

100 Mile Development Corporation

Forest Stewardship Plan

Community Forest Agreement K2W

100 Mile House Forest District – 100 Mile House TSA

FSP Term: 5 Years (2022 – 2026)

Commencing: January 1, 2022

FSP ID#

Preamble to *FSP*

100 Mile Development Corporation has prepared this Forest Stewardship Plan (*FSP*) for operations within the Community Forest Agreement area. The *Forest Stewardship Plan* is comprised of one Forest Development Unit (FDU). K2W is located near 100 Mile House within the 100 Mile House Natural Resource District. 100 Mile Development Corporation works closely with West Fraser Mills and has used their *FSP* in the past to develop cut blocks and roads within the Community Forest Agreement (CFA) area. In cooperation with West Fraser Mills it was decided that the 100 Mile Development Corporation would submit basically the same *FSP* as developed by West Fraser Mills. The West Fraser Mills *FSP* was approved in 2020.

The *FSP* defines one *Forest Development Unit (FDU)*, within which primary forest activities may occur during the 5-year term of the plan. These activities will be conducted in accordance with the results, strategies, measures and standards specified in the *FSP* which in turn are consistent with the *objectives set by government* for the resource values found within the *FDU* of the *FSP*. Despite the exemption from the requirement to prepare results or strategies for an objective set by *government* for timber provided by Forest Planning and Practices Regulation (*FPPR*) Section 12(8) and defined within the Cariboo Chilcotin Land Use Plan, a strategy for timber has been specified. All results and strategies within this *FSP* have been developed consistent with the timber harvesting rights granted by the *government* for the applicable timber supply areas as required by *FRPA* 5(2).

This *FSP* is structured to include the following components:

- **Administration and Interpretation (Part 1)** provides definitions of terms used in the *FSP*; links to specific legislation; the overall organization of the *FSP*; and authorities from *government*.
- **Term (Part 2)** provides details on the date the *FSP* was submitted to *government* for approval; the specified term of the *FSP*; and the commencement date of the *FSP*.
- **Application of the *FSP* (Part 3)** specifies what this *FSP* applies to the 100 Mile Development Corporation
- ***Forest Development Units (Part 4)*** outlines the *FDU* applicable to this *FSP* and provides an *FDU* Overview Map.
- **Results or Strategies (Part 5)** specifies results or strategies consistent, to the extent *practicable*, with each applicable objective set by *government*. Each objective is summarized and sourced. In some instances, such as the objective for Soils, there exists a default practice requirement that has been adopted as the result or strategy for the *FSP*; in other instances, this plan either replaces the default or, in situations in which there is no such default, it proposes a result or strategy designed to be consistent with *government's* established objective. Sources of objectives addressed by the plan include:
 - objectives prescribed under *FRPA* 149 (1),
 - objectives established under *FPC* and continued under *FRPA* 181 for Specified Designations designated under *FPC* and continued under *FRPA* 180,
 - objectives established under section 93.4 of the Land Act,
 - objectives established under *FPC* Section 3-5, and continued under Land Act Section 93.8 as an objective established under Land Act Section 93.4, and
 - objectives established through the Government Actions Regulation.

- **Measures (Part 6)**, specifies measures for invasive plants and *natural range barriers* as required by *FPPR* sections 17 and 18.
- **Stocking Standards (Part 7)**, provides background information on the requirements for stocking standards; the application of stocking standards generally for each *cutblock* and any specified variances from the stocking standards contained within this plan.
- **Plan Signatures (Part 8)**, includes the signatures of the Reviewing Forester and the authorized licensee representatives
- **Appendices** including Stocking Standards.

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1 ADMINISTRATION AND INTERPRETATION

1.1 Definitions

Definitions appearing in the body of this *FSP* are presented in *italics* for ease of recognition. In this *FSP*, unless this *FSP* specifies:

1. **“Act”** means the *Forest and Range Practices Act* RSBC 2002, c.69.
2. **“Access Control”** means a control point located on a *road* which makes the *road* beyond the *access control* point impassable with a vehicle, excluding all-terrain vehicles, as defined under the Motor Vehicle Act. Types of *access control* include, but are not limited to, gates, cement blocks, deep trenches, ripping the *road* surface for greater than 200 metres where *practicable* or the piling of debris on the *road*. If the *access control(s)* is rendered ineffective the *FSP holder* will, upon identification through inspections, stakeholder notification or when *made known*, re-establish the *access control(s)* as soon as *practicable*. The *access control(s)* is to remain in place until such time as the *road* has been deactivated.
3. **“Adjacent”** as defined in *FPPR* 65(1) means “an area that is sufficiently close to a cutblock that, due to its location, could directly impact on, or be impacted by, a forest practice carried out within the cutblock”.
4. **“Agreement”** means an *agreement* listed in section 3.2, unless this *FSP* no longer applies to that *agreement*.
5. **“Agreement holder or holder”** is defined in *FPPR* section 1 (1) and means “a holder of an *agreement* under the *Forest Act*, other than a woodlot *licence*” and for the purposes of this *FSP*, applies to the *agreement* holders listed in section 3.2, or any successor or assignee of that *agreement*, unless this *FSP* no longer applies to that *agreement* holder.
6. **“Backcountry”** means an area comprised of Recreational Opportunity Spectrum (ROS) experiences of semi-primitive motorized and/or semi-primitive non-motorized and/or primitive as defined by the British Columbia Ministry of Forests Recreation Manual, Chapter 6, Figure 1: ROS Delineation Criteria on-line version of September 1, 2006.
7. **“Beetle Management Unit (BMU)”** means a management area, within which a landscape level beetle management strategy, as defined by the Ministry of Forests, Lands, Natural Resource Operations and Rural Development, is implemented.
8. **“Careful sanitation harvest practices”** means *harvesting* with the following requirements:
 - a. a mark to cut system is used to target currently infested trees for *harvest*,
 - b. a detailed ground-based survey is completed before *harvesting*,
 - c. where *practicable* new skid trails must be <5 metres wide, and use existing trails where available,
 - d. use existing landings and roads where they are available. New landings can be constructed within an OGMA provided that they are spaced 800m apart and restricted to 0.3ha in size. *Roads* can only be constructed within an OGMA where no other *practicable* option exists,
 - e. within OGMA, old attack (grey or red non-infested trees) must be left on site where they are required to be felled due to safety concerns,
 - f. excluding *roads*, trails and landings, limit the *harvest* or damage of non-infested trees to 10% of the total volume of currently infested stems to be removed,
 - g. stumps must be 30cm or lower on the uphill side, unless a higher stump is required to address hand-falling safety concerns,

- h. All *harvesting*, hauling of fibre and removal or burning of fresh debris (>2m long and >20cm in diameter) must be completed prior to April 1st where *practicable*. Where this is not *practicable* a mitigation plan will be developed and submitted to *FLNRORD*.
- 9. **“Conclusion of harvest (ing)”** means when all fibre has been *harvested* and been delivered from the *cutblock*.
- 10. **“Conclusion of road construction”** means at such time that the *road* is useable for industrial traffic.
- 11. **“Current”** means, in the context of an *FSP*, timber sale *licence*, *CP* or *RP*, an approved document that has not expired or been replaced.
- 12. **“Cutblock”** means a specific area with well-defined boundaries:
 - a. in which a *holder* of a *Licence* has *harvested* or is *harvesting* timber under an authorization, or
 - b. in which a *holder* of a *Licence* is authorized to *harvest* timber but where *harvesting* has not occurred.
- 13. **“dbh” (diameter breast height)** means the stem diameter (outside bark) of a tree measured at breast height. Breast Height is defined in the BC cruising manual.
- 14. **“Essential for insect control”** means where *harvest* is essential to curtail severe damage to forest values at the landscape level in a *BMU* classified as *suppression* in the most recent District forest health strategy for that insect pest, and
 - a. there are >75 trees in an *infestation site(s)* and *careful sanitation harvest practices* are conducted only within the *infestation site(s)*, or
 - b. there are 15-75 trees in an *infestation site(s)* and *careful sanitation harvesting practices* are conducted only within the *infestation site(s)*, after trap trees have first been used to the extent possible and where effective.
- 15. **“Equivalent Clearcut Area (ECA)”** - the proportion of the overall forest land-base area within a watershed, or specified sub-units of a larger watershed, that has been disturbed (e.g. *harvested*, cleared, affected by forest pathogens or insects, or burned, etc.), with consideration given to the state of hydrologic recovery within the area disturbed. Hydrologic recovery, and the magnitude of the *ECA* impact, is influenced by numerous factors including: the silvicultural system used; the level of forest stand regeneration and the location and distribution of disturbance within the watershed. The method to be used to determine *ECA* is described in Appendix 2 of the Coastal Watershed Assessment Procedure Guidebook (CWAP) Interior Watershed Assessment Procedure Guidebook (IWAP) Second Edition Version 2.1 April 1999 <https://www.for.gov.bc.ca/tasb/legsregs/fpc/fpcguide/wap/wapgdwbk-web.pdf> , or a *Qualified Professional* defines the specific assumptions and approaches utilized in developing the *ECA* calculation. *ECAs* will be calculated using the most up to date data within the Forest Tenure Administration system (*harvested*, approved, and submitted from all *licences* within the watershed). The methodology will be submitted to *FLNRORD*.
- 16. **“Forest Development Unit (FDU)”** as defined in *FPPR* section 1(1).
- 17. **“Forest Act”** means the *Forest Act* R.S.B.C. 1996, c.157.
- 18. **“FSP holder” or “holder”** means the *agreement* holders listed in paragraph 3.2, or any successor or assignee of that *agreement*, unless this *FSP* no longer applies to that *agreement*holder.
- 19. **“Fuel mitigation”** are treatments in an approved community or regional wildfire plan that occur within Primary Fuel Breaks or Interface Fuel Breaks and that achieve:
 - a. the reduction of fine surface debris, ladder fuels and small diameter trees in intermediate and overtopped crown classes and,
 - b. the separation of tree crowns among individual trees or clumps within the dominant and co-dominant layers sufficient to mitigate the spread of a passive crown fire, to a

maximum spacing of 6 meters between crowns,

- c. minimal practicable impacts to Primary Old Seral Forest Characteristics in OGMAs, Riparian Reserve Zones, and Lakeshore Management Zones.
 - i. **“Primary Old Seral Characteristics”** are **Crown** forest within an Interface or Primary Fuel Break, large (>37.5 cm dbh) and very large (>57.5 cm dbh) trees, large coarse woody debris, and dead and declining trees where they do not represent a significant safety hazard.
 - ii. **“Primary Fuel Break”**-means a strategic landscape level fuel break outside interface fuel breaks, where treatments are authorized by the District Manager for the purpose of influencing wildfire behavior and facilitating fire-fighting activities.
 - iii. **“Interface Fuel Break”**-means fuel breaks where treatments are authorized by the District Manager to address protection of property and public safety by reducing the risk of ignition and spread of wildfire in key areas adjacent to the community.

20. **“Government”** means the *government* of British Columbia.

21. **“Harvest”** is defined in *FPPR* sec 1(1).

22. **“High value wildlife tree(s)”** means a tree over 37.5cm *dbh* among the target residual conifer species or over 20cm *dbh* for deciduous species, and that falls within one of the wildlife tree classes of 2 through 8 as described in the table below,

Wildlife Tree Classes		
Class	Description	Characteristics
2	Live/Unhealthy	Internal decay or growth deformities (including insect damage, broken tops) dying tree.
3	Dead	Hard heartwood, needles/twigs present, roots stable.
4	Dead	Hard heartwood, no needles/twigs; 50% of branches lost; loose bark; top usually broken; roots stable.
5	Dead	Spongy heartwood; most branches/bark absent; internal decay; roots stable for larger trees; roots of smaller trees beginning to soften.
6	Dead	Soft heartwood; no branches or bark; sapwood/heartwood sloughing from upper bole; lateral roots of larger ones softening; smaller ones unstable.
7-8	Dead	Soft heartwood; stubs; extensive internal decay; outer shell may be hard; lateral roots completely decomposed; hollow or nearly hollow shells.

23. **“Infestation site”** is a contiguous bark beetle infestation of trees which includes all currently infested trees separated by no more than 50m from any other currently infested tree or trees.
24. **“Interface fuel break”** means a fuel break where treatments are authorized by the District Manager to address protection of property and public safety by reducing the risk of ignition and spread of wildfire in key areas *adjacent* to the community.
25. **“Intermediate Crown Classes”** means trees with crowns either below or extending into the canopy formed by co-dominant and dominant trees; receiving little direct light from above and none from the sides; usually with small crowns considerably crowded on the sides.
26. **“Licence”** means an *agreement* under the *Forest Act*.
27. **“LU-BEC Unit”** means the association of a specific landscape unit and *BEC* subzone or subzone variant.
28. **“Made or Makes Known”** are items communicated to *FSP holder* from the Statutory Decision Maker or a District Manager or designate through written correspondence or electronic media.
29. **“Major licence”** has the meaning given to it under the *Forest Act*.
30. **“Major Wildlife Feature”** means a den, stick nest, cavity nest, hibernaculum, mineral lick or wallow, a fisheries sensitive feature, or a nest of a category of species at risk that is limited to birds.
31. **“Merchantable”** means 12.5cm *dbh* for pine and 17.5cm *dbh* for all other species.
32. **“Mitigation action”** means activities, process(es) or actions developed by a *Qualified Professional* that have the purpose of addressing the impacts on affected parties, that are a result of an *FSP holder’s harvesting* and/or *road* construction activities.
33. **“Mitigation strategy”** is a plan developed to mitigate the effects of *harvesting* and/or *road* construction on an affected party, that specifies:
 - a. what *mitigation actions* are to be undertaken; and
 - b. who is responsible for undertaking the *mitigation actions*; and
 - c. where the *mitigation actions* will occur; and
 - d. when the *mitigation actions* will be completed.
34. **“Natural disturbance”** means the pattern of disturbance to vegetation and terrain, at all spatial scales, man caused or naturally caused, considered to have occurred prior to the period of significant influence by European originated cultures.
35. **“Natural range barrier”** is a river, rock face, dense timber or any other naturally occurring feature that stops or significantly impedes livestock movement to and from an *adjacent* area.
36. **“No harvest area”** means an area of land other than a park, protected area or ecological reserve, where *primary forestry activities* are not permitted unless otherwise specified in the results and strategies of this *FSP*.

37. **“Objectives set by Government”** as defined in *FRPA* sec 1(1).
38. **“Overtopped crown classes”** means trees with crowns entirely below the general level of the crown cover, receiving little or no direct light from above or from the sides.
39. **“Plan preparer”** is the person required to prepare the plan which is 100 Mile Development Corporation
40. **“Primary forest activity”** as defined in *FPPR* section 1(1), means one or more of the following:
 - a. timber *harvesting*; (*harvest* as defined in *FPPR* s.1)
 - b. silviculture treatments;
 - c. wildlife habitat enhancements; or
 - d. road construction, maintenance and deactivation.
41. **“Permanent OGMA – static”** means an old growth management area (OGMA) which retains a fixed location in the landscape.
42. **“Permanent OGMA – rotating”** means an old growth management area (OGMA) that contributes to the long-term OGMA target area.
43. **“Permanent road”** means a road that provides access for timber *harvesting* and remains operational after *primary forest activities* are complete on the area that the road was intended to access.
44. **“Prior to submission”** means prior to the Forest Tenure Administration System (FTA) submission of a *cutblock* or *road* section to *government* seeking approval.
45. **“Primary old seral forest characteristics”** means, within a *primary* or *interface fuel break*, stems larger than >37.5cm *dbh*, large, coarse woody debris, and dead and declining trees where they do not represent a *safety hazard*.
46. **“Primary fuel break”** means a strategic landscape level fuel break outside *interface fuel breaks*, where treatments are authorized by the District Manager for the purpose of influencing wildfire behavior and facilitating fire-fighting activities.
47. **“Qualified Professional”** means a registered member in good standing with a professional association whose training, ability and experience makes the member professionally competent in the relevant area of practice.
48. **“Referral period”** means the time specified by the *FSP holder* seeking comments. The period will be a minimum of 60 days unless a shorter period has been endorsed by *FLNRORD*.
49. **“Road”** has the meaning given to it in *FPPR* s.1.
50. **“Roaded access”** means the presence or absence of *roads* and *road networks* that provide reasonably apparent routes of access to an area. *Roaded access* is provided to a location when the location is within 1 kilometer of a *road* where the subgrade of the *road* has not been de-compacted as part of a *road* deactivation program or fully covered with replaced overburden. *Roaded access* may be temporarily or permanently barricaded, may have had bridge superstructures and/or major crossings removed, or may be otherwise deactivated.
51. **“Safety hazard”** means a situation or circumstance the *holder* determines to be a potential source of harm to workers or the general public based on WorkSafe BC regulations and policies. *Safety hazards* include but are not limited to danger trees (snags), inadequate visibility, falling objects, steep slopes, *unstable terrain*, etc.
52. **“Scenic area”** is an area defined in the Cariboo Chilcotin Land Use Plan Land Act Order spatial data set – Scenic areas and Scenic corridors as displayed in Appendix A Maps.
53. **“Shallow and Moderate Snowpack Zones”** means the following biogeoclimatic units within the CCLUP area: BG-all subzones, IDfxm, IDfxw, IDfk3, IDfk4, SBPSxc and those areas of the SBSmh lying south and west of Quesnel.
54. **“Significant Wildlife Tree”** means a coniferous tree over 65.5cm *dbh*, and over 20cm *dbh* for deciduous species, and trees containing a nest of a bald eagle, osprey, great blue heron or a

category of species at risk limited to birds, and trees identified in the field as being used by wildlife for denning.

55. **“Suppression”** means a bark beetle control strategy designed to reduce or keep the outbreak to a size and distribution that can be handled by treating 80% or more of the infestations found on the most *current* aerial overview inventory in the most *current* district forest health strategy.
56. **“Transition OGMA”** means an old growth management area (OGMA) which only exists until it is replaced by other old forest in that *LU-BEC unit* or 20 years from the June 25, 2010 effective date of the CCLUP LAO Order, whichever is less.
57. **“Thinning from Below”** means a silviculture treatment in which trees are removed from *intermediate* and *overtopped classes*, leaving the larger trees on site.
58. **“Temporary road”** means a *road* that is only required for a limited period of time during the specific forest management phase in a *cutblock*. These *roads* are deactivated once the phase is completed.
59. **“Unstable Terrain”** – *Unstable terrain* is defined as the following areas:
 - a. Polygons identified with a Slope Stability Class with Roads of “P” (potentially unstable) and “U” (unstable) in the spatial dataset
WHSE_TERRESTRIAL_ECOLOGY.STE_TER_STABILITY_POLYS_SVW, or
 - b. Polygons identified with a Slope Stability Class with Roads of Class 4R, Class 4, Class 5, Class IVR, Class IV, and Class V in the spatial dataset
WHSE_TERRESTRIAL_ECOLOGY.STE_TER_STABILITY_POLYS_SVW, or
 - c. Indicators of *unstable terrain* identified in the field as detailed in the Mapping and Assessing Terrain Stability Guidebook, August 1999, or
 - d. Gentle-over-steep type of terrain feature comprised of both: (1) steep and potentially unstable slopes that are (2) located immediately down-slope of gentle terrain where forest development can potentially occur.
60. **“Wildlife habitat area (WHA)”** as defined in *FPPR s.1* means a *wildlife habitat area*
 - a. continued under section 180 and 181 [grandparenting specified designations] of the *Act*, or
 - b. established under the Government Actions Regulation.
61. **“Wildlife tree retention area (WTRA)”** defined in *FPPR sec 1 (1)* is synonymous with Wildlife Tree Patch or ‘WTP’.

1.2 Acronyms

The following acronyms may be used within this Forest Stewardship Plan:

AUM – Animal Unit Month

BEC - Biogeoclimatic Ecosystem Classification

CCLUP – Cariboo-Chilcotin Land Use Plan

CFA – Community Forest Agreement

CP - Cutting Permit

DDM – Delegated Decision Maker

GWM – General Wildlife Measure

GAR - Government Actions Regulation B.C. Reg. 582/2004

FPC - Forest Practices Code of British Columbia Act R.S.B.C. 1996, c. 159 and all regulations there under

FPPR – Forest Practices and Planning Regulation

FRPA – Forest and Range Practices Act

FSP – Forest Stewardship Plan

FDP – Forest Development Plan

FDU – Forest Development Unit

LAO (LUO) – Ministry of Agriculture and Lands, Integrated Land Management Bureau 93.4 Land Act Ministerial Order, Land Use Objectives for the Cariboo-Chilcotin Land Use Plan (*CCLUP*) Area dated April 18, 2011 and signed May 24, 2011

FLNRORD – Ministry of Forests, Lands, Natural Resource Operations and Rural Development

RESULTS – Reporting Silviculture Updates and Land Status Tracking System

RP - Road Permit

RRZ – Riparian Reserve Zone

RMZ – Riparian Management Zone

RMA – Riparian Management Area

SRMP – Sustainable Resource Management Plan

TSA - Timber Supply Area

VQO – Visual Quality Objective

WHA – Wildlife Habitat Area

1.3 Relevant Date for Legislation and Objective References

In this *FSP*, unless this *FSP* specifies otherwise; reference to legislation, an established objective, an establishment of an area referred to in section 14(3)(a) to (i) of *FPPR* or an order made by *government* means that legislation, established objective, notice, designation, area or order as it was on the date of submission of this *FSP*.

1.4 Application of Legislation

This *FSP* has been designed considering the legal and contextual relationship between the Land Act Order applicable to the Cariboo Chilcotin Land Use Plan area, orders established under Government Actions Regulations that establish objectives, the *CCLUP* 90-day Implementation Process Final Report, Objectives set by *FPPR* and associated Practice Requirements.

1.5 Definitions in Legislation

In this *FSP*, unless this *FSP* specifies, words and phrases defined in *FRPA* or the *Forest Act* and associated regulations under them have the same meaning as those definitions, as they were on the date of this *FSP* submission.

1.6 Changes to Legislation

Subject to section 1.4, if legislation referred to in this *FSP* is renamed or a provision of legislation referred to in this *FSP* is renumbered, the reference in this *FSP* is to be construed as a reference to the provision as renamed or renumbered, as the case may be.

1.7 Expressions Inclusive

In this *FSP*, unless this *FSP* specifies, or the context requires otherwise,

1. the singular includes the plural and the plural includes the singular; and
2. the masculine, the feminine and the neuter are interchangeable, and each includes the body corporate.

1.8 Organization

This *FSP* is divided into:

- 1 parts,
 - 1.1 sections,
 - 1.1.1 paragraphs,
 - 1.1.1.1 subparagraphs,
 - 1. clauses,
 - a. sub clauses
 - i. sub-sub clauses

1.9 Heading and Preamble

The headings and preamble in this *FSP* are for ease of reference only and are not to be construed as part of this *FSP*.

1.10 Appendices Part of the FSP

The Appendices to this *FSP* are a part of this *FSP* and any reference in this *FSP* to this *FSP* includes a reference to the Appendices.

1.11 Application of Results and Strategies

Each result, strategy and measure in this *FSP* applies to a *CP* or *RP* held by an *agreement holder*, unless specified in the specific result, strategy or measure as applying to other activities or otherwise exempted through legislation from a Delegated Decision Maker (*DDM*). Notwithstanding the foregoing, in a proceeding in respect of an alleged failure to achieve a result or carry out a strategy, the result or strategy applies only to the *agreement holder* whose *CP* or *RP* is located in the area subject to the proceeding.

The provisions of this *FSP* do not apply to the extent necessary to allow the *holder* of this *FSP* and its employees, servants, agents, contractors and subcontractors to carry out fire control or fire suppression in accordance with an enactment.

2 TERM OF THE PLAN

2.1 Date of Submission

The date of submission of this *FSP* for approval is January 11, 2022.

2.2 Term

For the purposes of Section 6(1) (a) of the Act, the term of this *FSP* is 5 years, commencing on the date specified in section 2.3 of this *FSP*, unless:

- a) the *holders* of this *FSP* elect to replace it with another approved *FSP*, or
- b) it is extended pursuant to *FRPA*.

2.3 Commencement of Term

For the purposes of Section 6(1) (b) of the Act, the term of this *FSP* commences on approval date of this *FSP*.

3 APPLICATION

3.1 Holder of the FSP

The *agreement holder* of this *FSP* is 100 Mile Development Corporation. The person required to prepare the plan is 100 Mile Development Corporation.

3.2 Application to Agreements

This *FSP* applies to each cutting permit issued and each *road* permit granted:

- a) on or after the date the term of this *FSP* commences, as specified in section 2.3,
- b) within the *FDU* as defined in section 4.1 and 4.2,
- c) in respect of the *agreements* under the *Forest Act* and the *agreement holders* specified in table 3.2.

<i>FDU Name</i>	<i>TSA</i>	<i>Agreement Holder</i>	<i>Forest Act Agreement, Forest Licence</i>
K2W	100 Mile	100 Mile Development Corporation	K2W

3.3 Cutblocks or Roads Approved under a Previous *FSP*

Consistent with *FRPA* Section 21(2), *cutblocks* or *roads* approved under a previous *FSP* or *FDP* will be subject to this *FSP* for a result or strategy under Part 5, a measure under Part 6 or a stocking standard under Part 7 **if an amendment occurs** to the *cutblock* or *road* site plan under a previous plan and states that the application of the *current FSP* provision applies.

4 FOREST DEVELOPMENT UNIT

4.1 Forest Development Unit

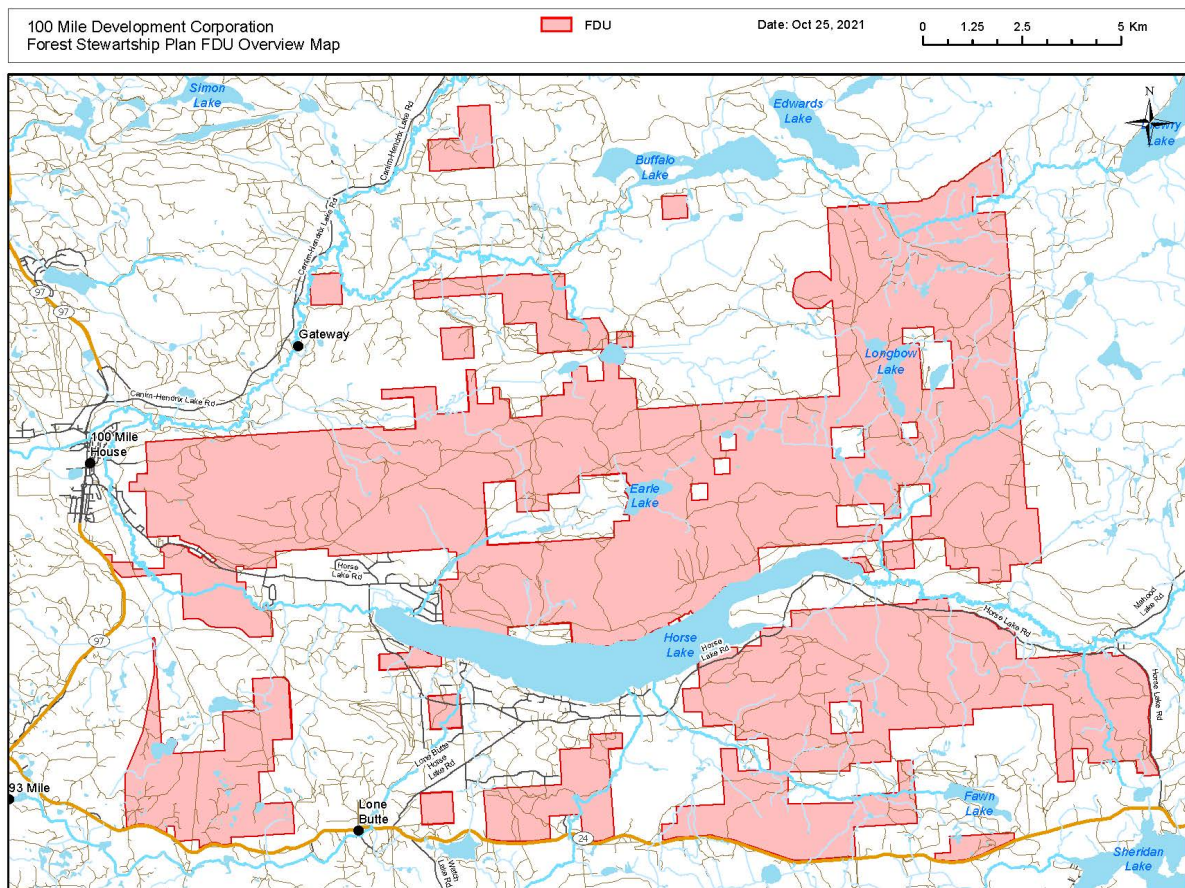
For the purposes of the *FRPA* Section 5(1)(a)(ii) and *FPPR* section 14(1)(a), the *FDU* that applies to an *agreement holder* and an *agreement* under this *FSP* are specified in table 4.1. and shown on the Forest Stewardship Plan Maps in Appendix A to this *FSP*.

Table 4.1 Forest Development Units

<i>FDU</i> Name	Description
K2W	Area Covered by Community Forest Agreement K2W

Areas excluded from the *FDU*, not necessarily indicated on the map due to scale, are: First Nations title lands, federal lands, private land, woodlot license areas, parks, ecological reserves, and all other areas where timber extraction under the authority of *Forest Act agreements* are precluded.

4.2 FDU Overview map



4.3 Identifying Required Values within Forest Development Units

For the purposes of *FPPR* sections 14(2) and (3), table 4.3 and the Forest Stewardship Plan Maps in Appendix A of this *FSP*, identify the things referred to in those sections that are in the *FDU* and in effect as of the date of submission of this *FSP*. These items include: ungulate winter ranges, *wildlife habitat areas*, fisheries sensitive watersheds, *lakeshore management zones*, *scenic areas*, *community watersheds*, old growth management areas, areas in which commercial *harvesting* is prohibited by another enactment and cutting permits and *road* permits that are held by the *agreement holder* if that is the person required to prepare the plan. A list of Cutting Permits, cutblocks and road permits approved under a previous *FSP* are listed in Appendix F.

4.4 Cutblocks and Roads declared pursuant to Section 14 (4) of FPPR

There are no newly declared areas pursuant to section 14(4) of the *FPPR* at the time of Submission of this *FSP*.

5 RESULTS AND STRATEGIES

5.1 Soils - FPPR section 5

Source of Objective: FPPR section 5 Soils

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

Result or Strategy for Soils

1. In relation to the objective set by *government* for soils that is set out in section 5 of the FPPR, the FSP holder adopts as a result or strategy, FPPR section 35 (*Soil disturbance limits*) and FPPR section 36 (*Permanent access structure limits*) as those sections were on the date of submission of this FSP.

5.2 Timber - FPPR section 6

Source of Objective: FPPR section 6 Timber

The objectives set by government for timber are to:

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

Source of Objective: CCLUP 90 day report and Declaration of the CCLUP as a Higher Level Plan: Filing and Notice

Timber targets provide assurance to the forest industry regarding access for development to the forest land base.

Conventional: *The portion of the total forest available for conventional harvest systems. Conventional management is defined as the current industry norm, including any standard prescribed practices.*

Modified: *The portion of the total forest available for harvest using modified practices in recognition of other resource values. This will include a wide range of modified practices with the selection determined by the specific circumstances on a site-specific basis. Many such modified practices are currently in use. This category provides considerable opportunity for the industry to develop areas while retaining other resource values.*

Depending upon the value to be managed for, these resource values can be addressed through a wide spectrum of modified regimes, including:

- adjusted cutblock size or shape to retain visual quality;
- modified clearcut systems, such as small patch clearcuts, feathered edges, green tree retention or deciduous tree retention;
- alternative harvesting systems, such as highlead, helicopter, small machinery or horse-logging; and
- alternative silvicultural systems, such as selection or shelterwood.

No Harvest: The portion of the total forest that, due to other resource values, is not presently available for harvest under current forest management regimes. Some of these areas are expected to become available in the future provided that retention of the other resource values, particularly wildlife, can be ensured.

The following timber targets are prescribed as commitments for the zones of this Land Use Plan. These are pro-rated averages across each of the zones; there are considerable variations among the sub-units, based on the specific mix of resource values. Also, at both the zonal and sub-unit levels, these figures are aggregates based on GIS calculations of the land area required for the range of values. These figures are percentages of the productive forest land base.

The timber targets for the zones of the CCLUP are:

Zonal and Sub-Unit

CCLUP Zone	Access to Timber Target %
Special Resource Development Zone	70% maximum 30% netdown
Integrated Resource Development Zone	81% maximum 19% netdown
Enhanced Resource Development Zone	83% maximum 17% netdown

Sub Unit	Timber Target		
	Conventional Harvest %	Modified Harvest %	No Harvest %
Interlakes	26	66	8
Rail	37	58	5
Gustafson	72	21	7

Result or Strategy for Timber

1. The *FSP holder* will contribute to achieving the Conventional and Modified *Harvest* Timber Targets specified in the *CCLUP* through complying with the results and strategies presented in this *FSP*, subparagraphs:
 - a. 5.3.2.1 (Moose);
 - b. 5.3.2.2 (Mule Deer);
 - c. 5.7 (Biodiversity);
 - d. 5.8 (Visual Quality).

2. The *FSP holder* will contribute to achieving the *No-Harvest* Timber Targets specified in the *CCLUP* through the results and strategies presented in these *FSP* paragraphs:
 - a. 5.4.2.1 (Riparian Reserve Zone);
 - b. 5.7.2 (Old Growth Management Areas);
 - c. 5.7.5 (Wildlife Tree Retention Areas);
 - d. 5.5.6 (Critical Fish); and subparagraphs:

5.3 Wildlife

5.3.1 Wildlife - *FPPR* section 7

Source of Objective: *FPPR* section 7 (1) Wildlife, triggered by a notice provided under *FPPR* 7(2)

The objective set by government for wildlife is, without unduly reducing the supply of timber from British Columbia's forests, to conserve sufficient wildlife habitat in terms of amount of area, distribution of areas and attributes of those areas, for

(a) the survival of species at risk,

(b) regionally important wildlife, and

(c) the winter survival of specified ungulate species.

