBSmw	01	80251	Fd PI Sx	Fd PI Sx	Bl	Bl		Act ^b At ^a Ep ^a	1200	700	600	7	12	15	PI Fd Others	2.0 1.4 1.0
	02*	80252	Fd PI	Fd PI		Bl ²⁸ Sx ²⁸	Bl ²⁸ Sx ²⁸	At ^b Ep ^b	1000	500	400	7	12	15	PI Fd Others	1.4 1.0 0.8
	03	80253	Fd ³² PI	Fd ³² PI		Sx ³²	Bl ³² Sx ³²	At ^b	1200	700	600	7	12	15	PI Fd Others	2.0 1.4 1.0
	04	80254	Fd PI Sx ²⁸	Fd PI Sx ²⁸	Bl ²⁸	Bl ²⁸		At ^a Ep ^{9,a}	1200	700	600	7	12	15	PI Fd Others	2.0 1.4 1.0
	05	80255	PI Sx ³²	PI Sx ³²	Bl ³²	Bl ³²		Act ^a At ^a	1200	700	600	4	9	15	PI Others	2.0 1.0
	06	80256	Fd PI Sx	Fd PI Sx	Bl	Bl		Act ^a At ^a Ep ^a	1200	700	600	4	9	15	PI Fd Others	2.0 1.4 1.0
	07	80257	Sx ³²	Sx ³² PI	Bl ³² PI	Bl ³²		Act ^a At ^b	1200	700	600	4	9	15	PI Others	2.0 1.0
	08	80258	Fd ³² Sx	Fd ³² Sx	Bl PI	Bl PI		Act ^a At ^a Ep ^a	1200	700	600	4	9	15	PI Fd Others	2.0 1.4 1.0
	09	80259	Sx ^{1,32}	Sx ^{1,32}	Bl ^{1,32} PI ¹	Bl ^{1,32} PI ¹		Act ^a	1000	500	400	4	9	15	PI Others	1.4 0.8
	10*	80260	PI ¹ Sx ^{1,32}	PI ¹ Sx ^{1,32}		Sb	Sb		400	200	200	4	9	15	PI Others	1.4 0.8
SBSwk1	01	80261	Fd ¹⁷ PI Sx	Fd ¹⁷ PI Sx	Bl	Bl		Act ^b	1200	700	600	4	9	15	PI Fd Others	2.0 1.4 1.0
	02*	80262	Fd ¹⁷ PI	Fd ¹⁷ PI		Bl Sx	Bl Sx		1000	500	400	7	12	15	PI	1.4

1,2 etc - see "Footnotes"

*Avoid logging

** Additional information or recommended standards are contained in the text portion of the reference guide.

Reference Guide for FDP Stocking Standards**

Cariboo Forest Region

BGC			Regeneration Guide										Free Growing Guide				
Classification			Species					Stocking(I)			Regen	Assessment		Min. Height(II)			
Zone/SZ	Series	Standards ID	Conifer				Broadleaf	Target	MIN pa	MIN p	Delay	Earliest	Latest	Species	Ht		
			Primary	Preferred (p)	Secondary	Acceptable (a)										Tertiary	(well-spaced/ha)
	03	80263	Fd ^{4,17,32} Pl	Fd ^{4,17,32} Pl		Sx ³²	Bl ³² Sx ³²	1200	700	600	7	12	15	Fd	1.0		
														Others	0.8		
	04	80264	Fd Pl Sx ²⁸	Fd Pl Sx ²⁸	Bl ²⁸	Bl ²⁸	At ^b Ep ^b	1200	700	600	7	12	15	Pl	2.0		
														Fd	1.4		
	05	80265	Pl Sx	Pl Sx	Bl	Bl		1200	700	600	7	12	15	Others	1.0		
														Pl	2.0		
	06	80266	Pl Sx ³²	Pl Sx ³²	Bl ³²	Bl ³²	Sb	Act ^b	1200	700	600	4	9	15	Others	1.0	
														Pl	2.0		
	07	80267	Pl Sx ³²	Pl Sx ³²	Bl ³²	Bl ³²	Act ^a At ^{17,b} Ep ^{17,b}	1200	700	600	4	9	15	Others	1.0		
														Pl	2.0		
	08	80268	Sx	Sx Pl	Bl Pl	Bl	Act ^a At ^{17,b} Ep ^{17,b}	1200	700	600	4	9	15	Pl	2.0		
														Others	1.0		
	09	80269	Sx ^{1,32}	Sx ^{1,32}	Bl ^{1,32} Pl ¹	Bl ¹ Pl ¹	Act ^a	1000	500	400	4	9	15	Pl	1.4		
														Others	0.8		
	11*	80270	Pl ¹ Sx ^{1,32}	Pl ¹ Sx ^{1,32}	Sb	Sb	Bl ^{1,32}	400	200	200	4	9	15	Pl	1.4		
														Others	0.8		

1,2 etc - see "Footnotes"

*Avoid logging

** Additional information or recommended standards are contained in the text portion of the reference guide.

Footnotes and Definitions to Table 9 Stocking Standards for Even-Aged Stands

Conifer Tree Species

"Ba" means amabilis fir;
"Bg" means grand fir;
"Bl" means subalpine fir;
"Bp" means noble fir;
"Cw" means western red cedar;
"Fd" means Douglas-fir;
"Hm" means mountain hemlock;
"Hw" means western hemlock;
"Lt" means tamarack;
"Lw" means western larch;
"Pa" means whitebark pine;

"Pl" means lodgepole pine;
"Pw" means white pine;
"Py" means ponderosa pine;
"Sb" means black spruce;
"Se" means Engelmann spruce;
"Ss" means Sitka spruce;
"Sw" means white spruce;
"Sx" means hybrid spruce or interior spruce;
"Sxs" means hybrid Sitka spruce;
"Sxw" means hybrid white spruce;
"Yc" means yellow cedar.

Broadleaf Tree Species

"Acb" means balsam poplar;
"Act" means black cottonwood;
"At" means trembling aspen;
"Dr" means red alder;
"Ep" means common paper birch;
"Mb" means bigleaf maple;
"Qg" means garry oak;
"Ra" means arbutus;

"Biogeoclimatic unit" or "BGC classification" means the zone, subzone, variant and site series described in the most recent field guide published by the Ministry of Forests for the identification and interpretation of ecosystems, as applicable to a harvested area.

"MIN" or "Min" means minimum.

Footnote #	Footnote	Footnote #	Footnote
1	elevated microsites are preferred	29	risk of heavy browsing by moose
2	suitable on thick forest floors	30	retired November 2010
3		31	use of resistant stock mitigates risk of white pine blister rust. Do not use non-resistant stock for reforestation. See BC Journal of Ecosystems and Management 10(1): 97-100.
	restricted to coarse-textured soils		limited by growing-season frosts
4	restricted to medium-textured soils	32	footnote retired and replaced with footnote 'a'
5	footnote retired	33	risk of snow damage
6	restricted to nutrient-very-poor sites	34	use of resistant stock mitigates risk of spruce weevil damage. Use stock with the highest resistance rating for your area. See Ss Weevil Decision Tool
7		35	(http://www.for.gov.bc.ca/hre/forgen/projects/spruceweevil) and BC Journal of Ecosystems and Management 7(3): 45-49.
	restricted to nutrient-medium sites		suitable major species on salal-dominated sites
8	restricted to steep slopes	36	retired November 2010
9	restricted to southerly aspects	37	footnote retired
10	restricted to northerly aspects	38	avoid exposed and windy sites
11	restricted to crest slope positions	39	risk of redheart
12	suitable on cold air drainage sites	40	limited by poorly drained soils
13	restricted to upper elevations of biogeoclimatic unit	41	restricted to fresh soil moisture regimes
14	restricted to lower elevations of biogeoclimatic unit	42	
15	restricted to northern portion of biogeoclimatic unit in region	43	suitable on mainland coast only (QCI only)
16	restricted to southern portion of biogeoclimatic unit in region	44	suitable in areas with stronger maritime influence
17	restricted to western portion of biogeoclimatic unit in region	45	suitable in areas with stronger continental influence
18	restricted to eastern portion of biogeoclimatic unit in region	46	
19		47	restricted to area north of the Dean Channel
	restricted, not in Queen Charlotte Islands		risk of balsam wooly adelgid – applies to all Abies species in subzones within the regulated quarantine area
20	restricted, not near outer coast	48	(http://www.al.gov.bc.ca/cropprot/balsamwa.htm)
21	restricted to mainland	49	risk of heavy browsing by deer
22	restricted to southern Gardner Canal-Kitlope area	50	retired November 2010
23	restricted to trial use	51	restricted to sites where the species occurs as a major species in a pre-harvest, natural stand
24	suitable (as a major species) in wetter portion of biogeoclimatic unit	52	
25	suitable on sites lacking salal		restricted to areas with proven PI performance
26	suitable minor species on salal-dominated sites	53	restricted to sheltered microsites with deep soil
27	partial canopy cover required for successful establishment	54	minor component
		55	risk of unsuccessful release of advance regeneration

