

# Gilbert Smith Forest Products Ltd. Forest Stewardship Plan

Thompson/Okanagan Forest Region
Thompson Rivers Forest District
Kamloops Timber Supply Area

FSP Term: 5 Years (commencing 2020)

FSP ID#

# **Preamble**

This Forest Stewardship Plan (*FSP*) is a requirement of the Forest and Range Practices Act (*FRPA*). The *FSP* identifies a Forest Development Unit (*FDU*) within which timber harvesting and road construction activities may occur during the term of the plan. The purpose of the plan is specify results, strategies, measures and standards that are consistent to the extent *practicable* with resource value objectives set by government under *FRPA* and that are within the area of the *FDU*. Holders of this *FSP* must conduct cutblock harvesting, road construction and reforestation activities within the *FDU* consistent with the requirements of *FRPA* and this *FSP*.

This FSP replaces the Gilbert Smith Forest Products Ltd Forest Stewardship Plan #457.

Primary forest activities under this *FSP* apply to Crown land within the Kamloops *TSA*, excluding Indian Reserves, protected areas, Tree Farm Licence 35, Woodlots, and Community Forest Agreements.

The FDU boundaries for this FSP are indicated on the attached FSP maps.

The results and strategies of this *FSP* also conform to the Sustainable Forest Management Plan (SFM) for the Kamloops *TSA*. The SFM is the basis for CSA certification of forest management activities and is updated annually by forest licensees and a public advisory group. Annual audits are conducted by the CSA registrar.

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*; provisions for cancellation and exemption; 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 of the *FSP* term.
- **Application of the FSP (Part 3)** specifies which *licence*s and *agreement holders* the FSP applies to and provides for dis-application of a *licence* or *agreement holder* from the FSP.
- **Forest Development Units (Part 4)** specifies one *FDU* that is applicable to the *FSP*, displays an *FDU* Overview Map, and addresses the identification of required values within the *FDU*.
- 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, default practice requirements have been adopted as the result or strategy for the objective; in other instances, this plan either replaces the default practice requirements or proposes a result or strategy designed to be consistent with a government established objective where no default practice requirement exists. 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, 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 election of stocking standards generally for each *cutblock* and any specified variations from the stocking standards.
- **Signatures (Part 8),** includes the signatures of the Preparing Forester, the person required to prepare the plan.
- Appendices include Stocking Standards (Appendix A); Objectives for Interpretive Forest Sites, Recreation Sites or Recreation Trails continued under FPPR section 181 (Appendix B); FSP Maps (Appendix C); and FSP Notice, Review and Comment (Appendix D).

# **Table of Contents**

1	Adm	inistration And Interpretation	1
	1.1	Definitions	1
	1.2	Relevant Date for Legislation and Objective References	3
	1.3	Definition from Legislation	4
	1.4	Changes to Legislation	4
	1.5	Expressions Inclusive	4
	1.6	Preamble, Headings and Background Information	4
	1.7	Appendices	4
	1.8	Cancellation of an Objective, Notice or Order	4
	1.9	Exemption under FPPR Section 7(3)	4
	1.10	Protection of Existing CPs and RPs	4
	1.11	Authority from Government	5
	1.12	No Prohibition of Activities Otherwise Permitted or Required	5
	1.13	Conditional Exemptions under FPPR section 12	5
2	Tern	n	5
	2.1	Date of Submission for Approval	5
	2.2	Term	5
	2.3	Commencement of Term	6
3	Appl	ication	6
	3.1	Application to Agreements and Holders of Agreements	6
	3.2	Application to Agreements held by Additional Holders	
	3.3	Dis-application of FSP	
	3.4	Application of Results and Strategies	6
	3.5	Cutblocks or Roads Approved under a Previous FSP	7
4	Fore	st Development Units	7
	4.1	FDUs	7
	4.2	Identifying Required Values within Forest Development Units	7
	4.3	FDU Overview Map	
5	RES	ULTS AND STRATEGIES	9
	5.1	Soils	9
	5.2	Wildlife - FPPR section 7(1) Species at Risk and KHLPO Wildlife Objectives	
	5.3	Water, Fish, Wildlife and Biodiversity within Riparian Areas	
	5.4	KHLPO Riparian Management Areas and Inland Fisheries	
	5.5	KHLPO Water Management	
	5.6	Fisheries Sensitive Watersheds	
	5.7	Water in Community Watersheds	23
	5.8	Wildlife and Biodiversity – Landscape Level	
	5.9	Wildlife and Biodiversity – Stand Level	
	5.10	Old Growth Management	
	5.11	Visual Quality	

5.12	Cultural Heritage Resources	28
5.13	KHLPO Archaeological Assessments	30
5.14	Interpretive Forest Sites, Recreation Sites or Recreation Trails	31
5.15	KHLPO Recreation and Tourism Zones	32
5.16	KHLPO Remote Recreation and Tourism Zones	33
5.17	KHLPO Settlement Resource Management Zones	33
5.18	KHLPO Range	34
6 Me	asures	36
6.1	Invasive Plants	36
6.2	Natural Range Barriers	38
7 Sto	cking Standards	40
7.1	Definitions	40
7.2	Stocking Standards – Election	40
7.3	Stocking Standards – General	40
7.4	Stocking standards – Intermediate Cutting or Harvest of Special Forest Products	41
7.5	Stocking Standards - Variations	41
8 Sig	natures	44
8.1	Signature of Preparing Forester	44
8.2	Signature of Person Required to Prepare the Plan	44
APPENI	DICES	45
Apper	ndix A – Stocking Standards	45
	ndix B – Legal Objectives for Interpretive Forest Sites, Recreation Sites or Recreation Trails	
Apper	ndix C – Forest Stewardship Plan Maps	60
	ndix D – Notice, Review and Comment	

# 1 ADMINISTRATION AND INTERPRETATION

#### 1.1 Definitions

For ease of recognition, terms that are defined in this FSP are presented in *italics* where they appear in the body of the *FSP*.

For the purposes of results, strategies or measures that follow in this *FSP*, unless this *FSP* specifies, or the context requires otherwise:

- "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". In regards to a road, "adjacent" means an area that is sufficiently close to a road that, due to its location, could directly impact on, or be impacted by, a forest practice carried out on that road;
- 2. "agreement" means a Forest Act agreement listed in Table 3.1, unless this FSP no longer applies to that agreement;
- 3. "agreement holder" is defined in FPPR section 1 and "means a holder of an agreement under the Forest Act, other than a woodlot licence" and for the purpose of this FSP, applies to the agreement holders listed in Table 3.1, or any successor or assignee of that agreement, unless this FSP no longer applies to that agreement holder
- 4. "BEC" means Biogeoclimatic Ecosystem Classification;
- 5. "Commencement Date" means the date the Term of this FSP begins, as specified in Paragraph 2.3;
- 6. "CP" means Cutting Permit
- 7. "Crown Managed Forest Land Base" or "CMFLB" means, consistent with its use in the Kamloops Timber Supply Area Timber Supply Review Data Package September 2015, the forested area of the TSA that the provincial government manages for a variety of natural resource values. This excludes non-forested areas (e.g., water, rock and ice), non-productive forest (e.g., alpine areas, areas with very low productivity), and non-commercial forest (e.g., brush areas). The CMFLB excludes land base whose timber resource is not controlled by the province (e.g., private or federal lands) or for which the timber harvest is accounted otherwise (e.g., tree farm licences, community forests);
- 8. **"Crown range"** means, for the purposes of this *FSP*, Crown land in a range district, or Crown land leased under the Land Act;
- 9. "current" means, in the context of a Forest Stewardship Plan, Cutting Permit, Road Permit or Timber Supply Review, an approved document that has not expired or been replaced;
- 10. "cutblock" means an area in which a Forest Act licence holder:
  - a) has harvested timber under a cutting permit or timber sale licence; or
  - b) is authorized to harvest timber under a cutting permit or timber sale licence, and that harvesting has not yet occurred; unless
  - c) the area is exempt from a Forest Stewardship Plan, as provided by *FPPR* section 4, if the area was harvested in accordance with *FRPA*; or
  - d) the area was exempt from a Forest Development Plan, silviculture prescription or site plan if that area was harvested in accordance with the Forest Practices Code.
- 11. "*dbh*" means diameter breast height, a standard method of expressing the diameter of the bole of a tree, generally measured at a height 1.3 meters above the point of germination.
- 12. "established cutblock" means a cutblock that has been:

- a) harvested under an agreement to which this FSP applies;
- b) declared under this FSP;
- c) included within a *current* cutting permit issued under an agreement to which this *FSP* applies, whether or not the cutblock(s) within the cutting permit is subject to this *FSP*; or
- d) identified spatially in the BC Geographic Warehouse as a *cutblock*:
  - (i) harvested under a timber sale *licence* or *major licence* to which this *FSP* does not apply; or
  - (ii) included in a timber sale *licence or current CP* issued under a *major licence* to which this *FSP* does not apply;
- 13. "established road" means a road:
  - a) constructed under a *CP* or *RP* issued under or associated with a *licence* to which this *FSP* applies;
  - b) declared under this FSP;
  - c) included within a *current CP* or *RP* issued under or associated with a *licence* to which this *FSP* applies, whether the *CP* or *RP* is or is not subject to this *FSP*;
  - d) identified spatially in the BC Geographic Warehouse as a road:
    - (i) constructed by a person other than a holder of this FSP; or
    - (ii) included within a *CP* or *RP* issued in respect of a *Licence* to which this *FSP* does not apply.
- 14. "FDU" means forest development unit under this FSP;
- 15. "Forest Act" means the Forest Act R.S.B.C 1996, c. 157;
- 16. "forested area" means the portion of the Crown Managed Forest Land Base that is forested or has been forested and is capable of producing a stand of trees. VRI polygons classified as lakes, rock, alpine, shrub and wetland are excluded from forested area;
- 17. "FPC" means the Forest Practices Code of British Columbia Act RSBC 1996, c 159;
- 18. "FPPR" means the Forest Planning and Practices Regulation B.C. Reg. 14/2004;
- 19. "FRPA" or the "Act" means the Forest and Range Practices Act RSBC 2002, c.69, and applicable regulations made there under;
- 20. "FSP" means Forest Stewardship Plan;
- 21. "GSFP" means Gilbert Smith Forest Products Ltd;
- 22. "Government" means the government of British Columbia:
- 23. "harvest area" means the area where timber has been harvested from a *cutblock* or road right-of-way.
- 24. "holder" means FSP holders listed as agreement holders in Paragraph 3.1, or any successors or assignees of those agreements, unless this FSP no longer applies to those agreement holders:
- 25. "initial silviculture activities" means, for the following activities on a *cutblock*, the activity that is completed last:
  - a) site preparation;
  - b) debris pile burning; or
  - c) initial reforestation, including tree planting or direct seeding.
- 26. "KHLPO" means the Kamloops Higher Level Plan Order, established pursuant to section 93.4 of the Land Act, and dated Jan 8, 2009;
- 27. "KLRMP" means the Kamloops Land and Resources Management Plan;
- 28. "Legislated Planning Date" means:
  - a) the date that is 4 months prior to the date this FSP is submitted for approval; or
  - b) if an enactment or an objective established by Government requires that a date different that the date referred to in clause (a) be applied under this *FSP*, that different date;
- 29. "licence" means an agreement under the Forest Act.
- 30. "major licence" has the meaning given to it under the Forest Act,