*Note: Within the Cariboo Region, no notices under *FPPR* 7(2) have been provided upon the date of submission of this *FSP*.*

Result or Strategy for Wildlife *FPPR* section 7

1. The *FSP holder* will adhere to the results and strategies presented within this *FSP*, specifically paragraphs:
 - a. 5.3.2 (Regionally Important Wildlife);
 - b. 5.3.3 (Wildlife Species at Risk);
 - c. 5.3.3.18 (Additional Wildlife Species not previously specified).

5.3.2 Wildlife - Regionally Important

5.3.2.1 Moose

Source of Objective: <i>CCLUP 90 Day Report</i>
<i>“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.”</i>
Source of Objective: <i>CCLUP appendix 4 page 155</i>
<i>The overall objective is to maintain habitat through maintenance of:</i> <ul style="list-style-type: none">• <i>Forested buffers around wetlands and riparian areas,</i>• <i>Cover and early seral (shrubby) upland winter habitats,</i>• <i>Other aspects of moose habitat needed on a site-specific basis, including calving areas and summer habitat protection,</i>• <i>Careful access management, including limitations on permanent access, deactivation of temporary roads, and limiting road crossings of wetlands and riparian areas as much as possible.</i>
Source of Objective: <i>LAO objective 32</i>
<i>“Retain sufficient vegetation to provide security and thermal cover for wintering moose adjacent to high value wetlands as defined by the spatial data set Cariboo Chilcotin High Value Wetlands for Moose, and adjacent to W1, W3 or W5 wetlands, including shrub-carrs.”</i>

Definitions

For the purposes of this result or strategy:

“High Value Moose Wetland Management Zone (HVMWMZ)” is an area surrounding a *High Value Moose Wetland* with a width of 200m (slope distance) measured from the physical ‘edge’ (consistent with the Riparian Guidebook, 1995) of the wetland.

“High value moose wetland” is as defined in the Cariboo Chilcotin Land Use Plan Land Act Order spatial data set: Cariboo-Chilcotin High Value Wetlands for Moose displayed in Appendix A Maps.

“Moose Management Unit (MMU)” means an area surrounding a W1, W3, W5 or *shrub-carr* wetland not identified as a *High Value Moose Wetland*. The *Moose Management Unit* is an area with a width of 100 metres (slope distance) applied to the outside physical ‘edge’ (consistent with the Riparian Guidebook, 1995) of a W1, W3, W5 or *shrub-carr* wetland.

“Security cover” means sufficiently stocked live conifers and deciduous averaging greater than 3 metres in height.

“Shrub-carr” means a wetland that is shrub dominated and comprised of scrub birch and willows up to 2m tall, developed on mineral soils that are periodically saturated, but rarely inundated.

“Thermal cover” means sufficiently stocked live conifers greater than or equal to 15 metres tall with greater than 40% crown closure. For the SBPS, IDF or MS *BEC* zones, if 15 metre tall stands are not available, then greater than or equal to 8 metres tall with greater than 40% crown closure conifer stands will be acceptable as *thermal cover*.

“Visual screen” means vegetation, topography and/or a woody *debris pile* that completely obstructs $\geq 50\%$ of the view from a *road* surface.

Result and/or Strategy for Moose

Applicable area: All *FDUs*.

1. Where thermal cover and security cover exist the *FSP holder* will, at the *conclusion of harvesting a cutblock* that overlaps with a *HVMWMZ* or *MMU*, **not cause** the area to have,
 - a. within the SBPS, IDF or MS *BEC* zones:
 - i. less than 30% of the area as *thermal cover*; and
 - ii. less than 60% of the area as *security cover*,
 - b. within the SBS *BEC* zone:
 - i. less than 33% of the area as *thermal cover*; and
 - ii. less than 66% of the area as *security cover*,
 - c. within the ICH or ESSF *BEC* zones:
 - i. less than 60% of the area as *thermal cover*; and
 - ii. less than 80% of the area as *security cover*.
2. Where practicable for all *thermal* and *security cover* retained above, retention patches will be:
 - a. greater than or equal to 100m wide;
 - b. greater than 2 hectares; and
 - c. not greater than 400 metres apart where more than one patch is established.
3. If the wetland within a *HVMWMZ* or *MMU* is less than 6 hectares, then clause 2. above does not apply.
4. The *FSP holder* will not construct a new *permanent road* within a *HVMWMZ* or *MMU*, unless no *practicable* alternative exists for the *road* location.

5. Where the *FSP holder harvests a cutblock* within 500 metres (slope distance) of *High Value Moose Wetlands*, the *FSP holder* will:
 - a. at the *conclusion of harvesting*, establish and/or retain a *visual screen* for that portion of the *cutblock* within 500 metres of the *High Value Moose Wetland* until free growing; or
 - b. immediately following delivery of the fibre from the corresponding *cutblock* associated with the *High Value Moose Wetland*, establish an *access control(s)* to eliminate vehicular access into the *cutblock*.

6. Where the “DIGITAL ROAD ATLAS” (WHSE_BASEMAPPING.DRA_DGTL_ROAD_ATLAS_MPAR_SP) and “ALL FOREST ROAD SECTIONS – FTEN” (WHSE_FOREST_TENURE.FTEN_ROAD_SECTION_LINES_SVW) road layer densities exceed 0.6 km/km² within 1000 metres of a High Value Moose Wetland, the *FSP holder* will, immediately following delivery of the fibre from the corresponding *cutblock* associated with the High Value Moose Wetland, deactivate or establish an access control(s) on all new roads to eliminate vehicular access within 1000 metres of the High Value Moose Wetland.

7. For those portions of a *cutblock* where retention is required for *visual screen(ing)* within 500 metres of the wetland associated with a *HVMWMZ* or *MMU*, the free growing damage criteria for even-aged coniferous trees as specified in the FS 660 field card, with regard to dwarf mistletoe, will not apply to retained lodgepole pine and subsequent lodgepole pine regeneration.

5.3.2.2 Mule Deer

Source of Objective: <i>CCLUP 90 Day Report</i>
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<i>“To maintain Mule Deer winter range values through modified harvest regimes.....”</i>
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Result and/or Strategy for Mule Deer

1. The *FSP holder* adopts as a result or strategy the *general wildlife measures* specified in the applicable *GAR* order for Ungulate Winter Ranges U-5-001, U-5-002, U-5-003, as that order was on the date the *FSP* was submitted for approval.

5.3.2.3 Furbearers – General

Source of Objective: <i>CCLUP 90 Day Report</i>
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<i>“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, mule deer winter range and lakeshore management zones and throughout the polygon under the biodiversity conservation strategy.”</i>

Source of Objective: <i>CCLUP appendix 4 pages 156 / 159</i>

“furbearers such as marten and fisher, waterfowl, and many other species benefit from the application of the guidelines under the FPC and access management.”

“the region contains an abundance of wetlands which provide important habitat for many species. They are of particular importance for waterfowl, moose and furbearers.....”

Definitions

For the purposes of this result or strategy:

“Debris pile” means an accumulation of woody debris $\geq 3\text{m}$ by $\geq 5\text{m}$ in dimension $\geq 2\text{m}$ high, consisting of the largest pieces available.

Result and/or Strategy for Furbearers - General

Applicable area: All *FDUs*.

1. Where *harvesting* removes greater than 50% of the basal area in contiguous areas greater than 5 hectares, the *FSP holder* will, at the *conclusion of harvesting*, where *practicable*, retain a minimum of 1 unburnt *debris pile* per hectare within those portions of *cutblocks* located within 100 metres of a classifiable riparian feature. Within primary and interface fuel breaks in an approved community or regional wildfire plan the retention of unburnt debris piles is not required.
2. The *FSP holder* will adhere to the results and strategies presented within this *FSP*, specifically sections:
 - a. 5.3 (Wildlife);
 - b. 5.4 (Riparian);
 - c. 5.5 (Fish and Sensitive Habitats); and
 - d. 5.7 (Biodiversity).

5.3.3 Wildlife – Species at Risk and other Sensitive Habitats

Source of Objective: *CCLUP 90 Day Report, Appendix 3, Zonal and Sub-Unit Resource Targets*

*“To manage for bighorn sheep, moose, furbearer, **species at risk and other sensitive habitat** 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”*

Result and/or Strategy for Species at Risk and Sensitive Habitats

Applicable area: All *FDUs*.

1. In relation to the general objective set by *government* for species at risk and other sensitive habitats, the *FSP holder* will:
 - a. adopt as a result or strategy each *general wildlife measure* that applies to an area, when carrying out *primary forest activities* on that area, consistent with the requirements of *FPPR* section 69, *general wildlife measures*; and
 - b. comply with each of the following *FSP* results or strategies that are specified for an

area, when carrying out *primary forest activities* on that area:

- i. 5.3 (Wildlife);
- ii. 5.4 (Riparian Areas);
- iii. 5.5 (Fish and Sensitive Habitats);
- iv. 5.7 (Biodiversity);
- v. 5.8 (Visual Quality);
- vi. 5.9 (Cultural Heritage);
- vii. 5.12 (Wildcraft); and
- viii. 5.15 (CASC).

- 2. If a species at risk is observed during road construction or harvesting, and the activity could impact the species at risk, the FSP Holder will:
 - a. have a Qualified Professional assess the risk and develop a strategy that mitigates the impact to that species at risk, and
 - b. implement the strategy developed by the Qualified Professional.

5.3.3.1 Mountain Caribou (Eastern)

Source of Objective: *CCLUP appendix 3*

“To maintain caribou habitat as per the Quesnel Highlands caribou strategy”

*“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.”*

Source of Objective: *CCLUP appendix 4 pages 156-157*

“...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 Forest Ecosystem Networks and old growth reserve requirements within each landscape unit.”

Result and/or Strategy for Mountain Caribou

No Result and/or Strategy is provided as no Cariboo Habitat Areas located within areas under this FSP

5.3.3.2 Northern Caribou (Western)

Source of Objective: CCLUP appendix 3
<i>“To Maintain Caribou habitat as per the Itcha/Ilgachuz Caribou strategy”</i>
<i>“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.”</i>
<u>Within the Charlotte Alplands SRDZ:</u>
<i>“To manage for caribou, grizzly bear, moose, furbearer, species at risk, and other sensitive habitats within the areas identified as riparian buffers, recreation areas and lakeshore management zones and throughout the polygon under the biodiversity conservation strategy.”</i>
Source of Objective: CCLUP appendix 4 pages 157-158
Implementation of ‘Modified Harvest’ areas.

Result and/or Strategy for Northern Caribou

No Result and/or Strategy is provided as no Caribou Habitat Areas located within areas under this FSP

5.3.3.3 Grizzly Bear

Source of Objective: CCLUP 90 Day Report
<i>“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.”</i>
Source of Objective: LAO objectives 33 and 34
<i>“Apart from existing Wildlife Habitat Areas, retain security cover adjacent to critical grizzly bear foraging habitats which include salmon and trout spawning reaches or shoals, and herb-dominated avalanche tracks 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.”</i>
<i>“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.”</i>

Result and/or Strategy for Grizzly Bear

No Result and/or Strategy is provided as no Grizzly Bear Habitat Areas located within areas under this FSP

5.3.3.4 Furbearer – Fisher and Wolverine

Source of Objective: CCLUP 90 Day Report

*“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, mule deer winter range and lakeshore management zones and throughout the polygon under the biodiversity conservation strategy.”*

Source of Objective: CCLUP appendix 4 pages 156 / 159

“furbearers such as marten and fisher, waterfowl, and many other species benefit from the application of the guidelines under the FPC and access management.”

*“the region contains an abundance of wetlands which provide important habitat for many species. They are of particular importance for waterfowl, moose and **furbearers**.....”*

Definitions

For the purposes of this result or strategy:

“Debris pile” means a mechanically piled accumulation of woody debris $\geq 3\text{m}$ by $\geq 5\text{m}$ in dimension and $\geq 2\text{m}$ high, consisting of the largest pieces available.

“Fisher life history components” means the key categories of fisher life history activities which are denning, resting, foraging and movement.

“Fisher Habitat Zones” means the large areas of fisher habitat as defined in the *Fisher Spatial Data Set*, for which guidelines have been developed specific to the zone for managing fisher habitat attributes, based on the ecosystem composition, structural attributes and climate of the zone.

“Fisher Spatial Data Set” means the GIS shapefiles for use in ArcGIS that have been developed to identify fisher habitat conditions and retention targets around proposed *cutblocks* for forestry operations, and which is available at BC Fisher Habitat – British Columbia Fisher Habitat and Forestry Web Module (<https://www.bcfisherhabitat.ca/>).

“User’s guide” means the document *“User’s Guide – Fisher Habitat Spatial Data”*, which is available at BC Fisher Habitat – British Columbia Fisher Habitat and Forestry Web Module (<https://www.bcfisherhabitat.ca/>).

“Fisher Landscape Conditions” means the relative availability of fisher habitat for a *fisher life history component* in a female fisher home range sized polygon around a proposed *cutblock*.

“Fisher Stand Condition” means the type of stand being proposed for *harvest* in terms of *fisher life history components*:

1. **“Type 1 stands”** are forest habitat types that support at least 75% of fishers’ use for a given *life history component*;
2. **“Type 2 stands”** are forest habitat types that support up to 25% of fishers’ use for a given *life history component*.

“Fisher Retention Targets” means the amount of area/structures that should be retained during forest development based on an overlay of a *cutblock* boundary with the *fisher spatial data set*. The *retention targets* for a *cutblock* vary according to the *Habitat Zone, Landscape Conditions, and Stand Conditions* for the *cutblock*.

“Near Landscape Condition Target” means, based on the results of overlaying a *cutblock* boundary with the *fisher spatial data set*, that the density of *Type 1 stands* for the specified *fisher life history component* (e.g. denning or resting) within a typical female fisher home range centered on the *cutblock*, is reduced to near a level that may not be sufficient to support fishers, as outlined in the *user’s guide*

Result and/or Strategy for Furbearers

1. *Prior to submission* of a cutting permit or road permit, the *FSP Holder* will:
 - a. conduct a GIS overlay of each *cutblock* and associated new road access corridor, consistent with the approach outlined in the *user’s guide*, with the *fisher spatial data set* to identify the *fisher landscape condition, fisher stand condition, and fisher retention targets* for each *fisher life history component* pertaining to the *cutblock*;
 - b. ensure a *Qualified Professional* completes an assessment with recommendations that:
 - i. includes field verification of the actual *fisher stand condition* of the *cutblock* and access corridor, and whether habitat attributes for denning or resting *fisher life history components* as identified by the above GIS exercise are present in the *cutblock* and access corridor (e.g. large diameter trees with cavities and/or bole decay, coarse woody debris (CWD) accumulations, spruce trees with rust brooms), and
 - ii. demonstrates how the information obtained in the above GIS exercise and field work was considered in the final submitted design of *cutblock* boundaries and road location, *wildlife tree retention areas (WTRA)*, and CWD retention for the *cutblock*, to retain fisher habitat in relation to the *fisher retention targets* pertaining to the *cutblock, and*.
 - iii. the assessment will ensure, to the extent practicable, that the proposed harvest and road construction will meet the Fisher retention targets, and preference is given in WTRA selection to type 1 stands that are below the near landscape condition target.
2. The *FSP holder* will ensure that the recommendations from the *Qualified Professional’s* assessment in clause 1 are followed to the extent *practicable* when conducting *primary forest activities* in relation to the *cutblock*.
3. The *FSP holder* will comply with the results and/or strategies presented in sections: 5.3 (Wildlife), 5.4 (Riparian Areas), 5.5 (Fish and Sensitive Habitats), 5.7 (Biodiversity), 5.8 (Visual Quality), 5.9 (Cultural Heritage), 5.12 (Wildcraft), 5.15 (CASC) of this *FSP*.

5.3.3.5 American Badger

Source of Objective: *CCLUP 90 Day Report, Appendix 3, Zonal and Sub-Unit Resource Targets*

(This objective is triggered by “Background Information” notices issued in 2005 by the Quesnel, Central Cariboo, Chilcotin and 100 Mile House Forest Districts. This species was named within the notices for the purpose of clarifying the intent of *CCLUP* objectives for species at risk, as a service to planners and decision makers when preparing and approving forest stewardship plans for forestry operations in the *CCLUP* area).

*“To manage for bighorn sheep, moose, furbearer, **species at risk** and other sensitive habitat 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”*

Definitions

For the purposes of this result or strategy:

“Badger occurrence” means the confirmed point location of a Badger den or Badger sighting that is identified by:

1. the BC Conservation Data Centre not less than 12 months prior to cutting authority application, and within 200 metres of a proposed *cutblock* or proposed *road*;
2. a *Qualified Professional* during a field assessment within a proposed *cutblock* or along a proposed *road* location.

“Potential habitat BEC zone” means the following *BEC* zones identified as being Badger potential habitat in the Ministry of Environment “*Accounts and Measures for Managing Identified Wildlife—Accounts V. 2004*”:

BEC zone	Subzone/Variant
IDF	dk3
SBPS	mk
SBS	dw2

Result and/or Strategy for Badger

Applicable area: Within the Badger *potential habitat BEC zones* of all *FDUs*.

1. The *FSP holder* will ensure that prior to *harvesting a cutblock* or constructing a *road* within a Badger *potential habitat BEC zone*, a *Qualified Professional*:
 - a. completes an assessment for *Badger occurrence* within or *adjacent* to that proposed *cutblock* or proposed *road*; and
 - b. where a *Badger occurrence* is identified through the assessment, prepares a Badger management plan in relation to that *cutblock* or *road* that is consistent to the extent *practicable* with the Badger *general wildlife measures* provided by the *Accounts and Measures for Managing Identified Wildlife – Accounts V. 2004*.
2. The *FSP holder* will ensure *primary forest activities* are conducted consistent with the Badger management plan developed in clause 1.

5.3.3.6 Great Basin Spadefoot

Source of Objective: *CCLUP 90 Day Report, Appendix 3, Zonal and Sub-Unit Resource Targets*

(This objective is triggered by “Background Information” notices issued in 2005 by the Quesnel, Central Cariboo, Chilcotin and 100 Mile House Forest Districts. This species was named within the notices for the purpose of clarifying the intent of *CCLUP* objectives for species at risk, as a service to planners and decision makers when preparing and approving forest stewardship plans for forestry operations in the *CCLUP* area).

*“To manage for bighorn sheep, moose, furbearer, **species at risk** and other sensitive habitat 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”*

Result and/or Strategy for Great Basin Spadefoot

No Result and/or Strategy is provided as no Great Basin Spadefoot Habitat Areas located within areas under this FSP

5.3.3.7 Flammulated Owl

Source of Objective: *CCLUP 90 Day Report, Appendix 3, Zonal and Sub-Unit Resource Targets*

(This objective is triggered by “Background Information” notices issued in 2005 by the Quesnel, Central Cariboo, Chilcotin and 100 Mile House Forest Districts. This species was named within the notices for the purpose of clarifying the intent of *CCLUP* objectives for species at risk, as a service to planners and decision makers when preparing and approving forest stewardship plans for forestry operations in the *CCLUP* area).

*“To manage for bighorn sheep, moose, furbearer, **species at risk** and other sensitive habitat 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”*

Definitions

For the purposes of this result or strategy:

“Flammulated Owl occurrence” means the confirmed point location of a Flammulated Owl nest or Flammulated Owl sighting that is identified by:

1. the BC Conservation Data Centre not less than 12 months prior to cutting authority application, and within 200 meters of a proposed *cutblock* or proposed *road*;
2. a *Qualified Professional* during a field assessment within a proposed *cutblock* or along a proposed *road* location.

“Potential habitat BEC zone” means the following *BEC* zones identified as being Flammulated Owl potential habitat in the Ministry of Environment *“Accounts and Measures for Managing Identified Wildlife– Accounts V. 2004”*:

BEC zone	Subzone/Variant
IDF	dk3

Result and/or Strategy for Flammulated Owl

Applicable area: Within the Flammulated Owl *potential habitat BEC zones* of all *FDUs*.

1. The *FSP holder* will ensure that prior to *harvesting a cutblock* or constructing a *road* that is located within a Flammulated Owl *potential habitat BEC zone*, a *Qualified Professional*:
 - a. completes an assessment for *Flammulated Owl occurrence* within and *adjacent* to that proposed *cutblock* or proposed *road*; and
 - b. where a *Flammulated Owl occurrence* is identified through the assessment, prepares a Flammulated Owl management plan in relation to that *cutblock* or *road* that is consistent to the extent *practicable* with the *Flammulated Owl general wildlife measures* provided by the *Accounts and Measures for Managing Identified Wildlife – Accounts V. 2004*.
2. The *FSP holder* will ensure that *primary forest activities* are conducted consistent with the Flammulated Owl management plan developed in clause 1 and the results and strategies specified in *FSP* subparagraphs:
 - a. 5.3.2.1 (Moose);
 - b. 5.3.2.2 (Mule Deer); and paragraph
 - c. 5.7.2 (Old Growth Management Areas).

5.3.3.8 Fringed Myotis

Source of Objective: *CCLUP 90 Day Report, Appendix 3, Zonal and Sub-Unit Resource Targets*

(This objective is triggered by “Background Information” notices issued in 2005 by the Central Cariboo, Chilcotin and 100 Mile House Forest Districts. This species was named within the notices for the purpose of clarifying the intent of *CCLUP* objectives for species at risk, as a service to planners and decision makers when preparing and approving forest stewardship plans for forestry operations in the *CCLUP* area).

*“To manage for bighorn sheep, moose, furbearer, **species at risk** and other sensitive habitat 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”*

Definitions

For the purposes of this result or strategy:

“Fringed Myotis occurrence” means the confirmed point location of a Fringed Myotis hibernaculum, roost or sighting that is identified by:

1. the BC Conservation Data Centre not less than 12 months prior to cutting authority application, and within 200 meters of a proposed *cutblock* or proposed *road*;
2. a *Qualified Professional* during a field assessment within a proposed *cutblock* or along a proposed *road* location.

“potential habitat BEC zone” means the following *BEC* zones identified as being Fringed Myotis potential habitat in the Ministry of Environment “*Accounts and Measures for Managing Identified Wildlife– Accounts V. 2004*”:

<i>BEC</i> zone	Subzone/Variant
IDF	dk3

Result and/or Strategy for Fringed Myotis

Applicable area: Within the Fringed Myotis *potential habitat BEC* zones of all *FDUs*.

1. The *FSP holder* will ensure that prior to *harvesting* a *cutblock* or constructing a *road* that is located within a Fringed Myotis *potential habitat BEC* zone, a *Qualified Professional*:
 - a. completes an assessment for *Fringed Myotis occurrence* within and *adjacent* to that proposed *cutblock* or proposed *road*; and
 - b. where a *Fringed Myotis occurrence* is identified through the assessment, prepares a Fringed Myotis management plan in relation to that *cutblock* or *road* that is consistent to the extent *practicable* with the Fringed Myotis *general wildlife measures* provided by the *Accounts and Measures for Managing Identified Wildlife – Accounts V. 2004*.
2. The *FSP holder* will ensure that *primary forest activities* are conducted consistent with the Fringed Myotis management plan developed in clause 1 and the results or strategies specified in *FSP* sections:
 - a. 5.4 (Riparian Areas); and paragraph
 - b. 5.7.2 (Old Growth Management Areas).

5.3.3.9 Great Basin Gopher Snake

Source of Objective: *CCLUP 90 Day Report, Appendix 3, Zonal and Sub-Unit Resource Targets*

(This objective is triggered by “Background Information” notices issued in 2005 by the Central Cariboo, Chilcotin and 100 Mile House Forest Districts. This species was named within the notices for the purpose of clarifying the intent of *CCLUP* objectives for species at risk, as a service to planners and decision makers when preparing and approving forest stewardship plans for forestry operations in the *CCLUP* area).

*“To manage for bighorn sheep, moose, furbearer, **species at risk** and other sensitive habitat 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”*

Result and/or Strategy for Great Basin Gopher Snake

No Result and/or Strategy is provided as no Great Basin Gopher Snake Habitat Areas located within areas under this FSP

5.3.3.10 Lewis’s Woodpecker

Source of Objective: *CCLUP 90 Day Report, Appendix 3, Zonal and Sub-Unit Resource Targets*

(This objective is triggered by “Background Information” notices issued in 2005 by the Quesnel, Central Cariboo, Chilcotin and 100 Mile House Forest Districts. This species was named within the notices for the purpose of clarifying the intent of CCLUP objectives for species at risk, as a service to planners and decision makers when preparing and approving forest stewardship plans for forestry operations in the CCLUP area).

*“To manage for bighorn sheep, moose, furbearer, **species at risk** and other sensitive habitat 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”*

Definitions

For the purposes of this result or strategy:

“Lewis’s Woodpecker occurrence” means the confirmed point location of a Lewis’s Woodpecker nest or sighting that is identified by:

- a. the BC Conservation Data Centre not less than 12 months prior to cutting authority application, and within 200 meters of a proposed *cutblock* or proposed *road*;
- b. a *Qualified Professional* during a field assessment within a proposed *cutblock* or along a proposed *road* location.

“potential habitat BEC zone” means the following *BEC* zones identified as being Lewis’s Woodpecker potential habitat in the Ministry of Environment “*Accounts and Measures for Managing Identified Wildlife– Accounts V. 2004*”:

BEC zone	Subzone/Variant
IDF	dk3
SBPS	mk

Result and/or Strategy for Lewis’s Woodpecker

Applicable area: Within the Lewis’s Woodpecker *potential habitat BEC zones* of all *FDUs*.

1. The *FSP holder* will ensure that prior to *harvesting a cutblock* or constructing a *road* that is located within a Lewis’s Woodpecker *potential habitat BEC zone*, a *Qualified Professional*:
 - a. completes an assessment for *Lewis’s Woodpecker occurrence* within and *adjacent* to that proposed *cutblock* or proposed *road*;
 - b. where a *Lewis’s Woodpecker occurrence* is identified through the assessment, prepares a Lewis’s Woodpecker management plan in relation to that *cutblock* or *road* that is consistent to the extent *practicable* with the Lewis’s Woodpecker *general wildlife measures* provided by the *Accounts and Measures for Managing Identified Wildlife – Accounts V. 2004*.
2. The *FSP holder* will ensure that *primary forest activities* are conducted consistent with the Lewis’s Woodpecker management plan developed in clause 1, and the results or strategies

specified in *FSP* section:

- a. 5.4 (Riparian Areas); and paragraphs
- b. 5.7.2 (Old Growth Management Areas); and
- c. 5.7.5 (Wildlife Tree Retention Areas).

5.3.3.11 Spotted Bat

Source of Objective: *CCLUP 90 Day Report, Appendix 3, Zonal and Sub-Unit Resource Targets*

(This objective is triggered by “Background Information” notices issued in 2005 by the Quesnel, Central Cariboo, Chilcotin and 100 Mile House Forest Districts. This species was named within the notices for the purpose of clarifying the intent of *CCLUP* objectives for species at risk, as a service to planners and decision makers when preparing and approving forest stewardship plans for forestry operations in the *CCLUP* area).

*“To manage for bighorn sheep, moose, furbearer, **species at risk** and other sensitive habitat 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”*

Definitions

For the purposes of this result or strategy:

“Spotted Bat occurrence” means the confirmed point location of a Spotted Bat roost site, hibernaculum or sighting that is identified by:

- a. the BC Conservation Data Centre not less than 12 months prior to cutting authority application, and within 200 meters of a proposed *cutblock* or proposed *road*;
- b. a *Qualified Professional* during a field assessment within a proposed *cutblock* or along a proposed *road* location.

“Potential habitat BEC zone” means the following *BEC* zones identified as being Spotted Bat potential habitat in the Ministry of Environment “*Accounts and Measures for Managing Identified Wildlife—Accounts V. 2004*”:

BEC zone	Subzone/Variant
IDF	dk3

Result and/or Strategy for Spotted Bat

Applicable area: Within the Spotted Bat *potential habitat BEC* zones of all *FDUs*.

1. The *FSP holder* will ensure that prior to *harvesting a cutblock* or constructing a *road* that is located within a Spotted Bat *potential habitat BEC zone*, a *Qualified Professional*:
 - a. completes an assessment for the *Spotted Bat occurrence* within and *adjacent* to that proposed *cutblock* or proposed *road*;
 - b. where a *Spotted Bat occurrence* is identified through the assessment, prepares a Spotted Bat management plan in relation to that *cutblock* or *road* that is consistent to the extent *practicable* with the Spotted Bat *general wildlife measures* provided by the *Accounts and Measures for Managing Identified Wildlife – Accounts V. 2004*.
2. The *FSP holder* will ensure that *primary forest activities* are conducted consistent with the

Spotted Bat management plan develop in clause 1, and the results or strategies specified in FSP paragraphs:

- a. 5.7.2 (Old Growth Management Areas); and
- b. 5.7.5 (Wildlife Tree Retention Areas).

5.3.3.12 White Pelican

Source of Objective: *CCLUP appendix 4, Sectoral Strategies, Species and Habitats at Risk, page 156*
(Note that the objective below has been achieved by the establishment of WHAs or protected areas around those lakes listed in the objective. In addition, White Pelican WHAs have been established around Alex Graham, Beaver, Meldrum, Knox, Dester, Tzenaicut, Martin, and Pelican Lakes).

“Consistent with the targets, provide buffers of at least 200 meters and limit human disturbance around important pelican feeding lakes. These lakes are Pantage, Puntzi, Rosita-Tautri, Taniikul, Abuntlet, Anahim, Chilcotin, Kluskus(3), Natsy, and Owen.”

Source of Objective: *CCLUP appendix 4, Zonal Management Strategies, Enhanced Development Zone, page 162*

“limit disturbance to White Pelicans on feeding lakes”

Result and/or Strategy for White Pelican

1. The FSP holder will comply with the results and strategies specified in FSP section 5.3 (Wildlife).

5.3.3.13 Great Blue Heron

Source of Objective: *CCLUP 90 Day Report, Appendix 3, Zonal and Sub-Unit Resource Targets*
(This objective is triggered by “Background Information” notices issued in 2005 by the Quesnel, Central Cariboo, Chilcotin and 100 Mile House Forest Districts. This species was named within the notices for the purpose of clarifying the intent of CCLUP objectives for species at risk, as a service to planners and decision makers when preparing and approving forest stewardship plans for forestry operations in the CCLUP area).

*“To manage for bighorn sheep, moose, furbearer, **species at risk** and other sensitive habitat 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”*

Definitions

For the purposes of this result or strategy:

“Great Blue Heron occurrence” means the confirmed point location of a Great Blue Heron nest that is identified by:

- a. the BC Conservation Data Centre not less than 12 months prior to cutting authority application, and within 700 meters of a proposed *cutblock* or proposed *road*;
- b. a *Qualified Professional* during a field assessment within a proposed *cutblock* or along a proposed *road* location.

“potential habitat BEC zone” means the following BEC zones identified as being Great Blue Heron potential habitat in the Ministry of Environment *“Accounts and Measures for Managing Identified*

Wildlife– Accounts V. 2004”:

BEC zone	Subzone/Variant
IDF	dk3
SBS	dk, dw1

Result and/or Strategy for Great Blue Heron

Applicable area: Within the Great Blue Heron *potential habitat BEC zones* of all FDU's.

1. The *FSP holder* will ensure that, prior to *harvesting a cutblock* or constructing a *road* that is located within a Great Blue Heron *potential habitat BEC zone*, a *Qualified Professional* completes an assessment for *Great Blue Heron occurrence* within and *adjacent* to that proposed *cutblock* or proposed *road*.
2. Where a *Great Blue Heron occurrence* is identified through the assessment in clause 1, the *FSP holder* will:
 - a. prior to *harvesting that cutblock* or constructing that *road*, establish a minimum 12-hectare *wildlife tree retention area* which encompasses that *Great Blue Heron occurrence*; and
 - b. not *harvest timber*, construct a *road* or carry out mechanical site preparation within 500 metres of that *Great Blue Heron occurrence* between February 15 and August 31 annually, unless a *Qualified Professional* determines the nest is not active.

5.3.3.14 Dolly Varden (Bull Trout)

Source of Objective: CCLUP 90 Day Report, Appendix 3, Zonal and Sub-Unit Resource Targets, pgs. 79 and 87.

For Niut and South Chilcotin SRDZ - To manage for Dolly Varden (Bull Trout) habitat by applying modified management regimes over additional riparian areas totaling approximately 1% of the forest area.

Definitions

For the purposes of this result or strategy:

“Potential Dolly Varden spawning congregations” means a stream, portions of a stream or reaches that have the characteristics suitable for Dolly Varden spawning. These characteristics include but are not limited to: cool and flowing water, low stream gradient (1-1.5%) clean gravel <20mm diameter, water velocity of 0.03-0.80 m/s and cover in the form of undercut banks, debris jams, pools, and overhanging vegetation.

Result and/or Strategy for Dolly Varden

Applicable area: All *FDUs*.