28 limited by moisture deficit

Localized Footnotes

- 56 **Kalum** forest district - see footnote 35
- 57
- 58 retired November 2010 see footnote 31
- 59 **Southern Interior Forest Region** - Fd limited to a max 50% of preferred and acceptable well-spaced stems in the IDfMw and all subzones of the ICH (except the ICHxw) due to root rot in areas where stump removal has not been performed. See BC Journal of Ecosystems and Management 9(2): 60-65.
- 60 **Prince George region** - max 1,400 total sph of aspen and cottonwood.
- 61 Treat as 'ghost' trees in surveys.
- 62 **Squamish** forest district - species is acceptable in Squamish forest district only.
- 63 **Squamish** forest district only - acceptable on cold air drainage sites only.
- 64 retired November 2010 see footnote 47
- 65 **Queen Charlotte Islands** forest district - must meet district manager specified minimum well-spaced preferred stems per hectare and minimum height requirements for Cw and/or Yc
- 66 **Mackenzie** forest district - may be preferred where risk of snow damage is low or where risk of frost damage is excessive on spruce
- 67 **Chilliwack** forest district - species is acceptable in Chilliwack forest district only.
- 68 **Chilliwack** forest district - species is preferred in Chilliwack forest district only.
- 69 Species is restricted to upper elevations when used in the southern portion of the biogeoclimatic unit.
- 70 **Pr Rupert** region - Hw is restricted to a maximum of 50% of the well spaced stems at free growing

Broadleaf Management Constraints

- a productive, reliable, and feasible regeneration option
- b limited in productivity, reliability and/or feasibility

Variations from General Standards

1) Reduced MITD from General Standard

A reduced MITD may be appropriate for sites where suitable growing spots are limited by site characteristics, site conditions, management objectives constraining site utilization, or there is a significant risk of damage to planted or natural trees.

The minimum inter-tree distance will not be reduced to less than 1.0 m.

Examples of situations and circumstances where a reduced MITD of 1.6 m include but are not limited to:

- hydric or sub-hydric sites;
- rocky sites occupying >20% of plantable spots, as determined by a plantability assessment;
- sites where a silviculture treatment has failed due to high levels of livestock damage
- very harsh sites where protected microsites are critical (e.g. snow creep, vegetation competition/press, frost pooling, steep slopes, deep organic soils);
- sites with a significant number of large wildlife trees (e.g., 50 uniformly distributed trees per hectare);
- riparian areas with a high residual component;
- sites where stump avoidance strategy is employed to manage root rot;
- sites where mechanical site preparation activities have been undertaken;
- partial cut areas with an abundance of non-preferred residual regeneration;
- harvested site with high numbers of trees reserved to address a result or strategy identified in the FSP;
- areas where the planting density is 1800sph or higher.

Examples of situations and circumstances where a reduced MITD of 1.0m may be appropriate include but are not limited to:

- rocky sites occupying >50% of plantable spots, as determined by a plantability assessment,
- areas where a silviculture treatment has failed due to high levels of livestock damage, and plantable obstacles are available for <50% of target density, as determined by a plantability assessment,
- very harsh sites where protected microsites are critical (e.g. snow creep, vegetation competition/press, frost, steep slopes, deep organic soils)
- managing for Grizzly Bear Habitat (addressed in “Managing for Grizzly Bear Habitat”, below)

2) Uneven- Aged Management

Uneven-aged stocking standards survey procedures will be applied consistent with the current Resource Practices Branch, Silviculture Survey Procedures Manual, as amended from time to time. These standards will be applied to all Douglas-fir leading stands in all biogeoclimatic (BEC) zones where management is uneven-aged. Table 10 outlines the uneven-aged stocking standards.

Table 8 Stocking Standards for Uneven-aged Stands*

Target from Table 9 standards	Layer**	Stocking*** Target pa	MIN pa	MIN p	Target from Table 9 standards	Layer**	Stocking*** Target pa	MIN pa	MIN p
(stems/ha)		(well-spaced/ha)			(stems/ha)		(well-spaced/ha)		
1200	1	600	300	250	800	1	300	150	150
	2	800	400	300		2	400	200	200
	3	1000	500	400		3	600	300	300
	4	1200	700	600		4	800	400	400
1000	1	400	200	200	600	1	300	150	150
	2	600	300	250		2	400	200	200
	3	800	400	300		3	500	300	300
	4	1000	500	400		4	600	400	400
900	1	400	200	200	400	1	200	100	100
	2	500	300	250		2	300	125	125
	3	700	400	300		3	300	150	150
	4	900	500	400		4	400	200	200

* Maximum regeneration delay is seven years. For a seven-year regeneration delay, the early free growing is 12 years and the late free growing is 15 years. Regeneration delay can be met immediately following harvest if the residual stand has no significant damage or pest problems and meets minimum stocking standards. If regeneration is achieved immediately following harvest, earliest free growing date is 12 months after completion of harvest and the latest date is 24 months after completion of harvest.

** Stand layer definition: layer 1 mature (trees ≥ 12.5 cm dbh), layer 2 pole (trees 7.5 cm to 12.4 cm dbh), layer 3 sapling (trees ≥ 1.3 m height to 7.4 cm dbh) and layer 4 regeneration (trees < 1.3 m height)

*** pa – preferred and acceptable, p – preferred

Preferred and acceptable species and "Target from Table 9 standards" are as specified in Table 9 by biogeoclimatic ecosystem classification (BEC) site series.

3) Mixed Wood Stocking Standards

Mixed wood stocking standards (Table 11) may only be applied in situations when:

- the net merchantable cruise volume is greater than 30% net deciduous; and,
- the merchantable deciduous volume will be utilized; and,
- the objective is to manage for mixed wood timber value.

Where mixed wood standards are applied, broadleaf trees not tallied as well-spaced or free-growing trees will be considered “competing vegetation” for the purpose of assessing the free growing status of the coniferous crop trees.

Table 9 Mixed wood Stocking Standards

Target from Conifer Standards	Species	Target Stocking (well-spaced/ha)	Minimum Stocking Standards (well- spaced/ha)			Minimum Height at Free Growing (m)		Maximum Regen Delay (yrs)	Latest Free Growing (yrs)
			Min. Preferred & Acceptable at RD & FG	Min. Preferred & Acceptable at RD & FG	Min. FG Conifers	Dec.	Con.		
400	As defined in Table 9*	400	200	200	200	0.8	As defined in Table 9*	7	20
600		800	500	400	400	1.0		7	20
1000		1200	700	600	400	1.2		7	20
1200		1600	1000	800	600	1.5		7	20

*Defined as productive, reliable, and feasible regeneration option.

4) Deciduous Stocking Standards

Deciduous stocking standards (Table 12) may only be applied in situations when:

- a. the net merchantable cruise volume is greater than 70% net deciduous; and,
- b. the merchantable deciduous volume will be utilized; and,
- c. the objective is to manage for deciduous or mixed wood timber value.

Table 10 Deciduous Stocking Standards

Target from Conifer Standards	Species	Target Stocking (well-spaced/ha)	Minimum Stocking Standards (well- spaced/ha)			Minimum Height at Free Growing (m)		Maximum Regen Delay (yrs)	Latest Free Growing (yrs)
			Min. Preferred & Acceptable at RD & FG	Min. Preferred & Acceptable at RD & FG	Min. FG Conifers	Dec.	Con.		
400	As defined in Table 9*	600	400	400	n/a	0.8	As defined in Table 9*	7	20
600		1000	500	400	n/a	1.0		7	20
1000		1600	1000	800	n/a	1.2		7	20
1200		2000	1200	1000	n/a	1.5		7	20

*Defined as productive, reliable, and feasible regeneration option.

5) Brush Competition

Residual layer 1 broadleaf trees remaining post-harvest will not be considered competing at the time of the free growing evaluation.

Shrubs and non-commercial broadleaf species being managed to achieve an objective, result or strategy of the FSP are not considered competing at the time of free growing evaluation.

Aspen, cottonwood, birch, willow, poplar, and alder are not considered competing brush when conducting a free growing survey within:

- 5 m of S4, S5, and S6 streams and all wetlands greater than 0.25 ha in the ICH and ESSF BEC zones, and
- 10 m of S4, S5, and S6 streams, and all wetlands greater than 0.25 ha in all other BEC zones.

Where visual buffer for wildlife was retained as defined in a site plan or other operational plan; broadleaf species and shrubs will not be considered competing brush, when conducting a free growing survey within that buffer.

6) Lodgepole Pine Dwarf Mistletoe

When assessing the free growing status of a well-spaced lodgepole pine crop tree and its proximity to an over topping pine stem, only stems located within the net area to reforest (NAR) portion of the block being surveyed will be considered overtopping stems.

7) Benchmark Grasslands Standards

Areas harvested within the identified grassland benchmark area have no regeneration obligation.