- 31. "Minister" means the Minister responsible for the Forest Act,
- 32. "**MFLNRORD**" means Ministry of Forests, Lands, Natural Resource Operations and Rural Development;
- 33. "net area to be reforested" or "NAR" has the meaning given to it under FPPR section 1(2);
- 34. "OGMA" means an Old Growth Management Area as defined in Paragraph 5.10.1.
- 35. "practicable" means that which is feasible or performable in the circumstances, when the balance of all relevant factors (such as environment, social, economic, safety, usefulness) is considered:
- 36. "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;
- 37. "range agreement" means a grazing tenure held by a range agreement holder and issued under the Range Act or Land Act. Spatial and attribute data for range agreements are housed in the BC Geographic Warehouse.
- 38. "*reasonable*" means generally considered to be fair, proper, just and suitable under the circumstances:
- 39. "road" has the meaning given to it in FPPR section1;
- 40. "RP" means Road Permit.
- 41. "scenic area" has the meaning given to it under FPPR section 1;
- 42. "timeline" means, in regards to a FSP result or strategy referral provided by the FSP holder to a First Nation or stakeholder, the length of time specified in the referral that provides a reasonable opportunity for review and response. A referral response must be received by the FSP holder within the timeline specified in the referral in order to be considered as part of the result or strategy. The timeline will be:
  - a) 60 days for First Nations;
  - b) 30 days for stakeholders; or
  - c) another length of time where agreed to with a First Nation *or* stakeholder, or as indicated in a notice published in a newspaper.
- 43. "TSA" means timber supply area;
- 44. "VRI" means the BC Government 'Vegetation Resource Inventory', housed in the BC Geographic Warehouse. The VRI data that is relevant to specific FSP results or strategies is the version of VRI that is available not less than 18 months prior to cutting authority application or amendment.

## 1.2 Relevant Date for Legislation and Objective References

In this FSP, unless this FSP specifies otherwise, reference to any of the following things means that thing as it existed on the *Legislated Planning Date*, unless it is repealed or cancelled, in which case the reference to that item does not apply to the FSP:

- a) legislation;
- b) a legally established objective:
- c) a wildlife notice under FPPR section 7(2):
- d) the designation of a species to which such a notice or established objective applies;
- e) the establishment of a thing that is to be identified in a forest stewardship plan, referred to in *FPPR* section 14(3)(a) to (i); or
- f) an order made by government.

# 1.3 Definition from Legislation

Words and phrases used in this *FSP* that are defined in the Forest Act, *FRPA*, or *FPPR* have the same meaning as those legal definitions were on the Legislative Planning Date, unless this *FSP* specifies, or the context requires otherwise.

# 1.4 Changes to Legislation

Subject to Paragraph 1.2, if a government agency or 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 it is renamed or renumbered, as the case may be.

# 1.5 Expressions Inclusive

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

- a) the singular includes the plural and the plural includes the singular; and
- b) the masculine, the feminine and the neuter are interchangeable and each includes the corporate.

# 1.6 Preamble, Headings and Background Information

In this *FSP* the preamble, headings and material presented as 'Background Information' are displayed for ease of reference only and are not to be construed as legal *FSP* content.

# 1.7 Appendices

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

## 1.8 Cancellation of an Objective, Notice or Order

Without limiting any other provision in this *FSP*, if any of the following things is cancelled, repealed or otherwise made to be no longer in effect, the *FSP* result or strategy pertaining to the thing no longer applies, effective the date it is cancelled, repealed or made to be no longer in effect:

- a) a legally established objective;
- b) a wildlife notice under FPPR section 7(2):
- c) the designation of a species to which such a notice or established objective applies;
- d) the establishment of a thing that is to be identified in a forest stewardship plan, referred to in FPPR section 14(3)(a) to (i); or
- e) an order made by government.

#### 1.9 Exemption under FPPR Section 7(3)

Without limiting Paragraph 1.8, if an exemption from the obligation to specify a result or strategy in relation to a wildlife objective is given under section 7(3) of the *FPPR*, and that exemption applies in respect of a species and an area to which a result or strategy in this *FSP* pertains, that result or strategy does not apply to the extent of the exemption.

# 1.10 Protection of Existing CPs and RPs

Except as expressly provided for under Paragraph 3.4, despite any other provision in this *FSP*, an area within a *FDU* is not subject to a result or strategy under Part 5, a measure under Part 6 or a stocking standard under Part 7 if:

- a) the area is subject to a cutting permit or road permit that, under section 19(1) of the Act, is not affected by approval of this FSP:
- section 7(1) of the Act provides that such an area is considered to have received the Minister's approval under section 16(1) of the Act for that area without being subject to such result, strategy, measure or stocking standard;
- c) in respect of a result or strategy, section 2(2) of the Government Actions Regulation provides that the objective to which it pertains does not apply to the area;
- d) in respect of a result or strategy, the objective to which that result or strategy pertains specifies that the objective does not apply to the area; or
- e) FRPA otherwise provides that the area is not subject to such component of this FSP.

# **1.11 Authority from Government**

Without limiting any other provision in this *FSP*, this *FSP* does not apply to a primary forest activity undertaken by *holder* of this *FSP* if and to the extent Government, with the consent of the *holder*, expressly authorizes such activities to be undertaken in a manner that differs from the requirements of this *FSP*.

## 1.12 No Prohibition of Activities Otherwise Permitted or Required

Despite any other provision in this *FSP*, nothing in this *FSP* prevents, affects or limits the *holder* of this *FSP* from carrying out an activity permitted by section 4(1.1) of the *FPPR*.

# 1.13 Conditional Exemptions under FPPR section 12

The FSP holder is exempt from the FPPR practice requirement sections specified in Table 1.13 by including an applicable result or strategy in this approved FSP:

Table 1.13 Exemptions				
Paragraph in this FSP	FPPR section providing Exemption	FPPR Practice Requirement section to which the Exemption Applies		
5.3.2.1 a)	12.1(2)	Sections 47 to 51, 52(2) and 53.		
5.8.1	12.1(3)	Sections 64 and 65		
5.9.2	12.5(1)	Section 66		
5.9.3	12.5(2)	Section 67		

# 2 TERM

# 2.1 Date of Submission for Approval

The date this *FSP* is submitted to government for approval is\_\_\_\_\_.

#### 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 Paragraph 2.3, unless:

- a) the holders of this FSP elect to replace it with another approved FSP; or
- b) it is extended by the Minister.

#### 2.3 Commencement of Term

For the purposes of section 6(1) (b) of the *Act*, the term of this *FSP* commences on the date of approval by the Delegated Decision Maker (DDM), or another date as specified by the DDM.

# 3 APPLICATION

# 3.1 Application to Agreements and Holders of Agreements

For the purposes of *FRPA* section 3(4), this *FSP* applies to each cutting permit issued and each *road* permit or road permit amendment granted:

- a) on or after the date the term of this FSP commences, as specified in Paragraph 2.3;
- b) within an FDU of this FSP; and
- c) in respect of the *agreements* under the *Forest Act* and the *agreement holders* specified in Table 3.1; except that
- d) consistent with *FPPR* section 14(4), the requirements of a previous *FSP* will apply to *cutblocks* that have been declared under that previous *FSP*, regardless of when the cutting permit for that *cutblock* is issued.

Table 3.1 FSP Agreement Holders and Agreements					
FDU Name	TSA	Agreement Holder	Forest Act Agreement		
Kamloops	Kamloops	Gilbert Smith Forest Products Ltd	FL A18692		
Kamloops	Kamloops	Gilbert Smith Forest Products Ltd	FL A89106		
Kamloops	Kamloops	Gilbert Smith Forest Products Ltd	NRFL A88222		
Kamloops	Kamloops	Gilbert Smith Forest Products Ltd	TL T0713		
Kamloops	Kamloops	Simpcw Resources Group	NRFL A88221		
Kamloops	Kamloops	Simpcw Resources Group	RFL A89991		

# 3.2 Application to Agreements held by Additional Holders

On or after the commencement of term defined in section 2.3, *GSFP* may specify that this *FSP* applies to an additional Forest Act *agreement holder* and *agreement* by submitting a *FSP* minor amendment to government, consistent with *FRPA* section 20 and PPR section 30(2).

# 3.3 Dis-application of FSP

At any time during the term of this FSP, an agreement holder may elect to dis-apply this FSP from an agreement it holds, as specified in Paragraph 3.1.

## 3.4 Application of Results and Strategies

Each result and strategy in this *FSP* applies to an area within a *FDU* that is subject to a cutting permit or road permit granted to a *holder* of this *FSP*. Notwithstanding the foregoing, in a proceeding in respect of an alleged *FSP* non-compliance, the proceeding applies only to the *FSP holder* who was granted the cutting permit or road permit that is the focus of the alleged *FSP* non-compliance.

# 3.5 Cutblocks or Roads Approved under a Previous FSP

Consistent with FRPA section 21(2), cutblocks or roads approved under a previous FSP 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 to the cutblock or road site plan states that the application of the current FSP provision applies.

# 4 FOREST DEVELOPMENT UNITS

### 4.1 FDUs

For the purposes of the *FRPA* section 5(1)(a)(ii) and *FPPR* section 14(1)(a), the Kamloops *FDU* identified on the Forest Stewardship Plan Maps in Appendix D to this *FSP* applies to *agreement holders* and *agreements* specified in Table 3.1 of this FSP. For illustrative purposes, an FSP overview map is displayed below in FSP section 4.3.

This *FSP* is applicable the identified portions of Crown Land within the Kamloops *TSA* and the land area associated with TFL 18. The *FDU* does not include Indian Reserves, the land area associated with TFL 35, community forests, and woodlots.