1. *Prior to the submission of a cutting permit or road permit a Qualified Professional will assess S1 and S2 streams, and S3 streams greater than 2.5m in width (having a gradient of less than 3%), in watersheds that are known to contain Dolly Varden, within the harvest area or within 100 metres adjacent to the harvest area for potential Dolly Varden spawning congregations. If the stream has the potential for Dolly Varden spawning congregation capability, the FSP holder will ensure the Qualified Professional provides recommendations to protect the spawning habitat. The FSP holder will follow the Qualified Professional's recommendations.*
2. *The FSP holder will comply with the results and strategies presented in sections: 5.3 (Wildlife), 5.4 (Riparian Areas), 5.5 (Fish and Sensitive Habitats), 5.7 (Biodiversity), 5.8 (Visual Quality), 5.9 (Cultural Heritage), 5.12 (Wildcraft), 5.15 (CASC) of this FSP.*

5.3.3.15 California Big Horn Sheep

Source of Objective: <i>CCLUP 90 Day Report, Appendix 3, South Chilcotin SRDZ page 94, and Gaspard ERDZ page 141.</i>
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<i>"To manage for key bighorn sheep and mule deer migration routes."</i>

Source of Objective: <i>CCLUP 90 Day Report, Appendix 3, page 82, Marble SRDZ</i>
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<i>"To manage for bighorn sheep, moose, furbearer, species at risk and other sensitive habitat 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"</i>

Source of Objective: <i>CCLUP 90 Day Report, Appendix 3, pg 96, Taseko Lake SRDZ</i>

<i>"To manage for grizzly bear, mountain goat, bighorn sheep, furbearer, species at risk and other sensitive habitats within the areas identified as riparian buffers, recreation areas and lakeshore management zones and throughout the polygon under the biodiversity conservation strategy, including key leading spruce stands".</i>
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Result and/or Strategy for California Bighorn Sheep

No Result and/or Strategy is provided as no California Bighorn Sheep Habitat Areas located within areas under this FSP

5.3.3.16 Prairie Falcon

Source of Objective: <i>DDM Expectations, and CCLUP general Species at Risk</i>
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<i>"To manage for bighorn sheep, moose, furbearer, species at risk and other sensitive habitat 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"</i>

Definitions

For the purposes of this result or strategy:

“Prairie Falcon occurrence” means the confirmed point location of a Prairie Falcon nest that is identified by:

- a. the BC Conservation Data Centre not less than 12 months prior to cutting authority application, and within 400 metres of a proposed *cutblock* or proposed *road*;
- b. a *Qualified Professional* during a field assessment within a proposed *cutblock* or along a proposed *road* location, of a Prairie Falcon sighting in proximity to a cliff area.

“potential habitat BEC zone” means the following *BEC* zones identified as being Prairie Falcon potential habitat in the Ministry of Environment “*Accounts and Measures for Managing Identified Wildlife– Accounts V. 2004*”:

BEC zone	Subzone/Variant
IDF	dk3

Result and/or Strategy for Prairie Falcon

Applicable area: Within the Prairie Falcon *potential habitat BEC zones* of all *FDUs*

1. The *FSP holder* will ensure that, prior to *harvesting a cutblock* or constructing a *road* that is located within a Prairie Falcon *potential habitat BEC zone*, a *Qualified Professional* completes an assessment for *Prairie Falcon occurrence* within and *adjacent* to that proposed *cutblock* or proposed *road*;
2. The *FSP holder* will ensure where a *Prairie Falcon occurrence* is identified through the assessment in clause 1:
 - a. prior to *harvesting that cutblock* or constructing that *road*, establish a minimum 2-hectare *wildlife tree retention area* which encompasses that *Prairie Falcon occurrence*; and
 - b. not *harvest timber*, construct *road* or carry out mechanical site preparation within 300 metres of that *Prairie Falcon occurrence* between March 15 and July 30 annually.

5.3.3.17 Sandhill Crane

Source of Objective: *DDM Expectations and CCLUP Species at Risk*

*“To manage for bighorn sheep, moose, furbearer, **species at risk** and other sensitive habitat 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”*

Definitions

For the purposes of this result or strategy:

“Sandhill Crane occurrence” means the confirmed point location of a Sandhill Crane nest site that is identified by:

- a. the BC Conservation Data Centre not less than 12 months prior to cutting authority application, and within 400 metres of a proposed *cutblock* or proposed *road*;
- b. a *Qualified Professional* during a field assessment within a proposed *cutblock* or along a proposed *road* location.

“potential habitat BEC zone” means the following *BEC* zones identified as being Sandhill Crane potential habitat in the Ministry of Environment “*Accounts and Measures for Managing Identified Wildlife– Accounts V. 2004*”:

BEC zone	Subzone/Variant
IDF	dk3
SBPS	mk
SBS	dw2

Result and/or Strategy for Sandhill Crane

Applicable area: Within the Sandhill Crane *potential habitat BEC* zones of all *FDU*s

1. The *FSP holder* will ensure that, prior to *harvesting* a *cutblock* or constructing a *road* that is located within a Sandhill Crane *potential habitat BEC* zone, a *Qualified Professional* completes an assessment for *Sandhill Crane occurrence* within and *adjacent* to that proposed *cutblock* or proposed *road*.
2. The *FSP holder* will ensure where a *Sandhill Crane occurrence* is identified through the assessment in clause 1:
 - a. prior to *harvesting* that *cutblock* or constructing that *road*, establish a minimum 2-hectare *wildlife tree retention area* which encompasses that *Sandhill Crane occurrence*; and
 - b. not *harvest* timber, construct a *road* or carry out mechanical site preparation within 400 metres of that *Sandhill Crane occurrence* between April 1 and August 31 annually.

5.3.3.18 Additional Wildlife Species not previously specified

Source of Objective: *DDM Expectations and CCLUP Species at Risk*

*“To manage for bighorn sheep, moose, furbearer, **species at risk** and other sensitive habitat 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”*

Definitions

For the purposes of this result or strategy:

“Occurrence” means, for a species of wildlife specified in table 5.3.3.18, a location of that species that is identified by:

- a) the BC Conservation Data Centre not less than 12 months prior to cutting authority application, and within 200 meters of a proposed *cutblock* or proposed *road*;
- b) a *Qualified Professional* through visual sighting or the discovery of an *occurrence feature* during a field assessment within a proposed *cutblock* or along a proposed *road* location.

“Occurrence feature” means the feature specified for each wildlife species in table 5.3.3.18.

“Potential habitat BEC zone” means, for those species included in this result or strategy, the *BEC* zones identified as being potential habitat in the Ministry of Environment “*Accounts and Measures for Managing Identified Wildlife– Accounts V. 2004*”, as listed in table 5.3.3.18.

Result and/or Strategy for Additional Wildlife Species not previously specified

Applicable area: all *FDUs*, within those *potential habitat BEC zones* identified in table 5.3.3.18.

1. The *FSP holder* will ensure that prior to *harvesting a cutblock* or constructing a *road* that is located within a *potential habitat BEC zone*:
 - a. a *Qualified Professional* completes an assessment within and *adjacent* to that proposed *cutblock* or proposed *road* for an *occurrence* of wildlife species that are identified in table 5.3.3.18 as having potential habitat in that *BEC zone*; and
 - b. where an *occurrence* of a wildlife species has been identified, a *Qualified Professional* prepares a management plan in relation to that proposed *cutblock* or proposed *road*, that is consistent with the management guidance for that species that is provided by the *Accounts and Measures for Managing Identified Wildlife – Accounts V. 2004*.
2. The *FSP holder* will ensure that *Primary forest activities* are conducted consistent with the management plan developed in clause 1 and the results or strategies specified in *FSP* section:
 - a. 5.4 (Riparian Areas); and paragraphs
 - b. 5.7.2 (Old Growth Management Areas); and
 - c. 5.7.5 (Wildlife Tree Retention Areas).

wildlife species	<i>potential habitat BEC Zone</i>	<i>occurrence feature</i>
Long-billed Curlew	IDF (dk3)	QP confirmed Long-billed Curlew nest site
Sharp-tailed Grouse	IDF (dk3) SBS (dw2)	QP confirmed Sharp-tailed Grouse nest site or breeding lek
Short-eared Owl	IDF (dk3)	QP confirmed Short-eared Owl nest site
Western Screech-owl	IDF (dk3)	QP confirmed Western Screech-owl nest site
White Pelican	All	QP confirmed sighting of White Pelican

5.4 Riparian Areas

5.4.1 Water, Fish, Wildlife and Biodiversity within Riparian Areas – FPPR section 8

Source of Objective: *FPPR sec 8*

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

Result and/or Strategy for Water, Fish, Wildlife and Biodiversity within Riparian Areas

1. The *FSP holder* will adhere to the results or strategy presented in paragraph 5.4.2 (streams, wetlands and lake riparian areas) of this *FSP*.
2. A *Qualified Professional* will determine the 'edge' of riparian features in a manner consistent with the Riparian Guidebook (1995).

5.4.2 Streams, Wetlands and Lake Riparian Areas

5.4.2.1 Riparian classification, Riparian Reserve Zone and Riparian Management Area

Source of Objective: LAO objective 20,23, and CCLUP objectives for riparian management.

....Maintain riparian reserves zones as no-harvest.....,For L3 and selected L1 lakes maintain a 10m riparian reserve zone.....

Definitions

For the purposes of this result or strategy:

“Critical riparian attributes” means natural streambank stability and run-off filtration, channel processes, stream shade, large woody debris, and organic input to the stream.

Result and/or Strategy for Riparian Classification, Riparian Reserve Zones and Riparian Management Areas

1. The *FSP holder* when conducting *primary forest activities* will comply with sections 47, 48, 49, 50, 51, 52(2) and 53 of the *FPPR* as those sections were on the date of *FSP* submission.
2. Where a Lakeshore Classification or Lake Management Classification has been established in accordance with section 180(h) of *FRPA* or section 93.4 of the Land Act, the *FSP holder* will follow the results and strategies contained in subparagraph 5.4.2.2 of this *FSP*. The riparian management zone requirements contained in subparagraph 5.4.2.2 for the lake will be in addition to the *FPPR* default requirements.
3. For selected L1 and L3 lakes (defined in the Cariboo Chilcotin Land Use Plan Land Act Order spatial data set: Cariboo-Chilcotin L3/L1 Lakes) displayed in Appendix A Maps, the *FSP holder* will maintain a 10-meter riparian reserve zone.
4. The *FSP holder* will comply with subparagraph 5.3.3.14 (Dolly Varden) for increased riparian protection, except where one or more of the conditions in clause 5. a-h below apply.
5. The *FSP holder* will, for those riparian features requiring a riparian reserve zone greater than 0m as per sections 47(4), 48(3) or 49(2) of the *FPPR*, will maintain the riparian reserve zone as a *no-harvest area* except for any of the following circumstances:
 - a. *harvesting is essential for insect control*, and all identified *infestation sites* on crown provincial forest land (excluding area-based tenures) within 500m of the infested riparian reserve are addressed prior to or in conjunction with *harvest* entries into the riparian reserve zone;
 - b. felling or modifying a tree that is a *safety hazard*, if there is no other *practicable* option for addressing the *safety hazard* and the felled or modified portion of the tree is retained on-site;
 - c. constructing a stream crossing;
 - d. creating a corridor for full suspension yarding;
 - e. creating guyline tiebacks;
 - f. 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, 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;

- g. felling or modifying a tree for the purpose of establishing or maintaining an interpretive forest site, recreation site, recreation facility or recreation trail; or
- h. *harvesting* is required within *primary* and *interface fuel breaks*, in an approved community or regional wildfire plan, where impacts to *primary old seral forest characteristics* and *critical riparian attributes* are minimized:
 - i. reduction of fine surface debris, ladder fuels and small diameter trees in *intermediate* and *overtopped crown classes*.

5.4.2.2 Lakes with Lakeshore Management Zones and Lakes with Lake Management Class

Source of Objective: LAO objective 16, 17, 18 and 19

....Maintain lakeshore management zones... and classes in accordance with schedule 2 and 3... with specified exceptions.....

Definitions

For the purpose of this result or strategy:

“Lakeshore Management Zone” means a management zone of a specified width *adjacent* to a classified lake as identified on the *FSP* Maps in Appendix A and defined in the Cariboo Chilcotin Land Use Plan Land Act Order spatial data set: Cariboo-Chilcotin Lake Management Zones.

Result and/or Strategy for Lakes

1. The *FSP holder* will conduct *primary forest activities* within *lakeshore management zones* in accordance with table 5.4.2.2.1.
2. For lakes with an established Lake Management Class (defined in the Cariboo Chilcotin Land Use Plan Land Act Order spatial data set: Cariboo-Chilcotin Lake Management Classes) displayed in Appendix A Maps, the *FSP holder* will conduct *primary forest activities* in accordance with the following provisions to achieve the objectives stated in table 5.4.2.2.2:
 - a. specific to General Lakes;
 - i. with an established *lakeshore management zone*, achieve the *VQO* by lakeshore management class listed in table 5.4.2.2.1 within the *lakeshore management zone*; or
 - ii. without an established *lakeshore management zone*, achieve a *VQO* of partial retention within 200m of the lake;
 - b. specific to Quality Lakes;
 - i. where *practicable* locate new *roads* outside of the *lakeshore management zone* and achieve the *VQO* by lakeshore management class listed in table 5.4.2.2.1 within the *lakeshore management zone*;

- c. specific to Refugium Lakes;
 - i. the *lakeshore management zone* will be a *no-harvest* area; or
 - ii. for refugium lakes without a *lakeshore management zone*; the area within 200m of the lake will be a *no-harvest* area;
 - d. specific to Wilderness Fisheries Lakes;
 - i. achieve a VQO of preservation within the *lakeshore management zone*; and
 - ii. where *practicable* not construct or upgrade *roads* within 2km of the lakeshore; or
 - iii. where new *roads* are constructed within 2km of the lakeshore, an *access control* will be established at the beginning of the *road* or at a minimum distance of 2km from the lakeshore immediately following the delivery of fibre from the cutting permit.
3. Despite sections 1 and 2, variance from the maximum disturbance limits and VQOs in table 5.2.2.2.1 is permitted in *lakeshore management zones* for any of the following reasons:
- a. *harvesting* is *essential for insect control*, and all identified *infestation sites* on crown provincial forest land excluding area-based tenures within 500m of the infested *lakeshore management zones* are addressed prior to or in conjunction with *harvest* entries into the *lakeshore management zones*;
 - b. *road* and fence construction in Class A lakeshore management classes where there is no other *practicable* location available; or
 - c. *harvesting* is required within *primary* and *interface fuel breaks*, in an approved community or regional wildfire plan, where impacts to *primary old seral forest characteristics* are minimized:
 - i. reduction of fine surface debris, ladder fuels and small diameter trees in *intermediate* and *overtopped crown classes*.

Table 5.4.2.2.1 - Lakeshore Management Zone Objectives by Visual Quality Objective in the Lakeshore Management Zone

All lakeshore management zones have a width as defined by the Cariboo Chilcotin Land Act Order spatial dataset, Cariboo-Chilcotin Lakeshore Classes and are measured from the 10m RRZ.

Forest Disturbance is defined as a previously forested area that has been harvested, as either a clearcut or a partial cut within the last 20 years.

Deciduous patches are areas >0.25 ha that are >80% deciduous species composition by Basal Area.

Moist Understory Habitat means: areas >0.25 ha with hygic or wetter soils.

Lakeshore Management Class	VQO in the LMZ	Forest Disturbance and Retention in the LMZ	
All	All	Conserve <i>deciduous patches, significant wildlife trees, major wildlife features and moist understory habitats</i>	
		Partial Cutting	Clearcutting
A	Preservation	No Harvest	
B	Retention	Maximum disturbed area is 20% of the lakeshore management zone every 20 years with a minimum basal area retention of 50%.	Maximum disturbed area is 10% of the lakeshore management zone every 20 years with openings smaller than 5 ha.
C	Partial Retention	Maximum disturbed area is 40% of the lakeshore management zone every 20 years with a minimum basal area retention of 50%.	Maximum disturbed area is 20% of the lakeshore management zone every 20 years with openings smaller than 10 ha.
D	Modification	Maximum disturbed area is 60% of the lakeshore management zone every 20 years with a minimum basal area retention of 50%.	Maximum disturbed area is 30% of the lakeshore management zone every 20 years.
E	Modification	Maximum disturbed area is 100% of the lakeshore management zone every 20 years with a minimum basal area retention of 50%.	Maximum disturbed area is 50% of the lakeshore management zone every 20 years.

Table 5.4.2.2.2 Lake Management Classes

Lake Management Class	Objective
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.
Wilderness Fisheries Lake	Manage the area surrounding the lake to maintain natural features in an undisturbed, wilderness setting.

5.4.2.3 Retention of Trees in a Riparian Management Zone

Source of Objective: LAO objective 21 and 22

....retain windfirm trees and other vegetation in riparian management zones on all S4 streams.....,in riparian management zones on W3 and W4 wetlands and L3 and L4 lakes retain deciduous patches, significant wildlife trees and major wildlife features.....

Definitions

For the purpose of this result or strategy:

“Retention%” in Table 5.4.2.3 is measured as % basal area including all stems (live or dead) >2.5m in height, or % of the area of the RMZ. The overall retention is calculated as the average for the entire riparian feature within all cutblocks within a Cutting Permit that the feature is located.

Trees that are stubbed and > 2.5m in height contribute to the basal area retention requirements listed in the Riparian Management Zone Retention Table. Utilization of stubbing is considered a best management practice in moderate and high windthrow hazard areas.

“Windthrow Hazard Assessment” is an assessment to determine windthrow hazard on Riparian Features listed in Table 5.4.2.3 consistent with the FS712 Windthrow Hazard form.

“The edge of riparian features” will be determined in a manner consistent with the Riparian Guidebook(1995).

S6 sensitive stream means the first 400m portion of an S6 stream measured from the confluence with a fish bearing stream, and

1. has a channel width of greater than 1.0 m, and
2. has the same stream order as the most downstream reach of the tributary.

Result and/or Strategy for Retention of Trees in the Riparian Management Zone

Applicable area: all FDUs

1. The FSP holders will meet or exceed the minimum basal area retention or area retention (% of RMZ) requirement listed in *Table 5.4.2.3 Riparian Management* immediately after harvest. The FSP holder will also maintain the Riparian Reserve Zone (RRZ), and Riparian Management Area (RMA) as per the riparian class for each riparian feature within or adjacent to a cutblock under this FSP.
2. The agreement holder will comply with the objective for stream, wetland and lake riparian areas by not conducting harvest and road building activities in reserve zones unless:
 - a. ≥ 15 trees contain current attack, and 80% of known infestations within the BMU are being addressed, and all known infestations within 500m of the RRZ are being addressed, and the harvest proposal is consistent with the relevant district forest health strategy, or
 - b. Felling or modifying a tree for the purpose of establishing or maintaining an interpretive forest site, recreation site, recreation facility or recreation trail as authorized by the FLNRORD Recreation Officer, or
 - c. Required for stream crossings, or

- d. Required for guyline tiebacks and no other practicable location is available, or
 - e. Required for drift fence location and no other practicable location is available, or
 - f. Required within primary and interface fuel breaks, in an approved community or regional wildfire plan, where impacts to primary old seral forest characteristics are minimized:
 - (i) reduction of fine surface debris, ladder fuels and small diameter trees in intermediate and overtopped crown classes and,
 - (ii) separation of tree crowns among individual trees or clumps within the dominant and co-dominant layers sufficient to mitigate the spread of a passive crown fire, to a maximum spacing of 6 metres between crowns. when implementing a fuel management prescription, or
3. Where a riparian management zone is established as per *Table 5.2.3.3* on S4 and S6 streams, the agreement holder will:
 - a. Retain to the extent practicable, brush species, advanced regeneration, non-merchantable conifers and non-commercial stems, and
 - b. maintain a machine free zone adjacent to the S4 or S6 stream except where the agreement holder is:
 - i. establishing a stream crossing, or
 - ii. removing a safety hazard for which there is no other practicable option to alleviate the safety hazard.
 4. Where a riparian management zone is established as per *Table 5.4.2.3* on W3 and W4 wetlands, the agreement holder will retain *deciduous patches, significant wildlife trees and major wildlife features* within W3, and W4 riparian management zones to the extent practicable.
 5. The agreement holder will establish a 5m Machine Free zone (on both sides) on all S4, S5, S6, W3 and W4 riparian features if harvesting is to occur within 5 metres of these riparian Features. A minimum of 75% of the non-merchantable stems and shrubs in the 5m machine free zone (MFZ) established on the linear feature outside of road crossings will be maintained. Tracks from machinery will not be permitted to enter the Machine Free Zone outside of designated crossing.
 6. The *FSP holder prior to harvesting a cutblock* will have a *Qualified Professional* complete a windthrow hazard assessment on the resulting riparian management area. The assessment will be consistent with the *Windthrow Handbook for British Columbia Forests (1994)*. If the assessment deems the windthrow risk to be high or very high, a *Qualified Professional* will prescribe a treatment consistent with the *Windthrow Handbook for British Columbia Forests (1994)*. The treatment will be documented in the site plan for the *cutblock*.

Table 5.4.2.3 Riparian Management

Riparian Class	Width (m) or Area (ha)**	Riparian Management Area Width (m)	Riparian Reserve Zone Minimum Width (m)	Riparian Management Zone Width (m)	Minimum Average Basal Area (%) or area (if RMZ is treed) to be Retained Within RMZ (%)
S1A	≥ 100	100	0	100	≥ 50
S1B	> 20 < 100	70	50	20	≥ 50
S2	$> 5 \leq 20$	50	30	20	≥ 20
S3	$1.5 \leq 5$	40	20	20	≥ 20
S4	< 1.5	30	0	30	≥ 30
S5	> 3	30	0	30	≥ 30
S6 sensitive	$1.0 \leq 3$	20	0	20	> 25
S6 all others	≤ 3	20	0	20	> 20
W1	> 5	50	10	40	≥ 20
W2 (BG, IDFx _m)	$> 1 \leq 5$	30	10	20	≥ 20
W3	$> 1 \leq 5$	30	0	30	≥ 20
W4 (BG, IDFx _m)	$> 0.5 \leq 1$	30	0	30	≥ 20
W5	Combined size of wetlands ≥ 5	50	10	40	≥ 20

Riparian Class	Area (ha)**	Riparian Management Area Width (m)	Riparian Reserve Zone Minimum Width (m)	Riparian Management Zone Width (m)	Minimum Average Basal Area (%) or area (if RMZ is treed) to be Retained Within RMZ (%)
L1A	>1000	0	0	0	N/A
L1B	>5 <1000	10	10**	0	N/A
L2 BG, IDFx _m	> 1 ≤ 5	30	10	20	≥25
L3	> 1 ≤ 5	30	0	30	≥25
L4 BG, IDFx _m	> 0.25 ≤ 1	30	0	30	≥25*
*In addition, retain ≥ 50 % sph of the regen. and deciduous in the 5m machine free zone (MFZ) established on both sides of the linear feature outside of road crossings.					
** The agreement holder will maintain a 10m riparian reserve zone for select lakes as defined by the spatial data set Cariboo-Chilcotin L3/L1 Lakes.					
<p>Retention% is measured as % basal area including all stems (live or dead) >2.5m in height, or % of the area of the RMZ. Windthrow Hazard Assessment to determine windthrow hazard will be performed on Riparian Features listed in Table 4 consistent with the FS712 Windthrow Hazard form. The edge of riparian features will be determined in a manner consistent with the Riparian Guidebook(1995).</p> <p>Trees that are stubbed and > 2.5m in height contribute to the basal area retention requirements listed in the Riparian Management Zone Retention Table. Utilization of stubbing is considered a best management practice in moderate and high windthrow hazard areas.</p> <p>S6 sensitive stream means the first 400m portion of an S6 stream measured from the confluence with a fish bearing stream, and</p> <ol style="list-style-type: none"> 1. has a channel width of greater than 1.0 m, and 2. has the same stream order as the most downstream reach of the tributary. 					

5.5 Fish and Sensitive Habitats

5.5.1 Fish Habitat in Fisheries Sensitive Watersheds – FPPR section 8.1

Source of Objective: *FPPR sec 8.1*

Until December 31, 2005 the objective set by government for fish habitat in fisheries sensitive watersheds is to prevent, only to the extent that it does not reduce the supply of timber from British Columbia's forests, the cumulative hydrological effects of primary forest activities in the fisheries sensitive watershed from resulting in a material adverse impact on the habitat of the fish species for which the fisheries sensitive watershed was established.

The fisheries sensitive watersheds are outside of the area applicable to this Forest Stewardship Plan are:

- *The Horsefly River*
- *The Cottonwood River*
- *The Bonaparte River*

The date specified by this objective has passed prior to this FSP being submitted; therefore, the objective is no longer applicable to this plan. The Horsefly River and Deadman River watersheds are recently covered with a Fisheries Sensitive GAR. Both of these watersheds are outside of the CFA area.

5.5.2 Salmon

Source of Objective: *CCLUP 90 day report*

- *Gustafson ERDZ - To manage the Bonaparte River watershed for salmon stocks, through riparian area protection and controls on rate of harvest. (90 day report page 125)*
- *Interlakes SRDZ – To manage the Bonaparte River watershed for salmon stocks (approximately 10% of the polygon), through riparian area protection and controls on the rate of harvest. (90 day report page 69)*
-

Result and/or Strategy for Salmon

No Result and/or Strategy is provided as the Bonaparte Watershed does not overlap areas under this FSP

5.5.3 Hydrological Stability

Source of Objective: *CCLUP 90 day report*

- *Interlakes SRDZ – To manage the Bridge Creek watershed for hydrologic stability through watershed assessment and monitoring programs. (90 day report page 69)*

Definitions

For the purpose of this result or strategy:

“Hydrological assessment” means an assessment that addresses:

1. the prevention of mass wasting and sediment delivery;
2. maintaining natural fish passage and fish habitat;
3. maintaining natural channel equilibrium and riparian function;
4. maintaining natural quality, quantity and timing of water flows.

“Key Watersheds” – The FDU is entirely within the Bridge Creek Watershed

“Key Watershed Reporting Units” – Basins, sub-basins and residual areas within the *Key Watershed* (Bridge Creek).

Result and/or Strategy for Hydrological Stability

1. *Prior to submission of a cutting permit or road permit within Key Watersheds, the FSP holder will:*
 - a. have a *Qualified Professional* conduct a hydrological assessment when the *ECA* is greater than or equal to 25% for the *key watershed reporting unit* where the applicable cutting permit or *road* permit is located;
 - b. ensure that the cutting permit or *road* permit is consistent with the recommendations within the hydrological assessment conducted in clause 1a. above;
 - c. ensure that newly constructed *roads* (less than 1 year old), fish stream crossings, or *roads* exhibiting signs of terrain instability are inspected post freshet for erosion, slope failures, and any signs of instability;
 - d. existing *roads* within *unstable terrain* will be inspected annually post freshet for erosion, slope failures, and any signs of instability;
 - e. any concerns or issues identified in clause 1 c. or 1 d. will be inspected by a *Qualified Professional* and a remediation plan will be created and implemented as per the *Qualified Professional’s* recommendations.

5.5.4 Critical Habitat for Fish

Source of Objective: *LAO objectives 12 and 13*

.... Maintain critical habitat for fish as no-harvest areas. Despite objective 12.... activities are permitted for following reasons....

Definitions

For the purposes of this result or strategy:

“Critical fish attributes” means natural streambank stability and run-off filtration, channel processes, stream shade, large woody debris, and organic input to the stream.

Result and/or Strategy for Critical Habitat for Fish

1. The *FSP holder* will maintain critical habitat for fish (defined in the Cariboo Chilcotin Land Use Plan Land Act Order spatial data set: Cariboo-Chilcotin Critical Habitat for Fish) displayed in Appendix A Maps as *no-harvest areas* except in the following circumstances where *primary forest activities* are permitted:
 - a) harvesting is essential for insect control, and all identified infestation sites on crown provincial forest land excluding area-based tenures within 500m of the infested critical habitat for fish area is addressed prior to or in conjunction with harvest entries into the critical habitat for fish;
 - b) required for the placement of guyline tiebacks and no other practicable location is available, or
 - c) for road and fence construction where there is no other practicable location , or
 - d) harvesting is required within primary and interface fuel breaks, in an approved community or regional wildfire plan, where impacts to primary old seral forest characteristics and critical fish habitat are minimized:
 - (i) reduction of fine surface debris, ladder fuels and small diameter trees in intermediate and overtopped crown classes

5.6 Water in Community Watersheds

Source of Objective: FPPR section 8.2

The objective set by government for water being diverted for human consumption through a licenced waterworks in a community watershed is to prevent to the extent that it does not unduly reduce the supply of timber from British Columbia's forests the cumulative hydrological effects of primary forest activities within the community watershed from resulting in

(a) a material adverse impact on the quantity of water or the timing of the flow of the water from the waterworks, or

(b) the water from the waterworks having a material adverse impact on human health that cannot be addressed by water treatment required under

(i) an enactment, or

(ii) the licence pertaining to the waterworks.

Result and/or Strategy for Water in Community Watersheds

No Result and/or Strategy is provided as the FSP does not overlap a Community Watershed

5.7 Biodiversity

5.7.1 Wildlife and Biodiversity – Landscape level

Source of Objective: FPPR section 9

The objective set by government for biodiversity at the landscape level is, without unduly reducing the supply of timber from British Columbia's forests, 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.

Source of Objective: CCLUP 90 day report

*Conserve biological diversity through ... objectives for ... **landscape connectivity, ... species composition, temporal distribution of cutblocks** These targets will be applied at the Landscape Unit Level ... [and] will be based on the Biodiversity Conservation Guidelines [aka Biodiversity Guidebook published September 1995] Application of these guidelines in all zones and polygons is required Consistent with the targets, maintenance of deciduous (Aspen) and spruce components are important considerations on the Chilcotin Plateau.*

*To manage for grizzly bear, ... and other sensitive habitats within the areas identified as riparian buffers, ... and throughout the polygon under the biodiversity conservation strategy, **including key leading spruce stands [or] including key leading deciduous stands [or] including key leading aspen stands***

In relation to the objective for wildlife and biodiversity at the landscape level that is set out in section 9 of the FPPR, the FSP holder will comply with the following result and strategy consistent with FPPR 12.4 as an alternate to the FPPR sec 64 and 65 to satisfy the DM expectations for Spatial/Temporal

Distribution of Cutblocks, Landscape Connectivity and Species Composition.

Definitions

For the purpose of this result or strategy:

“Patch assessment unit” means an area unit generated by the overlay of:

1. landscape units (LUs) defined in the *CCLUP LAO* spatial data set: *Cariboo-Chilcotin Landscape Units*, and
2. the accompanying most *current government* endorsed Biogeoclimatic Ecosystem Classification (*BEC*) and Natural Disturbance Type (*NDT*) classification, and
3. the Community Forest boundary.

“Patch size assessment” means an assessment completed with the last 2 years, conducted consistent with the methodology outlined in *“Regional Biodiversity Conservation Strategy Update Note #4”*, that:

1. calculates the amount of each seral stage currently present in the *patch assessment unit* that is in small, medium and large size patches according to the criteria in table 5.7.1.1, and
2. calculates the amount of the seral stage(s) created by the proposed *harvest* area that is in small, medium and large size patches according to the criteria in table 5.7.1.1, and
3. is based on the most *current* forest inventory, or the most recent *government* endorsed patch size analysis, or the best available forest inventory endorsed by *FLNRORD*, and
4. accounts for all completed, approved and submitted *harvesting* and wildfire impacts that are not reflected in the most *current* forest inventory or most recent *government* endorsed patch size analysis.

Table 5.7.1.1 – Patch size target ranges

		Patch Size Class (target % range in each class)				
NDT	BEC unit	0-40ha	41-80ha	80-250ha	40-250ha	>250ha
1	all	30-40	30-40	20-40	n/a	0
2	all	30-40	30-40	20-40	n/a	0
3	SBSdw, SBSmh, Douglas Fir throughout	20-30	25-40	30-50	n/a	0
3	all others	10-20	n/a	n/a	10-20	60-80
3	Douglas Fir restricted or absent					
4	all	30-40	30-40	20-30	n/a	0

Result and/or Strategy for Wildlife and Biodiversity – Landscape level

1. The *FSP holder* will, *prior to submission* of a cutting permit:
 - a. conduct a *patch size assessment* of the proposed *harvest*; and
 - b. to the extent *practicable* the proposed *harvest* must not cause the patch size distribution of the resulting seral stage(s) in a *patch assessment unit* to be inconsistent

with, or deviate further from, the patch size target ranges outlined in table 5.7.1.1, unless:

- i. one or more of the criteria A – D are met in paragraph 5.7.3 (Seral Stage); or
 - ii. the proposed *harvest* trends towards the desired patch size targets outlined in table 5.7.1.1
2. The *FSP holder* will, *prior to the submission* of a cutting permit, conduct an assessment that demonstrates how the design of stand level retention has maintained the natural connectivity characteristics in the area(s) of the proposed *harvest*, according to the Natural Connectivity Characteristics Frequency outlined in table 5.7.1.2 and described in the Biodiversity Guidebook (1995).

Table 5.7.1.2 – Natural Connectivity Characteristics Frequency

NDT	BEC unit	Natural Connectivity Characteristics Frequency						
		upland to upland	upland to stream	upland to wetland	cross-elevational	wetland complex	stream riparian	island remnants
1	ESSFwc3, ESSFwk1, ICHwk2, ICHwk4, MHmm2	high	high	high	high	low-moderate	high	low
2	CWHds1, CWHms1, ESSFmv1, ESSFmw, ESSFvx, ICHmk3, SBSwk1	high	moderate	moderate	high	low	high	low
3	SBPSdc, SBPSmc, SBPSmk, SBPSxc, SBSdk, SBSmc3, SBSdw1, SBSdw2	low	low	low	low	high	low	high
	MSxv	moderate-high	moderate-high	moderate-high	low	high	low	moderate
	ESSFdc, ESSFxc, MSdc, MSxk, SBSmc1, SBSmc2, SBSmm, ICHdk3	low-moderate	low-moderate	high	moderate	moderate	high	moderate
4	IDFdk3, IDFdk4	moderate-high	moderate-high	moderate-high	low	high	low	moderate
	BGxh3, BGxw2, IDFmw2, IDFww, IDFxh2, IDFxm, IDFxw	high	high	high	high	low-moderate	high	low

5.7.2 Old Growth Management Areas

Source of Objective: LAO objectives 8, 9, 10 and 11

.... Retain old forest and natural successional processes by maintaining as no-harvest area the permanent OGMA-static, permanent OGMA-rotating, and transition OGMA.... Despite objective 8....