8) Western Larch as an Acceptable Species

Western larch (Lw) may be considered an acceptable species on sites within the LW1 and LW2 seed planning zones, as per Chief Forester's Standards For Seed Use Guidelines.

9) Managing for Grizzly Bear Habitat

Where managing to address a grizzly bear habitat objective as per results and strategies in this FSP and committed to in the Site Plan:

- the MITD may be reduced to 1.0m, and
- the associated target density in Table 9 may be modified by a factor of 0.67* to achieve canopy gaps consistent with grizzly bear foraging areas, and
- mechanical site preparation will not be prescribed for these areas to protect berry-producing shrubs

*The factor applied to existing stocking standards contained within Table 9 for the free growing assessment where grizzly bear habitat objectives apply. This value and the MITD are adopted from 'Silviculture Guidelines and Practices for Maintaining or Recruiting Key Habitat Objectives, February 2004.'

8 APPENDIX B – FOREST STEWARDSHIP PLAN MAPS

Table 11 Summary of FSP Maps

Reference Map Number	Map Reference
Key	1:200,000 FDU Key Map for the TSA dated October 24, 2016
1-12	1:50,000 FSP maps dated April 27, 2017

9 APPENDIX C – WILDLIFE TREE RETENTION TARGETS

Table 12 Wildlife Tree Retention Targets

Landscape Unit	Biogeoclimatic Unit	WTR Target (% gross harvest area)	Landscape Unit	Biogeoclimatic Unit	WTR Target (% gross harvest area)
108 Mile Lake	ESSFwk 1_na	11	Atnarko	IDF dw_PineGroup	0
108 Mile Lake	IDF dk 3_FirGroup	9	Atnarko	IDF ww_FirGroup	0
108 Mile Lake	IDF dk 3_PineGroup	10	Atnarko	IDF ww_PineGroup	0
108 Mile Lake	SBPSmk_na	11	Atnarko	MS dc 2_na	4
108 Mile Lake	SBS dw 1_na	10	Atnarko	MS xv_na	6
108 Mile Lake	SBS dw 2_na	11	Atnarko	SBPSxc_na	6
108 Mile Lake	SBS mc 1_na	10	Baezaeko	MS xv_na	7
Abhau	SBS dw 1_na	6	Baezaeko	SBPSdc_na	8
Abhau	SBS dw 2_na	5	Baezaeko	SBPSmk_na	8
Abhau	SBS mh_na	3	Baezaeko	SBPSmk_na	8
Abhau	SBS mw_na	6	Baezaeko	SBS dw 2_na	8
Alexis	IDF dk 4_FirGroup	8	Baezaeko	SBS mc 2_na	8
Alexis	IDF dk 4_PineGroup	8	Baker	MS xv_na	8
Alexis	IDF xm_FirGroup	7	Baker	SBPSdc_na	8
Alexis	IDF xm_PineGroup	7	Baker	SBPSmk_na	8
Alexis	SBPSxc_na	9	Baker	SBS dw 1_na	6
Alkali	BG xh 3_FirGroup	8	Baker	SBS dw 2_na	8
Alkali	BG xh 3_PineGroup	7	Baker	SBS mc 2_na	7
Alkali	BG xw 2_FirGroup	5	Baker	SBS mh_na	8
Alkali	BG xw 2_PineGroup	7	Bambrick	ESSFv 2_na	7
Alkali	IDF dk 3_FirGroup	9	Bambrick	IDF dk 4_FirGroup	8
Alkali	IDF dk 3_PineGroup	9	Bambrick	IDF dk 4_PineGroup	8
Alkali	IDF xm_FirGroup	6	Bambrick	MS xv_na	7
Alkali	IDF xm_PineGroup	9	Bambrick	SBPSxc_na	7
Alplands	ESSFv 1_na	0	Beaver Valley	ICH mk 3_na	8
Alplands	MS xv_na	1	Beaver Valley	ICH wk 2_na	7
Alplands	SBPSxc_na	1	Beaver Valley	SBPSmk_na	8
Anaham	IDF dk 3_FirGroup	8	Beaver Valley	SBS dw 1_na	8
Anaham	IDF dk 3_PineGroup	8	Beaver Valley	SBS dw 2_na	8
Anaham	IDF dk 4_FirGroup	8	Beaver Valley	SBS mh_na	7
Anaham	IDF dk 4_PineGroup	8	Beece Creek	ESSFv 1_na	6
Anaham	IDF xm_FirGroup	6	Beece Creek	ESSFv 2_na	5
Anaham	IDF xm_PineGroup	8	Beece Creek	MS dv_na	5
Anaham	SBPSdc_na	5	Beece Creek	MS xv_na	6
Anaham	SBPSxc_na	9	Beece Creek	SBPSxc_na	5
Antler	ESSFwc 3_na	1	Beeftrail	ESSFv 1_na	7
Antler	ESSFwcw_na	1	Beeftrail	MS xv_na	7
Antler	ESSFwk 1_na	8	Beeftrail	SBPSmc_na	6
Antler	SBS wk 1_na	9	Beeftrail	SBPSxc_na	6
Atnarko	ESSFv 1_na	8	Betty Wendle	ESSFwc 3_na	0
Atnarko	IDF dw_FirGroup	0	Betty Wendle	ESSFwcp_na	0

Landscape Unit	Biogeoclimatic Unit	WTR Target (% gross harvest area)	Landscape Unit	Biogeoclimatic Unit	WTR Target (% gross harvest area)
Betty Wendle	ESSFwcw_na	0	Big Stick	IDF dw_PineGroup	6
Betty Wendle	ESSFwk 1_na	0	Big Stick	IDF ww_FirGroup	6
Betty Wendle	ICH wk 4_na	0	Big Stick	IDF ww_PineGroup	7
Betty Wendle	SBS wk 1_na	0	Big Stick	MS dc 2_na	6
Bidwell/Lava	ESSFvx 1_na	7	Big Stick	MS xv_na	6
Bidwell/Lava	IDF dk 4_FirGroup	2	Big Stick	SBPSxc_na	7
Bidwell/Lava	IDF dk 4_PineGroup	3	Big Valley	ESSFwc 3_na	7
Bidwell/Lava	IDF dw_FirGroup	6	Big Valley	ESSFwk 1_na	8
Bidwell/Lava	IDF dw_PineGroup	2	Big Valley	SBS wk 1_na	9
Bidwell/Lava	MS xv_na	6	Black Creek	ESSFwc 3_na	7
Bidwell/Lava	SBPSxc_na	7	Black Creek	ESSFwk 1_na	8
Big Bar	BG xh 3_FirGroup	0	Black Creek	ICH mk 3_na	8
Big Bar	BG xh 3_PineGroup	2	Black Creek	ICH wk 2_na	8
Big Bar	BG xw 2_FirGroup	6	Black Creek	SBPSmk_na	9
Big Bar	BG xw 2_PineGroup	4	Black Creek	SBS dw 1_na	8
Big Bar	ESSFxc3_na	5	Black Creek	SBS dw 2_na	8
Big Bar	IDF dk 3_FirGroup	8	Black Creek	SBS mc 1_na	8
Big Bar	IDF dk 3_PineGroup	9	Bonaparte Lake	ESSFdc 3_na	7
Big Bar	IDF xm_FirGroup	8	Bonaparte Lake	IDF dk 3_FirGroup	6
Big Bar	IDF xm_PineGroup	8	Bonaparte Lake	IDF dk 3_PineGroup	8
Big Bar	IDF xw_FirGroup	5	Bonaparte Lake	MS xk2_na	7
Big Bar	IDF xw_PineGroup	0	Bonaparte Lake	SBPSmk_na	8
Big Bar	MS xk3_na	7	Bonaparte Lake	SBS dw 1_na	8
Big Creek	BG xw 2_FirGroup	7	Bonaparte Lake	SBS dw 2_na	8
Big Creek	BG xw 2_PineGroup	7	Bonaparte Lake	SBS mm_na	8
Big Creek	ESSFvx 2_na	8	Bowron	ESSFwc 3_na	3
Big Creek	IDF dk 3_FirGroup	7	Bowron	ESSFwk 1_na	6
Big Creek	IDF dk 3_PineGroup	8	Bowron	ICH wk 4_na	3
Big Creek	IDF dk 4_FirGroup	7	Bowron	SBS wk 1_na	4
Big Creek	IDF dk 4_PineGroup	8	Bradley Creek	ESSFwc 3_na	7
Big Creek	IDF xm_FirGroup	6	Bradley Creek	ESSFwk 1_na	8
Big Creek	IDF xm_PineGroup	8	Bradley Creek	ICH dk_na	8
Big Creek	MS xv_na	8	Bradley Creek	IDF mw 2_FirGroup	8
Big Creek	SBPSxc_na	8	Bradley Creek	IDF mw 2_PineGroup	9
Big Lake	SBS dw 1_na	8	Bradley Creek	SBS dw 1_na	7
Big Lake	SBS dw 2_na	8	Bradley Creek	SBS dw 2_na	8
Big Lake	SBS mc 1_na	7	Bradley Creek	SBS mc 1_na	8
Big Lake	SBS mh_na	6	Bridge Creek	IDF dk 3_FirGroup	9
Big Stick	ESSFmw_na	6	Bridge Creek	IDF dk 3_PineGroup	10
Big Stick	ESSFvx 1_na	6	Bridge Creek	SBPSmk_na	11
Big Stick	IDF dw_FirGroup	5	Bridge Creek	SBS dw2_na	11