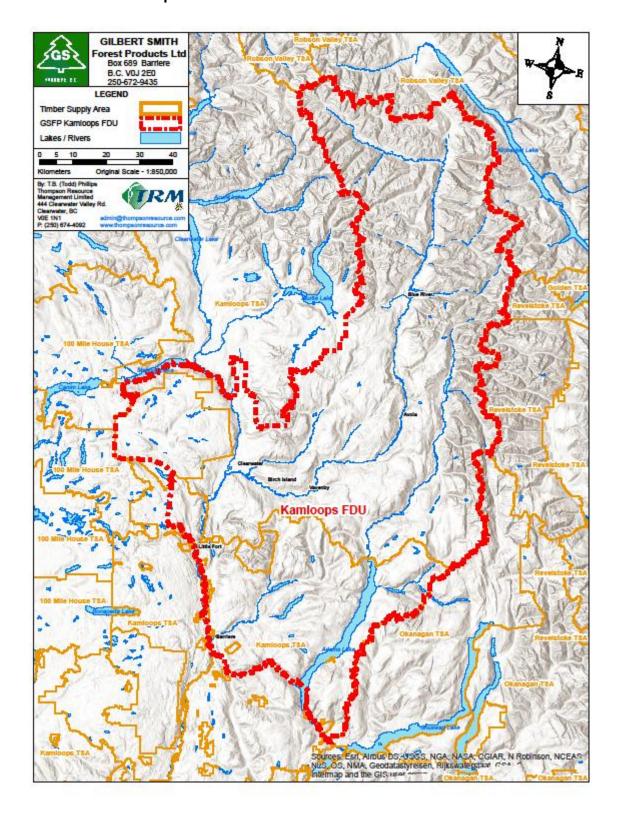
Table 4.1 Forest Development Unit			
FDU Name Description			
Kamloops	Areas within the Kamloops <i>TSA</i> that are identified on the <i>FSP</i> maps and the area associated with TFL 18.		

# 4.2 Identifying Required Values within Forest Development Units

For the purposes of *FPPR* sections 14(2) and (3), Table 4.2 and the Forest Stewardship Plan Maps in Appendix D to this *FSP* identify the things referred to in those sections that are in the *FDU* and in effect as of the *legislated planning date*. These items include: ungulate winter range, *wildlife habitat area*, *fisheries sensitive watershed*, *scenic area*, *community watershed*, *old growth management area*, area 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.

Table 4.2 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 Legislated Planning Date					
FDU Name	Licence	CP/RP			
Kamloops	A18692	CPs 66, 68, 72, 73, 599, 903, 906, 907, 908, 909			
Kamloops	A18692	RPs R06105, R13486, R13487, R15236, R15240, R15241, R17456, R19269			
Kamloops	A88222	CPs G5, G7, G8, G14, G15, G24			
Kamloops	A88222	RPs R18841, R19522			
Kamloops	A89106	CPs 67, 69, 80, 705, 706, 707, 904, 905			
Kamloops	A89106	RPs R18584 R18692 R19806 R20349 R20398			
Kamloops	T0713	CPs BB, CC			
Kamloops	T0713	RPs R18347			

# 4.3 FDU Overview Map



# 5 RESULTS AND STRATEGIES

#### 5.1 Soils

#### **Background Information**

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.

# 5.1.1 Result or Strategy for Soils

Applicable FDU: Kamloops

For the objective for soils that is set out Section 5 of the FPPR, the FSP holder adopts FPPR section 35 (Soil disturbance limits) and FPPR section 36 (Permanent access structure limits), as those sections were on the Legislated Planning Date of this FSP, except that, where the FSP holder is constructing a temporary access structure on a *cutblock* that is less than 10 hectares NAR and it is not *practicable* to achieve the 5% limit specified in FPPR section 35(4)(b)(i), the FSP holder may cause soil disturbance that exceeds the limits specified in FPPR section 35(3) (a) or (b) if:

- 1. the *holder* does not exceed those limits by more than 10% of the area covered by the standards unit, excluding the area covered by a roadside work area; and
- 2. by the regeneration date, a sufficient amount of the area within the standards unit is rehabilitated such that the FSP holder is in compliance with the limits set out in FPPR section 35(3) (a) or (b).

# 5.2 Wildlife - FPPR section 7(1) Species at Risk and KHLPO Wildlife Objectives

#### 5.2.1 KHLPO General Wildlife Objectives

#### **Background Information**

Source of Objective: KHLPO section 2.1.3.1

To conserve the diversity and abundance of native species and their habitats throughout the Kamloops LRMP.

Source of Objective: KHLPO section 2.1.12

Ensure habitat needs of all naturally occurring wildlife species are provided for. Special attention will be paid to those red- and blue-listed species, as defined by Ministry of Environment, and species designated as regionally important (e.g. Mule Deer).

Source of Objective: KHLPO section 2.5.1

The overall objective of special resource management zones for habitat and wildlife management areas is to: maintain or enhance identified *wildlife habitat areas*.

# 5.2.1.1 Result or Strategy for KHLPO General Wildlife Objectives

Applicable FDU: Kamloops

For the general wildlife objectives set by government, the FSP holder will be achieve the results or carry out the strategies specified in:

- 1. Paragraph 5.22 [Wildlife FPPR section 7(1) Species at Risk and KHLPO Wildlife];
- 2. Paragraph 5.33.2 [Water, Fish, Wildlife and Biodiversity within Riparian Areas ];

- 3. Paragraph 5.3.3 [Retention of Trees in a Riparian Management Zone];
- 4. Paragraph 5.8 [Wildlife and Biodiversity Landscape Level;
- 5. Paragraph 5.99 [Wildlife and Biodiversity Stand Level]; and
- 6. Paragraph 5.10 [Old Growth Management ].

#### 5.2.2 KHLPO Mountain Goat

# **Background Information**

Source of Objective: FPPR section 7(1).

The amount, distribution and attributes of habitat required for the winter survival of Mountain Goat in the Kamloops *TSA* was identified in a notice given under *FPPR* section 7(2). This notice requires that a *FSP* holder specify a *FSP* result or strategy for Mountain Goat in respect of the *FPPR* section 7(1) wildlife objective.

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

- (a) the survival of species at risk,
- (b) the survival of regionally important wildlife, and
- (c) the winter survival of specified ungulate species.

Source of Objective: KHLPO section 2.1.3.1

To conserve the diversity and abundance of native species and their habitats throughout the Kamloops LRMP.

Source of Objective: KHLPO section 2.1.12

Ensure habitat needs of all naturally occurring wildlife species are provided for. Special attention will be paid to those red- and blue-listed species, as defined by Ministry of Environment, and species designated as regionally important (e.g. Mule Deer).

Source of Objective: KHLPO section 2.5.1

The overall objective of special resource management zones for habitat and wildlife management areas is to: maintain or enhance identified *wildlife habitat areas*.

#### 5.2.2.1 Definitions

For the purposes of this result or strategy:

"Mountain Goat winter range" means areas that are identified as mountain goat winter range, provided as spatial data supporting the FPPR section 7(2) notice for Mountain Goat, and shown on the maps in Appendix 1 to this FSP.

"escape terrain" means rock outcrops or cliffs with slopes greater than 60%, within Mountain Goat Winter Range.

#### 5.2.2.2 Result or Strategy for *KHLPO* Mountain Goat

Applicable FDU: Kamloops

For the objectives set by government for Mountain Goat, where the FSP holder harvests a *cutblock* within *Mountain Goat winter range*, the FSP holder will:

 ensure that, prior to submitting a cutting permit application for that cutblock, when the harvest areas of that cutblock and any established cutblocks within that Mountain Goat winter range are combined, not more than 33% of the forested area within 200 meters of escape terrain will be less than 40 years of age;

- 2. not cause there to be less than 50% of the pre-harvest, non-lodgepole pine basal area retained within that *cutblock* at the conclusion of harvesting that *cutblock*, exclusive or road rights-of-way, landings or excavated trails; and
- 3. not harvest timber from *VRI* polygons within that *cutblock* that have a species composition of >50% Douglas-fir, combined with a height of at least 12 meters, and a canopy closure of at least 70%, unless that harvest is required for any of the following purposes:
  - a) constructing a road right-of-way, landing or excavated trail;
  - b) creating a yarding corridor; or
  - c) creating guyline tiebacks.

#### 5.2.3 KHLPO Deer

# **Background Information**

Source of Objective: KHLPO section 2.1.12.1

- [a] Maintain or enhance forage production and habitat requirements in critical deer winter range.
- [b] Disperse the timber harvest throughout the winter range and spread it out evenly over the rotation.
- [c] Maintain at least 25% of *forested area* in thermal cover. Link thermal cover units together with suitable travel corridors, especially mature Douglas-fir vets on ridges.

Source of Objective: KHLPO section 2.5.1

The overall objective of special resource management zones for habitat and wildlife management areas is to: maintain or enhance identified *wildlife habitat areas*.

Source of Objective: KHLPO section 2.5.2

[H11 - Skull Wildlife Habitat] Maintain or enhance forage production and habitat requirements in critical deer winter range.

# 5.2.3.1 Definitions

For the purposes of this result or strategy:

"critical deer winter range" means the Crown land portion of:

- a) the area identified as critical deer winter range on Map 1: Critical Deer & Moose Winter Range for Kamloops Higher Level Plan, of the Kamloops Higher Level Plan Order, dated January 8, 2009;
   and
- b) the area identified in the *KLRMP* as H11 on Figure 10: Special Resource Management, Habitat/Wildlife Management Areas, and referred to as Skull Wildlife Habitat.

"suitable snow interception cover" or "SIC" means a VRI polygon within critical deer winter range that:

- a) is greater than 0.25 hectares in size;
- b) is conifer leading (with preference given to Douglas-fir); and
- c) has a crown closure class of:
  - (i) 2 or greater in the PP or IDFxh BEC; and
  - (ii) 4 or greater in all other BEC zones the ICH BEC;

"planning cell" means a sub-unit of a critical deer winter range polygon that is designated and managed internally by the FSP holder, with a maximum area of 800 hectares.

"ridge" means a topographic feature, either partially or entirely in a *cutblock*, consisting of a continuous elevated crest of land at least 50 meters slope distance in length, where the slope of the ground perpendicular to and downslope of both sides of the crest exceeds 30% for a slope distance of at least 20 meters.

"deer forage" means palatable species of plants that are a food source for deer, including Douglas maple (*Acer glabrum*), Trembling aspen (*Populus tremuloides*), Saskatoon (*Amelanchier alnifolia*), and Redstem ceonothus (*Ceanothus sanquineus*).