Result and/or Strategy for Old Growth Management Areas

1. For the Old Growth Management Areas (defined in the Cariboo Chilcotin Land Use Plan Land Act Order spatial data set: Cariboo-Chilcotin Old Growth Management Areas)

displayed in Appendix A Maps, the *FSP holder* will maintain as *no-harvest areas* the *permanent OGMA-static*, *permanent OGMA-rotating*, and *transition OGMA*s, except for the following circumstances:

- a. *harvesting* and *road* construction is permitted in *permanent OGMA-static* or *permanent OGMA-rotating* for any of the following reasons:
 - i. *harvesting* incursions of 10.0ha or less that better align OGMA boundaries with intended geographic features where OGMA boundaries were clearly intended to follow a geographic feature, which include:
 1. existing *roads* that were established prior to the OGMA establishment; or
 2. other geographic features that are deemed by a *Qualified Professional* in consultation with *FLNRORD* staff to be an intended geographic feature used for OGMA boundary delineation;
 - ii. *harvesting* is *essential for insect control*, and all identified *infestation sites* on crown provincial forest land (excluding area-based tenures) within 500m of the infested OGMA is addressed prior to or in conjunction with *harvest* entries into the OGMA;
 - iii. Guyline tiebacks and no other *practicable* location is available;
 - iv. *road* and fence construction where no other *practicable* location is available;
 - v. *thinning from below* to enhance old (as defined in table 5.7.3 in this *FSP*) forest attributes as defined in the Biodiversity Guidebook (1995) in OGMA's located within Mule Deer Winter Range in the *shallow and moderate snowpack zones*;
 - vi. *harvesting* is required within *primary* and *interface fuel breaks*, in an approved community or regional wildfire plan, where impacts to *primary old seral forest characteristics* are minimized:
 1. reduction of fine surface debris, ladder fuels and small diameter trees in *intermediate* and *overtopped crown classes* and,
 2. separation of tree crowns between individual trees or among clumps within the dominant and co-dominant layers sufficient to mitigate the spread of a passive crown fire, to a maximum spacing of 6 metres between crowns;
 - vii. where *permanent OGMA-rotating* have:
 1. mature conifer mortality exceeding 50% by basal area greater than 17.5cm *dbh* or;
 2. stand age exceeding 200 years for stands with 70% or greater Lodgepole pine by basal area greater than 17.5cm *dbh*.
- b. *harvesting* and *road* construction is permitted in *transition OGMA*s for any of the following reasons:
 - i. *harvesting* incursions of 10.0ha or less that better align OGMA boundaries with intended geographic features where OGMA boundaries were clearly intended to follow a geographic feature, which can include one or more of the following:
 1. existing *roads* that were established prior to the OGMA establishment; or

2. other geographic features that are deemed by a *Qualified Professional* in consultation with *FLNRORD* staff to be an intended geographic feature used for OGMA boundary delineation;
 - ii. *harvesting is essential for insect control*; and all identified *infestation sites* on crown provincial forest land (excluding area-based tenures) within 500m of the infested *transition OGMA* is addressed prior to or in conjunction with *harvest* entries into the OGMA;
 - iii. Guyline tiebacks and no other *practicable* location is available;
 - iv. *road* and fence construction where no other *practicable* location is available;
 - v. *thinning from below* to enhance old (as defined in table 5.7.3 in this *FSP*) forest attributes as defined in the Biodiversity Guidebook (1995) in OGMA's located within Mule Deer Winter Range in the *shallow and moderate snowpack zones*;
 - vi. *harvesting* is required within *primary* and *interface fuel breaks*, in an approved community or regional wildfire plan, where impacts to *primary old seral forest characteristics* are minimized:
 1. reduction of fine surface debris, ladder fuels and small diameter trees in *intermediate and overtopped crown classes*; and
 2. separation of tree crowns among individual trees or clumps within the dominant and co-dominant layers sufficient to mitigate the spread of a passive crown fire, to a maximum spacing of 6 metres between crowns;
 - vii. equivalent old forest exists in locations contributing to the *permanent OGMA* target in the same *LU-BEC unit*;
 - viii. conifer mortality exceeds 50% of *merchantable* basal area in the *transition OGMA*.
2. The cutting permit and/or *road* permit application, in conjunction with *RESULTS* reporting completed by the *FSP holder*, will serve to address the reporting requirement associated with changes to OGMA's resulting from *harvesting* or *road* building conducted under clause 1 of this strategy.

5.7.3 Seral Stage

Source of Objective: CCLUP 90 day report

To manage for the biodiversity targets stated within the Biodiversity Conservation Strategy for the Cariboo-Chilcotin Land Use Plan, Biodiversity Strategy Committee, July 1996 and consistent with the Short-Term Timber Availability Plan.

Definitions

For the purpose of this result or strategy:

“Seral assessment unit” means an area unit generated by the overlay of:

1. the landscape unit and biodiversity emphasis objective defined in the Cariboo Chilcotin Land Use Plan Land Act Order spatial data set: Cariboo-Chilcotin Landscape Units, and
2. the accompanying most *current government* endorsed Biogeoclimatic Ecosystem Classification (BEC), and
3. amalgamated as per the LU/BEC amalgamations listed in Appendix E of the this FSP, and
4. the Community Forest boundary.

“Mature+Old Seral target area” means the target for the minimum amount of mature or older forest present in a *seral assessment unit*, which is determined by the applicable target % in table 5.7.3 multiplied by the total *Forest Management Land Base (FMLB)* of the *seral assessment unit*.

“Mature+old seral deficit unit (M+O deficit unit)” means a *seral assessment unit* where, at the time of cutting permit submission, the mature+old forest (defined in table 5.7.3) is below the *mature+old seral target area*, based on stand age in the most *current* or best available forest inventory, accounting for all completed, approved, submitted *harvesting* and wildfire impacts that are not reflected in the most *current* forest inventory.

“Old seral target area” means the target for the minimum amount of older forest present in a *seral assessment unit*, which is determined by the applicable target % in table 5.7.3 multiplied by the total *Forest Management Land Base (FMLB)* of the *seral assessment unit*.

“Forest Management Land Base (FMLB)” means the areas within the following categories of land ownership:

Ownership	Schedule	FMLB
40 Private	N	No
52 Indian Reserve	N	No
53 Military Reserve	N	No
60 Ecological Reserve	N	Yes
61 UREP (Use, Recreation and Enjoyment of the Public) Reserves	N	Yes
62 Forest Management Unit (TSA)	C	Yes
63 Provincial Park Class A	N	Yes
64 Special Forest Management Area	N	Yes
65 Wildlife Management Area	N	Yes
67 Provincial Park equivalent or Reserve	N	Yes
68 Forest Recreation Reserves	N	Yes
69 Miscellaneous Reserves	N	Yes
72 Tree Farm Licence – Private	A	No
72 Tree Farm Licence – Crown	B	Yes
77 Woodlot Licence – Private	A	No
77 Woodlot Licence – Crown	B	Yes
79 Community Forest – Private	A	No
79 Community Forest – Crown	B	Yes
99 Misc. lease	N	No

“Recruitment strategy” means a strategy to re-establish the *mature+old seral target area* as soon as possible. This strategy is done by adding the less than mature hectares contained in *no-harvest areas*, including parks, protected areas, ecological reserves, reserve areas and wildlife tree patches first to determine if they contain enough hectares to balance the deficiency. If, once accounting for these areas, there are still not enough hectares to meet the minimum *mature+old seral target area*, then additional mature recruitment areas are selected from the *seral assessment unit* based on the following priority:

1. in order from oldest to youngest available, and
2. displaying *stand attributes* most conducive to regaining mature seral condition as soon as possible, and
3. areas must be larger than 2ha in size and not conflict with trending towards patch size targets outlined in 5.7.1 of this *FSP*;

The additional mature recruitment areas selected outside of the *no-harvest areas* will be submitted spatially to *FLNRORD* and these areas will be *no-harvest* until the *seral assessment* is not in a Mature plus Old deficit.

“Stand attributes” means the amounts and characteristics, consistent with the *BEC* subzone and variant, for large living trees, standing dead trees, coarse woody debris, tree species diversity, and structural diversity, as described in appendix 5 of the Biodiversity Guidebook (1995).

Result and/or Strategy for Seral Stage

1. The *FSP holder* accepts the exemption provided by the Cariboo Region *DDMs* to specify a result or strategy to achieve the requirement for the old seral targets set out in table 7 BCS. Spatialized *OGMAs* are intended to retain old forest and natural successional processes.
2. The *FSP holder* will not harvest mature seral or older forest in a *M+O deficit unit* unless one or more of the following criteria are met:

- a. criterion A
 - i. *harvest* is for the purpose of salvage where pine represents 70% or greater of the *merchantable* basal area within the area to be *harvested* and greater than 50% of the *merchantable* pine stems are red, grey, or green attacked mountain pine beetle or;
 - ii. *harvest* is for the purpose of salvage where the mortality of the *merchantable* conifer basal area is greater than 50%; or
 - iii. *harvest* is for the purpose of salvage and the *harvest* authority is issued under a license with a specific stand eligibility criteria specifying a dead or damaged stand, in which case seral drawdown will be consistent with the criteria in the license;

- b. criterion B
 - i. the area is *harvested* using a partial cut system; and
 - ii. the basal area to be removed from the area to be *harvested* is $\leq 40\%$ of the total pre-*harvest* basal area of conifer; and
 - iii. the live conifer basal area to be removed from the area to be *harvested* is $< 30\%$ of the pre-*harvest* basal area; and
 - iv. the *harvest* is evenly distributed across the pre-*harvest* diameter classes, or the *harvesting* is a *thinning from below* treatment that removes only *intermediate* and *overtopped crown classes*; and
 - v. 70% of the pre-*harvest stand attributes* are retained post-*harvest*;

- c. criterion C
 - i. *harvesting* is required within *primary* and *interface fuel breaks*, in an approved community or regional wildfire plan, where impacts to *primary old seral forest characteristics* are minimized:
 - 1. reduction of fine surface debris, ladder fuels and small diameter trees in *intermediate* and *overtopped crown classes* and,
 - 2. separation of tree crowns among individual trees or clumps within the dominant and co-dominant layers sufficient to mitigate the spread of a passive crown fire, to a maximum spacing of 6 metres between crowns.
 - ii. *Harvesting* is within a designated Wildfire Urban Interface area, reduction of fine surface debris, dead trees, ladder fuels and small diameter trees in *intermediate* and *overtopped crown classes*.

- d. criterion D
 - i. *Harvesting* is essential for insect control.

- 3. Where criterion A is used to allow for *harvest* in a *M+O deficit unit*, the *FSP holder* will ensure that the *seral assessment unit* is not drawn down below the *old seral target area* threshold.
- 4. Where criterion A is used to allow for *harvest* in a *M+O deficit unit*, the *FSP holder* will develop a *recruitment strategy* for the *seral assessment unit*.

5. Stands that are indicated as mature or old seral age in the most *current* forest inventory that have greater than 70% mortality at the individual *merchantable* stem level either through severe wildfire, insect or windthrow damage will be considered to be less than mature age. Individual trees are determined to be dead if:
 - a. crown mortality from fire scorch is >75%; or
 - b. the bole and roots of the tree are severely damaged by wildfire; or
 - c. the tree is green, red, or grey attack mountain pine beetle; or
 - d. the tree has been uprooted by the wind.

6. The *FSP holder* will not harvest forest less than *mature* or *older forest* stand age in a *M+O deficit unit* unless sufficient mature recruitment area has been reserved from harvest.

Table 5.7.3 Seral Stage targets displayed in percentages (*table 7 of the BCS*)

NDT	BEC	Seral Stage Age Definition			Lower Emphasis Guidelines			Intermediate Emphasis Guidelines			Higher Emphasis Guidelines		
		Zone	Early	Mature	Old	Early max.	Mature + Old min.	Old min.	Early max.	Mature + Old min.	Old min.	Early max.	Mature + Old min.
1	ESSF	<40	>120	>250	n/a	19	19	22	36	19	17	54	28
1	ICH	<40	>100	>250	n/a	17	13	30	34	13	23	51	19
1	MH	<40	>120	>250	n/a	19	19	22	36	19	17	54	28
2	CWH	<40	>80	>250	n/a	17	9	36	34	9	27	51	13
2	ESSF	<40	>120	>250	n/a	14	9	36	28	9	27	42	13
2	ICH	<40	>100	>250	n/a	15	9	36	31	9	27	46	13
2	SBS	<40	>100	>250	n/a	15	9	36	31	9	27	46	13
3	ESSF	<40	>120	>140	n/a	14	14	46	23	14	35	34	21
3	MS	<40	>100	>140	n/a	14	14	46	26	14	35	39	21
3	SBPS	<40	>100	>140	n/a	8	7	66	17	7	50	25	10
3	SBS	<40	>100	>140	n/a	11	11	54	23	11	40	34	16
3	ICH	<40	>100	>140	n/a	14	14	46	23	14	35	34	21
4	IDF - Fd Group	<40	>100	>250	n/a	22	21	12	43	21	9	65	32
4	IDF - Pl Group	<40	>100	>140	n/a	11	11	54	23	11	40	34	16

5.7.4 Wildlife and Biodiversity – Stand Level

Source of Objective: *FPPR* section 9.1

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

Result and/or Strategy for Wildlife and Biodiversity – stand level

1. The *FSP holder* will adhere to the results or strategies presented in paragraph 5.7.5 (Wildlife Tree Retention) of this *FSP*.
2. The *FSP holder* will adopt *FPPR* section 68 Coarse Woody Debris as a requirement.

5.7.5 Wildlife Tree Retention Areas

Source of Objective: *LAO objectives 6 and 7*

Where harvesting removes >50 percent of the pre-harvest stand basal area.....Where practicable, in partially cut stands, where harvesting removes <50 percent of the pre-harvest basal area....

Definitions

For the purpose of this result or strategy:

“Shelterwood Silvicultural System” means a silvicultural system in which trees are removed in a series of cuts designed to achieve a new even-aged stand under the shelter of the remaining trees.

“Wildlife tree” as defined in *FPPR* section 1 means “...a tree or group of trees that (a) provide wildlife habitat, and (b) assist in the conservation of stand level biodiversity”.

“Short-term reserve” is a retention area prescribed to be in place until the associated *cutblock* reaches Free Growing.

Result and/or Strategy for Wildlife Tree Retention Areas

1. Where *harvesting* removes greater than 50 percent of the pre-harvest basal area or *harvesting* is part of a *shelterwood silvicultural system*, the *FSP holder* will upon the conclusion of *harvesting*:
 - a. have established *wildlife tree retention areas* to meet or exceed the minimum targets specified in Appendix B by *LU-BEC Unit* for *wildlife tree* retention expressed as a percentage of the gross *harvest* area of a cutting permit; and
 - b. the *wildlife tree retention areas* will be located in the following priorities:
 - i. within *wildlife habitat areas*, trees suitable for wildlife habitat, ungulate winter ranges, riparian areas, *scenic areas*, areas required for meeting natural connectivity as described in table 5.7.1.2; or
 - ii. to minimize dash distance to less than 500m with the *wildlife tree retention area* consisting of areas greater than 0.25ha in size; and
 - iii. representing the pre-*harvest* mature component attributes of the *cutblock*.

2. Where *harvesting* removes less than 50 percent of the pre-*harvest* basal area, the *FSP holder* will, to the extent *practicable*, retain *high value wildlife trees* up to the targets specified in Appendix B by *LU-BEC Unit* and expressed as a percentage of the gross *harvest* area of a cutting permit as determined by a *Qualified Professional* or a timber cruise.
3. Individual stems reserved from *harvest* within the *harvest* area can contribute to the *wildlife tree retention area* target on a basal area or volume equivalency basis.
4. *High value wildlife trees* retained as part of this result that are stubbed for the reasons below (a and b) when the *FSP holder* is conducting *primary forest activities* will still contribute to meeting the applicable objective.
 - a. to address a *safety hazard*, if there is no other *practicable* option for addressing the *safety hazard*; and
 - b. the cut portion of the tree is retained on-site.
5. The agreement holder will not harvest timber from a wildlife tree retention area until the trees on the net area to be reforested of the cutblock to which the wildlife tree retention area relates have developed attributes that are consistent with a mature seral condition, unless:
 - a. required to address a *safety hazard*, if there is no other *practicable* option for addressing the *safety hazard*; or
 - b. the WTP is no longer functioning as its intended purpose due to mortality from fire, insect damage or blowdown; or
 - c. required to access future development; or
 - d. the WTRA is within primary and interface fuel breaks, in an approved community or regional wildfire plan.
6. Where the *FSP holder harvests* within a *wildlife tree retention area* and,
 - a. the *harvesting* results in the *wildlife tree retention area* to drop below the targets specified in the Appendix B targets for the cutting permit, the *FSP holder* will:
 - i. ensure that a suitable replacement area of equal size is re-established, and
 - ii. the replacement area will be the closest available location consistent with the priorities for locating WTRA in clause 1 b.; and
 - iii. the replacement area will be a minimum of 0.25ha in size and;
 - iv. the change will be reported in *RESULTS* by May 1 of the following year; or
 - b. the *harvesting* does not cause the *wildlife tree retention area* to drop below the targets specified in the Appendix B targets for the cutting permit, the *FSP holder* will:
 - i. report the change in *RESULTS* by May 1 of the following year.
7. Areas that have been set aside under the Chief Forester's Guidance on Landscape and Stand-level Structural Retention in Large-Scale Mountain Pine Beetle Salvage Operations and identified as WTRA or reserves in *RESULTS*, or under the Quesnel District Guidance for Conservation Legacy Areas, will continue to be protected until the conditions described in the guidance are met, unless:
 - a. required to address a safety hazard, if there is no other practicable option for addressing the safety hazard; or
 - b. the area specified in section 5.7.5.8 is no longer functioning as its intended purpose due to mortality from fire, insect damage or blowdown; or

- c. required to access future development.

5.8 Visual Quality

5.8.1 Visual Quality – FPPR section 9.2

Source of Objective: FPPR section 9.2

The objective set by government in relation to visual quality for a scenic area, that

- a) *was established on or before October 24, 2002, and,*
- b) *for which there is no visual quality objective, is to ensure that the altered forest landscape for the scenic area*
- c) *in visual sensitivity class 1 is in either the preservation or retention category,*
- d) *in visual sensitivity class 2 is in either the retention or partial retention category,*
- e) *in visual sensitivity class 3 is in either the partial retention or modification category,*
- f) *in visual sensitivity class 4 is in either the partial retention or modification category,*
- g) *in visual sensitivity class 5 is in either the modification or maximum modification category.*

Result and/or Strategy for Visual Quality under FPPR section 9.2

1. The FSP holder will adhere to the results and/or strategies presented in paragraph 5.8.2 (Visual Quality) of this FSP.

5.8.2 Visual Quality – CCLUP

Source of Objective: LAO objectives 26, 27, 28 and 29

Maintain the visual quality objectives for scenic areas.....harvesting is permitted where essential for insect control....design harvest areas to mimic natural openings....

Definitions

For the purpose of this result or strategy:

“Alteration” means changing or making something different as a result of conducting *harvesting* or *road* construction by a *holder* of this plan.

“Severely burnt scenic areas” means the portions of *scenic areas* that are visible from the applicable viewpoints that have >75% of the trees with >75% crown mortality (>75% brown needles or no needles) from scorch.

“Significant public viewpoint” means one or more of the following where accessible by the public:

1. lake surfaces for a *scenic area* associated with a lake,
2. river channel for a *scenic area* associated with a river,
3. existing tourism facilities and key tourist use areas,
4. existing *tourism operations* as defined in section 1.1,
5. points for highways deemed significant by a *Qualified Professional*,

6. points for parks and *backcountry* areas are those viewpoints deemed significant by a *Qualified Professional*,
7. other viewpoints that are deemed significant by a *Qualified Professional*.

Result and/or Strategy for Visual Quality under CCLUP

1. The *FSP holder* will, upon the *conclusion of harvesting* and/or *road* construction within a *Visual Quality Objective (VQO)* polygon in a known *scenic area* (defined by the Cariboo Chilcotin Land Use Plan Land Act Order spatial data set: Cariboo-Chilcotin Scenic Areas) as displayed in Appendix A Maps, ensure the *alteration* resulting from the size, shape and location of *cutblocks* and *roads* is consistent with the following specified definitions for the *VQO* that the *alteration* is within:
 - a. Preservation (P) *VQO*: When assessed from a *significant public viewpoint*, is very small in scale and not easily distinguishable from the *pre-harvest* landscape;
 - b. Retention (R) *VQO*: When assessed from a *significant public viewpoint*, is difficult to see, small in scale and natural in appearance;
 - c. Partial Retention (PR) *VQO*: When assessed from a *significant public viewpoint*, is easy to see, small to medium in scale and is natural and not rectilinear or geometric in shape;
 - d. Modification (M) *VQO*: When assessed from a *significant public viewpoint*, is very easy to see, and is large in scale and natural in appearance, or small to medium in scale but with some angular characteristics;
 - e. Maximum Modification (MM) *VQO*: When evaluated from a *significant public viewpoint*, is very easy to see, and is very large in scale, rectilinear and geometric in shape, or both.
2. Despite clause 1, the extent of proposed *alteration* resulting from the size, shape and location of *cutblocks* and *roads* can be exceeded provided that:
 - a. *harvesting* is *essential for insect control*, and all identified *infestation sites* on crown provincial forest land excluding area-based tenures within 500m of the infested *scenic area* is addressed prior to or in conjunction with *harvest* entries into the *scenic area*;
 - b. *harvesting* is required within *primary* and *interface fuel breaks*, in an approved community or regional wildfire plan, where impacts to *primary old seral forest characteristics* are minimized:
 - i. reduction of fine surface debris, ladder fuels and small diameter trees in *intermediate* and *overtopped crown classes*.
3. Within scenic corridors (defined in the Cariboo Chilcotin Land Use Plan Land Act Order spatial data set: Cariboo-Chilcotin Scenic Corridors) displayed in Appendix A Maps, *harvest* areas, when viewed from a *significant public viewpoint*, will be designed to mimic:
 - a. existing natural openings;
 - b. vegetation patterns; and
 - c. natural features.
4. When *harvest* areas are viewed from the high elevation viewpoints (defined in the Cariboo Chilcotin Land Use Plan Land Act Order spatial data set: Cariboo-Chilcotin High Elevation Viewpoints) displayed in Appendix A Maps, *harvest* areas will be designed to mimic:
 - a. existing natural openings;

- b. vegetation patterns; and
 - c. natural openings.
5. Despite clause 1, in *severely burnt scenic areas* where salvage *harvesting* will exceed the *alteration* allowed for under the established *VQOs* for partial retention and modification, the *FSP holder* will:
- a. have a *Qualified Professional* conduct a visual impact assessment which includes a description of the visual design measures taken to mitigate visual impacts;
 - b. conduct public consultation through placing an ad in the local newspaper at least 30 days prior to cutting permit or *road* permit submission;
 - c. design the *harvest* opening to resemble natural shapes without rectilinear or geometric edges;
 - d. develop a reforestation plan that demonstrates that exceeding the *VQO* will result in a net benefit to visual green-up recovery;
 - e. retain green healthy trees where *practicable*;
 - f. where *practicable*;
 - i. utilize multiple smaller openings,
 - ii. expedite rehabilitation of *alteration* from *roads* visible from viewpoints,
 - iii. describe the retention within the *cutblock* boundaries,
 - iv. consider and incorporate input received from the public consultation conducted in clause 5 b.

5.9 Cultural Heritage

5.9.1 Cultural Heritage Resources – *FPPR* section 10

Source of Objective: <i>FPPR</i> section 10
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<i>The objective set by government for cultural heritage resources is to conserve, or, if necessary, protect the cultural heritage resources that are:</i>
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- | |
|---|
| <ul style="list-style-type: none"> a) <i>the focus of a traditional use by an aboriginal people that is of continuing importance to that people, and</i> b) <i>not regulated under the Heritage Conservation Act.</i> |
|---|

Definitions

For the purpose of this result or strategy:

“Cultural heritage resource” or **“CHR”** 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, that is the focus of a traditional use by an aboriginal people that is of continuing importance to that people, and that is not regulated under the *Heritage Conservation Act*.

“CHR mitigation strategy” means a plan to mitigate the direct impact of *primary forest activities* on an identified *CHR*, based on:

- 1. the relative value or importance of a particular *cultural heritage resource* to a traditional use by an aboriginal people;
- 2. the relative abundance or scarcity of a *cultural heritage resource* that is the focus of a traditional use by an aboriginal people;

3. the historical extent of a traditional use by an aboriginal people of a *cultural heritage resource*;
4. the impact on *government* granted timber *harvesting* rights of conserving or protecting a *cultural heritage resource* that is the focus of a traditional use by an aboriginal people; and
5. options for mitigating the impact that a forest practice might have on a *cultural heritage resource* that is the focus of a traditional use by an aboriginal people.

Result and/or Strategy for Cultural Heritage Resources

1. The *FSP holder* will share information regarding the location of proposed *cutblocks* and *roads* with First Nations for a minimum of 60 days (or consistent with current government policy) *prior to the submission* of a cutting permit or *road* permit to government for approval. This information sharing is done with First Nations whose asserted traditional territory overlaps the area of proposed development.
2. Where a *cultural heritage resource (CHR)* is *made known* or identified, as a result of clause 1, to the *FSP holder* through written correspondence during the specified *referral period*, will:
 - a. develop a *CHR mitigation strategy* with the involvement of the concerned *First Nation* ; and
 - b. submit a summary of the strategy to the relevant District Manager *prior to submissions* of cutting permits and *road* permits.
3. The *FSP holder* will, upon or *prior to submission* of a cutting permit or *road* permit, submit to *government* an information sharing summary documenting:
 - a. proof of information sharing to those First Nations whose asserted traditional territory overlaps the proposed development; and
 - b. correspondence resulting from information sharing.

5.9.2 Mature Birch Retention

Source of Objective: LAO objective 24
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<i>Maintain at least 40% of the existing mature birch to allow for First Nations cultural use within cutblocks in the Beaver Valley, Polley, Lower Cariboo and Cariboo Lakes LUs....</i>
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Definitions

For the purpose of this Result or Strategy:

“Mature Birch” means *Betula papyrifera* greater than 60 years old.

Result and/or Strategy for Mature Birch Retention

No Result and/or Strategy is provided as the areas of Mature Birch Retention do not overlap areas covered by this FSP.

5.10 Recreation

5.10.1 Backcountry

Source of Objective: *CCLUP 90 day report*

Maintain a % of the polygon in a backcountry condition....

Result and/or Strategy for Backcountry

1. Where an access management plan or sub-regional management plan addressing access management has been endorsed by the pertinent District Manager, Regional Manager or equivalent, the *FSP holder* will adhere to the requirements specified in that plan for *road* density, *road* use and *road* location.
2. Where a non-buffered trail (Land Act Order trail) is identified in the field within a *harvest* area, the *FSP holder* will, at the completion of primary forest activities:
 - a. ensure that the trail is left free of debris; and
 - b. create stub trees along the trail at a distance suitable to mark the location of the trail post-*harvest*; and where practicable
 - c. not conduct skidding or site preparation on the trail; and where practicable
 - d. not locate *roads* on the trail, with the exception of *road* crossings.
3. Despite clause 2 c., if skidding is required on a trail and where practicable, skidding will be perpendicular to the trail and only where crossings are required.
4. The *FSP holder* will, *prior to submission* of a cutting permit or *road* permit notify registered guide outfitters, registered trappers, known clubs or associations whose interests in maintaining *backcountry* condition are potentially affected by the proposed forestry activities and provide these parties a minimum of 60 days (or less as approved by the applicable *FLNRORD* District Manager) to identify any issues or concerns they may have in the vicinity of the proposed forest activities.
5. If the party identified in clause 4 above responds in writing with a concern related to *backcountry*, a *Qualified Professional* will develop a *mitigation strategy*. The *FSP holder* will share the *mitigation strategy* to maintain the applicable *backcountry* condition with the applicable party to seek agreement.
6. If an agreement cannot be reached between the *FSP holder* and the applicable party, the *FSP holder* will submit the applicable party's concerns and the *mitigation strategy* *prior to submission* of the applicable cutting permit or *road* permit to *FLNRORD*. The District Manager or designate will determine if the *mitigation strategy* adequately addresses the concerns raised or if a meeting between the *FSP holder* and the applicable party is required. If an agreement is not reached or the District Manager or designate determines the *mitigation strategy* is not adequate to address the concerns raised, the decision will be at the sole discretion of the District Manager or designate and the *FSP holder* will develop a plan consistent with the decision.

7. When proposing or conducting *primary forest activities* within a *backcountry* management area, as defined in Appendix A Maps, where no endorsed plan exists, each *holder* of this *FSP* will adhere to the results or strategies presented in sections 5.3 (Wildlife), 5.4 (Riparian), 5.8 (Visual Quality), 5.10 (Recreation), 5.11 (Tourism), 5.12 (Wildcraft) and 5.15 (CASC) of this *FSP*.

5.10.2 Land Act Order Trails

Source of Objective: *LAO objective 30 and 31*

...maintain a 50m management zone on either side.....except where harvesting is essential for insect control or managing blowdown....

Definitions

For the purpose of this result or strategy:

“Blowdown” means a tree or trees uprooted by the wind.

Result and/or Strategy for LAO Trails

1. For buffered trails (shown on Cariboo Chilcotin Land Use Plan Land Act Order map 10 – Buffered Trails in *SRMP* Areas) as displayed in Appendix A Maps, the *FSP holder*, when conducting *primary forest activities*, will maintain a management zone which consists of an area of 50m on both sides of the trail, with the treed area inside the management zone having an average of 85 percent basal area retention, except where *roads* cross the trail.
2. Clause 1 does not apply if *FLNRORD* confirms that a buffer is not required.
3. Despite clause 1, *harvesting* activities that remove more than 15 percent of the basal area within the management zone is permitted for any of the following circumstances:
 - a. *harvesting is essential for insect control*, and all identified *infestation sites* on crown provincial forest land excluding area-based tenures within 500m of the infested trail buffer is addressed prior to or in conjunction with *harvest* entries into the buffer area;
 - b. *harvesting* is necessary to maintain the recreation value of the trail; recover *blowdown* that has occurred;
 - c. *harvesting* is required within *primary* and *interface fuel breaks*, in an approved community or regional wildfire plan, where impacts to *primary old seral forest characteristics* are minimized:
 - i. reduction of fine surface debris, ladder fuels and small diameter trees in *intermediate* and *overtopped crown classes* and the integrity of the trail remains intact;
 - d. *harvesting* is required to implement a management plan developed by a *Qualified Professional* agreed to by the primary user of the trail and endorsed by *FLNRORD*.

5.10.3 Interpretive Forest Sites, Recreation Sites or Recreation Trails

Source of Objective: *FRPA* 181

Interpretive forest sites, recreation sites and recreation trails that were legally designated under FPC have been continued under FRPA section 180. Where objectives for these interpretive forest sites, recreation sites and recreation trails were legally established under FPC, the objectives have been continued under FRPA 181.

Definitions

For the purpose of this result or strategy:

“Objective” means, within the applicable *FDU*, the legally established *objective(s)* for:

- 5.10.3.1 Recreation Sites and Trails within the Cariboo-Chilcotin Forest District;
- 5.10.3.2 Recreation Sites and Trails within the Quesnel Forest District;
- 5.10.3.3 Recreation Sites and Trails within the 100 Mile House Forest District.

“Site” means a recreation *site* or area legally designated under *FPC*, and continued under *FRPA* section 180, for which a legal *objective* is continued under *FRPA* section 181 or established under *FRPA* sec 56. The extent of these *sites* is identified spatially on files held in the B.C. Geographic Warehouse. The list of *sites* and *objectives* is included in Appendix C to this *FSP*.

“Trail” means a recreation trail legally designated under *FPC* and continued under *FRPA* section 180 for which a legal *objective* is established under *FRPA* section 181 or established under *FRPA* sec 56. The location of these trails is identified spatially on files held in the B.C. Geographic Warehouse. The list of trails and *objectives* is included in Appendix C to this *FSP*.

Result and/or Strategy for the Interpretive Forest Sites, Recreation Sites or Recreation Trails

1. The *FSP holder* will, prior to *harvesting* a *cutblock* or constructing a *road* within 100 metres (slope distance) of a *site* or *trail* with an established *objective*:
 - a. refer the proposed *harvesting* or *road* construction to the Ministry responsible for recreation, requesting input on the proposal as it relates to the established *site* or *trail objectives*;
 - i. where the Ministry responsible for recreation responds and provides input on the *harvesting* or *road* construction proposal, the *FSP holder* will incorporate the input into the development of a *harvesting* and *road* construction management strategy; and
 - ii. the *harvesting* and *road* construction management strategy will be developed consistent to the extent *practicable* with the established *objective* for the *trail* or *site*;
 - b. communicate the management strategy to the Ministry responsible for recreation.
2. The *FSP holder* will conduct *harvesting* and *road* construction consistent with the developed management strategy.

5.11 Tourism

Source of Objective: CCLUP 90 day report

To maintain the visual quality in the viewshed surrounding existing tourism operations...