Landscape Unit	Biogeoclimatic Unit	WTR Target (% gross harvest area)
Bridge Lake	ESSFdc 3_na	8
Bridge Lake	SBPSmk_na	8
Bridge Lake	SBS dw 1_na	8
Bridge Lake	SBS dw 2_na	8
Bridge Lake	SBS mc 1_na	8
Bridge Lake	SBS mm_na	9
Brittany	ESSFvx 1_na	6
Brittany	IDF dk 4_FirGroup	4
Brittany	IDF dk 4_PineGroup	6
Brittany	IDF dw_FirGroup	0
Brittany	IDF dw_PineGroup	0
Brittany	IDF xm_FirGroup	4
Brittany	IDF xm_PineGroup	6
Brittany	MS dc 2_na	0
Brittany	MS xv_na	6
Brittany	SBPSxc_na	6
Canim Lake	ESSFdc 3_na	7
Canim Lake	ICH mk 3_na	8
Canim Lake	ICH mw 3_na	7
Canim Lake	IDF mw 2_FirGroup	7
Canim Lake	IDF mw 2_PineGroup	8
Canim Lake	SBS dw 1_na	7
Canim Lake	SBS dw 2_na	7
Canim Lake	SBS mc 1_na	7
Canim Lake	SBS mm_na	7
Cariboo Lake	ESSFwc 3_na	10
Cariboo Lake	ESSFwk 1_na	10
Cariboo Lake	ICH wk 4_na	11
Cariboo Lake	SBS wk 1_na	11
Chasm	ESSFxc3_na	2
Chasm	IDF dk 3_FirGroup	8
Chasm	IDF dk 3_PineGroup	9
Chasm	IDF xw_FirGroup	6
Chasm	IDF xw_PineGroup	6
Chasm	MS xk3_na	4
Cheshi Stikelan	ESSFvx 1_na	3
Cheshi Stikelan	IDF dw_FirGroup	3
Cheshi Stikelan	IDF dw_PineGroup	6
Cheshi Stikelan	MS dc 2_na	7
Chilanko	IDF dk 4_FirGroup	5
Chilanko	IDF dk 4_PineGroup	6

Landscape Unit	Biogeoclimatic Unit	WTR Target (% gross harvest area)
Chilanko	MS xv_na	6
Chilanko	SBPSxc_na	7
Chilko	ESSFvx 1_na	0
Chilko	IDF dw_FirGroup	0
Chilko	IDF dw_PineGroup	0
Chilko	MS dc 2_na	0
Chilko	MS xv_na	0
Chimney	BG xw 2_FirGroup	3
Chimney	BG xw 2_PineGroup	2
Chimney	IDF dk 3_FirGroup	8
Chimney	IDF dk 3_PineGroup	8
Chimney	IDF xm_FirGroup	9
Chimney	IDF xm_PineGroup	10
Chine	MS xv_na	7
Chine	SBPSdc_na	5
Chine	SBPSmc_na	5
Chine	SBS mc 2_na	7
Christenson Creek	ESSFvx 1_na	0
Christenson Creek	MS xv_na	6
Christenson Creek	SBPSmc_na	6
Christenson Creek	SBPSxc_na	6
Churn	BG xh 3_FirGroup	0
Churn	BG xh 3_PineGroup	0
Churn	BG xw 2_FirGroup	1
Churn	BG xw 2_PineGroup	0
Churn	ESSFvx 2_na	8
Churn	IDF dk 4_FirGroup	2
Churn	IDF dk 4_PineGroup	5
Churn	IDF xm_FirGroup	0
Churn	IDF xm_PineGroup	0
Churn	MS xv_na	7
Churn	SBPSxc_na	6
Clearwater	ESSFvx 1_na	0
Clearwater	IDF dk 4_FirGroup	5
Clearwater	IDF dk 4_PineGroup	6
Clearwater	IDF dw_FirGroup	7
Clearwater	IDF dw_PineGroup	7
Clearwater	MS xv_na	7
Clearwater	SBPSxc_na	7
Clinton	ESSFxc3_na	3
Clinton	IDF dk 3_FirGroup	7

Landscape Unit	Biogeoclimatic Unit	WTR Target (% gross harvest area)	Landscape Unit	Biogeoclimatic Unit	WTR Target (% gross harvest area)
Clinton	IDF dk 3_PineGroup	7	Deadman	SBPSmk_na	9
Clinton	IDF xw_FirGroup	7	Deception Mountain	ESSFwc 3_na	0
Clinton	IDF xw_PineGroup	6	Deception Mountain	ESSFwk 1_na	6
Clinton	MS xk3_na	7	Deception Mountain	ICH dk_na	7
Clisbako	MS xv_na	7	Deception Mountain	ICH mk 3_na	7
Clisbako	SBPSdc_na	7	Dog Creek	BG xh 3_FirGroup	10
Clisbako	SBPSmk_na	8	Dog Creek	BG xw 2_FirGroup	10
Clisbako	SBPSxc_na	8	Dog Creek	BG xw 2_PineGroup	10
Clusko	MS xv_na	7	Dog Creek	IDF dk 3_FirGroup	9
Clusko	SBPSxc_na	8	Dog Creek	IDF dk 3_PineGroup	10
Coglistiko	MS xv_na	6	Dog Creek	IDF xm_FirGroup	7
Coglistiko	SBPSdc_na	6	Dog Creek	IDF xm_PineGroup	9
Coglistiko	SBPSmc_na	6	Dog Creek	SBPSmk_na	10
Coglistiko	SBS mc 2_na	7	Doran Creek	CWH ds 1_na	0
Colwell	ESSFmw_na	7	Doran Creek	CWH ms 1_na	0
Colwell	ESSFvx 1_na	6	Doran Creek	ESSFvx 1_na	0
Colwell	IDF dw_FirGroup	5	Doran Creek	IDF dw_FirGroup	0
Colwell	IDF dw_PineGroup	6	Doran Creek	IDF dw_PineGroup	0
Colwell	MS dc 2_na	6	Doran Creek	MH mm 2_na	0
Colwell	MS xv_na	6	Downton	ESSFvx 1_na	0
Corkscrew	ESSFvx 1_na	0	Downton	MS xv_na	0
Corkscrew	MS xv_na	5	Dragon	IDF dk 3_FirGroup	8
Corkscrew	SBPSxc_na	6	Dragon	IDF dk 3_PineGroup	8
Crazy Creek	CWH ms 1_na	0	Dragon	IDF xm_FirGroup	8
Crazy Creek	ESSFvx 1_na	0	Dragon	IDF xm_PineGroup	8
Crazy Creek	IDF dw_FirGroup	4	Dragon	SBS dw 1_na	8
Crazy Creek	IDF dw_PineGroup	2	Dragon	SBS dw 2_na	8
Crazy Creek	MS dc 2_na	6	Dragon	SBS mc 1_na	8
Cunningham	ESSFwc 3_na	5	Dragon	SBS mh_na	8
Cunningham	ESSFwk 1_na	7	East Arm	ESSFwc 3_na	0
Cunningham	ICH wk 4_na	7	East Arm	ESSFwk 1_na	4
Cunningham Lake	IDF dk 3_FirGroup	8	East Arm	ICH wk 2_na	7
Cunningham Lake	IDF dk 3_PineGroup	9	Eastside	ESSFwc 3_na	6
Dash	ESSFvx 2_na	7	Eastside	ESSFwk 1_na	6
Dash	MS xv_na	7	Eastside	ICH wk 2_na	7
Dash	SBPSxc_na	7	Edmond	CWH un_na	0
Deadman	IDF dk 3_FirGroup	7	Edmond	ESSFmw_na	0
Deadman	IDF dk 3_PineGroup	8	Edmond	ESSFvx 1_na	0
Deadman	IDF xh 2_FirGroup	7	Edmond	IDF dw_PineGroup	0
Deadman	IDF xh 2_PineGroup	8	Edmond	MS dc 2_na	0
Deadman	MS xk 2_na	7	Eliguk	ESSFvx 1_na	0