# 5.2.3.2 Result or Strategy for KHLPO Deer

Applicable FDU: Kamloops

For the objectives set by government for deer in the *KLRMP* area, where the *FSP holder* harvests a *cutblock* within a *critical deer winter range planning cell*, the *FSP holder* will ensure that:

- 1. prior to submitting a cutting permit application for that *cutblock*, when the *harvest areas* of that *cutblock* and any established *cutblocks* within that *planning cell* are combined, not less than 25% of the *forested area* in the *planning cell* will qualify as *SIC*;
- 2. at the conclusion of harvesting that *cutblock*:
  - a) Douglas-fir trees greater than 65cm *dbh* are retained on *ridges*, where present and *practicable*, as a component of the *wildlife tree retention* requirements specified in Paragraph 5.9.2 [Result or Strategy for Wildlife and Biodiversity Stand Level]; and
  - b) deer forage is retained within that *cutblock*, where present and *practicable*, unless retaining deer forage will prevent the FSP holder from achieving the obligation to establish a free growing stand within the *net area to be reforested* of that *cutblock*.

#### 5.2.4 KHLPO Moose

# **Background Information**

Source of Objective: KHLPO section 2.1.12.2

- [a] Maintain thermal and visual cover for moose, and enhance browse production.
- [b] Maintain suitable forest cover attributes with respect to thermal cover and forage production.

Source of Objective: KHLPO section 2.5.1

The overall objective of special resource management zones for habitat and wildlife management areas is to: maintain or enhance identified *wildlife habitat areas*.

Source of Objective: KHLPO section 2.5.2

[H12 - Skwilatin Wildlife Habitat] Maintain or enhance forage production and habitat requirements in critical moose winter range.

#### 5.2.4.1 Definitions

For the purposes of this result or strategy:

- "critical moose winter range" means the Crown land portion of the area identified as Critical Moose Winter Range on Map 1: Critical Deer & Moose Winter Range for Kamloops Higher Level Plan of the Kamloops Higher Level Plan Order, dated January 8, 2009.
- "planning cell" means each spatially separate and distinct polygon identified as critical moose winter range on Map 1: Critical Deer & Moose Winter Range for Kamloops Higher Level Plan of the Kamloops Higher Level Plan Order, dated January 8, 2009.
- "moose habitat key element" means a W1, W2, W3 or W5 wetland, or a L1-A, L1-B, L2, L3 or L4 classified lake.
- "moose management unit" means an area consisting of a moose habitat key element and a 200 meter zone applied to the outside edge of a moose habitat key element, inclusive of the riparian management area associated with the moose habitat key element.
- "visual screen" means vegetation and/or topography that partially or completely obstructs the view from a road surface into an adjacent area.
- "moose forage" means palatable species of plants that are a food source for moose, including willow (Salix spp.), birch (Betula spp.) and Red-osier dogwood (Cornus stolonifera).

# 5.2.4.2 Result or Strategy for KHLPO Moose

Applicable FDU: Kamloops

For the objectives set by government for moose in the *KLRMP* area, where the *FSP holder* harvests a *cutblock*, constructs a *road* or conducts silviculture treatments within a *critical moose winter range* planning cell, the *FSP holder* will ensure that:

- 1. prior to submitting a cutting permit application for that *cutblock*, when the *harvest areas* of that *cutblock* and any established *cutblocks* within that *planning cell* are combined,
  - a) at least 20% of the *forested area* within that *planning cell* is greater than or equal to 15 meters in height;
  - b) no more than 50% of the *forested area* in a *moose management unit* is less than 5 meters in height;
- 2. at the conclusion of harvesting that *cutblock* and conducting silviculture treatments:
  - a) no point within that *cutblock* is greater than 400 meters from an area that is at least 100 meters in width and has conifer leading forest cover greater than or equal to 5 meters in height, if less than 40% of the pre-harvest basal area is retained on that *cutblock*;
  - b) moose forage is retained within that cutblock, where present and practicable, unless retaining moose forage will prevent the FSP holder from achieving the obligation to establish a free growing stand within the net area to be reforested of that cutblock.
- 4. no harvesting occurs in deciduous leading *VRI* polygons that are greater than 3 hectares in area, unless that harvest is required for one or more of the following purposes:
  - a) constructing a road right-of-way, landing or excavated trail;
  - b) creating a yarding corridor; or
  - c) creating guyline tiebacks;
- 3. no new permanent *road* is constructed within a *moose management unit*, unless no *practicable* alternative *road* location exists; and
- 4. where new permanent *road* is constructed within a *moose management unit*, at the conclusion of that *road* construction and where *practicable*, a *visual screen* is retained along and/or between the new permanent *road* and the *moose habitat key element*, unless the safe use of the *road* warrants removal of the *visual screen*.

#### 5.2.5 Flammulated Owl

#### **Background Information**

Source of Objective: KHLPO section 2.1.3.1

To conserve the diversity and abundance of native species and their habitats throughout the Kamloops LRMP.

**Source of Objective:** KHLPO section 2.1.12

Ensure habitat needs of all naturally occurring wildlife species are provided for. Special attention will be paid to those red- and blue-listed species, as defined by Ministry of Environment, and species designated as regionally important (e.g. Mule Deer).

Source of Objective: KHLPO section 2.5.1

The overall objective of special resource management zones for habitat and wildlife management areas is to: maintain or enhance identified *wildlife habitat areas*.

#### 5.2.5.1 Result or Strategy for Flammulated Owl

Applicable FDU: Kamloops

For the objectives set by government for Flammulated Owl, the *FSP* strategy specified for *OGMA*'s in Paragraph 5.10.1.2 [Result or Strategy for *KLRMP* Area Old Growth Management Areas] is the strategy for Flammulated Owl.

# 5.2.6 Lewis's Woodpecker

## **Background Information**

Source of Objective: KHLPO section 2.1.3.1

To conserve the diversity and abundance of native species and their habitats throughout the Kamloops LRMP.

Source of Objective: KHLPO section 2.1.12

Ensure habitat needs of all naturally occurring wildlife species are provided for. Special attention will be paid to those red- and blue-listed species, as defined by Ministry of Environment, and species designated as regionally important (e.g. Mule Deer).

Source of Objective: KHLPO section 2.5.1

The overall objective of special resource management zones for habitat and wildlife management areas is to: maintain or enhance identified *wildlife habitat areas*.

#### 5.2.6.1 Definitions

For the purposes of this result or strategy:

"occurrence site" means the mapped location of a Lewis's Woodpecker occurrence that is:

- a) on Crown land; and
- b) identified spatially either:
  - (i) as supporting information to the "BACKGROUND INFORMATION FOR WILDLIFE HABITAT FOR SPECIES AT RISK OBJECTIVES UNDER THE KAMLOOPS LAND AND RESOURCE MANAGEMENT PLAN, IN THE KAMLOOPS FOREST DISTRICT"; or
  - (ii) by the BC Conservation Data Centre, not less than 12 months prior to the cutting permit application that applies to a *cutblock*; unless
- c) a qualified professional confirms that site is not suitable for providing nesting, security, and/or foraging habitat for Lewis's Woodpecker, based on the attributes described in the Accounts and Measures for Managing Identified Wildlife (Identified Wildlife Management Strategy Version 2004).

## 5.2.6.2 Result or Strategy for Lewis's Woodpecker

Applicable FDU: Kamloops

For the objectives set by government for Lewis's Woodpecker the FSP holder will:

- 1. within a core area:
  - a) not construct a new road unless no practicable alternative road location exists;
  - b) not harvest a cutblock;
- 2. within a management area:
  - a) not construct a new road unless no practicable alternative road location exists;
  - b) not employ the use of pesticides:
  - c) at the conclusion of harvesting a *cutblock* and where *practicable*:
    - (i) not cause there to be less than six (6) dead standing *mature trees* or *stubs* per hectare of the largest diameter stems;

<sup>&</sup>quot;core area" means an area located within 100 meters (slope distance) of an occurrence site.

<sup>&</sup>quot;management area" is an area located 100 meters (slope distance) beyond the edge of an occurrence site.

<sup>&</sup>quot;mature tree" means a lodgepole pine tree at least 12.5 cm dbh, or another tree species at least 17.5 cm dbh.

<sup>&</sup>quot;stub" means a mature tree that is either mechanically felled or broken off at least 3m above the ground.

- (ii) retain live ponderosa pine and black cottonwood trees great than 30 cm dbh; and
- 3. if the FSP holder constructs a new road within a core area or management area, restrict access to that road to the extent that it is non-passable to a standard four-wheel drive pickup truck within one year of the conclusion of initial silviculture activities on the cutblock accessed by that road, where use of that road beyond the cutblock accessed by that road is not required by the FSP holder within two years following the conclusion of initial silviculture activities on the cutblock.

# 5.2.7 Spotted Bat

#### **Background Information**

Source of Objective: KHLPO section 2.1.3.1

To conserve the diversity and abundance of native species and their habitats throughout the Kamloops LRMP.

**Source of Objective:** KHLPO section 2.1.12

Ensure habitat needs of all naturally occurring wildlife species are provided for. Special attention will be paid to those red- and blue-listed species, as defined by Ministry of Environment, and species designated as regionally important (e.g. Mule Deer).

Source of Objective: KHLPO section 2.5.1

The overall objective of special resource management zones for habitat and wildlife management areas is to: maintain or enhance identified wildlife habitat areas.

#### 5.2.7.1 Definitions

For the purposes of this result or strategy:

"occurrence site" means the mapped location of a Spotted Bat occurrence that:

- a) is on Crown land; and
- b) contains cliff features or talus slopes;
- c) is identified either:
  - (i) as information supporting the "BACKGROUND INFORMATION FOR WILDLIFE HABITAT FOR SPECIES AT RISK OBJECTIVES UNDER THE KAMLOOPS LAND AND RESOURCE MANAGEMENT PLAN, IN THE KAMLOOPS FOREST DISTRICT"; or
  - (ii) by the BC Conservation Data Centre, not less than 12 months prior to the cutting permit application that applies to a *cutblock*; unless
- d) a *qualified professional* confirms that site is not suitable for providing roosting or foraging habitat for Spotted Bat, based on the attributes described in the *Accounts and Measures for Managing Identified Wildlife (Identified Wildlife Management Strategy Version 2004).*

#### 5.2.7.2 Result or Strategy for Spotted Bat

Applicable FDU: Kamloops

For the objectives set by government for Spotted Bat, the FSP holder will:

- 1. within a core area:
  - a) not construct a new road unless no practicable alternative road location exists;
  - b) not harvest a cutblock;
- 2. within a management area:
  - a) not construct a new road unless no practicable alternative road location exists;
  - b) not cause there to be less than 50% of the pre-harvest basal area retained at the conclusion of harvesting a *cutblock*:
  - c) not employ the use of pesticides;

<sup>&</sup>quot;core area" means an area not less than 5 hectares, incorporating an occurrence site.

<sup>&</sup>quot;management area" is an area located 100 meters (slope distance) beyond the edge of a core area.