Forestry Strategies (to integrate with tourism needs)

In order for the forest industry to operate in or near important tourism areas, their operations should incorporate tourism needs for high quality environments, including:

- 1. Tranquil Settings - forest operations in the mid and especially the back country should be conducted outside of the peak tourism season, to reduce the impact of noise.*
- 2. Scenic Quality - forest operations should either avoid or minimize impacts on scenic quality. Any impacts that do occur must be rehabilitated within a specified time period.*
- 3. Air Visibility Quality - smoke generation (through slash burning, etc.)*
- 4. Setting Diversity - alternative silvicultural and harvesting systems should be employed to provide for a variety of forest settings.*
- 5. Controlled Access - access management planning should precede operations in order to incorporate tourism industry needs.*

Result and/or Strategy for Existing Tourism Operations

1. The *holder* of this *FSP* will adhere to the results or strategies presented in section 5.8 (Visual Quality) and 5.12 (Wildcraft) of this *FSP*.
2. The *FSP holder* will, *prior to submission* of a cutting permit or *road* permit, notify applicable licensed commercial recreation tenure holders and known private tourism operators of proposed development within 2 kilometers of their tenure or operation, and provide these parties a minimum of 60 days (or less as approved by the applicable *FLNRORD* District Manager) to identify any issues or concerns they may have in the vicinity of the proposed development.
3. If the licensed commercial recreation tenure holder or known private tourism operator responds with concerns related to the objectives stated above (Forestry Strategies to integrate with tourism needs 1-5, or a visual quality concern), a *Qualified Professional* will develop a *mitigation strategy*. The *FSP holder* will share the *mitigation strategy* with the applicable party to seek agreement. The *FSP holder* will implement the agreed to strategy.
4. If an agreement cannot be reached between the *FSP holder* and the applicable party, the *FSP holder* will submit the applicable party's concerns and the *mitigation strategy prior to submission* of the applicable cutting permit or *road* permit to *FLNRORD*. The District Manager or designate will determine if the *mitigation strategy* adequately addresses the concerns raised or if a meeting between the *FSP holder* and the applicable party is required. If an agreement is not reached or the District Manager or designate determines the *mitigation strategy* is not adequate to address the concerns raised, the decision will be at the sole discretion of the District Manager or designate and the *FSP holder* will develop a plan consistent with the decision.

5.12 Wildcraft

Source of Objective: *CCLUP 90 day report (wildcraft and access)*

To maintain roaded access to ...% of the polygon... and restricting the development of permanent road access over specified targets in CCLUP.

Result and/or Strategy for Wildcraft

1. Where *government* initiates and *makes known* an access management plan or process within the *FDU*, the *FSP holder* will conduct *primary forest activities* consistent with the access management plan for the area.
2. Prior to establishing an *access control* or deactivation that eliminates vehicle access on an existing tenured *road* which has been in place for greater than 5 years, the *FSP holder* will notify the parties listed below specifying a *referral period* and placing an advertisement in the local newspaper(s) greater than 60 days prior to the activities occurring.
 - a. First Nations whose traditional territory overlaps the location of the proposed *access control*; and
 - b. Stakeholders who have the potential to be impacted due to the *access control*.
3. The *FSP holder* will adhere to results or strategies identified in sections 5.3 (Wildlife), 5.4 (Riparian), 5.5 (Fish and Sensitive Habitats), 5.6 (Community Watersheds), 5.8 (Visual Quality), 5.9 (Cultural Heritage), 5.10 (Recreation), 5.11 (Tourism) and 5.15 (CASC) of this *FSP*.

5.13 Grazing – Maintenance of Animal Unit Months

Source of Objective: *CCLUP 90 day report*

To maintain the current authorized level of AUM in the polygon where the current authorized level of AUM for the polygon is as listed in the CCLUP..... and to maintain the existing proportion of AUMs by range unit within the polygons....

Result and/or Strategy for the Maintenance of Animal Unit Months

1. Where it is *made known* to the *FSP holder* by *government* or a grazing tenure *holder* that one or more of the following conditions are present:
 - a. the designated *AUM* level as of February 15, 1995 for the polygon is unsustainable or unachievable as a direct result of the *primary forest activities* conducted by a *holder* of this *FSP*; or
 - b. the proportion of *AUMs* by range unit within the polygon, as per the February 15, 1995 availability of *AUMs*, has changed and that *AUM* availability in one or more range units within the polygon is decreasing as a direct result of *primary forest activities*, then the *FSP holder* conducting *primary forest activities* within the identified range unit(s) will enter into consultation with the affected range tenure holders and modify *harvesting* and silviculture practices to maintain the February 15, 1995 *AUM* levels by polygon and the February 15, 1995 *AUM* levels by range unit.

- 2 The *FSP holder* will comply with section 6.2 of this *FSP* to refer proposed developments and engage in discussion with the range tenure holder.

5.14 Community Areas of Special Concern (CASC)

Source of Objective: <i>CCLUP 90 day report</i>
<i>....To Manage the Upper Dean River as a quality stream fishery.....</i>
Source of Objective: <i>LAO objective 14 and 15</i>
<i>To maintain community areas of special concern as no harvest areas.....except where harvesting is essential for insect control.....</i>

Result and/or Strategy for Community Areas of Special Concern (CASC)

No Result and/or Strategy is provided as Community Areas of Special Concern do not overlap areas covered by this FSP.

5.15 Grassland Habitats

Source of Objective: <i>CCLUP 90 day report</i>
<i>....To Manage in conjunction with protected areas to maintain or enhance key grassland habitats and to maintain regionally significant Beecher Prairie pothole habitat values.....</i>
Source of Objective: <i>LAO objective 25</i>
<i>To implement silviculture practices that facilitate restoration of open grassland condition.....</i>

Definitions

For the purpose of this result or strategy:

“Grassland Habitat” means the areas defined by the Cariboo Chilcotin Land Use Plan Land Act Order spatial data set: Cariboo-Chilcotin Grassland Benchmark Area as displayed in Appendix A Maps.

Result and/or Strategy for Grassland Habitats

1. Within *grassland habitat* the *FSP holder* will not:
 - a. construct *roads*, trails, landings or create bladed or excavated *road* (in block / non-tenured) surfaces, unless no other *practicable* alternative exists for accessing and/or extracting timber; or
 - b. apply herbicide treatments; or
 - c. conduct reforestation activities.

2. Within *grassland habitat* the *FSP holder* will:
 - a. conduct *primary forest activities* to a maximum of 5% soil disturbance; and
 - b. minimize the disturbed width and length of *roads*, trails, landings to the extent *practicable*;
 - c. process and deck timber outside of the *grassland habitat* where *practicable*;
 - d. grass seed disturbed sites with ecologically suitable species for the site.
 - e. Rehabilitate newly constructed or upgraded roads, trails or landings not needed for long term access. This will be accomplished by re-contouring and grass seeding with ecologically suitable species unless all operations affecting roads, trails and landings are conducted on frozen ground where it precludes any further disturbance by those operations.

3. The *FSP holder* will, for those portions of *cutblocks* within the *grassland habitat*, at the *conclusion of harvesting*, have:
 - a. retained all conifer stems greater than 65cm *dbh* except for the following:
 - i. the stems containing active bark beetle located within a *suppression BMU* for that insect pest; or
 - ii. felling or modifying a tree that is a *safety hazard*, if there is no other *practicable* option for addressing the *safety hazard*;
 - b. for each stem >65cm *dbh* retained, retain 1 to 4 conifer stems > 12.5cm *dbh* targeting stems *adjacent* to the stems > 65cm *dbh* retained;
 - c. retained all deciduous stems >12.5cm *dbh* where *practicable* except where they require felling due to safety concerns.

4. The *FSP holder* will apply clause 9 in the variations from general standards within the stocking standards section (Cariboo Region SS Supporting Document July 24, 2018) of this *FSP* for portions of *cutblocks* that fall within *grassland habitat*.

6 MEASURES

6.1 Measures to prevent the introduction or spread of invasive plants

Definitions

For the purpose of this measure:

“Grass seed” means Canada Common #1 Forage Mixture or higher standard forage mixture, as defined by the *Canada Seeds Act*.

“Overburden” means the layer of material above the target material and is where vegetation is or would be established.

Invasive plant measures

1. The *FSP holder* will:
 - a. apply *grass seed* to those areas of contiguous exposed mineral soil greater than 0.1 ha associated with *road* cut slopes, fill slopes, ditch lines and right-of-way landings within one year following access construction, reconstruction or deactivation, with the exception of:
 - i. where grass seeding would be inconsistent with a *Wildlife Habitat Area* requirement;
 - ii. where grass seeding would be inconsistent with an ungulate winter range requirement; or
 - iii. where grass seeding would be inconsistent with other legislated requirements;
 - b. when excavating and transporting material for use in *road* or other construction, assess the material source for invasive plants, and where invasive plants are identified, will clear the site of *overburden* before excavation;
 - c. report previously un-identified infestations of invasive plants through the Report-A-Weed application (www.gov.bc.ca/invasive-species), within 60 days of that new infestation being identified;
 - d. if invasive plants, excluding bull thistle, are present during mechanical site preparation, *harvesting* or roadbuilding operations, the *FSP holder* will instruct its contractors and its staff to remove any identified plant material or accumulations of soil which may contain invasive plant material from machinery, vehicles, personnel and pets prior to moving to subsequent areas, to the extent *practicable*.

6.2 Measures to mitigate the effect of removing or rendering ineffective natural range barriers

Natural Range Barrier Measures

1. The *FSP holder*, at a minimum of 60 days *prior to submission* of a cutting permit or *road* permit, will share information regarding the location of the proposed *cutblocks* and *roads* with range tenure holders whose tenured area overlaps the area of proposed development and specify a *referral period*.

2. Where the range tenure holder responds in writing to the *FSP holder* within the *referral period* that a *natural range barrier* will be removed or rendered ineffective as a result of the proposed *harvesting* or *road building* activities, and the *FSP holder* is in **agreement**, the *FSP holder* will construct fence lines and install cattleguards and/or gates in accordance with accepted standards to prevent cattle drift within one year, where *practicable*, following the removal or rendering ineffective of the *natural range barrier*.
3. Where the range tenure holder responds in writing to the *FSP holder* within the *referral period* that a *natural range barrier* will be removed or rendered ineffective as a result of the proposed *harvesting* or *road building* activities, and the *FSP holder* **disagrees**, the *FSP holder* will conduct a meeting between the District Range Officer, the *FSP holder* and the range tenure holder to reach agreement. If agreement is not reached, the decision will be at the sole discretion of the District Manager and the *FSP holder* will implement the decision.
4. Where the range tenure holder does not respond to the information sharing and the *FSP holder* is aware of the potential for a *natural range barrier* to be removed or rendered ineffective through *harvesting* or *road building* activities, the *FSP holder* will contact the District Range Officer for a decision.
5. Where the range tenure holder responds in writing to the *FSP holder* within the *referral period* that a conflict will be generated between the tenure holder's range use plan and the proposed *primary forest activities*, the *FSP holder* will conduct a meeting between the District Range Officer, the *FSP holder* and the range tenure holder to reach agreement. If agreement is not reached, the decision will be at the sole discretion of the District Manager and the *FSP holder* will implement the decision.

7 STOCKING STANDARDS

Inclusive within this *FSP* are the stocking standards that will be used consistent with the results and strategies outlined elsewhere in this document. The Regional Endorsed Stocking Standards will be used for *cutblocks harvested* under this *FSP* unless otherwise stated. For areas where fuel mitigation is required, Fire Fuel Mitigation standards will be used. The Stocking Standards are located in Appendix D of this *FSP*.

8 PLAN SIGNATURES

While this plan was a collaboration between forest professionals from different companies and government, the plan must be signed by the person required to prepare the plan as per *FRPA 5(3)*. While I did not write all the content within this FSP, I have fully reviewed it and certify that it meets the standards expected of a member of the Association of British Columbia Forest Professionals and the requirements of *FRPA*.

RPF

Date (dd/mm/yyyy)

Authorization Signatures

The following individuals are acknowledging this FSP is submitted on behalf of the 100 Mile Development Corporation

Roy Scott
Chief Administrative Officer
District of 100 Mile House

Date (dd/mm/yyyy)

APPENDIX A – FOREST STEWARDSHIP PLAN MAP(S)

APPENDIX B WILDLIFE TREE RETENTION TARGETS

Landscape Unit	Biogeoclimatic Unit	WTR Target (% gross harvest area)
Bridge Creek	IDFdk3 FirGroup	9
Bridge Creek	IDFdk3 PineGroup	10
Bridge Creek	SBPSmk_na	11
Bridge Creek	SBSdw2_na	11
Bridge Lake	SBPSmk_na	8
Bridge Lake	SBSdw1_na	8
Bridge Lake	SBSdw2_na	8
Forest Grove	IDFdk3 FirGroup	10
Forest Grove	IDFdk3 PineGroup	10
Forest Grove	SBSdw1_na	9
Forest Grove	SBSdw2_na	10

APPENDIX C OBJECTIVES FOR RECREATION SITES AND TRAILS

ORG UNIT CODE	FOREST FILE ID	PROJECT NAME	PROJECT TYPE	TOTAL AREA (ha)	TOTAL TRAIL LENGTH (km)	OBJECTIVE DESCRIPTION
DMH	REC184097	Bridge Lake Ice Caves Recreation Trail	RTR - Recreation Trail	0	2.359	
DMH	REC240475	Earle Lake Trails	RTR - Recreation Trail	0	2.661	
DMH	REC6586	100 MILE SNOWMOBILE TRAIL	RTR - Recreation Trail	0	35.711	
DMH	REC6612	FAWN CREEK RECREATION TRAILS	RTR - Recreation Trail	0	18.141	
DMH	REC6951	INTERLAKES SNOWMOBILE TRAIL	RTR - Recreation Trail	0	40.141	

APPENDIX D REGIONAL STOCKING STANDARDS

The regional stocking standards consist of:

1. Cariboo Region Stocking Standards Supporting Document July 24, 2018
2. Cariboo Region Stocking Standards July 24, 2018
3. Cariboo Region Enhanced Stocking Standards Final July 24, 2018
4. Cariboo Region Enhanced Stocking Standards for IDF Stands Impacted by Wildfires July 24, 2018
5. Final Signed *FLNRORD* documentation July 26, 2018
6. Fire Fuel Mitigation Stocking Standards

The documents listed above are attached to this *FSP*.

Cariboo Region Stocking Standards Supporting Document (July 24, 2018)

Section 44(1) of the Forest Planning and Practices Regulation (FPPR) applies 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 specified in the Cariboo Region Stocking Standards (CRSS) and its addendum shall apply to areas harvested under the Forest Stewardship Plan (FSP). These stocking standards may also be applied to areas harvested under a previous FSP or Forest Development Plan. The stocking standards approved under this FSP will apply to an area harvested under a previous plan when the stocking standard identification number applicable to a Standard Unit (SU) is submitted to RESULTS.

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* and the *FS660- Silviculture Survey Reference* field card, as amended from time to time, unless specified or varied through provisions of this FSP.

2) Site Identification for the Purpose of Determining Stocking Standard

When determining the appropriate stocking standard in the CRSS, site identification will be completed based on the procedures and site descriptions contained in Land Management Handbook Number 39 (1997) – *A Field Guide to the Forest Site Identification and Interpretation for the Cariboo Forest Region*, as amended from time-to-time. For biogeoclimatic subzones that are not contained in the Cariboo Region field guide Handbook Number 23 (1990) – *A Guide to the Site Identification and Interpretation for the Kamloops Forest Region* and Handbook Number 24 (1993) – *A Field Guide for Site Identification and Interpretation for the Southwest Portion of the Prince George Forest Region*, as amended from time-to-time, shall be used.

3) District Policies That May Apply

Unless otherwise specified in the this FSP, where a District approves a policy that varies the standards or procedure described in the *Resource Practices Branch, Silviculture Survey Procedures Manual*, the policy may be applied in the applicable District at the discretion of the obligation holder.

4) Deviation from Potential (DFP) Survey Methodology to Assess Stocking Levels

Where harvesting on a SU having **even aged stocking standards** has resulted in partial cutting as a result of:

- a) forest health management, or
- b) where retention of crop trees is required to achieve a result or strategy in the FSP to address an objective set by government,

the deviation from potential (DFP) survey methodology may be used to assess compliance with stocking standards provided:

- a) the stratum contains between five (5) and twenty (20) m²/ha of residual basal area in stems ≥ 12.5 cm dbh, of preferred and/or acceptable species; and
- b) the stratum is greater than 1 ha in size; and
- c) the SU is not being managed to uneven-aged standards.

Where the DFP survey methodology is used the applicable stocking standard in the CRSS, with regard to preferred and acceptable species, minimum tree heights, minimum inter tree distance, stocking targets, regeneration period and free growing period, continue to apply with the following exceptions:

- a) minimum inter tree distance for stems ≥ 12.5 cm dbh is 0.0 m; and,
- b) subject to d) trees contributing to the retained basal area must be a preferred or acceptable species in the applicable stocking standard or another commercially valuable coniferous species, and
- c) trees contributing to stocking targets must be preferred or acceptable species specified in the stocking standard; and,
- d) any tree species specifically reserved to address a result or strategy in the FSP will contribute to the measurable basal area on the site.

5) Intermediate Harvest

Where a stand is harvested consistent with FPPR section 44 (4), other than harvesting for the purpose of uneven-aged management, it shall be deemed an intermediate harvest where the harvested stand complies with the conditions specified below for a minimum period of 12 months following the completion of harvesting.

- a) greater than 20 m² average basal must be retained in trees with a diameter at breast high of ≥ 12.5 cm; and
- b) no area > 2 ha or 10% of the SU area, whichever is less, has a retained basal area less than 20 m²; and
- c) trees contributing to the retained basal area must be the species identified as preferred and acceptable in the CRSS; and

- d) greater than 50% of the contributing retained basal area must be a preferred tree species as defined in the CRSS, if it existed on site prior to harvest; and
- e) trees contributing to the retained basal area comply with the attributes defined in *FS 660 - Free growing damage criteria for multi-storey conifer stands*.

If during the 12 months period following the completion of harvesting the conditions specified below are not maintained, the licensee shall hold a free growing obligation on the harvested area and the appropriate stocking standards in the CRSS shall be applied.

6) Uneven Aged Management

The uneven-aged stocking standards in the CRSS will be applied in situations where:

- a) the biogeoclimatic (BEC) zone/subzone is IDF, SBSdw2 or MSxk and Douglas-fir is the leading species pre-harvest; and
- b) the silviculture system for the stand is single tree or the removal of small groups of trees resulting in openings < 0.25 ha in size and the stand is being managed for multi-aged stand structure; and
- c) following completion of harvesting:
 - i. three (3) distinct layers are present
 - ii. layers 1 and 2 combined is either
 - a. $\geq 6\%$ crown closure, or
 - b. $> 5\text{m}^2/\text{ha}$ of basal area in layer 1, and
 - iii. layers 3 and/or 4 are present.

If upon the completion of harvesting a continuous area ≥ 1 ha within the NAR area does not meet the requirements of c) above a separate standards unit will be created and even-aged stocking standards shall be applied to the area.

7) Conversion of Multi-Story Douglas-fir Stand to Even Aged Management Following a Wildfire

Where a SU or a portion thereof is impacted by a wildfire to the extent that the conditions specified in Section 5(c) "*Uneven Aged Management*" are no longer met, the impacted portion shall be defined as a separate SU and even-aged stocking standards shall be applied to the area.

8) Mixed Wood Stocking Standards

A mixed wood stocking standard may only be applied in situations where:

- a) the net merchantable cruise volume is greater than 30% net deciduous; and
- b) the merchantable deciduous volume will be utilized; and

- c) the pre-harvest objective specified in the site plan is to manage the SU for mixed wood timber values.

Broadleaf forest health free growing criteria are as specified in the *FS660- Silviculture Survey Reference* field card.

The applicable stocking standard in the CRSS for a SU shall be converted to a mixed wood stocking standard based on Table 1. Broadleaf species contained in a mixed wood stocking standard shall be considered preferred species.

Table 1: *Conversion Table for Conifer Standards to Mixed Wood Standards*

Target from Conifer Standards	Species	Target Stocking (well-spaced/ha)	Minimum Stocking Standards (well-spaced/ha)			Minimum Height at Free Growing (m)		Regen Delay (yrs)	Latest Free Growing (yrs)
			Min. Preferred & Acceptable	Min. Preferred	Min. Preferred Conifers	Dec.	Con.		
400	As defined by a productive, reliable and feasible regeneration option (footnote "a") in Reference Guide for FDP Stocking Standards	400	200	200	200	2.0	From CRSS for applicable site series	7	20
600		800	500	400	400	2.0		7	20
1000		1200	700	600	400	2.0		7	20
1200		1600	1000	800	600	2.0		7	20

Where mixed wood standards are applied, black cottonwood, trembling aspen, and common paper birch 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, unless Variation from General Standard 13) *Standard for the Reduction of Weevil Damage* is applied.

9) Broadleaf Stocking Standards

Broadleaf stocking standards may only be applied in situations where:

- a) the net merchantable cruise volume is greater than 70% net deciduous; and
- b) the merchantable deciduous volume will be utilized; and
- c) the pre-harvest objective specified in the site plans is to manage the SU for broadleaf timber value.

Broadleaf forest health free growing criteria are as specified in the *FS660- Silviculture Survey Reference* field card.

The applicable stocking standard in the CRSS for a SU shall be converted to a broadleaf stocking standard based on Table 2. Broadleaf species contained in a broadleaf stocking standard shall be considered preferred species.

Table 2: *Conversion Table for Conifer Standards to Broadleaf Standards*

Target from Conifer Standards	Species	Target Stocking (well-spaced/ha)	Minimum Stocking Standards (well-spaced/ha)			Minimum Height at Free Growing (m)		Regen Delay (yrs)	Latest Free Growing (yrs)
			Min. Preferred & Acceptable	Min. Preferred	Min. Conifers	Dec.	Con.		
400	As defined by a productive, reliable and feasible regeneration option (footnote "a") in Reference Guide for FDP Stocking Standards	600	400	400	n/a	2.0	From CRSS for applicable site series	7	20
600		1000	500	400	n/a	2.0		7	20
1000		1600	1000	800	n/a	2.0		7	20
1200		2000	1200	1000	n/a	2.0		7	20

10) Brush Competition

Where specified in the site plan as leave trees, layer one (≥ 12.5 cm dbh), black cottonwood, trembling aspen, and birch trees, retained at the time of harvest are not considered competing vegetation at the time of the free growing assessment of coniferous crop trees.

Black cottonwood, trembling aspen and birch trees, and shrubs species being managed to achieve an objective, result or strategy of the FSP as specified in the site plan, are not considered competing vegetation at the time of free growing evaluation of coniferous crop trees.

Trembling aspen, black cottonwood, birch, willow, 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 within 10 m of S4, S5, and S6 streams, and all wetlands greater than 0.25 ha in all other BEC zones.

Where a brushing treatment has been undertaken, and a visual buffer is required to achieve a result or strategy, aspen, cottonwood, birch, willow and alder will not be considered competing brush when conducting a free growing survey where survey plots fall within the buffer.

For the purposes of free growing assessments in the SBPS BEC zone scrub birch will be considered non-competing when assessing the free growing status of crop trees.

Where the uneven-aged stocking standard applicable to a site specifies a minimum free growing height of 0.4 m for Douglas-fir, snow berry, soopalallie, common juniper, vaciniums sp. saskatoon, birch-leafed spirea, herbaceous vegetation, and grasses are not considered competing vegetation at the time of free growing evaluation of the well-spaced Douglas-fir.

Where required to assess the free growing status of a crop tree the conifer to brush ratio shall be 125% for the ESSF, IDF and MS biogeoclimatic zones, and 150% in the ICH, SBPS and SBS biogeoclimatic zones.

11) Lodgepole Pine Dwarf Mistletoe

In SUs where lodgepole pine is the only preferred species, when assessing the free growing status of a well-spaced lodgepole pine crop tree in regard to its proximity to mistletoe infected over topping pine stems, only stems located within the net area to reforest (NAR) portion of the block being surveyed will be considered overtopping stems. Therefore, well-spaced lodgepole pine trees that do not have visible evidence of mistletoe infection remain eligible as potential free growing trees regardless of their proximity or height relative to visibly infected stems that are located outside of the NAR.

12) Retained Mistletoe Infected Lodgepole Pine to Address a Result or Strategy

Where lodgepole pine stems are retained consistent with the South Chilcotin Stewardship Plan, for the purpose of visual screening modelled moose habitat or where specifically required by a result or strategy in the FSP, the free growing damage criteria for even-aged coniferous trees as specified in the FS 660 field card, with regard to dwarf mistletoe, will not apply to retained lodgepole pine and subsequent lodgepole pine regeneration, provided that the portion of the block where pine are retained as a visual screen or to achieve a result or strategy in the FSP is defined as a unique SU.

13) Limitations on the Use of Larch

The use of western larch must be consistent with the *Chief Forester's Standards for Seed Use*, as amended from time to time. (i.e., western larch restricted to 10% of planting program on an annual basis).

Despite western larch being listed as an acceptable species in the CRSS for various biogeoclimatic subzones/site series, western larch shall only be considered an acceptable species where it is established consistent with the LW1 and LW2 seed planning zones.

Larch shall not be considered preferred or acceptable in mule deer winter range (MDWR).

14) Limitations on the Use of White Pine

The use of white pine is restricted to rust resistant seedlots.

Despite white pine's inclusion in a stocking standard, where white pine is planted outside of an "A" Class seed planning zone for white pine the seedlings are considered to be non-compliant with the *Chief Forester's Standard for Seed Use*.

15) Enhanced Stocking Standards

Enhanced stocking standards contained in the CRSS can be applied at the discretion of the obligation holder.

16) Maximum Density Limits at Free Growing

The maximum allowable density at the time of free growing declaration

- a) for pine leading strata where pine is ≥ 80 percent of the inventory is 25,000 countable conifers per hectare;
- b) for all other species and mixed pine stands where pine is less than 80% of the inventory is 10,000 countable stems per hectare; and
- c) for SUs to which uneven-aged stocking standards apply, the maximum density of stems in layer 3 is 1,0000 stems per hectare.

Where salvage harvesting has occurred following a wildfire disturbance the free growing obligation holder is exempt from clauses a) and b) above.

VARIATIONS FROM GENERAL STANDARDS

A Forest Professional may vary the stocking standard listed in the CRSS as defined below in the following situations and circumstances:

1) Multiple Years to Harvest a Standard Unit

Where harvesting occurs over multiple years on a SU with a 4-year regeneration delay, regeneration delay may be extended to 4 years after the start of the last harvest entry to a maximum of 7 years from the initial disturbance date. The late free growing date will be 20 years from the harvest start date of the initial harvest entry.

2) Seven Year Regeneration Delay

Within three (3) years following harvest commencement, and where based on a post-harvest field assessment, if a portion of a SU with a 4 year regeneration delay is planned to be regenerated by natural regeneration or direct seeding, the area being managed for natural regeneration or direct seedling may be defined as a separate standards unit with regeneration delay period of 7 years.

3) Changes to Milestones Due To Damage Caused By Wildfire

Where any portion of a standards unit larger than 1 ha is disturbed by wildfire such that the SU is left **Not Satisfactorily Restocked (NSR)** according to the currently approved stocking standard then:

- a) a new disturbance shall be reported for that opening;
- b) the NSR portion of the original standards unit may be defined as a new standards unit;
and
- c) the appropriate stocking standards from CRSS shall apply to the disturbed area with the exception that;
 - i. if the Regeneration Delay period has not elapsed, then Regeneration Delay and Late Free Growing shall be calculated from the new disturbance date, or
 - ii. if the Regeneration Delay period has elapsed, then a new Regeneration Delay period will not apply and only Late Free Growing shall be calculated from the new disturbance date.

4) Pine as a Preferred Species in IDF Subzones

Where in the IDF biogeoclimatic zone an area is being managed with an uneven-aged silviculture system and the pre-harvest gross volume is greater than 40% lodgepole pine, and lodgepole pine is an acceptable species in the CRSS for the applicable site series, lodgepole pine may be elevated to a preferred species to a maximum of 50% of the well-spaced stems.

5) Spruce as a Preferred Species in IDF Subzones

Where in the IDF biogeoclimatic zone the pre-harvest gross volume is greater than 40% spruce, and spruce is an acceptable species in the CRSS for the applicable site series, spruce may be elevated to a preferred species to a maximum of 50% of the well-spaced stems.

6) Reduced Minimum Inter-tree Distance

The minimum inter tree-distance (MITD) for a SU may be varied from the standard defined in the CRSS in the following situations and circumstances.

- a) Where mechanical site preparation, other than slash piling, has been undertaken to create microsites prior to planting the MITD can be reduced to 1.6m.
- b) On slopes >20% in the ESSF BEC zone where protected microsites are critical for successful reforestation due to snow creep, MITD may be reduced to 1.0 m where the SU has been planted to target density or greater.

- c) Where based on a silvicultural survey a SU or portion thereof which has previously been planted has failed to maintain minimum stocking densities, due to the impacts of cattle or horses, the affected area maybe designated as a separate SU. In the newly designated SU the MITD may be reduced to 1.0 m if planting will be completed.
- d) For areas that are identified and mapped as a root disease polygon, which may include up to a 30 m buffer, a separate SU may be created and the MITD may be reduced to 1.6 m where a stump avoidance strategy is employed to manage root disease.
- e) Where salvage harvesting has been undertaken in the IDF biogeoclimatic zone following a stand initiating wildfire, which is defined as having a level of disturbance such that the stand is NSR prior to salvage harvesting, and where the objective is to restore Douglas-fir and even-aged management is required, the MITD for Douglas-fir may be reduced to 0.5 m. The reduced MITD shall apply to the distance between natural or planted Douglas-fir stems and any other preferred or acceptable crop tree species. The MITD between non-Douglas-fir crop trees species (e.g., pine to pine) remains as specified in the CRSS.
- f) On rocky sites where a plantibility survey has determined that the target stocking cannot be achieved due to the presence of rock when assessed at the applicable MITD, the MITD may be reduced to 1.6 m.

7) Grizzly Bear Habitat

Where consistent with a result and/or strategy in the FSP and prescribed in a site plan pre-harvest, a clumped tree distribution is required for the management of grizzly bear habitat, the target density, minimum preferred and acceptable and minimum preferred values in the stocking standards in the CRSS shall be modified by the factors of 0.67. For example a stocking standard of 1000/500/400 shall become 670/335/268. The minimum intertree distance shall be 1.0 m and maximum density of countable conifers shall be 4,000/ha.

The site plan must prescribe the number of trees in a cluster, the number of clusters/hectare and the spacing between clusters.

8) GAR Consistency

Where stocking standards included in this FSP conflict with the management objectives/direction of an Order under the Government Action Regulation (GAR), the stocking standards will be varied to the extent that they do not conflict with management objectives/direction of the applicable GAR Order.

Achievement of a stocking standard does not supersede the obligation holder's obligation to be consistent with all requirements specified in the GAR Order.

9) Benchmark Grasslands Standards

Areas harvested within the identified Cariboo-Chilcotin Grassland Strategy benchmark area shall have no regeneration or free growing obligation.

10) Bighorn Sheep Management Area Standards

For SUs located within the identified Churn Creek Big Horn Sheep Migration Corridor stocking standards may be varied to the extent recommended in writing by a FLNRO&RD Habitat Biologist.

11) Standard for the Reduction of Weevil Damage

If,

- a) there is an active white pine weevil (*Pissodes strobi*) population on the block or an adjacent managed opening as evidenced by the presence of weevil damaged trees, and
- b) the spruce trees being assessed are of acceptable form and vigour and meet all other acceptability criteria (i.e., preferred or acceptable species, minimum height, MITD),

then for the purpose of assessing the free growing status of spruce crop trees, all deciduous vegetation shall be assessed as non-competing brush.

12) Variations to Preferred or Acceptable Species

The preferred and/or acceptable species in the stocking standards in the CRSS may be varied to the extent specified below in the following situation and circumstances.

- a) Where greater than 10% of the total merchantable volume on the area of a SU, based on a timber cruise, is of a conifer species not identified in the approved stocking standards, that species may be designated an acceptable species where it is ecologically suitable.
- b) Where prior to harvest lodgepole pine is greater than 50% of the total merchantable volume lodgepole pine can be designated as a preferred species in the following biogeoclimatic subzone/site series:
 - i. ESSFdc2/06 and /07
 - ii. ESSFxc/07 and /08
 - iii. ICHmk3/04 and /06
 - iv. ICHmw3/01
 - v. IDF dk/04

- vi. IDF mw2/01 and 03
- vii. IDfxm/06, 07 and /08
- viii. MSxk/09

13) BEC Site Series Mosaics

Where an area consists of a mosaic of two or more biogeoclimatic site series, which cannot be clearly delineated or mapped (i.e., site series are less than one contiguous hectare in size), the stocking standard that applies to the area is the stocking standard for the dominate site series. The applied stocking standard may be varied such that a preferred species from the applicable stocking standard for either site series may be considered a preferred species and an acceptable species from the applicable stocking standard for either site series may be considered an acceptable species.

14) Douglas-fir Preferred on Mule Deer Winter Ranges

Within all mule deer winter range units to which this FSP applies, Douglas-fir may be considered a preferred species for the purposes of the stocking standards in addition to the species listed in the stocking standards in the CRSS.

15) Management of Root Disease Sites

For standard units that consist solely of areas that are identified and mapped as a root disease polygon, which may include up to a 30m buffer surrounding the area of infection, an alternate ecologically suitable, commercially valuable species that are moderately susceptible, tolerant, or immune may be specified as preferred and/or acceptable to maximize species diversity on site at the time of planting.

Due to the risk of increased inoculum levels, which may result from a conifer release treatment, on areas that have been identified and mapped and managed as a root disease polygon, which may include up to a 30 m buffer, for the purpose of assessing the free growing status of a conifer crop tree, all trembling aspen, paper birch, black cottonwood, willow and alder shall be assessed as non-competing brush.