Landscape Unit	Biogeoclimatic Unit	WTR Target (% gross harvest area)	Landscape Unit	Biogeoclimatic Unit	WTR Target (% gross harvest area)
Eliguk	MS xv_na	4	Gaspard	IDF xm_FirGroup	7
Eliguk	SBPSmc_na	6	Gaspard	IDF xm_PineGroup	9
Eliguk	SBS mc 2_na	7	Gaspard	MS xv_na	9
Eliguk	SBS mc 3_na	7	Gaspard	SBPSxc_na	9
Euchiniko	SBPSdc_na	6	Gerimi	SBS mh_na	7
Euchiniko	SBPSmk_na	6	Gerimi	SBS mw_na	7
Euchiniko	SBSdk	6	Gerimi	SBS wk 1_na	6
Euchiniko	SBSdw2	6	Green Lake	IDF dk 3_FirGroup	8
Euchiniko	SBS mc 2_na	6	Green Lake	IDF dk 3_PineGroup	8
Euchiniko	SBS mc 3_na	7	Green Lake	SBPSmk_na	8
Farwell	BG xh 3_FirGroup	8	Green Lake	SBS dw 1_na	9
Farwell	BG xh 3_PineGroup	2	Green Lake	SBS dw 2_na	8
Farwell	BG xw 2_FirGroup	7	Gunn Valley	ESSFv 1_na	0
Farwell	BG xw 2_PineGroup	10	Gunn Valley	MS dv_na	3
Farwell	IDF dk 3_FirGroup	8	Gunn Valley	SBPSxc_na	3
Farwell	IDF dk 3_PineGroup	9	Haines	ESSFv 2_na	8
Farwell	IDF dk 4_FirGroup	8	Haines	IDF dk 4_FirGroup	7
Farwell	IDF dk 4_PineGroup	9	Haines	IDF dk 4_PineGroup	8
Farwell	IDF xm_FirGroup	8	Haines	IDF xm_FirGroup	7
Farwell	IDF xm_PineGroup	9	Haines	IDF xm_PineGroup	7
Farwell	SBPSmk_na	9	Haines	MS xv_na	8
Forest Grove	ICH mk 3_na	8	Haines	SBPSxc_na	8
Forest Grove	IDF dk 3_FirGroup	10	Hawks Creek	IDF dk 3_FirGroup	9
Forest Grove	IDF dk 3_PineGroup	10	Hawks Creek	IDF dk 3_PineGroup	10
Forest Grove	IDF mw 2_FirGroup	6	Hawks Creek	IDF xm_FirGroup	8
Forest Grove	IDF mw 2_PineGroup	6	Hawks Creek	IDF xm_PineGroup	7
Forest Grove	SBS dw 1_na	9	Hawks Creek	SBPSmk_na	10
Forest Grove	SBS dw 2_na	10	Hawks Creek	SBS dw 1_na	10
Forest Grove	SBS mm_na	10	Hawks Creek	SBS dw 2_na	10
Franklyn	CWH un_na	0	Hawks Creek	SBS mc 1_na	11
Franklyn	ESSFmw_na	0	Helena Lake	IDF dk 3_FirGroup	10
Franklyn	ESSFv 1_na	0	Helena Lake	IDF dk 3_PineGroup	11
Franklyn	IDF dw_FirGroup	0	Helena Lake	SBPSmk_na	12
Franklyn	IDF dw_PineGroup	0	Hendrix Lake	ESSFwc 3_na	8
Gaspard	BG xw 2_FirGroup	9	Hendrix Lake	ESSFwk 1_na	8
Gaspard	BG xw 2_PineGroup	10	Hendrix Lake	ICH dk_na	9
Gaspard	ESSFv 2_na	9	Hendrix Lake	ICH mk 3_na	9
Gaspard	IDF dk 3_FirGroup	7	Hendrix Lake	IDF mw 2_FirGroup	8
Gaspard	IDF dk 3_PineGroup	9	Hendrix Lake	IDF mw 2_PineGroup	9
Gaspard	IDF dk 4_FirGroup	7	Hickson	CWH ms 1_na	0
Gaspard	IDF dk 4_PineGroup	9	Hickson	ESSFv 1_na	0

Landscape Unit	Biogeoclimatic Unit	WTR Target (% gross harvest area)	Landscape Unit	Biogeoclimatic Unit	WTR Target (% gross harvest area)
Hickson	MH mm 2_na	0	Koster/Lone Cabin	BG xh 3_FirGroup	0
Holtry	ESSFv 1_na	8	Koster/Lone Cabin	BG xh 3_PineGroup	0
Holtry	MS xv_na	8	Koster/Lone Cabin	BG xw 2_FirGroup	0
Holtry	SBPSxc_na	7	Koster/Lone Cabin	BG xw 2_PineGroup	0
Horsefly	ESSFwc 3_na	7	Koster/Lone Cabin	ESSFv 2_na	7
Horsefly	ESSFwk 1_na	7	Koster/Lone Cabin	IDF dk 3_FirGroup	0
Horsefly	ICH mk 3_na	8	Koster/Lone Cabin	IDF dk 3_PineGroup	0
Horsefly	ICH wk 2_na	8	Koster/Lone Cabin	IDF dk 4_FirGroup	6
Horsefly	SBS dw 1_na	8	Koster/Lone Cabin	IDF dk 4_PineGroup	7
Hotnarko	ESSFv 1_na	7	Koster/Lone Cabin	IDF xm_FirGroup	0
Hotnarko	IDF dw_FirGroup	5	Koster/Lone Cabin	IDF xm_PineGroup	1
Hotnarko	IDF dw_PineGroup	6	Koster/Lone Cabin	MS xk3_na	6
Hotnarko	IDF ww_FirGroup	0	Koster/Lone Cabin	MS xv_na	5
Hotnarko	IDF ww_PineGroup	0	Lightning	ESSFwc 3_na	6
Hotnarko	MS xv_na	6	Lightning	ESSFwk 1_na	9
Hotnarko	SBPSxc_na	6	Lightning	SBS mw_na	8
Indianpoint	ESSFwc 3_na	1	Lightning	SBS wk 1_na	9
Indianpoint	ESSFwk 1_na	6	Likely	ESSFwc 3_na	3
Indianpoint	ICH wk 4_na	6	Likely	ESSFwk 1_na	9
Indianpoint	SBS wk 1_na	6	Likely	ICH mk 3_na	10
Jack of Clubs	ESSFwc 3_na	5	Likely	ICH wk 2_na	9
Jack of Clubs	ESSFwk 1_na	6	Little River	ESSFwc 3_na	1
Jack of Clubs	SBS wk 1_na	7	Little River	ESSFwk 1_na	6
Kelly Lake	BG xh 3_FirGroup	0	Little River	ICH wk 4_na	7
Kelly Lake	BG xh 3_PineGroup	0	Loon	IDF dk 3_FirGroup	8
Kelly Lake	ESSFxc 3_na	2	Loon	IDF dk 3_PineGroup	8
Kelly Lake	ESSFxc 3_na	8	Loon	IDF xw_FirGroup	6
Kelly Lake	IDF dk 3_FirGroup	2	Loon	IDF xw_PineGroup	6
Kelly Lake	IDF dk 3_PineGroup	2	Loon	MS xk2_na	8
Kelly Lake	IDF xw_FirGroup	0	Lord River	ESSFv 1_na	1
Kelly Lake	IDF xw_PineGroup	0	Lord River	MS dv_na	5
Kelly Lake	MS xk3_na	0	Lower Cariboo	ESSFwc 3_na	4
Klinaklini	ESSFv 1_na	7	Lower Cariboo	ESSFwk 1_na	10
Klinaklini	IDF dk 4_FirGroup	5	Lower Cariboo	ICH mk 3_na	11
Klinaklini	IDF dk 4_PineGroup	7	Lower Cariboo	ICH wk 2_na	10
Klinaklini	MS xv_na	6	Lower Cariboo	ICH wk 4_na	10
Klinaklini	SBPSxc_na	7	Lower Cariboo	SBS mh_na	10
Kluskus	ESSFv 1_na	4	Lower Cariboo	SBS mw_na	10
Kluskus	MS xv_na	4	Lower Cariboo	SBS wk 1_na	11
Kluskus	SBPSdc_na	6	Mackin	IDF dk 3_FirGroup	8
Kluskus	SBPSmc_na	6	Mackin	IDF dk 3_PineGroup	9

Landscape Unit	Biogeoclimatic Unit	WTR Target (% gross harvest area)
Mackin	IDF dk 4_FirGroup	10
Mackin	IDF dk 4_PineGroup	9
Mackin	IDF xm_FirGroup	7
Mackin	IDF xm_PineGroup	8
Mackin	SBPSdc_na	9
Mackin	SBPSxc_na	9
Marmot	ESSFmv 1_na	9
Marmot	MS xv_na	7
Marmot	SBPSdc_na	8
Marmot	SBPSmk_na	8
Marmot	SBS dw 2_na	8
Marmot	SBS mc 2_na	7
Matthew	ESSFwc 3_na	4
Matthew	ESSFwk 1_na	8
Matthew	ICH wk 4_na	10
McKay	ESSFwc 3_na	9
McKay	ESSFwk 1_na	9
McKay	ICH wk 2_na	9
McKinley	ESSFwc 3_na	7
McKinley	ESSFwk 1_na	8
McKinley	ICH mk 3_na	9
McKinley	ICH wk 2_na	8
McKinley	SBS dw 1_na	8
McKusky	ESSFwc 3_na	3
McKusky	ESSFwk 1_na	7
McKusky	ICH wk 2_na	8
McLinchy	ESSFvx 1_na	0
McLinchy	MS xv_na	7
McLinchy	SBPSxc_na	7
Meadow Lake	BG xw 2_FirGroup	8
Meadow Lake	BG xw 2_PineGroup	4
Meadow Lake	IDF dk 3_FirGroup	10
Meadow Lake	IDF dk 3_PineGroup	11
Meadow Lake	IDF xm_FirGroup	9
Meadow Lake	IDF xm_PineGroup	8
Meadow Lake	SBPSmk_na	11
Meldrum	IDF dk 3_FirGroup	15
Meldrum	IDF dk 3_PineGroup	15
Meldrum	IDF xm_FirGroup	14
Meldrum	IDF xm_PineGroup	17
Middle Lake	ESSFvx 1_na	0