- 3. if the FSP holder constructs a new road within a core area or management area:
  - a) not construct a road between March 1 and October 31 of any given year;
  - b) not remove rock or talus; and
  - c) restrict access to that road to the extent that it is non-passable to a standard four-wheel drive pickup truck within one year of the conclusion of initial silviculture activities on the cutblock accessed by that road, where use of that road beyond the cutblock accessed by that road is not required by the FSP holder within two years following the conclusion of initial silviculture activities on the cutblock.

#### 5.2.8 Wildlife - KHLPO General Wildlife Objectives

# **Background Information**

Source of Objective: KHLPO section 2.1.3.1

To conserve the diversity and abundance of native species and their habitats throughout the Kamloops LRMP.

Source of Objective: KHLPO section 2.1.12

Ensure habitat needs of all naturally occurring wildlife species are provided for. Special attention will be paid to those red- and blue-listed species, as defined by Ministry of Environment, and species designated as regionally important (e.g. Mule Deer).

Source of Objective: KHLPO section 2.5.1

The overall objective of special resource management zones for habitat and wildlife management areas is to: maintain or enhance identified *wildlife habitat areas*.

# 5.2.8.1 Result or Strategy for KHLPO General Wildlife Objectives

Applicable FDU: Kamloops

For the general wildlife objectives set by government, the FSP holder will be consistent with the results or strategies specified in:

- 1. Paragraph 5.2 [Wildlife FPPR section 7(1) Species at Risk and KHLPO Wildlife];
- 2. Paragraph 5.3.2 [Water, Fish, Wildlife and Biodiversity within Riparian Areas ];
- 3. Paragraph 5.3.3 [Retention of Trees in a Riparian Management Zone];
- Paragraph 5.8 [Wildlife and Biodiversity Landscape Level];
- 5. Paragraph 5.9 [Wildlife and Biodiversity Stand Level]; and
- 6. Paragraph 5.10 [Old Growth Management ].

# 5.3 Water, Fish, Wildlife and Biodiversity within Riparian Areas

#### **Background Information**

Source of Objective: FPPR section 8

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

Source of Regulation: FPPR section 12(3)

Despite section 12.1(2) and (6), a person who prepares a forest stewardship plan must specify in it, for the objective set out in section 8, a result or strategy that addresses retention of trees in a riparian management zone.

#### 5.3.1 Definitions

For the purposes of these results or strategies:

- "RMZ affected area" means the area of riparian management zone contained within a cutblock to which this FSP applies.
- "RMZ retained basal area equivalency" or "RMZ RBAE" means, for an RMZ that has been partial cut, the proportion of RMZ tree basal area retained that is equivalent to RMZ area, determined from the following equation:

"RMZ retention" means the treed proportion of the RMZ affected area retained at the conclusion of harvesting based on a combination of RMZ area reserved from harvest and RMZ RBAE, determined from the following equation:

"S6L" means an S6 stream as defined in FPPR section 47(3b) [Stream riparian classes], where the year-round wetted stream width of that S6 stream is greater than 1.5m.

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

Applicable FDU: Kamloops

For the objectives set by government for water, fish, wildlife and biodiversity within riparian areas set out in section 8 of the *FPPR*, the *FSP holder*.

- 1. undertakes to comply with the following *FPPR* sections as those sections were on the *legislated* planning date of this *FSP*, consistent with the exemption provided through *FPPR* section 12.1(2):
  - a) 47 [Stream Riparian Classes];
  - b) 48 [Wetland Riparian Classes];
  - c) 49 [Lake Riparian Classes];
  - d) 50 [Restrictions in a Riparian Management Area];
  - e) 51 [Restrictions in a Riparian Reserve Zone];
  - f) 52(2) [Restrictions in a Riparian Management Zone];
  - g) 53 [Temperature Sensitive Streams];
- 2. will ensure that, when harvesting or carrying out a silviculture treatment within a *cutblock* to which this *FSP* applies:
  - a) the tracks or wheels of ground based machinery are not operated within 5 meters slope distance of a S4, S5, S6 or *S6L* stream bank, unless:
    - (i) required to construct a stream crossing:
    - (ii) operating the machinery more than 5 meters from the stream bank would create a higher risk of sediment delivery to the stream; or
    - (iii) the harvesting or silviculture treatment is conducted in a manner that does not cause a material adverse effect to the stream bank and understory vegetation that is within 5 meters (slope distance) of the stream bank, and
  - b) trees are felled and yarded or skidded away from S4, S5, or S6 stream channels, where terrain constraints allow and it is *practicable* to do so; and
  - c) harvest related debris that has been introduced to a S4, S5, S6 or S6L stream channel is removed within 12 months of the conclusion of harvesting that *cutblock*, where that debris will have a material adverse effect on stream channel stability.

#### 5.3.3 Result or Strategy for Retention of Trees in a Riparian Management Zone

Applicable FDU: Kamloops

For the requirement to specify a result or strategy that addresses retention of trees in a riparian management zone established in *FPPR* section 12(3), at the conclusion of harvesting within a riparian management zone that is within a *cutblock* to which this *FSP* applies, the *FSP holder* will not cause *RMZ retention* to be less than specified in Table 5.3.3, unless that harvesting is conducted for the following circumstances,:

- to recover a tree that has been windthrown or has been damaged by fire, insects, disease or other causes, if the recovery of the tree will not have a material adverse impact on the riparian management zone; or
- 2. where the terrain and engineering constraints of the *cutblock* require that a cable or aerial harvest system be employed to safely harvest the *cutblock* and it is not *practicable* to achieve the specified *RMZ retention*;

in which case the FSP holder ensures that the RMZ retention specified in Table 5.3.3 is reduced only to the extent necessary to recover the windthrown or damaged tree, or conduct the cable or aerial harvesting.

Table 5.3.3 Riparian Management Zone Tree Retention					
•					RMZ
	Feature	RMA width	RRZ width	RMZ width	Retention
Riparian Class	dimension	(m)	(m)	(m)	(%)
S1-A stream <sup>1</sup>	<u>&gt;</u> 100m	100	0	100	50
S1-B stream <sup>1</sup>	>20m	70	50	20	50
S2 stream <sup>1</sup>	5 - 20m	50	30	20	20
S3 stream <sup>1</sup>	1.5 - 4.9m	40	20	20	20
S4 stream <sup>1</sup>	<1.5m	30	0	30	30
S5 stream <sup>1</sup>	>3m	30	0	30	30
S6L stream <sup>1</sup>	1.6 - 3m	20	0	20	20
S6 stream <sup>1</sup>	<1.5m	20	0	20	>0
W1 wetland <sup>2</sup>	>5ha	50	10	40	20
W2 wetland <sup>2</sup>	1 - 5ha	30	10	20	20
W3 wetland <sup>2</sup>	1 - 5ha	30	0	30	20
W4 wetland <sup>2</sup>	0.25 - 1.0 ha	30	0	30	20
W5 wetland <sup>2</sup>	complexes	50	10	40	20
L1-A lake <sup>3</sup>	>1000ha	0	0	0	N/A
L1-B lake <sup>3</sup>	>5 - 1000ha	10	10	0	N/A
L2 lake <sup>3</sup>	1 – 5ha	30	10	20	20
L3 lake <sup>3</sup>	1 – 5ha	30	0	30	20
L4 lake <sup>3</sup> 1 Refer to FPPR section 47 IStream Rip	0.25 - 1.0 ha	30	0	30	20

Refer to FPPR section 47 [Stream Riparian Classes] for definition details.

# 5.4 KHLPO Riparian Management Areas and Inland Fisheries

# **Background Information**

Source of Objective: KHLPO section 2.1.2.1 Riparian Management Areas

Manage riparian areas, including streams, wetlands and lakes in accordance with the Forest Planning and Practices Regulation and the Kamloops and Clearwater District Lakeshore Management Guidelines or other applicable management tools or agency agreements.

<sup>2</sup> Refer to FPPR section 48 [Wetland Riparian Classes] for definition details.

<sup>3</sup> Refer to FPPR section 49 [Lake Riparian Classes] for definition details.

# Source of Objective: KHLPO section 2.1.5 Inland Fisheries

Maintain a mosaic of angling opportunities within the recreational spectrum (i.e. walk-in lakes, drive-to lakes, trophy lakes).

### 5.4.1 Result or Strategy for KHLPO Riparian Management Areas and Angling Opportunities

Applicable FDU: Kamloops

For the objective set by government for Riparian Management Areas and Inland Fisheries, where the FSP holder harvests a *cutblock* or constructs a road to which the FSP applies, the FSP holder will:

- 1. not construct new *road* within 200 meters (slope distance) of a L1, L2 or L3 lake, unless no *practicable* alternative *road* location exists;
- 2. if the FSP holder constructs a new road within 200 meters (slope distance) of a L1, L2 or L3 lake restrict access to that road to the extent that it is non-passable to a standard four-wheel drive pickup truck within one year of the conclusion of initial silviculture activities on the cutblock accessed by that road, where use of that road beyond the cutblock accessed by that road is not required by the FSP holder within two years following the conclusion of initial silviculture activities on that cutblock; and
- 3. ensure harvesting and *road* construction is conducted consistent with the results or strategies specified in:
  - a) Paragraph 5.3.3 [Result or Strategy for Retention of Trees in a Riparian Management Zone];
  - b) Paragraph 5.11 [Visual Quality]; and
  - c) Paragraph 5.9.2 [Result or Strategy for Wildlife and Biodiversity Stand Level].

# 5.5 KHLPO Water Management

#### **Background Information**

Source of Objective: KHLPO 2.1.2

The objective set by government for water management is to ensure implementation of a referral process to notify all potentially impacted water licencees when development is proposed.

#### 5.5.1 Definitions

For the purposes of this result or strategy:

"water licence" means a licence issued under the Water Sustainability Act or a former water licence related Act not less than 4 months prior to cutting authority application or amendment. Water licence spatial and attribute data is housed in the BC Geographic Warehouse.

"point of diversion" means the location where water is legally diverted for the purpose specified in a water licence.

"water management mitigation strategy" means a plan developed by a qualified professional in order to mitigate potential impacts to a water licence that are related to harvesting and road construction, and identified by a water licence holder. The strategy specifies:

- a) what actions are to be undertaken;
- b) who is responsible for undertaking the actions;
- c) where the actions will occur; and
- d) when the actions will be completed.