16) Wildfire Urban Interface (WUI) Stocking Standards

(Currently under development)

17) Extension to Regeneration Delay Period Required to Reduce Pressure on Seed Supply and Nursery Capacity as a Result of 2017 Wildfires

Areas managed for natural reforestation may have regeneration delay extended to 9 years when all the following conditions are met:

- a) A regen survey is completed on the site in year 5 or 6 post-harvest start.
- b) The average stocking of preferred and acceptable species is greater than 500 well-spaced/ha.
- c) The regeneration survey has demonstrated that there are significant numbers of germinants on the site that will contribute to the stocking targets.
- d) The regen delay milestone date is not extended beyond 2028.

18) Extension to Regeneration Delay Period When Standards Units with a 4 Year Regen Delay are a Minor Component of the Cut Block

Where a cut block:

- a) is located in either the ESSFxv1, ESSFxv2, MSxv, SBPSdc, SBPSmc, SBPSmk or SBPSxc biogeoclimatic subzones, and
 - b) contains SU's that have a 4 year regeneration delay and 7 years regeneration delay periods, and
 - c) less than 25 percent (25%) of the NAR area of the cut block has a 4 year regeneration delay period,
- all standards units within the block may be managed with a 7 year regen delay period.

19) Intermediate Harvest Standards

Where harvesting is deemed to be an intermediate harvest, as per clause *General Condition clause 4) Intermediate Harvest* of this document, the applicable stocking standard in the CRSS may be varied such that:

- a) there shall be no regeneration objective, and
- b) the minimum basal area objective shall be set at 20m²/ha or greater.

20) Uneven Aged Management Required to Achieve a Result of Strategy in the FSP

Where required to achieve a result or strategy in the FSP any Douglas-fir leading stand may be managed for uneven aged stand structure. The stocking standard that shall apply will be the applicable even aged stocking standard, based on biogeoclimatic subzone and site series, from the CRSS as modified consistent with Table 3 below.

Table 3 *Stocking Standard Conversion Table*

Target Stocking from CRSS standards	Layer	Target Stocking	Minimum Stocking (P+A)	Minimum Stocking (P)
(stems/ha)		(well-spaced/ha)		
1200	1	600	300	250
	2	800	400	300
	3	1000	500	400
	4	1200	700	600
1000	1	400	200	200
	2	600	300	250
	3	800	400	300
	4	1000	500	400
800	1	300	150	150
	2	400	200	200
	3	600	300	300
	4	800	400	400
600	1	300	150	150
	2	400	200	200
	3	500	300	300
	4	600	400	400
400	1	200	100	100
	2	300	125	125
	3	300	150	150
	4	400	200	200

Cariboo Region Stocking Standards (July 24, 2018)

BGC				Free Growing							Assessments		Additional Standards
Classification				Species		Stocking					Regen Delay	Free Growing	
BGC Zone	Subzone	Variant	Site Series	Preferred (p)	Acceptable (a)	Layer	Target	MIN p+a	MIN p	MITD			
				minimum height (m)	minimum height (m)	Well-spaced/ha							
ESSF	dc	2	1	Sx(.8) BI(.8)	PI(1.6)	I	1200	700	600	2.0	4	20	Balsam (BI) is limited to a maximum of 50% of preferred and acceptable well spaced trees
ESSF	dc	2	2	PI(1.2)	Sx(.6) BI (.6)	I	1000	500	400	1.6	7	20	
ESSF	dc	2	3	PI(1.2) Sx (0.6) BI(.6)		I	1000	500	400	1.6	7	20	Balsam (BI) is limited to a maximum of 50% of preferred and acceptable well spaced trees
ESSF	dc	2	5	PI(1.2) Sx(.6) BI(.6)		I	1000	500	400	1.6	7	20	Balsam (BI) is limited to a maximum of 50% of preferred and acceptable well spaced trees
ESSF	dc	2	6	Sx(.8) BI(.8)	PI(1.6)	I	1200	700	600	2.0	4	20	
ESSF	dc	2	7	Sx(.8) BI(.8)	PI(1.6)	I	1200	700	600	1.6	4	20	
ESSF	dc	2	8	Sx(.6) BI(.6)		I	1000	500	400	1.6	4	20	
ESSF	mv	1	1	Sx(.8) BI(.8)	PI(1.6)	I	1200	700	600	2.0	4	20	
ESSF	mv	1	2	PI(1.2)	BI(.6)	I	1000	500	400	1.6	7	20	
ESSF	mv	1	3	PI(1.2) Sx(.6) BI(.6)		I	1000	500	400	1.6	7	20	
ESSF	mv	1	4	Sx(.6) BI(.6)	PI(1.2)	I	1000	500	400	1.6	7	20	
ESSF	mv	1	5	Sx(.6) BI(.6)	PI(1.2)	I	1000	500	400	1.6	4	20	
ESSF	wc	3	1	Sx(.8) BI(.8)	PI(1.6)	I	1200	700	600	2.0	4	20	
ESSF	wc	3	2	PI(1.2) Sx(.6) BI(.6)		I	1000	500	400	2.0	7	20	
ESSF	wc	3	3	Sx(.6) BI(.6)		I	600	400	300	1.6	7	20	
ESSF	wk	1	1	PI(2.0)Sx(1.0) BI(1.0)		I	1200	700	600	2.0	4	20	
ESSF	wk	1	2	PI(1.4) Sx(.8) BI(.8)	Lw(2.0)	I	1000	500	400	2.0	7	20	
ESSF	wk	1	3	PI(2.0) Sx(1.0) BI(1.0)	Lw(2.0)	I	1200	700	600	2.0	4	20	
ESSF	wk	1	4	Sx(1.0) BI(1.0)	PI(2.0)	I	1200	700	600	2.0	4	20	
ESSF	wk	1	5	Sx(1.0) BI(1.0)	PI(2.0)	I	1200	700	600	2.0	4	20	

BGC				Free Growing							Assessments		Additional Standards
Classification				Species		Stocking					Regen Delay	Free Growing	
BGC Zone	Subzone	Variant	Site Series	Preferred (p) minimum height (m)	Acceptable (a) minimum height (m)	Layer	Target	MIN p+a	MIN p	MITD (m)	(yrs)	(yrs)	
ESSF	wk	1	6	Sx(.8) Bl(.8)		I	1000	500	400	1.6	4	20	
ESSF	wk	1	7	Sx(.8) Bl(.8)		I	1000	500	400	1.6	4	20	

ESSF	xc		1	Pl(1.6) Sx(.8) Bl(.8)		I	1200	700	600	2.0	7	20	Balsam (Bl) is limited to a maximum of 50% of preferred and acceptable well spaced trees
ESSF	xc		2	Pl(1.2) Pa (.6)	Sx(.6) Bl(.6) Fd (.8) Lw (1.2)	I	600	400	300	1.6	7	20	Whitebark pine (Pa) is limited to a maximum of 50% of preferred and acceptable well spaced trees
ESSF	xc		5	Pl(1.2) Pa (.6)	Sx(.6) Bl(.6) Fd (.8) Lw (1.2)	I	1000	500	400	2.0	7	20	Whitebark pine (Pa) is limited to a maximum of 50% of preferred and acceptable well spaced trees
ESSF	xc		6	Pl(1.6) Sx(.8) Bl(.8)	Pa(.6)	I	1200	700	600	2.0	7	20	Balsam (Bl) is limited to a maximum of 50% of preferred and acceptable well spaced trees
ESSF	xc		7	Sx(.6) Bl(.6)	Pl(1.2)	I	1200	700	600	2.0	4	20	Balsam (Bl) is limited to a maximum of 50% of preferred and acceptable well spaced trees
ESSF	xc		8	Sx(.6) Bl(.6)	Pl(1.2)	I	1200	700	600	1.6	4	20	Balsam (Bl) is limited to a maximum of 50% of preferred and acceptable well spaced trees

ESSF	xv	1	1	Pl(1.0) Sx(.8) Bl(.8)	Pa(0.8)	I	1200	700	600	2.0	7	20	Balsam (Bl) is limited to a maximum of 50% of preferred and acceptable well spaced trees
ESSF	xv	1	2	Pl(.8) Pa(.6)	Bl(.6)	I	800	500	400	1.6	7	20	
ESSF	xv	1	3	Pl(.8) Pa(.6)		I	800	500	400	2.0	7	20	

BGC				Free Growing							Assessments		Additional Standards
Classification				Species		Stocking					Regen Delay	Free Growing	
BGC Zone	Subzone	Variant	Site Series	Preferred (p) minimum height (m)	Acceptable (a) minimum height (m)	Layer	Target	MIN p+a	MIN p	MITD (m)	(yrs)	(yrs)	
ESSF	xv	1	4	Pl(.8) Pa(.6)	Sx(.6) Bl(.6)	I	1000	600	500	2.0	7	20	
ESSF	xv	1	5	Pl(1.0) Pa(.8)	Sx(.8) Bl(.8)	I	1200	700	600	2.0	7	20	
ESSF	xv	1	6	Pl(1.0) Sx(.8)	Bl(.8)	I	1200	700	600	2.0	7	20	
ESSF	xv	1	7	Pl(1.0) Sx(.8) Bl(.8)		I	1200	700	600	2.0	4	20	Balsam (Bl) is limited to a maximum of 50% of preferred and acceptable well spaced trees
ESSF	xv	1	8	Pl(.8) Sx(.6) Bl(.6)		I	600	400	300	1.6	4	20	Balsam (Bl) is limited to a maximum of 50% of preferred and acceptable well spaced trees
ESSF	xv	1	9	Sx(.6) Bl(.6)	Pl(.8)	I	800	500	400	1.6	4	20	
ESSF	xv	2	1	Pl(1.0) Sx(.8)	Pa(.8) Bl(.8)	I	1200	700	600	2.0	7	20	
ESSF	xv	2	2	Pl(.8) Pa(.6)	Bl(.6)	I	800	500	400	1.6	7	20	
ESSF	xv	2	3	Pl(.8)	Pa(.6)	I	600	400	300	2.0	7	20	
ESSF	xv	2	4	Pl(1.0)	Bl(.8) Pa(.8)	I	1200	700	600	2.0	7	20	
ESSF	xv	2	5	Pl(1.0) Sx(.8)	Bl(.8) Pa(.8)	I	1200	700	600	2.0	7	20	
ESSF	xv	2	6	Pl(1.0) Sx(.8)	Bl(.8)	I	1200	700	600	2.0	7	20	
ESSF	xv	2	7	Pl(1.0) Sx(.8)	Bl(.8)	I	1200	700	600	2.0	4	20	
ESSF	xv	2	8	Sx(.6) Bl(.6)	Pl(.8)	I	600	400	300	1.6	4	20	
ESSF	xv	2	9	Sx(.6) Bl(.6)	Pl(.8)	I	600	400	300	1.6	4	20	Balsam (Bl) is limited to a maximum of 50% of preferred and acceptable well spaced trees
ESSF	xv	2	10	Sx(.6) Bl(.6)	Pl(.8)	I	600	400	300	1.6	4	20	Balsam (Bl) is limited to a maximum of 50% of preferred and acceptable well spaced trees
ICH	dk		1	Fd(1.4) Pl(2.0) Sx(1.0)	Bl(1.0) Cw(1.0) Pw(2.0) Lw(2.0)	I	1200	700	600	2.0	4	20	

BGC				Free Growing							Assessments		Additional Standards
Classification				Species		Stocking					Regen Delay	Free Growing	
BGC Zone	Subzone	Variant	Site Series	Preferred (p)	Acceptable (a)	Layer	Target	MIN p+a	MIN p	MITD			
				minimum height (m)	minimum height (m)		Well-spaced/ha			(m)	(yrs)	(yrs)	
ICH	dk		2	Fd(1.0) Pl(1.4)	Cw(.8) Sx(.8)	I	1000	500	400	1.6	7	20	
ICH	dk		3	Fd(1.4) Pl(2.0)	Cw(1.0) Sx(1.0)	I	1200	700	600	2.0	7	20	
ICH	dk		4	Fd(1.4) Pl(2.0) Sx(1.0)	Cw(1.0) Bl(1.0) Pw(2.0) Lw(2.0)	I	1200	700	600	2.0	4	20	
ICH	dk		5	Fd(1.4) Pl(2.0) Sx(1.0)	Cw(1.0) Bl(1.0) Pw(2.0)	I	1200	700	600	2.0	4	20	
ICH	dk		6	Fd(1.4) Pl(2.0) Sx(1.0)	Cw(1.0) Bl(1.0) Pw(2.0)	I	1200	700	600	2.0	4	20	
ICH	dk		7	Fd(1.4) Pl(2.0) Sx(1.0)	Bl(1.0) Pw(2.0)	I	1200	700	600	2.0	4	20	
ICH	dk		8	Fd(1.0) Sx(.8) Bl(.8)	Pl(1.4) Cw(.8) Pw(1.4)	I	1000	500	400	1.6	4	20	
ICH	dk		9	Sx(.8)	Pl(1.4) Bl(.8)	I	1000	500	400	1.6	4	20	
ICH	mk	3	1	Fd(1.4) Pl(2.0) Sx(1.0)	Bl(1.0) Cw(1.0) Lw(2.0) Pw(2.0)	I	1200	700	600	2.0	4	20	
ICH	mk	3	2	Fd(1.0) Pl(1.4)	Sx(.8), Lw(1.4)	I	1000	500	400	2.0	7	20	
ICH	mk	3	3	Fd(1.0) Pl(1.4)	Sx(.8) Cw(.8) Lw(1.4)	I	1000	500	400	2.0	7	20	
ICH	mk	3	4	Fd(1.4) Sx(1.0)	Bl(1.0) Cw(1.0) Pl(2.0) Pw(2.0)	I	1200	700	600	2.0	4	20	
ICH	mk	3	5	Sx(1.0) Pl(2.0)	Bl(1.0) Cw(1.0) Pw(2.0)	I	1200	700	600	2.0	4	20	
ICH	mk	3	6	Fd(1.4) Sx(1.0) Cw(1.0)	Bl(1.0) Pl(2.0) Pw(2.0)	I	1200	700	600	1.6	4	20	
ICH	mk	3	7	Sx(.8) Cw(.8)	Pw(1.4) Bl(.8) Pl(1.4)	I	1000	500	400	1.6	4	20	
ICH	mw	3	1	Fd(1.4) Sx(1.0) Cw(1.0) Pw(2.0)	Pl(2.0) Hw(1.0) Bl(1.0) Lw(2.0)	I	1200	700	600	2.0	4	20	
ICH	mw	3	2	Fd(1.0) Pl(1.4)	Pw(1.4) Py(1.4) Lw(1.4)	I	1000	500	400	1.6	4	20	
ICH	mw	3	3	Fd(1.0) Pl(1.4)	Pw(1.4) Py(1.4) Lw(1.4)	I	1000	500	400	2.0	7	20	
ICH	mw	3	4	Fd(1.4) Pl(2.0) Pw(2.0) Cw(1.0)	Lw(2.0) Sx(1.0)	I	1200	700	600	2.0	7	20	
ICH	mw	3	5	Fd(1.4) Pl(2.0) Pw(2.0) Cw(1.0)	Lw(2.0) Sx(1.0)	I	1200	700	600	2.0	7	20	

BGC				Free Growing							Assessments		Additional Standards
Classification				Species		Stocking					Regen Delay	Free Growing	
BGC Zone	Subzone	Variant	Site Series	Preferred (p) minimum height (m)	Acceptable (a) minimum height (m)	Layer	Target	MIN p+a	MIN p	MITD (m)	(yrs)	(yrs)	
ICH	mw	3	6	Cw(1.0) Hw(1.0) Sx(1.0)	Fd(1.4) Pw(2.0) Bl(1.0) Lw(2.0)	I	1200	700	600	2.0	4	20	Western Hemlock (Hw) is limited to a maximum of 50% of preferred and acceptable well spaced trees
ICH	mw	3	7	Cw(1.0) Hw(1.0) Sx(1.0)	Fd(1.4) Pw(2.0) Bl(1.0) Lw(2.0)	I	1200	700	600	2.0	4	20	Western Hemlock (Hw) is limited to a maximum of 50% of preferred and acceptable well spaced trees
ICH	mw	3	8	Cw(1.0) Hw(1.0) Sx(08)	Bl(.8)	I	1000	500	400	1.6	4	20	

ICH	wk	2	1	Sx(1.0) Pl(2.0) Fd(1.4)	Bl(1.0) Cw(1.0) Hw(1.0) Pw(2.0)	I	1200	700	600	2.0	4	20	
ICH	wk	2	2	Fd(1.0) Pl(1.4)	Bl(.8) Hw(.8)	I	1000	500	400	1.6	7	20	
ICH	wk	2	3	Fd(1.0) Pl(1.4)	Bl(.8) Lw(1.4)	I	1000	500	400	2.0	7	20	
ICH	wk	2	4	Fd(1.4) Pl(2.0)	Hw(1.0) Cw(1.0) Lw(2.0)	I	1200	700	600	2.0	4	20	
ICH	wk	2	5	Pl(2.0) Sx(1.0)	Bl(1.0) Cw(1.0) Pw(2.0)	I	1200	700	600	2.0	4	20	
ICH	wk	2	6	Pl(2.0) Sx(1.0)	Bl(1.0) Hw(1.0) Pw(2.0)	I	1200	700	600	2.0	4	20	
ICH	wk	2	7	Sx(1.0) Fd(1.4) Cw(1.0)	Bl(1.0) Hw(1.0) Pl(1.4)	I	1200	700	600	2.0	4	20	
ICH	wk	2	8	Sx(.8) Cw(.8)	Bl(.8)	I	1000	500	400	1.6	4	20	

ICH	wk	4	1	Sx(1.0) Pl(2.0) Fd(1.4)	Bl(1.0) Cw(1.0) Hw(1.0) Pw(2.0)	I	1200	700	600	2.0	4	20	
ICH	wk	4	2	Fd(1.0) Pl(1.4)	Bl(.8) Hw(.8)	I	1000	500	400	2.0	7	20	
ICH	wk	4	3	Fd(1.0) Pl(1.4)	Hw(1.0) Lw(1.4) Sx(1.0)	I	1000	500	400	2.0	7	20	
ICH	wk	4	4	Fd(1.4) Pl(2.0) Sx(1.0)	Bl(1.0) Hw(1.0)	I	1200	700	600	2.0	4	20	
ICH	wk	4	5	Fd(1.4) Pl(2.0)	Bl(1.0) Hw(1.0) Lw(2.0)	I	1200	700	600	2.0	4	20	
ICH	wk	4	6	Pl(2.0) Sx(1.0)	Bl(1.0) Pw(2.0)	I	1200	700	600	2.0	4	20	
ICH	wk	4	7	Sx(1.0) Fd(1.4) Cw(1.0)	Hw(1.0) Bl(1.0) Pl(2.0) Pw(2.0)	I	1200	700	600	2.0	4	20	
ICH	wk	4	8	Sx(.8) Cw(.8)	Bl(.8) Pl(1.4)	I	1000	500	400	1.6	4	20	

BGC				Free Growing							Assessments		Additional Standards
Classification				Species			Stocking				Regen Delay	Free Growing	
BGC Zone	Subzone	Variant	Site Series	Preferred (p)	Acceptable (a)	Layer	Target	MIN p+a	MIN p	MITD	Regen Delay (yrs)	Free Growing (yrs)	
				minimum height (m)	minimum height (m)		Well-spaced/ha			(m)			
IDF	dk	1	1	Fd(.8) Pl(1.0)	Sx(.6) Py(.6) Lw(1.0)	1	1000	500	400	2.0	7	20	
IDF	dk	1	1	Fd(.4)	Sx(.6) Pl(1.0) Py(.6) Lw(1.0)	4	1000	500	400	2.0	7	20	
IDF	dk	1	1	Fd	Sx Pl Py Lw	3	800	400	300	2.0	7	20	
IDF	dk	1	1	Fd	Sx Pl Py Lw	2	600	300	250	2.0	7	20	
IDF	dk	1	1	Fd	Sx Pl Py Lw	1	400	200	200	0.0	7	20	
IDF	dk	1	2	Fd(.8) Py(.6)	Pl(1.0)	1	600	400	300	2.0	7	20	
IDF	dk	1	2	Fd(.4)	Pl(1.0) Py(.6)	4	600	400	400	2.0	7	20	
IDF	dk	1	2	Fd	Pl Py	3	500	300	300	2.0	7	20	
IDF	dk	1	2	Fd	Pl Py	2	400	200	200	2.0	7	20	
IDF	dk	1	2	Fd	Pl Py	1	300	150	150	0.0	7	20	
IDF	dk	1	3	Fd(.8) PL(1.0)	Py(.6)	1	600	400	300	2.0	7	20	
IDF	dk	1	3	Fd(.4)	Pl(1.0) Py(.6)	4	600	400	400	2.0	7	20	
IDF	dk	1	3	Fd	Pl Py	3	500	300	300	2.0	7	20	
IDF	dk	1	3	Fd	Pl Py	2	400	200	200	2.0	7	20	
IDF	dk	1	3	Fd	Pl Py	1	300	150	150	0.0	7	20	
IDF	dk	1	4	Fd(.8) Pl(1.0)	Sx(.6) Py(.6) Lw(1.0)	1	1000	500	400	2.0	7	20	
IDF	dk	1	4	Fd(.4)	Sx(.6) Pl(1.0) Py(.6) Lw(1.0)	4	1000	500	400	2.0	7	20	
IDF	dk	1	4	Fd	Sx Pl Py Lw	3	800	400	300	2.0	7	20	
IDF	dk	1	4	Fd	Sx Pl Py Lw	2	600	300	250	2.0	7	20	
IDF	dk	1	4	Fd	Sx Pl Py Lw	1	400	200	200	0.0	7	20	
IDF	dk	1	5	Fd(.8) Sx(.6)	Lw(1.0) Pl(1.0) Bl(.6)	1	1000	500	400	2.0	7	20	
IDF	dk	1	5	Fd(.4) Sx(0.6)	Pl(1.0) Lw(1.0) Bl(.6)	4	1000	500	400	2.0	7	20	
IDF	dk	1	5	Fd Sx	Pl Lw Bl	3	800	400	300	2.0	7	20	
IDF	dk	1	5	Fd Sx	Pl Lw Bl	2	600	300	250	2.0	7	20	
IDF	dk	1	5	Fd Sx	Pl Lw Bl	1	400	200	200	0.0	7	20	
IDF	dk	1	6	Pl(1.0) Sx(.6)	Bl(.6)	1	1000	500	400	2.0	4	20	
IDF	dk	3	1	Fd(1.0) Pl(1.4)	Sx(.8) Py(1.0) Lw(2.0)	1	1200	700	600	2.0	7	20	

BGC				Free Growing							Assessments		Additional Standards	
Classification				Species			Stocking				Regen Delay	Free Growing		
BGC Zone	Subzone	Variant	Site Series	Preferred (p)	Acceptable (a)		Layer	Target	MIN p+a	MIN p				MITD
				minimum height (m)	minimum height (m)			Well-spaced/ha			(m)	(yrs)		(yrs)
IDF	dk	3	1	Fd(.4)	Sx(.8) Pl(1.0) Py(1.0)		4	1200	700	600	2.0	7	20	
IDF	dk	3	1	Fd	Sx Pl Py		3	1000	500	400	2.0	7	20	
IDF	dk	3	1	Fd	Sx Pl Py		2	800	400	300	2.0	7	20	
IDF	dk	3	1	Fd	Sx Pl Py		1	600	300	250	0.0	7	20	
IDF	dk	3	2	Fd(.8) Pl(1.0)	Py(.8)		1	800	500	400	2.0	7	20	
IDF	dk	3	2	Fd(.4)	Pl(1.0) Py(.8)		4	800	400	400	2.0	7	20	
IDF	dk	3	2	Fd	Pl Py		3	600	300	300	2.0	7	20	
IDF	dk	3	2	Fd	Pl Py		2	400	200	200	2.0	7	20	
IDF	dk	3	2	Fd	Pl Py		1	300	150	150	0.0	7	20	
IDF	dk	3	3	Fd(.8) Pl(1.0)	Py(.8)		1	800	500	400	2.0	7	20	
IDF	dk	3	3	Fd(.4)	Pl(1.0) Py(.8)		4	800	400	400	2.0	7	20	
IDF	dk	3	3	Fd	Pl Py		3	600	300	300	2.0	7	20	
IDF	dk	3	3	Fd	Pl Py		2	400	200	200	2.0	7	20	
IDF	dk	3	3	Fd	Pl Py		1	300	150	150	0.0	7	20	
IDF	dk	3	4	Fd(.8) Pl(1.0)	Py(1.0)		1	1000	500	400	2.0	7	20	
IDF	dk	3	4	Fd(.4)	Pl(1.0) Py(1.0)		4	1000	500	400	2.0	7	20	
IDF	dk	3	4	Fd	Pl Py		3	800	400	300	2.0	7	20	
IDF	dk	3	4	Fd	Pl Py		2	600	300	250	2.0	7	20	
IDF	dk	3	4	Fd	Pl Py		1	400	200	200	0.0	7	20	
IDF	dk	3	5	Fd(1.0) Pl(1.4)	Py(.8)		1	1200	700	600	2.0	7	20	
IDF	dk	3	5	Fd(.4)	Pl(1.4) Py(.8)		4	1200	700	600	2.0	7	20	
IDF	dk	3	5	Fd	Pl Py		3	1000	500	400	2.0	7	20	
IDF	dk	3	5	Fd	Pl Py		2	800	400	300	2.0	7	20	
IDF	dk	3	5	Fd	Pl Py		1	600	300	250	0.0	7	20	
IDF	dk	3	6	Fd(1.0) Pl(1.4)	Py(.8)		1	1200	700	600	2.0	7	20	
IDF	dk	3	6	Fd(.4)	Pl(1.4) Py(.8)		4	1200	700	600	2.0	7	20	
IDF	dk	3	6	Fd	Pl Py		3	1000	500	400	2.0	7	20	
IDF	dk	3	6	Fd	Pl Py		2	800	400	300	2.0	7	20	
IDF	dk	3	6	Fd	Pl Py		1	600	300	250	0.0	7	20	
IDF	dk	3	7	Fd(1.0) Pl(1.4) Sx(.8)			1	1200	700	600	2.0	4	20	

BGC				Free Growing							Assessments		Additional Standards
Classification				Species		Stocking					Regen Delay	Free Growing	
BGC Zone	Subzone	Variant	Site Series	Preferred (p) minimum height (m)	Acceptable (a) minimum height (m)	Layer	Target	MIN p+a	MIN p	MITD (m)			
IDF	dk	3	7	Fd(.4) Sx(.8)	PI(1.4)	4	1200	700	600	2.0	7	20	
IDF	dk	3	7	Fd Sx	PI	3	1000	500	400	2.0	7	20	
IDF	dk	3	7	Fd Sx	PI	2	800	400	300	2.0	7	20	
IDF	dk	3	7	Fd Sx	PI	1	600	300	250	0.0	7	20	
IDF	dk	3	8	Fd(1.0) PI(1.4) Sx(.8)		1	1200	700	600	2.0	4	20	
IDF	dk	3	8	Fd(.4) Sx(.8)	PI(1.4)	4	1200	700	600	2.0	7	20	
IDF	dk	3	8	Fd Sx	PI	3	1000	500	400	2.0	7	20	
IDF	dk	3	8	Fd Sx	PI	2	800	400	300	2.0	7	20	
IDF	dk	3	8	Fd Sx	PI	1	600	300	250	0.0	7	20	
IDF	dk	3	9	Sx(.6)	PI(1.0)	1	1000	500	400	1.6	4	20	

IDF	dk	4	1	Fd(1.0) PI(1.0)	Sx(.8) Py (1.0) Lw(1.0)	1	1200	700	600	2.0	7	20	
IDF	dk	4	1	Fd(.4)	PI(1.0) Sx(.8) Py(1.0)	4	1200	700	600	2.0	7	20	
IDF	dk	4	1	Fd	PI Sx Py	3	1000	500	400	2.0	7	20	
IDF	dk	4	1	Fd	PI Sx Py	2	800	400	300	2.0	7	20	
IDF	dk	4	1	Fd	PI Sx Py	1	600	300	250	0.0	7	20	
IDF	dk	4	2	Fd(.8) PI(1.0)	Py(1.0)	1	800	500	400	2.0	7	20	
IDF	dk	4	2	Fd(.4)	PI(1.0) Py(1.0)	4	800	400	400	2.0	7	20	
IDF	dk	4	2	Fd	PI Py	3	600	300	300	2.0	7	20	
IDF	dk	4	2	Fd	PI Py	2	400	200	200	2.0	7	20	
IDF	dk	4	2	Fd	PI Py	1	300	150	150	0.0	7	20	
IDF	dk	4	3	Fd(.8)	Py(1.0)	1	800	500	400	2.0	7	20	
IDF	dk	4	3	Fd(.4)	Py(1.0)	4	800	400	400	2.0	7	20	
IDF	dk	4	3	Fd	Py	3	600	300	300	2.0	7	20	
IDF	dk	4	3	Fd	Py	2	400	200	200	2.0	7	20	
IDF	dk	4	3	Fd	Py	1	300	150	150	0.0	7	20	
IDF	dk	4	4	Fd(.8) PI(1.0)	Py(1.0)	1	1000	500	400	2.0	7	20	
IDF	dk	4	4	Fd(.4)	PI(1.0) Py(1.0)	4	1000	500	400	2.0	7	20	
IDF	dk	4	4	Fd	PI Py	3	800	400	300	2.0	7	20	
IDF	dk	4	4	Fd	PI Py	2	600	300	200	2.0	7	20	

BGC				Free Growing							Assessments		Additional Standards
Classification				Species		Stocking					Regen Delay	Free Growing	
BGC Zone	Subzone	Variant	Site Series	Preferred (p)	Acceptable (a)	Layer	Target	MIN p+a	MIN p	MITD			
				minimum height (m)	minimum height (m)		Well-spaced/ha			(m)	(yrs)	(yrs)	
IDF	dk	4	4	Fd	PI Py	1	400	200	200	0.0	7	20	
IDF	dk	4	5	Fd(1.0) PI(1.0)	Py(1.0)	1	1200	700	600	2.0	7	20	
IDF	dk	4	5	Fd(.4)	PI(1.0) Py(1.0)	4	1200	700	600	2.0	7	20	
IDF	dk	4	5	Fd	PI Py	3	1000	500	400	2.0	7	20	
IDF	dk	4	5	Fd	PI Py	2	800	400	300	2.0	7	20	
IDF	dk	4	5	Fd	PI Py	1	600	300	250	0.0	7	20	
IDF	dk	4	6	PI(1.0)	Sx(.6) Py(1.0)	1	1000	500	400	2.0	7	20	
IDF	dk	4	7	Fd(1.0) PI(1.0)		1	1200	700	600	2.0	7	20	
IDF	dk	4	7	Fd(.4)	PI(1.0)	4	1200	700	600	2.0	7	20	
IDF	dk	4	7	Fd	PI	3	1000	500	400	2.0	7	20	
IDF	dk	4	7	Fd	PI	2	800	400	300	2.0	7	20	
IDF	dk	4	7	Fd	PI	1	600	300	250	0.0	7	20	
IDF	dk	4	8	PI(1.4) Sx(.6)		1	1000	500	400	2.0	4	20	
IDF	dk	4	9	PI(1.4) Fd(1.0) Sx(.8)		1	1200	700	600	2.0	4	20	
IDF	dk	4	9	Fd(.4) Sx(.8)	PI(1.0)	4	1200	700	600	2.0	7	20	
IDF	dk	4	9	Fd Sx	PI	3	1000	500	400	2.0	7	20	
IDF	dk	4	9	Fd Sx	PI	2	800	400	300	2.0	7	20	
IDF	dk	4	9	Fd Sx	PI	1	600	300	250	0.0	7	20	
IDF	dk	4	10	Sx(.6)	PI(1.0)	1	1000	500	400	1.6	4	20	
IDF	mw	2	1	Fd(1.0) Cw(.8) Pw(1.6)	Sx(.8) PI(1.6) Lw(1.6)	1	1200	700	600	2.0	4	20	
IDF	mw	2	2	Fd(.8) PI(1.2)	Py(1.2) Pw(1.2)	1	600	400	300	1.6	4	20	
IDF	mw	2	3	Fd(1.0)	Lw(1.6) Pw(1.6) Py(1.6) PI(1.6)	1	1000	500	400	1.6	7	20	
IDF	mw	2	4	Fd(1.0) Sx(.8) Cw(0.8)	Pw(1.6) Lw(1.6) Hw (1.6)	1	1200	700	600	2.0	4	20	
IDF	mw	2	5	Cw (.6) Sx(.6) Hw(.6)	Bl(.6)	1	400	200	150	1.6	4	20	
IDF	xm		1a	Fd(.8)	Py(.8)	1	1200	700	600	2.0	7	20	
IDF	xm		1a	Fd(.4)	Py(.8)	4	1200	700	600	2.0	7	20	
IDF	xm		1a	Fd	Py	3	1000	500	400	2.0	7	20	