Landscape Unit	Biogeoclimatic Unit	WTR Target (% gross harvest area)
Middle Lake	IDF dw_FirGroup	7
Middle Lake	IDF dw_PineGroup	7
Middle Lake	MS dc 2_na	5
Middle Lake	MS xv_na	5
Minton	BG xw 2_FirGroup	7
Minton	BG xw 2_PineGroup	7
Minton	IDF dk 4_FirGroup	7
Minton	IDF dk 4_PineGroup	8
Minton	IDF xm_FirGroup	7
Minton	IDF xm_PineGroup	8
Minton	SBPSxc_na	9
Mitchell Lake	ESSFwc 3_na	0
Mitchell Lake	ESSFwk 1_na	2
Mitchell Lake	ICH wk 2_na	2
Mitchell Lake	ICH wk 4_na	10
Moffat	ESSFwc 3_na	7
Moffat	ESSFwk 1_na	7
Moffat	SBPSmk_na	8
Moffat	SBS dw 1_na	9
Moffat	SBS dw 2_na	8
Moffat	SBS mc 1_na	8
Murphy Lake	ESSFwc 3_na	8
Murphy Lake	ESSFwk 1_na	8
Murphy Lake	SBPSmk_na	9
Murphy Lake	SBS dw 1_na	8
Murphy Lake	SBS dw 2_na	9
Murphy Lake	SBS mc 1_na	9
Nadila	ESSFvx 2_na	0
Nadila	MS xv_na	0
Nadila	SBPSxc_na	0
Narcosli	IDF xm_FirGroup	9
Narcosli	IDF xm_PineGroup	8
Narcosli	SBPSmk_na	8
Narcosli	SBS dw 1_na	10
Narcosli	SBS dw 2_na	8
Narcosli	SBS mc 2_na	8
Narcosli	SBS mh_na	7
Nazko	IDF dk 4_FirGroup	6
Nazko	IDF dk 4_PineGroup	6
Nazko	MS xv_na	8
Nazko	SBPSdc_na	7

Landscape Unit	Biogeoclimatic Unit	WTR Target (% gross harvest area)	Landscape Unit	Biogeoclimatic Unit	WTR Target (% gross harvest area)
Nazko	SBPSmk_na	9	Palmer/Jorgenson	MS xv_na	6
Nazko	SBPSxc_na	8	Palmer/Jorgenson	SBPSxc_na	6
Nemiah	ESSFv 1_na	6	Pan	ESSFv 1_na	0
Nemiah	IDF dk 4_FirGroup	7	Pan	MS xv_na	4
Nemiah	IDF dk 4_PineGroup	6	Pan	SBPSmc_na	6
Nemiah	IDF dw_FirGroup	0	Pan	SBS mc 2_na	7
Nemiah	IDF dw_PineGroup	4	Pantage	ESSFmv 1_na	8
Nemiah	MS dc 2_na	5	Pantage	SBPSdc_na	8
Nemiah	MS xv_na	6	Pantage	SBPSmk_na	8
Nemiah	SBPSxc_na	7	Pantage	SBS dw 1_na	8
Niagara	ESSFwc 3_na	0	Pantage	SBS dw 2_na	8
Niagara	ESSFwk 1_na	0	Pantage	SBS mc 2_na	8
Niagara	ICH wk 2_na	0	Pelican	ESSFmv 1_na	7
Nimpo	ESSFv 1_na	7	Pelican	SBPSdc_na	7
Nimpo	MS xv_na	7	Pelican	SBPSmk_na	7
Nimpo	SBPSxc_na	7	Pelican	SBS dw 2_na	7
Nostetuko	ESSFv 1_na	7	Pelican	SBS mc 2_na	7
Nostetuko	IDF dw_FirGroup	7	Penfold	ESSFwc 3_na	5
Nostetuko	IDF dw_PineGroup	7	Penfold	ESSFwk 1_na	5
Nostetuko	MS dc 2_na	7	Penfold	ICH wk 2_na	6
Nude Creek	CWH ds 1_na	0	Polley	ICH mk 3_na	9
Nude Creek	ESSFmw_na	0	Polley	ICH wk 2_na	8
Nude Creek	ESSFv 1_na	0	Polley	SBS dw 1_na	9
Nude Creek	IDF dw_FirGroup	0	Polley	SBS mh_na	9
Nude Creek	IDF dw_PineGroup	0	Punky Moore	ESSFv 1_na	1
Nude Creek	MH mm 2_na	0	Punky Moore	MS xv_na	4
Nude Creek	MS dc 2_na	0	Punky Moore	SBPSxc_na	4
Nuntzi Elkin	ESSFv 1_na	6	Puntzi	IDF dk 4_FirGroup	6
Nuntzi Elkin	IDF dk 4_FirGroup	5	Puntzi	IDF dk 4_PineGroup	7
Nuntzi Elkin	IDF dk 4_PineGroup	4	Puntzi	MS xv_na	6
Nuntzi Elkin	IDF xm_FirGroup	5	Puntzi	SBPSxc_na	6
Nuntzi Elkin	IDF xm_PineGroup	4	Pyper	IDF dk 4_FirGroup	6
Nuntzi Elkin	MS xv_na	6	Pyper	IDF dk 4_PineGroup	7
Nuntzi Elkin	SBPSxc_na	2	Pyper	IDF xm_FirGroup	6
Ottarasko	ESSFv 1_na	0	Pyper	IDF xm_PineGroup	6
Ottarasko	IDF dw_FirGroup	0	Pyper	SBPSxc_na	7
Ottarasko	IDF dw_PineGroup	0	Rainbow	ESSFv 1_na	0
Ottarasko	MS dc 2_na	0	Rainbow	IDF dw_FirGroup	0
Palmer/Jorgenson	ESSFv 1_na	6	Rainbow	IDF dw_PineGroup	0
Palmer/Jorgenson	IDF dk 4_FirGroup	6	Rainbow	MS dc 2_na	0
Palmer/Jorgenson	IDF dk 4_PineGroup	7	Rainbow	MS dv_na	0

Landscape Unit	Biogeoclimatic Unit	WTR Target (% gross harvest area)	Landscape Unit	Biogeoclimatic Unit	WTR Target (% gross harvest area)
Ramsey	IDF dk 3_FirGroup	10	Swift	ESSFwc 3_na	3
Ramsey	IDF dk 3_PineGroup	10	Swift	ESSFwk 1_na	8
Ramsey	MS xv_na	8	Swift	SBS wk 1_na	9
Ramsey	SBPSdc_na	9	Taseko	ESSFvx 1_na	6
Ramsey	SBPSmk_na	9	Taseko	MS dv_na	5
Ramsey	SBS dw 2_na	9	Tatla/Little Eagle	ESSFvx 1_na	7
Ramsey	SBS mc 2_na	8	Tatla/Little Eagle	IDF dk 4_FirGroup	5
Riske	BG xh 3_FirGroup	2	Tatla/Little Eagle	IDF dk 4_PineGroup	6
Riske	BG xh 3_PineGroup	9	Tatla/Little Eagle	MS xv_na	6
Riske	BG xw 2_FirGroup	10	Tatla/Little Eagle	SBPSxc_na	7
Riske	BG xw 2_PineGroup	9	Tautri	SBPSdc_na	8
Riske	IDF dk 3_FirGroup	10	Tautri	SBPSmk_na	8
Riske	IDF dk 3_PineGroup	11	Tautri	SBPSxc_na	8
Riske	IDF xm_FirGroup	10	Tchaikazan	ESSFvx 1_na	1
Riske	IDF xm_PineGroup	12	Tchaikazan	MS dv_na	5
Riske	SBPSmk_na	11	Tchaikazan	SBPSxc_na	5
Riske	SBPSxc_na	12	Telegraph	ESSFvx 1_na	7
Sandy	ESSFwc 3_na	0	Telegraph	IDF dw_FirGroup	0
Sandy	ESSFwk 1_na	0	Telegraph	IDF dw_PineGroup	7
Sandy	ICH wk 4_na	0	Telegraph	IDF ww_FirGroup	0
Sisters	IDF dk 4_FirGroup	8	Telegraph	IDF ww_PineGroup	0
Sisters	IDF dk 4_PineGroup	9	Telegraph	MS xv_na	7
Sisters	IDF xm_FirGroup	8	Telegraph	SBPSxc_na	7
Sisters	IDF xm_PineGroup	4	Tete Angela	ESSFvx 1_na	7
Sisters	SBPSxc_na	9	Tete Angela	IDF dk 4_FirGroup	6
Siwash	IDF dk 4_FirGroup	8	Tete Angela	IDF dk 4_PineGroup	5
Siwash	IDF dk 4_PineGroup	10	Tete Angela	MS xv_na	7
Siwash	IDF xm_FirGroup	9	Tete Angela	SBPSxc_na	7
Siwash	IDF xm_PineGroup	8	Tibbles	MS xv_na	7
Siwash	SBPSxc_na	10	Tibbles	SBPSdc_na	8
Snaking	ESSFmv 1_na	9	Tibbles	SBPSmk_na	8
Snaking	SBPSdc_na	8	Tibbles	SBS mc 2_na	8
Snaking	SBPSmk_na	8	Tiedemann	CWH ds 1_na	0
Snaking	SBS mc 2_na	8	Tiedemann	CWH ms 1_na	0
Spanish	ESSFwc 3_na	1	Tiedemann	MH mm 2_na	0
Spanish	ESSFwk 1_na	7	Toil	MS xv_na	2
Spanish	ICH dk_na	8	Toil	SBPSmk_na	6
Spanish	ICH mk 3_na	6	Tusulko	ESSFvx 1_na	8
Spanish	ICH mw 3_na	5	Tusulko	MS xv_na	6
Spanish	IDF mw 2_FirGroup	8	Tusulko	SBPSxc_na	7
Spanish	IDF mw 2_PineGroup	8	Twan	IDF dk 3_FirGroup	7