# 5.5.2 Result or Strategy for KHLPO Water Management

Applicable FDU: Kamloops

For the objective set by government for water management, where the *FSP holder* proposes *cutblock* harvesting or *road* construction that is within the catchment area of an S3, S4, S5 or S6 stream upon which a *point of diversion* is established, and that proposed *cutblock* harvesting or *road* construction is located less than one kilometer (horizontal distance) upstream of that *point of diversion*, the *FSP holder* will:

- 1. prior to harvesting the *cutblock* or constructing the *road*:
  - a) refer the proposed *cutblock* harvesting or *road* construction activities to the holder of the *water licence* associated with that *point of diversion*, requesting that the *water licence* holder identify concerns about their *water licence* that may be related to the activities;
  - b) where the *water licence* holder responds within the *timeline* specified in the referral and identifies concerns, ensure that a *water management mitigation strategy* is developed that addresses the concerns of the *water licence* holder to the extent that it is *practicable* to do so:
  - c) communicate the water management mitigation strategy to the water licence holder; and
- 2. ensure that cutblock harvesting and *road* construction is conducted consistent with the *water* management mitigation strategy.

#### 5.6 Fisheries Sensitive Watersheds

# **Background Information**

Source of Objectives: Order – Fisheries Sensitive Watershed, Thompson Rivers Forest District, given under authority of sections 14(1) and 14(2) of the Government Actions Regulation

- 1. For the Fisheries Sensitive Watersheds indentified by this Order, the objectives are:
  - a. Maintain channel stability and riparian function by retaining and protecting all mature timber and/or other natural vegetation on all active fluvial units on:
    - i. fish streams; and
    - ii. streams that are a direct tributary to fish streams.
  - b. Minimize adverse sediment related effects to fish and fish streams by maintaining a very low likelihood of harmful sediment delivery from un-natural sediment sources to:
    - i. fish streams; and
    - ii. streams that are a direct tributary to fish streams,
  - c. To protect the quantity and timing of annual and seasonal flows establish and maintain a sustainable rate of cut for the fisheries sensitive watershed and/or specified basins, that does not exceed 25% Equivalent Clearcut Area (ECA) above the snowline, with forest harvesting distributed by aspect, sub-basin, and elevation where possible.

# 5.6.1 Definitions

For the purposes of the fisheries sensitive watershed results or strategies:

- "Order" means the "Order Fisheries Sensitive Watershed, Thompson Rivers Forest District", given under authority of sections 14(1) and 14(2) of the Government Actions Regulation, dated March 27, 2018, and effective April 13, 2018.
- "fisheries sensitive watershed" means a watershed identified in the Order in "Table 1 Fisheries Sensitive Watersheds Established by this Order".
- "active fluvial unit" or "AFU", as defined in the Order, means "that portion of a floodplain over which water can be expected to flow during a runoff event of magnitude 1 in 100 years, and that portion of an AFU on which there is evidence of hydro-geomorphic processes, active within at least one full rotation".
- "applicable fisheries sensitive watersheds" means, for the purposes of *Order* Objective 1c., those watersheds, basins or residuals where a maximum *ECA* of 25% has been specified in Schedule B, Table 2 of the *Order*.

"direct tributary" means a stream channel that has the ability to transport sediment to downstream fish-bearing waters as a result of stream power and physical connection.

"relevant active fluvial unit" means an active fluvial unit that is relevant to the Order, due to its location within a fisheries sensitive watershed; and

- a) on a fish stream: or
- b) a stream that is a *direct tributary* to a fish stream.

"new road" means a road or road section within the Kamloops FDU that is included in either a Road Permit or an amendment to a Road Permit which is issued to a holder of this FSP during the term of this FSP. A road within the Kamloops FDU that was constructed prior to the term of this FSP and during the term of this FSP is transferred from another licence holder to a Road Permit or Road Permit Amendment held by a holder of this FSP is not considered a new road.

"active fluvial unit assessment" means an assessment, conducted by a qualified professional on a relevant active fluvial unit that is located within a proposed cutblock; or that crosses or is adjacent to a proposed new road, which specifies, where applicable, recommendations for:

- a) mature tree and/or other natural vegetation retention within that portion of a *relevant active fluvial* unit that is located within that *cutblock*; and
- b) the location, construction, maintenance and deactivation phases of the section of the proposed new road that crosses or is *adjacent* to the *relevant active fluvial unit*,

in order to ensure, to the extent it is *practicable* to do so, that stream channel stability and riparian function are maintained.

"sediment mitigation assessment" means an assessment conducted by a qualified professional, of a proposed new road that crosses or is adjacent to a fish stream or a stream that is a direct tributary to a fish stream, which:

- a) identifies existing or potential sediment generation and delivery zones that may be affected by or result from constructing, maintaining and where applicable, deactivating the proposed new road;
   and
- b) specifies recommendations or measures to mitigate potentially adverse sediment related effects to fish and fish streams that may result from un-natural sediment delivery related to that proposed new road.

"equivalent clearcut area", or "ECA", as defined in the Order "refers to the area of forest that has been disturbed (e.g. harvested, affected by insects, cleared or burned, with consideration given to the silvicultural system, regeneration, and location of forest stands within a watershed). ECA is an indicator used to measure the relative loss and recovery of hydrologic function of a forest canopy".

A qualified professional will specify the process and assumptions used in the ECA calculation.

"sustainable rate-of-cut", or "SRC", as defined in the Order "refers to a non-declining average annual rate of merchantable forest cover removal or alteration by primary forest activities and/or other land-use activities within the forest land base of the FSW. The sustainable rate-of-cut for the watershed and its basins must consider disturbances resulting from primary forest activities, natural events (wildfire, insects, pathogens etc...), and other land use activities, including disturbance on private land".

In any given year the actual harvest can exceed the SRC as long as the running average over a 10 year

time period is maintained by balancing high levels of annual harvest with years of little or no harvest.

A qualified professional will specify the process and assumptions used in the sustainable rate-of-cut calculation.

# 5.6.2 Result or Strategy for Fisheries Sensitive Watersheds – maintenance of channel stability and riparian function

Applicable FDU: Kamloops

For objective 1a of the *fisheries sensitive watershed Order*, to "maintain channel stability and riparian function" in *fisheries sensitive watersheds* the *FSP holder* will ensure that:

- 1. prior to harvesting a *cutblock* or constructing a new road to which this *FSP* applies, that is located within a *fisheries sensitive watershed*:
  - a) a *qualified professional* assesses that *cutblock* and new road location for the presence of a *relevant active fluvial unit*;
  - b) where a relevant active fluvial unit is identified within that cutblock or along that new road location, an active fluvial unit assessment is completed; and
- 2. *cutblock* harvesting and new road related activities are conducted consistent with the recommendations of the *active fluvial unit assessment*.

# 5.6.3 Result or Strategy for Fisheries Sensitive Watersheds – minimizing adverse sediment related effects to fish and fish streams

Applicable FDU: Kamloops

For objective 1b of the *fisheries sensitive watershed Order*, to "minimize adverse sediment related effects to fish and fish streams", the *FSP holder* will ensure that:

- 1. prior to constructing a *new road* to which this *FSP* applies, that is located within a *fisheries* sensitive watershed:
  - a) a *qualified professional* assesses that proposed *new road* location for the presence of a fish stream or a stream that is a *direct tributary* to a fish stream;
  - b) a sediment mitigation assessment is completed where a fish stream or stream that is a direct tributary to a fish stream is crossed by or adjacent to that new road location; and
- road activities are conducted consistent with the recommendations of the sediment mitigation assessment.

# 5.6.4 Result or Strategy for Fisheries Sensitive Watersheds – to protect the quantity and timing of annual and seasonal flows

Applicable FDU: Kamloops

For objective 1c of the *fisheries sensitive watershed Order*, "to protect the quantity and timing of annual and seasonal flows", the *FSP holder* will:

- 1. ensure that:
  - a) prior to harvesting a *cutblock* to which this *FSP* applies, that is located within an *applicable fisheries sensitive watershed*:
    - (i) the ECA above snowline of that applicable fisheries sensitive watershed is calculated;
    - (ii) where the calculated *ECA* above snowline of that *applicable fisheries sensitive* watershed exceeds 20%, a sustainable rate-of-cut is calculated;
  - b) *cutblock* harvesting to which this *FSP* applies, that is located within that *applicable fisheries* sensitive watershed is:
    - (i) conducted consistent with the calculated sustainable rate-of-cut,
    - (ii) distributed by aspect, sub-basin, and elevation where possible; and
- 2. where the ECA above snowline within an applicable fisheries sensitive watershed exceeds 25%, not conduct harvesting within that applicable fisheries sensitive watershed unless that harvesting is required to construct a road that provides access to timber beyond that applicable fisheries sensitive watershed, and there is no practicable alternate location for that road.

## 5.7 Water in Community Watersheds

#### **Background Information**

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.

#### 5.7.1 Definitions

For the purposes of this result or strategy:

"community watershed" has the meaning given to it in FPPR section 8.2(1), and contains a licenced waterworks through which water is being diverted for human consumption.

"community watershed assessment" means a qualified professional analysis of the cumulative hydrological effects of primary forest activities within a community watershed, which includes:

- a) a review of:
  - (i) the effects of existing and proposed human activities (including *established cutblocks* and *established roads*) on the watershed characteristics and hydrological processes that affect the generation of stream flow;
  - (ii) rates of hydrologic recovery within the watershed; and
  - (iii) waterworks infrastructure;
- b) identification of the potential for *primary forest activities* to result in:
  - (i) a material adverse impact on the quantity of water or the timing of the flow of the water from the waterworks; and
  - (ii) the water from the waterworks having a material adverse impact on human health that cannot be addressed by required water treatment required under an enactment or the licence pertaining to the waterworks; and
- c) recommendations to mitigate those potential material adverse impacts identified in (b).

"relevant" means, in relation to an existing community watershed assessment, where a qualified professional has determined that the assessment recommendations continue to be valid.

#### 5.7.2 Result or Strategy for Water in Community Watersheds

Applicable FDU: Kamloops

For the objective for water in *community watersheds*, that is set out in section 8.2 of the *FPPR*, for the portions of the *FDU* that fall within a *community watershed*, the *FSP holder*.

- 1. adopts *FPPR* sections 59 [Protecting Water Quality], 60(2) [Licenced Waterworks], and 61 [Excavated or Bladed Trails], as those sections were on the *legislated planning date* of this *FSP*;
- will ensure that:
  - a) prior to harvesting a *cutblock* or constructing a *road* within a *community watershed*, a *relevant community watershed assessment* has been carried out on that *community* watershed; and
  - b) harvesting and *road* construction activities are conducted consistent with the recommendations of that *community watershed assessment*.