BGC				Free Growing							Assessments		Additional Standards
Classification				Species		Stocking					Regen Delay	Free Growing	
BGC Zone	Subzone	Variant	Site Series	Preferred (p)	Acceptable (a)	Layer	Target	MIN p+a	MIN p	MITD	Regen Delay (yrs)	Free Growing (yrs)	
				minimum height (m)	minimum height (m)		Well-spaced/ha			(m)			
IDF	xm		1a	Fd	Py	2	800	400	300	2.0	7	20	
IDF	xm		1a	Fd	Py	1	600	300	250	0.0	7	20	
IDF	xm		1b	Fd(.8) Pl(.8)	Py(.8)	1	1200	700	600	2.0	7	20	
IDF	xm		1b	Fd(.4)	Pl(.8) Py(.8)	4	1200	700	600	2.0	7	20	
IDF	xm		1b	Fd	Pl Py	3	1000	500	400	2.0	7	20	
IDF	xm		1b	Fd	Pl Py	2	800	400	300	2.0	7	20	
IDF	xm		1b	Fd	Pl Py	1	600	300	250	0.0	7	20	
IDF	xm		2	Fd(.6)	Py(.8)	1	1000	500	400	2.0	7	20	
IDF	xm		2	Fd(.4)		4	1000	500	400	2.0	7	20	
IDF	xm		2	Fd		3	800	400	300	2.0	7	20	
IDF	xm		2	Fd		2	600	300	250	2.0	7	20	
IDF	xm		2	Fd		1	400	200	200	0.0	7	20	
IDF	xm		3	Fd(.6) Pl(.8)	Py(.8)	1	1000	500	400	2.0	7	20	
IDF	xm		3	Fd(.4)	Pl(.8)	4	1000	500	400	2.0	7	20	
IDF	xm		3	Fd	Pl	3	800	400	300	2.0	7	20	
IDF	xm		3	Fd	Pl	2	600	300	250	2.0	7	20	
IDF	xm		3	Fd	Pl	1	400	200	200	0.0	7	20	
IDF	xm		4	Fd(.6)	Py(.8)	1	1000	500	400	2.0	7	20	
IDF	xm		4	Fd(.4)		4	1000	500	400	2.0	7	20	
IDF	xm		4	Fd		3	800	400	300	2.0	7	20	
IDF	xm		4	Fd		2	600	300	250	2.0	7	20	
IDF	xm		4	Fd		1	400	200	200	0.0	7	20	
IDF	xm		5	Fd(.8)	Py(.8)	1	1200	700	600	2.0	7	20	
IDF	xm		5	Fd(.4)		4	1200	700	600	2.0	7	20	
IDF	xm		5	Fd		3	1000	500	400	2.0	7	20	
IDF	xm		5	Fd		2	800	400	300	2.0	7	20	
IDF	xm		5	Fd		1	600	300	250	0.0	7	20	
IDF	xm		6	Fd(.8)	Pl(1.0) Py(1.0) Lw(1.0)	1	1200	700	600	2.0	7	20	
IDF	xm		6	Fd(.8)		4	1200	700	600	2.0	7	20	
IDF	xm		6	Fd		3	1000	500	400	2.0	7	20	

BGC				Free Growing							Assessments		Additional Standards
Classification				Species		Stocking					Regen Delay	Free Growing	
BGC Zone	Subzone	Variant	Site Series	Preferred (p)	Acceptable (a)	Layer	Target	MIN p+a	MIN p	MITD	Regen Delay (yrs)	Free Growing (yrs)	
				minimum height (m)	minimum height (m)		Well-spaced/ha			(m)			
IDF	xm		6	Fd		2	800	400	300	2.0	7	20	
IDF	xm		6	Fd		1	600	300	250	0.0	7	20	
IDF	xm		7	Fd(.8)	PI(1.0)	1	1200	700	600	2.0	7	20	
IDF	xm		7	Fd(.4)		4	1200	700	600	2.0	7	20	
IDF	xm		7	Fd		3	1000	500	400	2.0	7	20	
IDF	xm		7	Fd		2	800	400	300	2.0	7	20	
IDF	xm		7	Fd		1	600	300	250	0.0	7	20	
IDF	xm		8	Fd(.8) Sx(.8)	PI(.8)	1	1200	700	600	1.6	4	20	
IDF	xm		8	Fd(.4) Sx(.8)	PI(.8)	4	1200	700	600	1.6	7	20	
IDF	xm		8	Fd Sx	PI	3	1000	500	400	1.6	7	20	
IDF	xm		8	Fd Sx	PI	2	800	400	300	1.6	7	20	
IDF	xm		8	Fd Sx	PI	1	600	300	250	0.0	7	20	
IDF	xm		9	Sx(.6) PI(.8)		1	1000	500	400	1.6	4	20	

IDF	xw		1	Fd(.8) Py(.8)		1	1200	700	600	2.0	7	20	
IDF	xw		1	Fd(.4)	Py(0.8)	4	1200	700	600	2.0	7	20	
IDF	xw		1	Fd	Py	3	1000	500	400	2.0	7	20	
IDF	xw		1	Fd	Py	2	800	400	300	2.0	7	20	
IDF	xw		1	Fd	Py	1	600	300	250	0.0	7	20	
IDF	xw		2	Fd(.6) Py(.6)		1	600	400	300	2.0	7	20	
IDF	xw		2	Fd(.4)	Py(0.8)	4	600	400	400	2.0	7	20	
IDF	xw		2	Fd	Py	3	500	300	300	2.0	7	20	
IDF	xw		2	Fd	Py	2	400	200	200	2.0	7	20	
IDF	xw		2	Fd	Py	1	300	150	150	0.0	7	20	
IDF	xw		3	Fd(.6) Py(.6)		1	600	400	300	2.0	7	20	
IDF	xw		3	Fd(.4)	Py(0.8)	4	600	400	400	2.0	7	20	
IDF	xw		3	Fd	Py	3	500	300	300	2.0	7	20	
IDF	xw		3	Fd	Py	2	400	200	200	2.0	7	20	
IDF	xw		3	Fd	Py	1	300	150	150	0.0	7	20	
IDF	xw		4	Fd(.6) Py(.6)		1	800	500	400	2.0	7	20	

BGC				Free Growing							Assessments		Additional Standards
Classification				Species		Stocking					Regen Delay	Free Growing	
BGC Zone	Subzone	Variant	Site Series	Preferred (p)	Acceptable (a)	Layer	Target	MIN p+a	MIN p	MITD			
				minimum height (m)	minimum height (m)		Well-spaced/ha			(m)			
IDF	xw		4	Fd(.4)	Py(1.0)	4	800	400	400	2.0	7	20	
IDF	xw		4	Fd	Py	3	600	300	300	2.0	7	20	
IDF	xw		4	Fd	Py	2	400	200	200	2.0	7	20	
IDF	xw		4	Fd	Py	1	300	150	150	0.0	7	20	
IDF	xw		5	Fd(.8)		1	1200	700	600	2.0	7	20	
IDF	xw		5	Fd(.4)		4	1200	700	600	2.0	7	20	
IDF	xw		5	Fd		3	1000	500	400	2.0	7	20	
IDF	xw		5	Fd		2	800	400	300	2.0	7	20	
IDF	xw		5	Fd		1	600	300	250	0.0	7	20	
IDF	xw		6	Fd(.6) Sx(.6)		1	1200	700	600	2.0	4	20	
IDF	xw		6	Fd(.4) Sx(0.6)		4	1200	700	600	2.0	7	20	
IDF	xw		6	Fd Sx		3	1000	500	400	2.0	7	20	
IDF	xw		6	Fd Sx		2	800	400	300	2.0	7	20	
IDF	xw		6	Fd Sx		1	600	300	250	0.0	7	20	
IDF	xw		7	Fd(.6) Sx(.6)		1	1000	500	400	1.6	4	20	
IDF	xw		7	Fd(.4) Sx(0.6)		4	1000	500	400	2.0	7	20	
IDF	xw		7	Fd Sx		3	800	400	300	2.0	7	20	
IDF	xw		7	Fd Sx		2	600	300	250	2.0	7	20	
IDF	xw		7	Fd Sx		1	400	200	200	0.0	7	20	

MS	dc	2	1	Pl(1.0) Sx(.8)	Fd(.8) Bl(.8)	1	1200	700	600	2.0	7	20	
MS	dc	2	2	Fd(.6) Pl(.8)	Bl(.6) Pa(.6)	1	1000	500	400	1.6	7	20	
MS	dc	2	3	Fd(.6) Pl(.8)	Bl(.6) Pa(.6)	1	1000	500	400	2.0	7	20	
MS	dc	2	4	Pl(1.0) Sx(.8)	Bl(.8)	1	1200	700	600	2.0	7	20	
MS	dc	2	5	Pl(1.0) Sx(.8)	Bl(.8)	1	1200	700	600	2.0	7	20	
MS	dc	2	6	Pl(1.0) Sx(.8)	Bl(.8)	1	1200	700	600	2.0	4	20	
MS	dc	2	7	Sx(.8) Bl(.8)	Pl(1.0)	1	1200	700	600	2.0	4	20	
MS	dc	2	8	Sx(.6)	Bl(.6) Pl(.8)	1	1000	500	400	1.6	4	20	

MS	dv		1	Pl(1.0) Sx(.8)	Bl(.8)	1	1200	700	600	2.0	7	20	
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BGC				Free Growing							Assessments		Additional Standards
Classification				Species		Stocking					Regen Delay	Free Growing	
BGC Zone	Subzone	Variant	Site Series	Preferred (p)	Acceptable (a)	Layer	Target	MIN p+a	MIN p	MITD	Regen Delay (yrs)	Free Growing (yrs)	
				minimum height (m)	minimum height (m)		Well-spaced/ha			(m)			
MS	dv		2	Pl(.8)		I	1000	500	400	2.0	7	20	
MS	dv		3	Pl(1.0)	Sx(.8) Bl(.8)	I	1200	700	600	2.0	7	20	
MS	dv		4	Pl(1.0)	Sx(.8) Bl(.8)	I	1200	700	600	2.0	7	20	
MS	dv		5	Pl(1.0)	Sx(.8) Bl(.8)	I	1200	700	600	2.0	7	20	
MS	dv		6	Pl(1.0) Sx(.8)	Bl(.8)	I	1200	700	600	2.0	7	20	
MS	dv		7	Pl(1.0) Sx(.8)	Bl(.8)	I	1200	700	600	2.0	7	20	
MS	dv		8	Sx(.6) Pl(.8)	Bl(.6)	I	1000	500	400	1.6	4	20	
MS	dv		9	Sx(.6)	Pl(.8) Bl(.6)	I	1000	500	400	1.6	4	20	
MS	xk		1	Fd(.8) Pl(1.4) Sx(.8)	Bl(.8) Lw(1.4)	I	1200	700	600	2.0	7	20	
MS	xk		1	Fd(.8) Pl(1.4) Sx(.8)	Bl(.8) Lw(1.4)	4	1200	700	600	2.0	7	20	
MS	xk		1	Fd Pl Sx	Bl Lw	3	1000	500	400	2.0	7	20	
MS	xk		1	Fd Pl Sx	Bl Lw	2	800	400	300	2.0	7	20	
MS	xk		1	Fd Pl Sx	Bl Lw	1	600	300	250	0.0	7	20	
MS	xk		2	Fd(.6) Pl(1.0)	Sx(.6) Bl(.6)	I	1000	500	400	1.6	7	20	
MS	xk		2	Fd(.6) Pl(1.0)	Sx(.6) Bl(.6)	4	1000	500	400	2.0	7	20	
MS	xk		2	Fd Pl	Sx Bl	3	800	400	300	2.0	7	20	
MS	xk		2	Fd Pl	Sx Bl	2	600	300	250	2.0	7	20	
MS	xk		2	Fd Pl	Sx Bl	1	400	200	200	0.0	7	20	
MS	xk		5a	Fd(.6) Pl(1.0)	Py(1.0) Lw(1.0)	I	1000	500	400	2.0	7	20	
MS	xk		5a	Fd(.6) Pl(1.0)	Py(1.0) Lw(1.0)	4	1000	500	400	2.0	7	20	
MS	xk		5a	Fd Pl	Py Lw	3	800	400	300	2.0	7	20	
MS	xk		5a	Fd Pl	Py Lw	2	600	300	250	2.0	7	20	
MS	xk		5a	Fd Pl	Py Lw	1	400	200	200	0.0	7	20	
MS	xk		5b	Pl(1.0)	Sx(.6) Lw(1.0) Fd(.6)	I	1000	500	400	2.0	7	20	
MS	xk		6	Pl(1.4) Sx(.8) Bl(.8)	Fd(.8)	I	1200	700	600	2.0	7	20	Balsam (Bl) is limited to a maximum of 50% of preferred and acceptable well spaced trees
MS	xk		8	Pl(1.4) Sx(.8)	Bl(.8)	I	1200	700	600	2.0	4	20	

BGC				Free Growing							Assessments		Additional Standards
Classification				Species		Stocking					Regen Delay	Free Growing	
BGC Zone	Subzone	Variant	Site Series	Preferred (p)	Acceptable (a)	Layer	Target	MIN p+a	MIN p	MITD			
				minimum height (m)	minimum height (m)		Well-spaced/ha			(m)	(yrs)	(yrs)	
MS	xk		9	Sx(.6)	Bl(.6) PL(1.0)	I	1000	500	400	1.6	4	20	
MS	xv		1	Pl(1.0) Sx(.8)	Bl(.8)	I	1200	700	600	2.0	7	20	
MS	xv		2	Pl(.8)		I	1000	500	400	2.0	7	20	
MS	xv		3	Pl(.8)		I	1000	500	400	2.0	7	20	
MS	xv		4	Pl(1.0) Sx(.8)	Bl(.8)	I	1200	700	600	2.0	7	20	
MS	xv		5	Pl(1.0) Sx(.8)	Bl(.8)	I	1200	700	600	2.0	7	20	
MS	xv		6	Pl(1.0) Sx(.8)	Bl(.8)	I	1200	700	600	2.0	7	20	
MS	xv		7	Pl(.8) Sx(.6)	Bl(.6)	I	1000	500	400	2.0	4	20	
MS	xv		8	Sx(.6)	Pl(.8) Bl(.6)	I	1000	500	400	1.6	4	20	
MS	xv		9	Sx(.6)	Bl(.6) Pl(.8)	I	400	200	150	1.6	4	20	
SBPS	dc		1	Pl(1.4) Sx(.8)	Fd(.8) SB(.8) Lw(1.4)	I	1200	700	600	2.0	7	20	
SBPS	dc		2	Pl(1.0)	Fd(.8)	I	1000	400	300	2.0	7	20	
SBPS	dc		3	Pl(1.4)	SB(.8) Sx(.8) Fd(.8) Lw(1.4)	I	1200	700	600	2.0	7	20	
SBPS	dc		4	Pl(1.4) Sx(.8)	SB(.8)	I	1200	700	600	2.0	7	20	
SBPS	dc		5	Pl(1.0) Sx(.6)	SB(.6)	I	1000	500	400	2.0	4	20	
SBPS	dc		6	Pl(1.0) Sx(.6)	SB(.6)	I	1000	500	400	1.6	4	20	
SBPS	dc		7	Pl(1.0) Sx(.6)	SB(.6)	I	400	200	150	1.6	4	20	
SBPS	dc		8	Sx(.6)	Pl(1.0) SB(.6)	I	1000	500	400	1.6	4	20	
SBPS	mc		1	Pl(1.6)	Sx(.8) SB(.8)	I	1200	700	600	2.0	7	20	
SBPS	mc		2	Pl(1.2)	Sx(.6) SB(.6)	I	1000	500	400	2.0	7	20	
SBPS	mc		3	Pl(1.6)	Sx(.8) SB(.8)	I	1200	700	600	2.0	7	20	
SBPS	mc		4	Pl(1.2) Sx(.6)	SB(.6)	I	1000	500	400	1.6	4	20	
SBPS	mc		5	Sx(.6)	Pl(1.2) SB(.6)	I	1000	500	400	2.0	4	20	
SBPS	mc		6	Pl(1.2) Sx(.6)	Sb(.6)	I	1000	500	400	1.6	4	20	
SBPS	mc		7	Pl(1.2) Sx(.6)	Sb(.6)	I	400	200	150	1.6	4	20	

BGC				Free Growing							Assessments		Additional Standards
Classification				Species		Stocking				Regen Delay	Free Growing		
BGC Zone	Subzone	Variant	Site Series	Preferred (p)	Acceptable (a)	Layer	Target	MIN p+a	MIN p			MITD	
				minimum height (m)	minimum height (m)		Well-spaced/ha			(m)	(yrs)	(yrs)	
SBPS	mk		1	Fd(1.0) Pl(1.6) Sx(.8)	Lw(1.6)	I	1200	700	600	2.0	7	20	
SBPS	mk		2	Fd(.8) Pl(1.2)	Sx(.6) Py(1.2)	I	1000	500	400	2.0	7	20	
SBPS	mk		3	Fd(1.0) Pl(1.6)		I	1200	700	600	2.0	7	20	
SBPS	mk		4	Fd(1.0) Pl(1.6) Sx(.8)	Lw(1.6)	I	1200	700	600	2.0	7	20	
SBPS	mk		5	Fd(1.0) Pl(1.6) Sx(.8)	Lw(1.6)	I	1200	700	600	2.0	7	20	
SBPS	mk		6	Pl(1.6) Sx(.8)		I	1200	700	600	2.0	4	20	
SBPS	mk		7	Sx(.6)	Bl(.6) Pl(1.2)	I	1000	500	400	1.6	4	20	
SBPS	mk		8	Pl(1.2) Sx(.6)	Sb(.6)	I	400	200	150	1.6	4	20	
SBPS	xc		1	Pl(1.0)	Fd(.6) Sx(.6) Lw(1.4)	I	1200	700	600	2.0	7	20	
SBPS	xc		2a	Fd(.6) Pl(1.0)		I	1000	500	400	1.6	7	20	
SBPS	xc		2b	Pl(1.0)		i	1000	500	400	1.6	7	20	
SBPS	xc		2c	Pl(1.0) Fd(0.6)		I	1000	500	400	1.6	7	20	
SBPS	xc		3	Pl(1.0) Sx(.6)		I	1000	500	400	2.0	4	20	
SBPS	xc		4	Pl(1.0) Sx(.8)	Lw(1.4)	I	1200	700	600	2.0	4	20	
SBPS	xc		5	Pl(1.0) Sx(.6)		I	1000	500	400	1.6	4	20	
SBPS	xc		6	Pl(1.0) Sx(.6)		I	1000	500	400	1.6	4	20	
SBS	dk		1	Pl(2.0) Sx(1.0) Fd(1.4)		I	1200	700	600	2.0	7	20	
SBS	dk		2	Pl(1.4) Sx(.8)		I	1000	500	400	1.6	7	20	
SBS	dk		3	Pl(2.0) Sx(1.0)	Sb(1.0)	I	1200	700	600	2.0	7	20	
SBS	dk		4	Fd(1.4) Pl(2.0) Sx(1.0)		I	1200	700	600	2.0	7	20	
SBS	dk		5	Pl(2.0) Sx(1.0) Fd(1.4)		I	1200	700	600	2.0	7	20	
SBS	dk		6	Pl(2.0) Sx(1.0) Fd(1.4)		I	1200	700	600	2.0	4	20	
SBS	dk		7	Sx(.8) Pl(1.4)		I	1000	500	400	2.0	4	20	
SBS	dk		8	Sx(1.0) Pl(2.0)		I	1200	700	600	2.0	4	20	
SBS	dk		9	Pl(1.4) SB(1.0)		I	400	200	150	1.6	4	20	
SBS	dk		10	Pl(1.4) Sx(.8) SB(.8)		I	400	200	150	1.6	4	20	
SBS	dw	1	1	Fd(1.4) Pl(2.0) Sx(1.0)	Lw(2.0) Bl(1.0)	I	1200	700	600	2.0	7	20	

BGC				Free Growing							Assessments		Additional Standards
Classification				Species		Stocking					Regen Delay	Free Growing	
BGC Zone	Subzone	Variant	Site Series	Preferred (p)	Acceptable (a)	Layer	Target	MIN p+a	MIN p	MITD			
				minimum height (m)	minimum height (m)		Well-spaced/ha			(m)	(yrs)	(yrs)	
SBS	dw	1	2	Fd(1.0) PI(1.4)	Lw(1.4)	I	1000	500	400	2.0	7	20	
SBS	dw	1	3	Fd(1.4) PI(2.0)	Lw(1.4)	I	1200	700	600	2.0	7	20	
SBS	dw	1	4	Fd(1.4) PI(2.0) Sx(1.0)		I	1200	700	600	2.0	7	20	
SBS	dw	1	5	Fd(1.4) PI(2.0) Sx(1.0)	Lw(1.4)	I	1200	700	600	2.0	7	20	
SBS	dw	1	6	Fd(1.4) PI(2.0) Sx(1.0)		I	1200	700	600	2.0	7	20	
SBS	dw	1	7	Fd(1.4) PI(2.0) Sx(1.0)	Bl(1.0)	I	1200	700	600	2.0	4	20	
SBS	dw	1	8	Fd(1.4) PI(2.0) Sx(1.0)	Bl(1.0)	I	1200	700	600	2.0	4	20	
SBS	dw	1	9	Sx(.8)	Bl(.8) PI(1.4)	I	1000	500	400	1.6	4	20	

SBS	dw	2	1	Fd(1.4) PI(2.0) Sx(1.0)	Lw(2.0)	I	1200	700	600	2.0	7	20	
SBS	dw	2	1	Fd(1.0) PI(2.0) Sx(1.0)		4	1200	700	600	2.0	7	20	
SBS	dw	2	1	Fd PI Sx		3	1000	500	400	2.0	7	20	
SBS	dw	2	1	Fd PI Sx		2	800	400	300	2.0	7	20	
SBS	dw	2	1	Fd PI Sx		1	600	300	250	0.0	7	20	
SBS	dw	2	2	Fd(1.0) PI(1.4)	Lw(1.4)	I	1000	500	400	2.0	7	20	
SBS	dw	2	2	Fd(1.0) PI(4)		4	1000	500	400	2.0	7	20	
SBS	dw	2	2	Fd PI		3	800	400	300	2.0	7	20	
SBS	dw	2	2	Fd PI		2	600	300	250	2.0	7	20	
SBS	dw	2	2	Fd PI		1	400	200	200	0.0	7	20	
SBS	dw	2	3	Fd(1.4) PI(2.0)		I	1200	700	600	2.0	7	20	
SBS	dw	2	3	Fd(1.0) PI(2.0)		4	1200	700	600	2.0	7	20	
SBS	dw	2	3	Fd PI		3	1000	500	400	2.0	7	20	
SBS	dw	2	3	Fd PI		2	800	400	300	2.0	7	20	
SBS	dw	2	3	Fd PI		1	600	300	250	0.0	7	20	
SBS	dw	2	4	Fd(1.4) PI(2.0)	Lw(2.0)	I	1200	700	600	2.0	7	20	
SBS	dw	2	4	Fd(1.0) PI(2.0)		4	1200	700	600	2.0	7	20	
SBS	dw	2	4	Fd PI		3	1000	500	400	2.0	7	20	
SBS	dw	2	4	Fd PI		2	800	400	300	2.0	7	20	
SBS	dw	2	4	Fd PI		1	600	300	250	0.0	7	20	
SBS	dw	2	5	Fd(1.4) PI(2.0) Sx(1.0)	Lw(2.0)	I	1200	700	600	2.0	7	20	

BGC				Free Growing							Assessments		Additional Standards
Classification				Species		Stocking					Regen Delay	Free Growing	
BGC Zone	Subzone	Variant	Site Series	Preferred (p) minimum height (m)	Acceptable (a) minimum height (m)	Layer	Target	MIN p+a	MIN p	MITD (m)			
SBS	dw	2	5	Fd(1.0) PI(2.0) Sx(1.0)		4	1200	700	600	2.0	7	20	
SBS	dw	2	5	Fd PI Sx		3	1000	500	400	2.0	7	20	
SBS	dw	2	5	Fd PI Sx		2	800	400	300	2.0	7	20	
SBS	dw	2	5	Fd PI Sx		1	600	300	250	0.0	7	20	
SBS	dw	2	6	Fd(1.4) PI(2.0) Sx(1.0)	Lw(2.0)	I	1200	700	600	2.0	7	20	
SBS	dw	2	6	Fd(1.0) PI(2.0) Sx(1.0)		4	1200	700	600	2.0	7	20	
SBS	dw	2	6	Fd PI Sx		3	1000	500	400	2.0	7	20	
SBS	dw	2	6	Fd PI Sx		2	800	400	300	2.0	7	20	
SBS	dw	2	6	Fd PI Sx		1	600	300	250	0.0	7	20	
SBS	dw	2	7	PI(2.0) Sx(1.0)	Bl(1.0)	I	1200	700	600	2.0	7	20	
SBS	dw	2	8	Fd(1.4) PI(2.0) Sx(1.0)	Bl(1.0)	I	1200	700	600	2.0	4	20	
SBS	dw	2	9	Fd(1.4) PI(2.0) Sx(1.0)	Bl(1.0)	I	1200	700	600	2.0	4	20	
SBS	dw	2	10	Sx(.8)	Bl(.8) PI(1.4)	I	1000	500	400	1.6	4	20	
SBS	dw	2	11	PI(1.4) Sx(.8)		I	400	200	150	1.6	4	20	
SBS	mc	1	1	Fd(1.0) PI(1.6) Sx(.8)	Bl(.8) Lw(1.6)	I	1200	700	600	2.0	7	20	
SBS	mc	1	2	PI(1.4)	Sx(.6) Bl(.6) Lw(1.4)	I	1000	500	400	2.0	7	20	
SBS	mc	1	3	Fd(1.0) PI(1.4)	Sx(.8) Lw(1.4)	I	1200	700	600	2.0	7	20	
SBS	mc	1	4	PI(1.6) Sx(.8)	Bl(.8)	I	1200	700	600	2.0	7	20	
SBS	mc	1	5	PI(1.6) Sx(.8)	Bl(.8)	I	1200	700	600	2.0	7	20	
SBS	mc	1	6	Fd(1.0) PI(1.6) Sx(.8)	Bl(.8)	I	1200	700	600	2.0	4	20	
SBS	mc	1	7	Fd(1.0) PI(1.6) Sx(.8)	Bl(.8)	I	1200	700	600	2.0	4	20	
SBS	mc	1	8	Sx(.6)	PI(1.2) Bl(.6)	I	1000	500	400	1.6	4	20	
SBS	mc	2	1	PI(1.6) Sx(.8)	Bl(.8)	I	1200	700	600	2.0	7	20	
SBS	mc	2	2	PI(1.2)	Sx(.6) Bl(.6)	I	1000	500	400	1.6	7	20	
SBS	mc	2	3	PI(1.6) Sx(.8)	Bl(.8) SB (.6)	I	1200	700	600	2.0	7	20	
SBS	mc	2	4	PI(1.6) Sx(.8)	Bl(.8)	I	1200	700	600	2.0	4	20	
SBS	mc	2	5	PI(1.6) Sx(.8)	Bl(.8)	I	1200	700	600	2.0	4	20	
SBS	mc	2	6	PI(1.6) Sx(.8)	Bl(.8)	I	1200	700	600	2.0	4	20	

BGC				Free Growing							Assessments		Additional Standards
Classification				Species		Stocking					Regen Delay	Free Growing	
BGC Zone	Subzone	Variant	Site Series	Preferred (p)	Acceptable (a)	Layer	Target	MIN p+a	MIN p	MITD	Regen Delay (yrs)	Free Growing (yrs)	
				minimum height (m)	minimum height (m)		Well-spaced/ha			(m)			
SBS	mc	2	7	Pl(1.2) Sx(.6)	Bl(.6) SB (.6)	I	1000	500	400	1.6	4	20	
SBS	mc	2	8	Pl(1.6) Sx(.8)	Bl(.8)	I	1200	700	600	2.0	4	20	
SBS	mc	2	9	Pl(1.6) Sx(.8)	Bl(.8)	I	1200	700	600	2.0	4	20	
SBS	mc	2	10	Pl(1.2) Sx(.6)	Bl(.6)	I	1000	500	400	1.6	4	20	
SBS	mc	2	11	Sx(.6)	Pl(1.2) Bl(.6)	I	1000	500	400	1.6	4	20	
SBS	mc	2	12	Pl(1.2) Sx(.6)	Bl(.6)	I	400	200	150	1.6	4	20	
SBS	mc	3	1	Pl(1.6) Sx(.8)	Bl(.8) Fd(0.8) Lw(0.8)	I	1200	700	600	2.0	7	20	
SBS	mc	3	2	Pl(1.6)	Sx(.8)	I	1200	700	600	2.0	7	20	
SBS	mc	3	3	Pl(1.6)	Sx(.8)	I	1200	700	600	2.0	7	20	
SBS	mc	3	4	Pl(1.6) Sx(.8)	Bl(.8) Sb(.8)	I	1200	700	600	2.0	7	20	
SBS	mc	3	5	Pl(1.6)	Sx(.8) Sb(.8)	I	1200	700	600	2.0	7	20	
SBS	mc	3	6	Pl(1.6)	Sx(.8) Sb(.8)	I	1200	700	600	2.0	7	20	
SBS	mc	3	7	Pl(1.6) Sx(.8)	Bl(.8)	I	1200	700	600	2.0	4	20	
SBS	mc	3	8	Pl(1.2) Sx(.6)	Bl(.6)	I	1000	500	400	1.6	4	20	
SBS	mc	3	9	Pl(1.2) Sx(.6)	Bl(.8) Sb(.8)	I	400	200	150	1.6	4	20	
SBS	mh		1	Fd(1.4) Sx(1.0)	Bl(1.0) Lw(2.0)	I	1200	700	600	2.0	7	20	
SBS	mh		2	Fd(1.0) Pl(1.4)	Lw(1.4)	I	1000	500	400	2.0	7	20	
SBS	mh		3	Fd(1.4) Pl(2.0) Sx(1.0)	Bl(1.0)	I	1200	700	600	2.0	7	20	
SBS	mh		4	Fd(1.4)	Bl(1.0) Sx(1.0) Lw(1.4)	I	1200	700	600	2.0	7	20	
SBS	mh		5	Fd(1.4) Sx(1.0)	Bl(1.0) Lw(2.0)	I	1200	700	600	2.0	7	20	
SBS	mh		6	Fd(1.4) Pl(2.0) Sx(1.0)	Bl(1.0)	I	1200	700	600	2.0	7	20	
SBS	mh		7	Fd(1.4) Sx(1.0)	Bl(1.0)	I	1200	700	600	2.0	4	20	
SBS	mh		8	Fd(1.4) Sx(1.0)	Bl(1.0)	I	1200	700	600	2.0	4	20	
SBS	mh		9	Sx(.8)	Bl(0.8)	I	1000	500	400	1.6	4	20	

BGC				Free Growing							Assessments		Additional Standards
Classification				Species		Stocking					Regen Delay	Free Growing	
BGC Zone	Subzone	Variant	Site Series	Preferred (p) minimum height (m)	Acceptable (a) minimum height (m)	Layer	Target	MIN p+a	MIN p	MITD (m)	(yrs)	(yrs)	
SBS	mm		1	Pl(2.0) Sx(1.0) Bl(1.0)	Fd(1.4)	I	1200	700	600	2.0	7	20	Balsam (Bl) is limited to a maximum of 50% of preferred and acceptable well spaced trees
SBS	mm		2	Pl(1.4)	Sx(.8) Bl(.8) Fd(1.0)	I	1000	500	400	1.6	7	20	
SBS	mm		3	Pl(1.4) Sx(.8)	Bl(.8) Fd(1.0)	I	1000	500	400	2.0	7	20	
SBS	mm		4	Pl(1.4) Sx(.8)	Fd(1.0) Bl(.8)	I	1000	500	400	2.0	7	20	
SBS	mm		5	Fd(1.4) Pl(2.0) Sx(1.0)	Bl(1.0)	I	1200	700	600	2.0	7	20	
SBS	mm		6	Pl(2.0) Sx(1.0) Bl(1.0)	Fd(1.4)	I	1200	700	600	2.0	7	20	Balsam (Bl) is limited to a maximum of 50% of preferred and acceptable well spaced trees
SBS	mm		7	Sx(1.0) Bl(1.0)	Fd(1.4) Pl(2.0) Cw(1.0)	I	1200	700	600	2.0	4	20	Balsam (Bl) is limited to a maximum of 50% of preferred and acceptable well spaced trees
SBS	mm		8	Sx(.8) Bl(.8)	Pl(1.4)	I	1000	500	400	1.6	4	20	
SBS	mw		1	Fd(1.4) Pl(2.0) Sx(1.0)	Bl(1.0) Lw(2.0)	I	1200	700	600	2.0	7	20	
SBS	mw		2	Fd(1.0) Pl(1.4)	Sx(.8) Bl(.8)	I	1000	500	400	1.6	7	20	
SBS	mw		3	Fd(1.4) Pl(2.0)	Sx(1.0) Lw(2.0)	I	1200	700	600	2.0	7	20	
SBS	mw		4	Fd(1.4) Pl(2.0) Sx(1.0)	Bl(1.0) Lw(2.0)	I	1200	700	600	2.0	7	20	
SBS	mw		5	Pl(2.0) Sx(1.0)	Bl(1.0)	I	1200	700	600	2.0	4	20	
SBS	mw		6	Fd(1.4) Pl(2.0) Sx(1.0)	Bl(1.0)	I	1200	700	600	2.0	4	20	
SBS	mw		7	Pl(2.0) Sx(1.0)	Bl(1.0)	I	1200	700	600	2.0	4	20	
SBS	mw		8	Fd(1.4) Sx(1.0)	Bl(1.0) Pl(2.0)	I	1200	700	600	1.6	4	20	
SBS	mw		9	Sx(.8)	Bl(.8) Pl(1.4)	I	1000	500	400	1.6	4	20	
SBS	mw		10	Pl(1.4) Sx(.8)	Sb(.8)	I	400	200	150	1.6	4	20	
SBS	mw		11	Pl(2.0) Sx(.8)	Bl(.8)	I	1200	700	600	2.0	4	20	
SBS	mw		12	Pl(1.4) Sx(.8)		I	1000	500	400	1.6	4	20	
SBS	mw		13	Sx(.8)	Bl(.8)	I	1000	500	400	1.6	4	20	