Landscape Unit	Biogeoclimatic Unit	WTR Target (% gross harvest area)	Landscape Unit	Biogeoclimatic Unit	WTR Target (% gross harvest area)
Twan	IDF dk 3_PineGroup	8	Wentworth	SBPSdc_na	9
Twan	IDF xm_FirGroup	7	Wentworth	SBPSmk_na	9
Twan	IDF xm_PineGroup	6	Wentworth	SBS mc 2_na	9
Twan	SBPSdc_na	8	Westbranch	ESSFv 1_na	3
Twan	SBPSxc_na	8	Westbranch	IDF dk 4_FirGroup	5
Twan	SBS dw 2_na	8	Westbranch	IDF dk 4_PineGroup	3
Umiti	ESSFwc 3_na	4	Westbranch	IDF dw_FirGroup	4
Umiti	ESSFwk 1_na	10	Westbranch	IDF dw_PineGroup	5
Umiti	SBS dw 1_na	10	Westbranch	MS dc 2_na	3
Umiti	SBS mh_na	10	Westbranch	MS xv_na	5
Umiti	SBS mw_na	10	Westbranch	SBPSxc_na	4
Umiti	SBS wk 1_na	10	Westside	ESSFwc 3_na	0
Upper Big Creek	ESSFv 2_na	1	Westside	ESSFwk 1_na	4
Upper Big Creek	MS xv_na	4	Westside	ICH wk 2_na	7
Upper Big Creek	SBPSxc_na	1	Whittier	SBPSmk_na	8
Upper Churn	ESSFv 2_na	6	Whittier	SBS dw 1_na	8
Upper Churn	MS xv_na	6	Whittier	SBS dw 2_na	8
Upper Churn	SBPSxc_na	7	Whittier	SBS mc 2_na	8
Upper Dean	ESSFmc_na	0	Whittier	SBS mh_na	8
Upper Dean	ESSFv 1_na	0	Williams Lake	IDF dk 3_FirGroup	8
Upper Dean	MS xv_na	5	Williams Lake	IDF dk 3_na	10
Upper Dean	SBPSmc_na	6	Williams Lake	IDF dk 3_PineGroup	9
Upper Dean	SBPSxc_na	6	Williams Lake	IDF xm_FirGroup	8
Upper Dean	SBS mc 2_na	0	Williams Lake	IDF xm_PineGroup	9
Upper Dean	SBS mc 3_na	6	Williams Lake	SBPSmk_na	9
Upper Tatlayoko	ESSFv 1_na	4	Williams Lake	SBS dw 2_na	10
Upper Tatlayoko	IDF dk 4_FirGroup	5	Willow	ESSFwc 3_na	5
Upper Tatlayoko	IDF dk 4_PineGroup	6	Willow	ESSFwk 1_na	8
Upper Tatlayoko	IDF dw_FirGroup	3	Willow	SBS wk 1_na	9
Upper Tatlayoko	IDF dw_PineGroup	6			
Upper Tatlayoko	MS dc 2_na	5			
Upper Tatlayoko	MS xv_na	6			
Upper Tatlayoko	SBPSxc_na	6			
Victoria	ESSFwc 3_na	5			
Victoria	ESSFwk 1_na	6			
Victoria	SBS mw_na	7			
Victoria	SBS wk 1_na	8			
Wasko/Lynx	ESSFwc 3_na	5			
Wasko/Lynx	ESSFwk 1_na	6			
Wasko/Lynx	ICH wk 2_na	6			
Wentworth	MS xv_na	8			

10 APPENDIX D – RIPARIAN CLASSIFICATIONS

FPPR Sections 47 to 51, 52(2), 53 and 55 to 57

Stream riparian classes

47(1) In this section, "**active flood plain**" means the level area with alluvial soils, adjacent to streams, that is flooded by stream water on a periodic basis and is at the same elevation as areas showing evidence of

- (a) flood channels free of terrestrial vegetation,
- (b) rafted debris or fluvial sediments, recently deposited on the surface of the forest floor or suspended on trees or vegetation, or
- (c) recent scarring of trees by material moved by flood waters.

(2) A stream that is a fish stream or is located in a community watershed has the following riparian class:

- (a) S1A, if the stream averages, over a one km length, either a stream width or an active flood plain width of 100 m or greater;
- (b) S1B, if the stream width is greater than 20 m but the stream does not have a riparian class of S1A;
- (c) S2, if the stream width is not less than 5 m but not more than 20 m;
- (d) S3, if the stream width is not less than 1.5 m but is less than 5 m;
- (e) S4, if the stream width is less than 1.5 m.

(3) A stream that is not a fish stream and is located outside of a community watershed has the following riparian class:

- (a) S5, if the stream width is greater than 3 m;
- (b) S6, if the stream width is 3 m or less.

(4) Subject to subsections (5) and (6), for each riparian class of stream, the minimum riparian management area width, riparian reserve zone width and riparian management zone width, on each side of the stream, are as follows:

Riparian Class	Riparian Management Area (metres)	Riparian Reserve Zone (metres)	Riparian Management Zone (metres)
S1-A	100	0	100
S1-B	70	50	20
S2	50	30	20
S3	40	20	20
S4	30	0	30
S5	30	0	30
S6	20	0	20

(5) If the width of the active flood plain of a stream exceeds the specified width for the riparian management zone, the width of the riparian management zone extends to the outer edge of the active flood plain.

(6) The minister may specify a riparian reserve zone for a stream with a riparian class of S1-A if the minister considers that a riparian reserve zone is required.

(7) The riparian reserve zone for a stream begins at the edge of the stream channel bank and extends to the width described in subsection (4) or (6).

(8) The riparian management zone for a stream begins at

(a) the outer edge of the riparian reserve zone, or

(b) if there is no riparian reserve zone, the edge of the stream channel bank,

and extends to the width described in subsection (4) or (5).

[am. B.C. Reg. 580/2004, s. 36.]

Wetland riparian classes

48(1) Wetlands have the following riparian classes:

(a) W1, if the wetland is greater than 5 ha in size;

(b) W2, if the wetland is not less than 1 ha and not more than 5 ha in size and is in one of the following biogeoclimatic zones or subzones:

(i) Ponderosa Pine;

(ii) Bunch Grass;

(iii) Interior Douglas-fir, very dry hot, very dry warm or very dry mild;

(iv) Coastal Douglas-fir;

(v) Coastal Western Hemlock, very dry maritime, dry maritime or dry submaritime;

(c) W3, if the wetland is not less than 1 ha and not more than 5 ha in size and is in a biogeoclimatic zone or subzone other than one referred to in paragraph (b);

(d) W4, if the wetland is

(i) not less than 0.25 ha and less than 1 ha in size and is in a biogeoclimatic zone or subzone referred to in paragraph (b) (i), (ii) or (iii), or

(ii) not less than 0.5 ha and less than 1 ha in size and is in a biogeoclimatic zone or subzone referred to in paragraph (b) (iv) or (v).

(2) Despite subsection (1), an area is to be treated as a single wetland with a riparian class of W5 if

(a) the area contains

(i) two or more W1 wetlands located within 100 m of each other,

(ii) a W1 wetland and one or more non-W1 wetlands, all of which are within 80 m of each other, or

(iii) two or more non-W1 wetlands located within 60 m of each other, and

(b) the combined size of the wetlands, excluding the upland areas, is 5 ha or larger.