# 5.8 Wildlife and Biodiversity - Landscape Level

#### **Background Information**

Source of Objective: FPPR section 9

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

### 5.8.1 Result or Strategy for Wildlife and Biodiversity – Landscape Level

Applicable FDU: Kamloops,

For the objective for wildlife and biodiversity at the landscape level that is set out in *FPPR* Section 9, consistent with the exemption provided by *FPPR* section 12.1(3), the *FSP holder* undertakes to comply with *FPPR* section 64 [Maximum *cutblock* size] and *FPPR* section 65 [Harvesting adjacent to another cutblock], as those sections were on the *Legislated Planning Date* of this *FSP*.

# 5.9 Wildlife and Biodiversity - Stand Level

#### **Background Information**

Source of Objective: FPPR section 9.1

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

#### 5.9.1 Definitions

For the purposes of this result or strategy:

"block area" means the net area to be reforested of a cutblock combined with the area occupied by proposed permanent access structures within a cutblock.

"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".

"wildlife tree retention area" or "WTRa" as defined in FPPR section 1 means" an area occupied by wildlife trees that is located

- a) in a cutblock,
- b) in an area that is contiguous to a *cutblock*, or
- c) in an area that is sufficiently close to the *cutblock* that the *wildlife trees* could directly impact on, or be directly impacted by, a forest practice carried out in the *cutblock*".

"wildlife tree retained basal area equivalency" or "WTRBAE" means the equivalent area of individual, clumps or groups of wildlife trees retained within a cutblock, determined by the following equation:

WTRBAE = basal area/ha of individual retained wildlife trees x block area basal area/ha of block

"wildlife tree retention" or "WTR" means the proportion of block area retained as wildlife trees at the conclusion of harvesting, based on a combination of distinct WTRa reserved from harvest and WTRBAE, determined from the following equation:

WTR % = (WTRa reserved from harvest) + (WTRBAE) X 100 block area

"equivalent" means equal to or better than, assessed by a *qualified professional* and based upon the following factors:

- a) total area;
- b) number of trees;
- c) species composition;
- d) habitat values; and
- e) mature or old seral attributes.

# 5.9.2 Result or Strategy for Wildlife and Biodiversity - Stand Level

Applicable FDU: Kamloops

For the objectives set by government for wildlife and biodiversity at the stand level set out in section 9.1 of the *FPPR* and consistent with *FPPR* section 12.5(1), which provides for a conditional exemption from *FPPR* section 66, where the *FSP holder* harvests timber on a *cutblock* to which this *FSP* applies, the *FSP holder* will ensure that:

- 1. at the conclusion of harvesting all *cutblock*s within a cutting permit, the *wildlife tree retention* that relates to the cutting permit will be at least 7% of the total *block area* of the *cutblock*s within that cutting permit;
- 2. at the conclusion of harvesting a *cutblock*, the *wildlife tree retention* that relates to that *cutblock* will be at least 3.5%; and
- 3. for the purposes of subsection (1) and (2), a *wildlife tree retention area* may relate to more than one *cutblock* if all of the *cutblock*s that relate to the *wildlife tree retention area* collectively meet the applicable requirements of this section.

### 5.9.3 Result or Strategy for Restrictions on Harvesting Wildlife Tree Retention

Applicable FDU: Kamloops

For the objectives set by government for wildlife and biodiversity at the stand level set out in *FPPR* section 9.1, and consistent with *FPPR* section 12.5(2), which provides for a conditional exemption from *FPPR* section 67 [Restriction on harvesting], the *FSP holder* will:

- 1. not harvest wildlife tree retention, unless:
  - a) the trees on the *net area to be reforested* of the *cutblock* to which the *WTRa* relates have developed attributes consistent with a mature seral condition;
  - b) the harvesting is conducted for one or more of the following purposes, and is limited to the extent necessary to accommodate that purpose:
    - (i) to provide for guyline clearance and tailhold anchors, where no alternative *practicable* option for locating a guyline or tailhold anchor exists;
    - (ii) to provide *road* access where no alternative *practicable* option for *road* location exists;
    - (iii) to construct and use a skid trail or forwarding trail: or
    - (iv) to maintain a road; and
- 2. where the FSP holder harvests a 0.1 ha or greater area within a WTRa for a purpose described in subsection 1b), prior to completing that WTRa harvest, ensure that a qualified professional identifies in a Site Plan one or more replacement WTRa that is equivalent to the portion of the WTRa that is harvested.

#### **5.10 Old Growth Management**

# 5.10.1 KLRMP Area Old Growth Management Areas

#### **Background Information**

**Source of Objectives:** Land Act section 93.4 Ministerial Order, Old Growth Management Objectives for the Kamloops LRMP Area, dated March 5, 2013

The objectives set by government for Old Growth Management are:

- 1. Conserve biodiversity by retaining old forest values and attributes, or rare features within *OGMA*s across the landscape over time.
- 2. Maintain all timber within *OGMA*s except as required to accommodate the following purposes:
  - a) to prevent the spread of insect infestation or disease that pose a significant threat to forested areas external to the OGMA:
  - b) to address safety hazards associated with primary forest activities;
  - c) to provide for guyline clearance and tailhold anchors;
  - d) to address fuel management concerns and related safety hazards;
  - e) to provide road access where no alternative practicable option for road location exists; or
  - to facilitate timber harvesting that will result in operationally practicable cutblock boundaries.
- 3. Primary forest activities conducted for the purposes under Objective #2 must:
  - a) be conducted to the minimum extent necessary to accommodate the purpose; and
  - b) not exceed the lesser of two hectares or 10% of an individual *OGMA* polygon per 20 year timeframe.

#### 5.10.1.1 Definitions

For the purpose of this result or strategy:

"Order" means Land Act section 93.4 Ministerial Order, Old Growth Management Objectives for the Kamloops LRMP Area, dated March 5, 2013.

# 5.10.1.2 Result or Strategy for *KLRMP* Area Old Growth Management Areas

Applicable FDU: Kamloops

For the objectives set by government for Old Growth Management Areas, the FSP holder will conduct primary forest activities consistent with the objectives of the Order.

## 5.11 Visual Quality

#### 5.11.1 Definitions

For the purposes of these strategies:

"visual quality objective" or "VQO" has the meaning given to it in FPPR section 1. VQO spatial and attribute data is housed in the BC Geographic Warehouse.

- "altered forest landscape", as defined in FPPR section 1, means forest landscape that
  - a) is viewable from a significant public viewpoint,
  - b) contains cutblocks or roads, and
  - c) is in one of the categories prescribed under FPPR section 1.1.

"categories of visually altered forest landscape" have the meaning given to them under FPPR section 1.1. They are defined by subjective measures of some or all of the following attributes:

- a) scale (or size);
- b) ease of seeing (or visual acuity); and
- c) shape (or appearance).

# 5.11.2 Visual Quality in Scenic Areas with a VQO

#### **Background Information**

Source of Objective: FRPA section 181

The objectives set by government for visual quality in *scenic areas* are the established Visual Quality Objectives, applied in accordance with *FPPR* Section 1.1, [Categories of Visually Altered Forest Landscape].

Source of Objective: KHLPO section 2.1.14.1

The primary objective in Visually Sensitive Areas is to ensure that the levels of visual quality expected by society are achieved on Crown land in keeping with the concepts and principles of integrated resource management.

Source of Objective: KHLPO section 2.6.1

Maintain viewscapes in recreation and tourism areas to a standard that does not detract from the recreational enjoyment of users.

#### 5.11.2.1 Result or Strategy for Visual Quality in Scenic Areas with a VQO

Applicable *FDU*: Kamloops

For the objectives set by government for visual quality in *scenic areas*, where the *FSP holder* harvests a cutblock or constructs a *road* to which this *FSP* applies, that is within a *scenic area* with an established *visual quality objective*, the *FSP holder* will ensure that the *altered forest landscape* (including *established cutblocks* and *established roads*), resulting from the completed *cutblock* harvesting and road construction, is consistent to the extent *practicable* with the established *VQO*, applied in accordance with *FPPR* Section 1.1 [*Categories of Visually Altered Forest Landscape*].

# 5.11.3 KHLPO Visual Quality in Scenic Areas with a VSC, without a VQO

#### **Background Information**

**Source of Objective:** FPPR section 9.2 (2), (only applies to former Headwaters Forest District portion of the FDU.)

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, and
- g) in visual sensitivity class 5 is in either the modification or maximum modification category.

Source of Objective: KHLPO section 2.1.14.1

The primary objective in Visually Sensitive Areas is to ensure that the levels of visual quality expected by society are achieved on Crown land in keeping with the concepts and principles of integrated resource management.

Source of Objective: KHLPO section 2.6.1

Maintain viewscapes in recreation and tourism areas to a standard that does not detract from the recreational enjoyment of users.

# 5.11.3.1 Result or Strategy for *KHLPO* Visual Quality in *Scenic Area*s with a VSC, without a *VQO*

Applicable FDU: Kamloops

For the objectives set by government for visual quality in *scenic areas*, where the *FSP holder* harvests a *cutblock* or constructs a *road* to which this *FSP* applies, that is located within a *scenic area* for which there is no legally established *visual quality objective*, the *FSP holder* will ensure that the *altered forest landscape* (including *established cutblocks* and *established roads*), resulting from the completed *cutblock* harvesting and road construction, is consistent to the extent *practicable* with an applicable *category of visually altered forest landscape* as specified in *FPPR* section 9.2(2), and applied in accordance with *FPPR Section 1.1 [Categories of Visually Altered Forest Landscape*].

# 5.11.4 KHLPO Visual Quality outside Visually Sensitive Areas

#### **Background Information**

Source of Objective: KHLPO section 2.1.14.1

Areas outside the identified visually sensitive areas in the Kamloops LRMP are managed for landscape objectives as follows: alterations may dominate the characteristic landscape but must borrow from natural line and form to such an extent and on such a scale that they are compatible to natural occurrences.

# 5.11.4.1 Result or Strategy for KHLPO Visual Quality outside Visually Sensitive Areas

Applicable FDU: Kamloops

For the *KHLPO* objective for areas outside the identified visually sensitive areas in the Kamloops LRMP (*KLRMP* Figure 5 Visually Sensitive Areas), where the *FSP holder* harvests a *cutblock* or constructs a *road* to which this *FSP* applies, that is located outside of a *scenic area*, the *FSP holder* will ensure that, at the conclusion of that *cutblock* harvesting or road construction, the resulting *altered forest landscape* (including *established cutblocks* and *established roads*), is consistent to the extent *practicable* with the characteristics of the modification *category of visually altered forest landscape*, applied in accordance with *FPPR* Section 1.1(d) [*Categories of Visually Altered Forest Landscape*].

# **5.12 Cultural Heritage Resources**

#### **Background Information**

Source of Objective: FPPR section 10

The objective set by government for cultural heritage resources is to conserve, or, if necessary, protect cultural heritage resources that are

- (a) the focus of a traditional use by an aboriginal people that is of continuing importance to that people, and
- (b) Not regulated under the Heritage Conservation Act.