BGC				Free Growing							Assessments		Additional Standards
Classification				Species		Stocking					Regen Delay	Free Growing	
BGC Zone	Subzone	Variant	Site Series	Preferred (p) minimum height (m)	Acceptable (a) minimum height (m)	Layer	Target	MIN p+a	MIN p	MITD (m)	(yrs)	(yrs)	
SBS	wk	1	1	Fd(1.4) Pl(2.0) Sx(1.0)	Bl(1.0)	I	1200	700	600	2.0	7	20	
SBS	wk	1	2	Pl(1.4) Fd(1.0)	Bl(.8) Sx(.8)	I	1000	500	400	2.0	7	20	
SBS	wk	1	3	Pl(2.0) Fd(1.4)	Sx(1.0)	I	1200	700	600	2.0	7	20	
SBS	wk	1	4	Fd(1.4) Pl(2.0) Sx(1.0)	Bl(1.0)	I	1200	700	600	2.0	7	20	
SBS	wk	1	5	Pl(2.0) Sx(1.0)	Fd(1.4) Bl(1.0)	I	1200	700	600	2.0	7	20	
SBS	wk	1	6	Pl(2.0) Sx(1.0)	Bl(1.0)	I	1200	700	600	2.0	4	20	
SBS	wk	1	7	Pl(2.0) Sx(1.0)	Bl(1.0)	I	1200	700	600	2.0	4	20	
SBS	wk	1	8	Pl(2.0) Sx(1.0)	Bl(1.0)	I	1200	700	600	2.0	4	20	
SBS	wk	1	9	Sx(.8)	Pl(1.4) Bl(.8)	I	1000	500	400	1.6	4	20	
SBS	wk	1	10	Pl(1.4) Sx(.8)		I	400	200	150	1.6	4	20	
SBS	wk	1	11	Pl(1.4) Sx(.8)		I	400	200	150	1.6	4	20	

Cariboo Region Enhanced Stocking Standards (July 24, 2018)

BGC		Free Growing						Assessments				Additional Standard	
Classification		Species		Stocking				Regen Delay	Free Growing	Min. Height		Minimum Planting Density	Other
Zone/Subzone	Site Series	Preferred	Acceptable	Target	MIN pa	MIN p	MITD			Species	Ht		
		(p)	(a)	(well-spaced/ha)			(m)	(yrs)	(yrs)		(m)		
ESSFwc3													
Enhanced	01	BI Sx	PI	1200	700	600	2.0	4	20	PI Others	1.6 0.8	1800	Species other than pine must make up greater than 50% of the planted seedlings
ESSFwk1													
Enhanced	01	BI Sx	PI	1200	700	600	2.0	4	20	PI Others	2.0 1.0	1800	Species other than pine must make up greater than 50% of the planted seedlings
Enhanced	03	SX BI	PI Lw	1200	700	600	2.0	4	20	PI Lw Others	2.0 2.0 1.0	1800	Species other than pine must make up greater than 50% of the planted seedlings
Enhanced	04	BI Sx	PI	1200	700	600	2.0	4	20	PI Others	2.0 1.0	1800	Species other than pine must make up greater than 50% of the planted seedlings
Enhanced	05	BI Sx	PI	1200	700	600	2.0	4	20	PI Others	2.0 1.0	1800	Species other than pine must make up greater than 50% of the planted seedlings
ICHmk3													
Enhanced	01	Fd Sx	PI BI Cw Lw Pw	1200	700	600	2.0	4	20	PI Fd Lw Pw Others	2.0 1.4 2.0 2.0 1.0	1600	Species other than pine must make up greater than 50% of the planted seedlings
Enhanced	04	Fd Sx	PI BI Cw Pw	1200	700	600	2.0	4	20	PI Fd Pw Others	2.0 1.4 2.0 1.0	1600	Species other than pine must make up greater than 50% of the planted seedlings
Enhanced	05	Sx	PI Cw BI Pw	1200	700	600	2.0	4	20	PI Pw Others	2.0 2.0 1.0	1600	Species other than pine must make up greater than 50% of the planted seedlings
Enhanced	06	Fd Sx Cw	BI PI	1200	700	600	2.0	4	20	PI Fd Lw Others	2.0 1.4 2.0 1.0	1600	Species other than pine must make up greater than 50% of the planted seedlings

BGC		Free Growing						Assessments				Additional Standard	
Classification		Species		Stocking				Regen Delay	Free Growing	Min. Height		Minimum Planting Density	Other
Zone/Subzone	Site Series	Preferred	Acceptable	Target	MIN pa	MIN p	MITD			Species	Ht		
		(p)	(a)	(well-spaced/ha)			(m)	(yrs)	(yrs)		(m)		
ICHwk2													
Enhanced	01	Fd Sx	PI BI Cw Hw Pw	1200	700	600	2.0	4	20	PI 2.0 Fd 1.4 Pw 2.0 Lw 2.0 Others 1.0	1600	Species other than pine must make up greater than 50% of the planted seedlings	
Enhanced	04	Fd	PI Hw Lw	1200	700	600	2.0	4	20	PI 2.0 Fd 1.4 Lw 2.0 Hw 1.0	1600	Species other than pine must make up greater than 50% of the planted seedlings	
Enhanced	05	Sx	BI Cw PI Pw	1200	700	600	2.0	4	20	PI 2.0 Pw 2.0 Others 1.0	1600	Species other than pine must make up greater than 50% of the planted seedlings	
Enhanced	06	Sx	BI PI Pw	1200	700	600	2.0	4	20	PI 2.0 Pw 2.0 Others 1.0	1600	Species other than pine must make up greater than 50% of the planted seedlings	
Enhanced	07	Sx Fd Cw	BI Hw PI	1200	700	600	2.0	4	20	Fdi 1.4 Pli 1.4 Others 1.0	1600	Species other than pine must make up greater than 50% of the planted seedlings	
ICH wk4													
Enhanced	01	Fd Sx	PI BI Cw Hw Pw	1200	700	600	2.0	4	20	PI 2.0 Fd 1.4 Pw 2.0 Others 1.0	1600	Species other than pine must make up greater than 50% of the planted seedlings	
Enhanced	04	Fdi Sx	PI BI Hw	1200	700	600	2.0	4	20	PI 2.0 Fd 1.4 Others 1.0	1600	Species other than pine must make up greater than 50% of the planted seedlings	
Enhanced	05	Fd	PI Hw Lw	1200	700	600	2.0	4	20	PI 2.0 Fd 1.0 Lw 2.0 Hw 1.0	1600	Species other than pine must make up greater than 50% of the planted seedlings	
Enhanced	06	Sx	BI PI Pw	1200	700	600	2.0	4	20	PI 2.0 Pw 2.0 Others 1.0	1600	Species other than pine must make up greater than 50% of the planted seedlings	

BGC		Free Growing						Assessments				Additional Standard	
Classification		Species		Stocking				Regen Delay	Free Growing	Min. Height		Minimum Planting Density	Other
Zone/Subzone	Site Series	Preferred (p)	Acceptable (a)	Target	MIN pa	MIN p	MITD			Species	Ht		
				(well-spaced/ha)			(m)	(yrs)	(yrs)		(m)		
Enhanced	07	Sx Fdi Cw	Hw BI PI Pw	1200	700	600	2.0	4	20	PI 2.0 Pw 2.0 Fd 1.4 Others 1.0	1600	Species other than pine must make up greater than 50% of the planted seedlings	
SBPSmk													
Enhanced	01	Fd PI Sx	Lw	1200	700	600	2.0	4	20	PI 1.6 Fd 1.0 Lw 1.6 Sx 0.8	1800		
Enhanced	03	Fd PI		1200	700	600	2.0	4	20	Fd 1.0 PI 1.6	1800		
Enhanced	04	Fd Pli Sx	Lw	1200	700	600	2.0	4	20	Fd 1.0 PI 1.6 Lw 1.6 Sx 0.8	1800		
Enhanced	05	Fd Pli Sx	Lw	1200	700	600	2.0	4	20	Fd 1.0 PI 1.6 Lw 1.6 Sx 0.8	1800		
Enhanced	06	PI Sx		1200	700	600	2.0	4	20	PI 1.6 Sx 0.8	1800		
SBSdw1													
Enhanced Pine	01	Fd PI Sx	BI Lw	1200	700	600	2.0	4	20	PI 2.0 Lw 2.0 Fd 1.4 Others 1.0	1800		
Enhanced Diverse	01	Fd Sx	BI PI Lw	1200	700	600	2.0	4	20	PI 2.0 Lw 2.0 Fd 1.4 Others 1.0	1600	Species other than pine must make up greater than 50% of the planted seedlings	
Enhanced Pine	04	Fd Pli Sx		1200	700	600	2.0	4	20	Fd 1.4 PI 2.0 Sx 1.0	1800		

BGC		Free Growing						Assessments				Additional Standard	
Classification		Species		Stocking				Regen Delay	Free Growing	Min. Height		Minimum Planting Density	Other
Zone/Subzone	Site Series	Preferred	Acceptable	Target	MIN pa	MIN p	MITD			Species	Ht		
		(p)	(a)	(well-spaced/ha)			(m)	(yrs)	(yrs)		(m)		
Enhanced Diverse	04	Fd Sx	PI	1200	700	600	2.0	4	20	Fd 1.4 PI 2.0 Sx 1.0	1600	Species other than pine must make up greater than 50% of the planted seedlings	
Enhanced Pine	05	Fd Pli Sx	Lw	1200	700	600	2.0	4	20	Fd 1.4 PI 2.0 Lw 1.4 Sx 1.0	1800		
Enhanced Diverse	05	Fd Sx	PI Lw	1200	700	600	2.0	4	20	Fd 1.4 PI 2.0 Lw 1.4 Sx 1.0	1600	Species other than pine must make up greater than 50% of the planted seedlings	
Enhanced	06	Fd Sx	BI PI	1200	700	600	2.0	4	20	PI 2.0 Fd 1.4 Others 1.0	1600	Species other than pine must make up greater than 50% of the planted seedlings	
Enhanced	07	Fd Sx	BI PI	1200	700	600	2.0	4	20	PI 2.0 Fd 1.4 Others 1.0	1600	Species other than pine must make up greater than 50% of the planted seedlings	
Enhanced	08	Fd Sx	BI PI	1200	700	600	2.0	4	20	PI 2.0 Fd 1.4 Others 1.0	1600	Species other than pine must make up greater than 50% of the planted seedlings	
SBSdw2													
Enhanced Pine	01	Fd PI Sx	Lw	1200	700	600	2.0	4	20	PI 2.0 Fd 1.4 Lw 2.0 Sx 1.0	1800		
Enhanced Diverse	01	Fd Sx	PI Lw	1200	700	600	2.0	4	20	PI 2.0 Fd 1.4 Lw 2.0 Sx 1.0	1600	Species other than pine must make up greater than 50% of the planted seedlings	
Enhanced	04	Fd PI	Lw	1200	700	600	2.0	4	20	Fd 1.4 PI 2.0 Lw 2.0	1800		
Enhanced Pine	05	Fd PI Sx	Lw	1200	700	600	2.0	4	20	PI 2.0 Fd 1.4 Lw 2.0 Sx 1.0	1800		

BGC		Free Growing						Assessments				Additional Standard		
Classification		Species		Stocking				Regen Delay	Free Growing	Min. Height		Minimum Planting Density	Other	
Zone/Subzone	Site Series	Preferred (p)	Acceptable (a)	Target	MIN pa	MIN p	MITD			Species	Ht			
				(well-spaced/ha)				(m)	(yrs)	(yrs)		(m)		
Enhanced Diverse	05	Fd Sx	PI Lw	1200	700	600	2.0	4	20	PI Fd Lw Sx	2.0 1.4 2.0 1.0	1600	Species other than pine must make up greater than 50% of the planted seedlings	
Enhanced Pine	06	Fd PI Sx	Lw	1200	700	600	2.0	4	20	PI Fd Lw Sx	2.0 1.4 2.0 1.0	1800		
Enhanced Diverse	06	Fd Sx	PI Lw	1200	700	600	2.0	4	20	PI Fd Lw Sx	2.0 1.4 2.0 1.0	1600	Species other than pine must make up greater than 50% of the planted seedlings	
Enhanced Pine	08	Fd PI Sx	BI	1200	700	600	2.0	4	20	PI Fd Others	2.0 1.4 1.0	1800		
Enhanced Diverse	08	Fd Sx	PI BI	1200	700	600	2.0	4	20	PI Fd Others	2.0 1.4 1.0	1600	Species other than pine must make up greater than 50% of the planted seedlings	
SBSmc1														
Enhanced	01	PI Fd Sx	BI Lw	1200	700	600	2.0	4	20	PI Fd Lw Others	1.6 1.0 1.6 0.8	1800		
Enhanced	03	Fd PI	Sx Lw	1200	700	600	2.0	4	20	Fd PI Lw Sx	1.0 1.4 1.4 0.8	1800		
Enhanced	04	PI Sx	BI	1200	700	600	2.0	4	20	PI Others	1.6 0.8	1800		
Enhanced	05	PI Sx	BI	1200	700	600	2.0	4	20	PI Others	1.6 0.8	1800		
Enhanced	06	PI Fd Sx	BI	1200	700	600	2.0	4	20	PI Fd Others	1.6 1.0 0.8	1800		
Enhanced	07	PI Fd Sx	BI	1200	700	600	2.0	4	20	PI Fd Others	1.6 1.0 0.8	1800		

BGC		Free Growing						Assessments				Additional Standard	
Classification		Species		Stocking				Regen Delay	Free Growing	Min. Height		Minimum Planting Density	Other
Zone/Subzone	Site Series	Preferred	Acceptable	Target	MIN pa	MIN p	MITD			Species	Ht		
		(p)	(a)	(well-spaced/ha)			(m)	(yrs)	(yrs)		(m)		
SBSmw													
Enhanced Diverse	01	Fd Sx	BI PI Lw	1200	700	600	2.0	4	20	PI 2.0 Lw 2.0 Fd 1.4 Others 1.0	1600	Species other than pine must make up greater than 50% of the planted seedlings	
Enhanced Pine	01	Fd PI Sx	BI Lw	1200	700	600	2.0	4	20	PI 2.0 Fd 1.4 Lw 2.0 Others 1.0	1800		
Enhanced	03	Fd PI	Sx Lw	1200	700	600	2.0	4	20	Fd 1.4 PI 2.0 Lw 2.0 Sx 1.0	1800		
Enhanced Diverse	04	Fd Sx	BI PI Lw	1200	700	600	2.0	4	20	PI 2.0 Lw 2.0 Fd 1.4 Others 1.0	1600	Species other than pine must make up greater than 50% of the planted seedlings	
Enhanced Pine	04	Fd PI Sx	BI Lw	1200	700	600	2.0	4	20	PI 2.0 Fd 1.4 Lw 2.0 Others 1.0	1800		
Enhanced	05	PI Sx	BI	1200	700	600	2.0	4	20	PI 2.0 Others 1.0	1800		
Enhanced Diverse	06	Fd Sx	BI PI	1200	700	600	2.0	4	20	PI 2.0 Fd 1.4 Others 1.0	1600	Species other than pine must make up greater than 50% of the planted seedlings	
Enhanced Pine	06	Fd PI Sx	BI	1200	700	600	2.0	4	20	PI 2.0 Fd 1.4 Others 1.0	1800		
Enhanced	07	PI Sx	BI	1200	700	600	2.0	4	20	PI 2.0 Others 1.0	1800		
Enhanced	08	Fd Sx	BI PI	1200	700	600	2.0	4	20	Fd 1.4 PI 2.0 Others 1.0	1600	Species other than pine must make up greater than 50% of the planted seedlings	

BGC		Free Growing						Assessments				Additional Standard	
Classification		Species		Stocking				Regen Delay	Free Growing	Min. Height		Minimum Planting Density	Other
Zone/Subzone	Site Series	Preferred (p)	Acceptable (a)	Target	MIN pa	MIN p	MITD (m)			Species	Ht (m)		
Enhanced Pine	11	PI Sx	BI Fd Lw	1200	700	600	2.0	4	20	PI 2.0 Fd 1.4 Lw 2.0 Others 0.8	1800		
SBSwk1													
Enhanced Pine	01	Fd PI Sx	BI	1200	700	600	2.0	4	20	PI 2.0 Fd 1.4 Others 1.0	1800		
Enhanced Diverse	01	Fd Sx	BI PI	1200	700	600	2.0	4	20	PI 2.0 Fd 1.4 Others 1.0	1600	Species other than pine must make up greater than 50% of the planted seedlings	
Enhanced Pine	04	Fd PI Sx	BI	1200	700	600	2.0	4	20	PI 2.0 Fd 1.4 Others 1.0	1800		
Enhanced Diverse	04	Fd Sx	BI PI	1200	700	600	2.0	4	20	PI 2.0 Fd 1.4 Others 1.0	1600	Species other than pine must make up greater than 50% of the planted seedlings	
Enhanced	05	PI Sx	BI Fd	1200	700	600	2.0	4	20	PI 2.0 Fd 1.4 Others 1.0	1800		
Enhanced	06	PI Sx	BI	1200	700	600	2.0	4	20	PI 2.0 Others 1.0	1800		
Enhanced	07	PI Sx	BI	1200	700	600	2.0	4	20	PI 2.0 Others 1.0	1800		
Enhanced	08	PI Sx	BI	1200	700	600	2.0	4	20	PI 2.0 Others 1.0	1800		

Cariboo Region Enhanced Stocking Standards for Wildfire Impacted Stands in the IDF Biogeoclimatic Zone (July 24, 2018)

BGC				Free Growing			Assessments				Additional Standards	
Classification		Species		Stocking		MITD	Regen	Free	Min. Height		Minimum Planting Density/ha	
Zone/ Subzone	Site Series	Preferred (p)	Acceptable (a)	Target (well-spaced/ha)	MIN pa (m)	MIN p (m)	Delay (yrs)	Growing (yrs)	Species	Ht (m)		
IDFdk3												
	1 slope	Fdi, Pl	Py, Sx,Lw	1200	700	600	2.0	4	20	Fdi 1.0 Py 1.0 Pli 1.4 Lw 1.4 Sx 0.8	1700	Applies to site with slopes greater than 10%. At time of regen delay declaration there must be 1000 well spaced Fdi crop trees/ha. Lw is not an acceptable species in MDWR.
	1 flat	Fdi, Pl	Py, Sx,Lw	1200	700	600	2.0	4	20	Fdi 0.8 Py 1.0 Pli 1.4 Lw 1.4 Sx 0.6	1700	Applies to site with slopes 10% or less. At time of regen delay declaration there must be 200 well spaced Fdi crop trees/ha. Lw is not an acceptable species in MDWR.
	2	Fdi, Pli	Py	800	500	400	2.0	4	20	Fdi 0.8 Py 0.8 Pli 1.0	1700	At time of regen delay declaration there must be 200 well spaced Fdi crop trees/ha
	3	Fdi, Pli	Py	800	500	400	2.0	4	20	Fdi 0.8 Py 0.8 Pli 1.0	1700	At time of regen delay declaration there must be 200 well spaced Fdi crop trees/ha
	4	Fdi, Pli	Py	1000	500	400	2.0	4	20	Fdi 0.8 Py 1.0 Pli 1.0	1700	At time of regen delay declaration there must be 1000 well spaced Fdi crop trees/ha
	5	Fdi, Pli	Py	1200	700	600	2.0	4	20	Fdi 1.0 Pli 1.4 Py 0.8	1700	At time of regen delay declaration there must be 1000 well spaced Fdi crop trees/ha
	6	Fdi, Pli	Py	1200	700	600	2.0	4	20	Fdi 1.0 Pli 1.4 Py 0.8	1700	At time of regen delay declaration there must be 1000 well spaced Fdi crop trees/ha
	7	Fdi, Pli, Sx		1200	700	700	2.0	4	20	Fdi 1.0 Pli 1.4 Sx 0.8	1700	At time of regen delay declaration there must be 1000 well spaced Fdi crop trees/ha
	8	Fdi, Pli, Sx		1200	700	700	2.0	4	20	Fdi 1.0 Pli 1.4 Sx 0.8	1700	At time of regen delay declaration there must be 200 well spaced Fdi crop trees/ha

BGC				Free Growing			Assessments				Additional Standards		
Classification		Species		Stocking			MITD	Regen	Free	Min. Height		Minimum Planting Density/ha	
Zone/ Subzone	Site Series	Preferred (p)	Acceptable (a)	Target (well-spaced/ha)	MIN pa	MIN p		Delay (yrs)	Growing (yrs)	Species	Ht (m)		
IDFdk4													
	1	Fdi, Pl	Py, Sx,Lw	1200	700	600	2.0	4	20	Fdi Pli Py Lw Sx	1.0 1.0 1.0 1.0 0.8	1700	At time of regen delay declaration there must be 200 well spaced Fdi crop trees/ha. Lw is not an acceptable species in MDWR.
	2	Fdi, Pli	Py	800	500	400	2.0	4	20	Fdi Pli Py	0.8 1.0 1.0	1700	At time of regen delay declaration there must be 200 well spaced Fdi crop trees/ha
	3	Fdi	Py	800	500	400	2.0	4	20	Fdi Py	0.8 1.0	1700	At time of regen delay declaration there must be 200 well spaced Fdi crop trees/ha
	4	Fdi, Pli	Py	800	500	400	2.0	4	20	Fdi Pli Py	0.8 1.0 1.0	1700	At time of regen delay declaration there must be 200 well spaced Fdi crop trees/ha
	5	Fdi, Pli	Py	1200	700	600	2.0	4	20	Fdi Pli Py	1.0 1.0 1.0	1700	At time of regen delay declaration there must be 1000 well spaced Fdi crop trees/ha
	7	Fdi, Pli		1200	700	600	2.0	4	20	Fdi Pli	1.0 1.0	1700	at time of regen delay declaration there must be 1000 well spaced Fdi crop trees/ha
	9	Fdi, Pli, Sx		1200	700	700	2.0	4	20	Fdi Pli Sx	1.0 1.4 0.8	1700	At time of regen delay declaration there must be 200 well spaced Fdi crop trees/ha
IDFxm													
	1a Typic Phase	Fdi	Py, Pli	1200	700	600	2.0	4	20	Fdi Py	0.8 0.8	1700	Applies to site with slopes greater than 10%. At time of regen delay declaration there must be 1000 well spaced Fdi crop trees/ha
	1b Cold Phase	Fdi, Pli	Py	1200	700	600	2.0	4	20	Fdi Pli Py	0.8 0.8 0.8	1700	Applies to site with slopes 10% or less. At time of regen delay declaration there must be 200 well spaced Fdi crop trees/ha
	2	Fdi	Py	1000	500	400	2.0	4	20	Fdi Py	0.6 0.8	1700	At time of regen delay declaration there must be 200 well spaced Fdi crop trees/ha.
	3	Fdi, Pli	Py	1000	500	400	2.0	4	20	Fdi Pli Py	0.6 0.8 0.8	1700	At time of regen delay declaration there must be 200 well spaced Fdi crop trees/ha
	4	Fdi	Py, Pli	1000	500	400	2.0	4	20	Fdi Py Pli	0.6 0.8 0.8	1700	At time of regen delay declaration there must be 200 well spaced Fdi crop trees/ha. Pine suitable as a nurse crop only.
	5	Fdi	Py, Pli	1200	700	600	2.0	4	20	Fdi Py Pli	0.8 0.8 0.8	1700	At time of regen delay declaration there must be 1000 well spaced Fdi crop trees/ha. Pine is suitable as a nurse crop only.

BGC				Free Growing			Assessments				Additional Standards		
Classification		Species		Stocking			MITD	Regen	Free	Min. Height		Minimum Planting Density/ha	
Zone/ Subzone	Site Series	Preferred (p)	Acceptable (a)	Target (well-spaced/ha)	MIN pa	MIN p		Delay (yrs)	Growing (yrs)	Species	Ht (m)		
	6	Fdi	Pli, Py, Lw	1200	700	600	2.0	4	20	Fdi Pli Py Lw	0.8 1.0 1.0 1.0	1700	At time of regen delay declaration there must be 1000 well spaced Fdi crop trees/ha. Lw is not an acceptable species in MDWR. Pli suitable as a nurse crop only.
	7	Fdi	Pli	1200	700	600	2.0	4	20	Fdi Pli	0.8 1.0	1700	At time of regen delay declaration there must be 1000 well spaced Fdi crop trees/ha. Pine is suitable as a nurse crop only.
	8	Fdi, Sx	Pli	1200	700	600	1.6	4	20	Fdi Pli Sx	0.8 0.8 0.8	1700	At time of regen delay declaration there must be 200 well spaced Fdi crop trees/ha.
IDFdK1													
	1	Fdi, Pli,	Sx, Py, Lw	1000	500	400	2.0	4	20	Fdi Pli Lw Other	0.8 1.0 1.0 0.6	1700	At time of regen delay declaration there must be 1000 well spaced Fdi crop trees/ha. Lw is not an acceptable species in MDWR.
	2	Fdi, Py	Pli	600	400	300	2.0	4	20	Fdi Pli Py	0.8 1.0 0.6	1200	At time of regen delay declaration there must be 200 well spaced Fdi crop trees/ha.
	3	Fdi, Pli	Py	600	400	300	2.0	4	20	Fdi Pli Py	0.8 1.0 0.6	1200	At time of regen delay declaration there must be 200 well spaced Fdi crop trees/ha.
	4	Fdi, Pli	Py, Sx, Lw	1000	500	400	2.0	4	20	Fdi Py Pli Lw Sx	0.8 0.6 1.0 1.0 0.6	1700	At time of regen delay declaration there must be 1000 well spaced Fdi crop trees/ha. Lw is not an acceptable species in MDWR.
	5	Fdi, Sx	Pli, Lw, Bl	1000	500	400	2.0	4	20	Fdi Ba Pli Lw Sx	0.8 0.6 1.0 1.0 0.6	1700	At time of regen delay declaration there must be 1000 well spaced Fdi crop trees/ha. Lw is not an acceptable species in MDWR.



File: 18000-03 Stocking Standards

July 26, 2018

Re: Cariboo Region Stocking Standards (2018)

Dear Licensee

Updated stocking standards for the Cariboo Region have been developed over the past two years by stewardship staff from the three natural resource districts in the Cariboo and representation from the local licensees, including BC Timber Sales.

The updated regional stocking standards were developed to address the following objectives:

- Establishment of consistent reforestation standards which will be available to all licensees in the Cariboo Region to adopt.
- Streamline the stocking standard development, review and approval process to the benefit of all tenure holders and the ministry.
- Update the previously approved standards to increase diversity at the stand level through the inclusion of more ecologically suitable species.

The significant changes from previous standards to the new regional standards include:

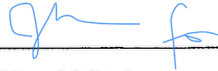
- Lodgepole pine is no longer a preferred species when managing uneven-aged stands in the Interior Douglas-fir (IDF) biogeoclimatic (BEC) zones.
- White pine, yellow pine, (aka ponderosa pine) and western larch are included where they are ecologically suitable in light of the science that is developing around the impacts of climate change and to increase diversity.
- The standards are written in a format that is both measurable and verifiable.
- Enhanced standards have been developed to allow for increased planting densities on specifically identified highly productive sites, and Douglas-fir sites in the IDF which were heavily impacted by the 2017 wildfires.
- The standards have been made consistent for BEC subzones that straddle the Cariboo and the Thompson Okanagan Regional Boundaries.

The regional stocking standards will be reviewed periodically. Where it is determined that a revision to the standards is required (e.g., based on new scientific evidence or to address and unanticipated situation and circumstance), the standards will be amended in consultation with Ministry Staff and tenure holders who have adopted the stocking standard into their FSP's.

We the undersigned support the use of the Cariboo Region Stocking Standards and the supporting documentation, dated July 24, 2018, as attached, in Forest Stewardship Plans, Woodlot Licences Plans, site plans and when prescribing government funded reforestation activities.

While tenure holders will continue to have the option of developing and obtaining approval of their own individual stocking standards, as provided under the Forest and Range Practices Act (FRPA), all tenure holders are encouraged to incorporate the Cariboo Region Stocking Standards in to their respective FSPs and site plans.

If you have any question please contact the Darcy Lillico, Regional Silviculture Specialist, (250)-398-4540.



Harold Stolar

District Manager
Cariboo-Chilcotin Natural
Resource District

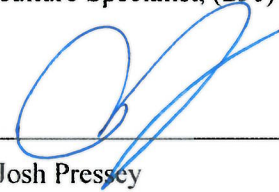
Dated: July 26/18



Patrick Byrne

District Manager
100 Mile House Natural
Resource District

Dated: July 26, 2018



Josh Pressey

District Manager
Quesnel Natural
Resource District

Dated: July 26/2018

Attachments:

Cariboo Region Stocking Standards (July 24, 2018) – Tabular stocking standards by BEC site series and silviculture system (even-aged versus uneven-aged).

Cariboo Region Stocking Standards Supporting Document (July 24, 2018) – Document that describes how the standards are to be applied and under which situation and circumstances they may be varied.

Cariboo Region Enhanced Stocking Standards (July 24, 2018) – Standards designed to encourage high initial planting densities consistent with district plans and policies on more productive sites and/or where there is a known forest health risk. Using the standards is optional but if a licensee chooses to utilize them they may receive a higher silviculture allowance as allowed by the appraisal manual.

Cariboo Region Enhanced Stocking Standards for Wildfire Impacted Stands in the IDF Biogeoclimatic Zone (July 24, 2018) – Standards are only applicable to the IDF stands damaged by wildfires. The standards are optional, but if the licensee chooses to utilize them, consistent with the requirement of the Interior Appraisal Manual, as amended from time to time, they may receive a higher silviculture appraisal allowance.

Fire Fuel Mitigation Stocking Standards

Treatment Type	BCG Zone and Site Series	Layer	Preferred (P)	Target (sph)	Min P (sph)	Max Conifer Density (sph) ⁶	Regen Delay (Max yrs)	Min Ht - Regen & FG (m)	MITD (m) ³	Broadleaf Comp Ratio (%)	FG (Max yrs)
Fdi Shaded Fuel Break -	IDFdk3 - 1, 2, 3, 4, 5, 6, 7 & 8.	L1 ⁵	At ^{1,2} , Ep ^{1,2} , Fdi, Sx ⁸	250	75	N/A	N/A	N/A	0	0 ⁴	5
		L2 ⁵	At ^{1,2} , Ep ^{1,2} , Fdi	250	75	N/A		N/A			
		L3 ⁵	At ¹ , Ep ¹ , Fdi	250***	75***	400		N/A			
		L4 ⁵	At ¹ , Ep ¹ , Fdi	250***	75***	N/A		N/A			
Fdi Shaded Fuel Break – Constrained ¹⁰	IDFdk3 - 1, 2, 3, 4, 5, 6, 7 & 8.	L1 ⁵	At ^{1,2} , Ep ^{1,2} , Fdi, Sx ⁸	300	75	N/A	N/A	N/A	0	0 ⁴	5
		L2 ⁵	At ^{1,2} , Ep ^{1,2} , Fdi	300	75	N/A		N/A			
		L3 ⁵	At ¹ , Ep ¹ , Fdi	300***	75***	600 ⁷		N/A			
		L4 ⁵	At ¹ , Ep ¹ , Fdi	300***	75***	N/A		N/A			
Pli Shaded Fuel Break	IDFdk3 - 1, 2, 3, 4, 5, 6, 7 & 8.	Evenaged	At ^{1,2} , Ep ^{1,2} , Fdi, Sx ⁹ , Pli ⁹	800	100	1,200	N/A	N/A	1.0	0 ⁴	5
Aspen Parkland	IDFdk3 - all site series.	Evenaged	At ^{1,2} , Ep ^{1,2} , Fdi	800	80	600 ⁷	N/A	N/A	0	0 ⁴	5

*** Layer 3 and 4 stems will **not** contribute to target or minimum stocking.

1 Aspen and birch are fire management appropriate species that are ecologically adapted to the site which may be used as part of the fire management stocking standard.

2 Accept all aspen and birch regardless of form as it contributes to stand fire resistance.

3 The average Inter-tree distance may vary to 0m where there are clumps of trees. For layer 1 trees the target inter-crown distance is 6m, with a target ITD of 10m to create an open-crowned stand. Where a stand has a clumpy nature, the clumpy distribution will be retained and the inter-crown distance will be taken from the drip line perimeter of the clump.

4 Aspen and birch will not be considered deleterious to the free growing status of adjacent conifers.

5 Standard uneven aged silviculture surveying will be used to measure free growing status for layer 1 and 2 stems. Layer 3 and 4 stems will **not** contribute to target or minimum stocking.

6 Post Forest Enhancement Society (FES) funded treatment completion.

7 To allow for stocking retained for MDWR Visual screening or to address other resource values requiring additional visual screening.

8 Spruce is a preferred species, only inside of OGMA's, Lakeshore Management Zones, Stream, Wetland, and Lake Riparian Areas, where there are no Layer 1 or 2 Douglas-fir present that contribute to meeting the 6m maximum spacing between crowns as required in the LUO.

9 Pine and spruce are preferred species only where there are no Douglas-fir or deciduous present that contribute to meeting MSS.

10 Constrained refers to Mule Deer Winter Range and 'privacy screening', where it is desirable to increase the amount of layer 3 stems to reduce the length of sites lines through the treatment area. Privacy screening applies to treatments directly adjacent to residences or other high use areas such as well used trails.

APPENDIX E SERAL AMALGAMATION TABLE

Schedule 2

**BEC Unit Amalgamations Applicable to Implementation of
Mature + Old Seral Targets**

100 Mile House SRMP

Bridge Creek	SBPSmk + SBSdw2 + IDFdk3(P)
Bridge Lake	ESSFdc3 + SBSmc1 + SBSmm
Forest Grove	a) SBSdw1 + IDFmw2(F+P) + ICHmk3 + SBSmm b) IDFdk3(pine) + SBSdw2

APPENDIX F -Cutting Permits and Road Permits held by the *agreement* holder that is the person required to prepare the plan, and are in effect as of the date of submission of this *FSP*

FDU	Licence	Cutting Permit/Road Permit
K2W	K2W	006, 007, 009, 010, 011, 012, 013, 014, 015, 100
K2W	K2W	R17987