(3) Subject to subsections (4) and (5), for each riparian class of wetland, the minimum riparian management area width, riparian reserve zone width and riparian management zone width for the wetland are as follows:

Riparian Class	Riparian Management Area (metres)	Riparian Reserve Zone (metres)	Riparian Management Zone (metres)
W1	50	10	40
W2	30	10	20
W3	30	0	30
W4	30	0	30

W5	50	10	40
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(4) No riparian reserve zone or riparian management zone extends onto any enclosed upland areas in a W1 wetland if the wetland is

(a) located in a boreal, subboreal or hyper-maritime climate, and

(b) greater than 1 000 ha in size.

(5) If the minister considers it necessary for a riparian reserve zone or riparian management zone to extend onto an enclosed upland area, the minister may require either or both of the following:

(a) a riparian reserve zone of a width of 10 m or less;

(b) a riparian management zone of a width of 40 m or less.

(6) The riparian reserve zone for a wetland begins at the edge of the wetland and extends to the width described in subsection (3) or (5).

(7) The riparian management zone for a wetland begins at

(a) the outer edge of the riparian reserve zone, or

(b) if there is no riparian reserve zone, the edge of the wetland,

and extends to the width described in subsection (3) or (5).

[am. B.C. Regs. 580/2004, s. 37; 62/2005, s. 7.]

Lake riparian classes

49(1) Lakes have the following riparian classes:

(a) L1-A, if the lake is 1 000 ha or greater in size;

(b) L1-B, if

(i) the lake is greater than 5 ha but less than 1 000 ha in size, or

(ii) the minister designates the lake as L1-B;

(c) L2, if the lake is not less than 1 ha and not more than 5 ha in size and is located in a biogeoclimatic zones or subzone that is

- (i) Ponderosa Pine,
- (ii) Bunch Grass,
- (iii) Interior Douglas-fir, very dry hot, very dry warm or very dry mild,
- (iv) Coastal Douglas-fir, or
- (v) Coastal Western Hemlock, very dry maritime, dry maritime or dry subarctic;

(d) L3, if the lake is not less than 1 ha and not more than 5 ha in size and is in a biogeoclimatic zone or subzone other than one referred to in paragraph (c);

(e) L4, if the lake is

- (i) not less than 0.25 ha and not more than 1 ha in size and is in a biogeoclimatic zone or subzone referred to in paragraph (c) (i), (ii) or (iii), or
- (ii) not less than 0.5 ha and not more than 1 ha in size and is in a biogeoclimatic zone or subzone referred to in paragraph (c) (iv) or (v).

(2) Subject to subsection (3), for each riparian class of lake, the minimum riparian management area width, riparian reserve zone width and riparian management zone width are as follows:

Riparian Class	Riparian Management Area (metres)	Riparian Reserve Zone (metres)	Riparian Management Zone (metres)
L1-A	0	0	0

L1-B	10	10	0
L2	30	10	20
L3	30	0	30
L4	30	0	30

(3) If the minister considers it necessary, the minister may specify a riparian management area and a riparian reserve zone for a lake with a riparian class of L1-A.

(4) The riparian reserve zone for a lake begins at the edge of the lake and extends to the width described in subsection (2) or (3).

(5) The riparian management zone for a lake begins at

(a) the outer edge of the riparian reserve zone, or

(b) if there is no riparian reserve zone, the edge of the lake,

and extends to the width described in subsection (2) or (3).

[am. B.C. Regs. 580/2004, s. 38; 62/2005, s. 8.]

Restrictions in a riparian management area

50(1) A person must not construct a road in a riparian management area, unless one of the following applies:

(a) locating the road outside the riparian management area would create a higher risk of sediment delivery to the stream, wetland or lake to which the riparian management area applies;

(b) there is no other practicable option for locating the road;

(c) the road is required as part of a stream crossing.

(2) If a road is constructed within a riparian management area, a person must not carry out road maintenance activities beyond the clearing width of the road, except as necessary to maintain a stream crossing.

(3) A person who is authorized in respect of a road must not remove gravel or other fill from within a riparian management area in the process of constructing, maintaining or deactivating a road, unless

- (a) the gravel or fill is within a road prism,
- (b) the gravel or fill is at a stream crossing, or
- (c) there is no other practicable option.

[am. B.C. Reg. 62/2005, s. 9.]

Restrictions in a riparian reserve zone

51(1) An agreement holder must not cut, modify or remove trees in a riparian reserve zone, except for the following purposes:

- (a) felling or modifying a tree that is a safety hazard, if there is no other practicable option for addressing the safety hazard;
- (b) topping or pruning a tree that is not wind firm;
- (c) constructing a stream crossing;
- (d) creating a corridor for full suspension yarding;
- (e) creating guyline tiebacks;
- (f) carrying out a sanitation treatment;
- (g) felling or modifying a tree that has been windthrown or has been damaged by fire, insects, disease or other causes, if the felling or modifying will not have a material adverse impact on the riparian reserve zone;
- (h) felling or modifying a tree under an occupant licence to cut, master licence to cut or free use permit issued in respect of an area that is subject to a licence, permit, or other form of tenure issued under the *Land Act*, *Coal Act*, *Geothermal Resources Act*, *Mines Act*, *Mineral Tenure Act*,

Mining Right of Way Act, Ministry of Lands, Parks and Housing Act or Petroleum and Natural Gas Act, if the felling or modification is for a purpose expressly authorized under that licence, permit or tenure;

(i) felling or modifying a tree for the purpose of establishing or maintaining an interpretive forest site, recreation site, recreation facility or recreation trail.

(2) An agreement holder who fells, tops, prunes or modifies a tree under subsection (1) may remove the tree only if the removal will not have a material adverse effect on the riparian reserve zone.

(3) An agreement holder must not carry out the following silviculture treatments in a riparian reserve zone:

(a) grazing or broadcast herbicide applications for the purpose of brushing;

(b) mechanized site preparation or broadcast burning for the purpose of site preparation;

(c) spacing or thinning.

[am. B.C. Regs. 62/2005, s. 10; 151/2007, s. 2 (c);
269/2010, s. 7.]

Restrictions in a riparian management zone

52(2) An authorized person who cuts, modifies or removes trees in a riparian management zone for an S4, S5 or S6 stream that has trees that contribute significantly to the maintenance of stream bank or channel stability must retain enough trees adjacent to the stream to maintain the stream bank or channel stability, if the stream

(a) is a direct tributary to an S1, S2 or S3 stream,

(b) flows directly into the ocean, at a point near to or where one or more of the following is located:

(i) a herring spawning area;

(ii) a shellfish bed;

(iii) a saltwater marsh area;

- (iv) an aquaculture site;
- (v) a juvenile salmonid rearing area or an adult salmon holding area, or
- (c) flows directly into the ocean at a point near to the location of an area referred to in paragraph (b) and failure to maintain stream bank or channel stability will have a material adverse impact on that area.

[am. B.C. Reg. 580/2004, s. 39.]

Temperature sensitive streams

53 An authorized person who fells, modifies or removes trees in a riparian management area adjacent to a temperature sensitive stream, or a stream that is a direct tributary to a temperature sensitive stream, must retain either or both of the following in an amount sufficient to prevent the temperature of the temperature sensitive stream from increasing to an extent that would have a material adverse impact on fish:

- (a) streamside trees whose crowns provide shade to the stream;
- (b) understory vegetation that provides shade to the stream.

[en. B.C. Reg. 580/2004, s. 40.]

Stream crossings

55(1) An authorized person who builds a stream crossing as part of a road, a temporary access structure or permanent access structure must locate, build and use the crossing in a manner that

- (a) protects the stream channel and stream bank immediately above and below the stream crossing, and
- (b) mitigates disturbance to the stream channel and stream bank at the crossing.

(2) An authorized person who builds a stream crossing as part of a temporary access structure must remove the crossing when it is no longer required by the person.

[en. B.C. Reg. 580/2004, s. 40; am. B.C. Reg. 102/2005, s. 2.]

Fish passage

56(1) An authorized person who carries out a primary forest activity must ensure that the primary forest activity does not have a material adverse effect on fish passage in a fish stream.

(2) An authorized person who maintains a fish stream crossing built after June 15, 1995, must ensure that the crossing does not have a material adverse effect on fish passage.

(3) Despite subsections (1) and (2), an authorized person may temporarily allow a material adverse effect on fish passage to construct, maintain or deactivate a road, including a stream crossing, if

- (a) fish are not migrating or spawning, and
- (b) the source of the material adverse effect is removed immediately on completion of the construction, maintenance or deactivation.

[en. B.C. Reg. 580/2004, s. 40.]

Protection of fish and fish habitat

57 An authorized person who carries out a primary forest activity must conduct the primary forest activity at a time and in a manner that is unlikely to harm fish or destroy, damage or harmfully alter fish habitat.

[en. B.C. Reg. 580/2004, s. 40.]