#### 5.12.1 Definitions

For the purposes of this result or strategy:

"potentially affected First Nations" means those First Nations with interest within an area where cutblock harvesting or road construction is proposed. A potentially affected First Nation will be identified either:

a) from the Consultative Area Database (or equivalent successor database maintained the provincial government); or

- b) by a First Nation expressing that interest directly to the FSP holder.
- "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 evaluation" means a field or office based process to assess the potential direct impact of primary forest activities on a CHR, so that site information or recommendations for the development of strategies to mitigate the potential direct impact of primary forest activities on a CHR can be provided.

A CHR evaluation is conducted by an authorized member of a potentially affected First Nation or a qualified professional and is conducted where the potentially affected First Nation has shared information with the FSP holder regarding the presence, relative value and abundance of a CHR.

A CHR evaluation conducted by a qualified professional will be shared with the potentially affected First Nation.

- "CHR evaluation protocol" means a signed agreement or the portion of a signed agreement between the FSP holder and a potentially affected First Nations that defines the framework and timing of a CHR evaluation.
- "CHR mitigation strategy" means a plan to mitigate the direct impact of primary forest activities on an identified CHR, based on:
  - a) the relative value or importance of a particular *cultural heritage resource* to a traditional use by an aboriginal people;
  - b) the relative abundance or scarcity of a *cultural heritage resource* that is the focus of a traditional use by an aboriginal people;
  - c) the historical extent of a traditional use by an aboriginal people of a *cultural heritage resource*;
  - d) 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
  - e) 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.

#### 5.12.2 Result or Strategy for Cultural Heritage Resources

Applicable FDU: Kamloops

For the objective for *cultural heritage resources* that is set out in section 10 of the *FPPR*, the *FSP holder* will:

- 1. prior to harvesting a cutblock or constructing a road:
  - a) share information regarding the location of the proposed harvesting and *road* construction to *potentially affected First Nations*, ensuring existing *CHR evaluation protocols* are followed where they exist, and request that the *potentially affected First Nations*:
    - (i) indicates the presence, relative value and abundance of a CHR; and
    - (ii) identifies where a CHR evaluation is recommended:
  - b) where a *potentially affected First Nations* responds within the *timeline* specified as part of the information sharing and identifies the need for a *CHR evaluation*, ensure a *CHR evaluation* is completed on the area of proposed harvesting and *road* construction;
  - c) where a CHR evaluation includes recommendations to mitigate the direct impact of primary forest activities on a CHR, develop a CHR mitigation strategy;
  - d) share the CHR mitigation strategy with the potentially affected First Nation;
- 2. conduct *primary forest activities* on the area that is the focus of the *CHR evaluation* consistent with the *CHR mitigation strategy;* and
- if a previously unidentified CHR is encountered during cutblock harvesting or road construction, modify or stop these activities to the extent necessary to protect the CHR, share information about the CHR encounter with the potentially affected First Nation, and where that potentially affected First Nation indicates that a CHR evaluation is required, carry out the strategy beginning at paragraph 1 b).

## 5.13 KHLPO Archaeological Assessments

#### **Background Information**

Source of Objective: KHLPO section 2.1.16

Undertake archaeological assessments in all High and Medium Potential areas identified in the Archaeological Overview Assessment.

#### 5.13.1 Definitions

For the purposes of this result or strategy:

"Archaeological Overview Assessment" or "AOA model" means the Kamloops TSA 2010 AOA model overview maps, or as amended from time to time, and housed by the Thompson Rivers Forest District. These maps indicate areas of low, medium or high archaeological potential within the Kamloops TSA.

"archaeological resource" means the physical remains of past human activity that is protected under the Heritage Conservation Act (RSBC 1996 Chap 187).

"archaeological assessment" means an evaluation of archaeological resources within and adjacent to the area where *cutblock* harvesting or *road* construction is proposed, which is conducted using the following process, derived from the process described in on page 5 of the "AOA Process for FDP in the Kamloops *TSA*, Version April 29, 2002":

- Step 1 office review, completed by a participating First Nation, is an office review of applicable
  First Nations land use history and evidence of traditional or cultural use. Step 1 findings may
  determine that no further work is required or, when supported by a rationale, that the potential for
  archaeological resources on site warrants proceeding to Step 2;
- 2. Step 2 preliminary field review (PFR), completed by a *participating First Nation*, is a field review of applicable First Nations land use history and evidence of traditional or cultural use. Step 2 findings may determine that no further work is required or, when supported by a rationale, that the potential for *archaeological resources* on site warrants proceeding to Step 3;
- 3. Step 3 comprehensive field review, completed by a participating First Nation, is a more detailed field review of applicable First Nations land use history and evidence of traditional or cultural use. Step 3 findings may determine that no further work is required, or if archaeological evidence is found, mitigation recommendations can be put forward by the participating First Nation to avoid the site or proceed to Step 4; and
- 4. Step 4 archaeological impact assessment (AIA), completed under permit from the Archaeology Branch by an archaeologist, evaluates the significance of the archaeological resource to be adversely affected, as well as an assessment of the nature and extent of the impacts expected. The purpose of the assessment is to provide recommendations as to the most appropriate manner in which the resource may be managed in light of the identified impacts. The recommendations may include alteration of proposed development plans to avoid resource impact or mitigation studies directed at retrieving resource values prior to impact.

"participating First Nations" means those First Nations communities listed in the "Implementation Guidelines for the Kamloops AOA model and process (Version September 2013 – Appendices updated Nov 2014)", or as this document is amended from time to time.

# 5.13.2 Result or Strategy for KHLPO Archaeological Assessments

Applicable FDU: Kamloops

For the objective set by government to undertake archaeological assessments in all High and Medium Potential areas identified in the *Archaeological Overview Assessment*, where a *cutblock* or *road* is proposed within the *FDU* in a High or Medium Potential area as identified in the *AOA model*, the *FSP holder* will ensure that, prior to harvesting that *cutblock* or constructing that *road*, *archaeological assessments* are undertaken consistent with the *Implementation Guidelines for the Kamloops AOA model* 

and process (Version September 2013 – Appendices updated Nov 2014), or as this document is amended from time to time.

# 5.14 Interpretive Forest Sites, Recreation Sites or Recreation Trails

#### **Background Information**

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.

#### 5.14.1 Definitions

For the purposes of this result or strategy:

"objective" means the legally established objectives for Recreation Sites and Trails in the Clearwater Forest District, dated March 24, 1997.

"site" means a recreation site or area:

- a) located within the *FDU*;
- b) legally designated under FPC;
- c) continued under FRPA section 180; and
- d) that also has a legal objective continued under FRPA section 181.

The extent of these *sites* is identified spatially on files held in the B.C. Geographic Warehouse. The list of *sites* and *objectives* that are applicable to this *FSP* is included in Appendix B.

"trail" means a recreation trail:

- a) located within the FDU;
- b) legally designated under FPC;
- c) continued under FRPA section 180; and
- d) that also has a legal objective continued under FRPA section 181.

The location of these trails is identified spatially on files held in the B.C. Geographic Warehouse. The list of trails and *objectives* are applicable to this *FSP* is included in Appendix B.

# 5.14.2 Result or Strategy for Interpretive Forest Sites, Recreation Sites or Recreation Trails

Applicable FDU: Kamloops

For the objectives set by government for interpretive forest *sites*, recreation *sites* and recreation *trails*, and in relation to *cutblock* harvesting or road construction to which this *FSP* applies, the *FSP holder* will ensure that, where a *site* or *trail* legal *objective* refers to providing opportunity for:

- 1. a semi-primitive motorized recreation experience:
  - a) no *cutblock* harvesting or new road construction is conducted within that *site*;
  - b) no cutblock harvesting is conducted within 50 meters of that trail;
  - c) no new road is constructed within 50 meters of that *trail*, unless:
    - (i) there is no practicable alternate location for that road; or
    - (ii) a trail crossing is required to access timber beyond that trail; and
  - d) if a new road is constructed across that *trail*, access to that *trail* is not restricted at the intersection of that *trail* and the road right-of-way, except for a temporary restriction to construct or maintain that road:
- 2. a natural roaded recreation experience:
  - a) at the conclusion of harvesting a *cutblock* within that site, not less than 40% of the preharvest basal area is retained within that *cutblock*:
  - b) no new road is constructed within 50 meters of that trail, unless:

- (i) there is no *practicable* alternate location for that road; or
- (ii) a trail crossing is required to access timber beyond that trail; and
- c) if a new road is constructed across that *trail*, access to that *trail* is not restricted at the intersection of that *trail* and the road right-of-way, except for a temporary restriction to construct or maintain that road;
- 3. a modified roaded recreation experience:
  - a) within a *cutblock*, achieve the results or carry out the strategies in *FSP* paragraphs:
    - (i) 5.9 [Wildlife and Biodiversity Stand Level];
    - (ii) 5.11 [Visual Quality];
  - b) if a new road is constructed across that *trail*, access to that *trail* is not restricted at the intersection of that *trail* and the road right-of-way, except for a temporary restriction to construct or maintain that road; and
- 4. prior to harvesting a *cutblock* or constructing a road within 50 meters of a *site* or *trail*, receive authorization from a recreation officer to use the recreation *site*, recreation *trail* or interpretive forest *site* for an industrial activity, consistent with the requirements of *Forest Recreation Regulation* Section 16.

### 5.15 KHLPO Recreation and Tourism Zones

# **Background Information**

Source of Objective: KHLPO section 2.6.1.

Road and trail construction, maintenance and deactivation and other surface disturbances and construction will be undertaken in a manner that meets the management objectives of each recreation and tourism zone, in accordance with direction from an approved plan, local process, or enhanced referral.

# 5.15.1 Definitions

For the purpose of this result or strategy:

"recreation and tourism RMZ" means the areas identified on KLRMP Figure 11: Special Resource Management Recreation and Tourism as Recreation and Tourism Resource Management Zones, and listed below in Table 5.15.1:

Table 5.15.1 Recreat	Table 5.15.1 Recreation and Tourism Resource Management Zones											
R1,H2 Allan Creek	R5,H5 Clemina	R9 Taweel										
R2,H3 Bischoff Lakes	R6,W7 Lac Le Jeune	R10 Thompson Rivers										
R3 Blustery	R7,H7 North Thompson Glacier	R11 Tod Mountain										
R4,H4 Bone	R8,H8 Smoke	R12 Tod Mountain (controlled rec area)										

# 5.15.2 Result or Strategy for KHLPO Recreation and Tourism Zones

Applicable FDU: Kamloops

For the objective set by government for recreation and tourism zones, where government approves an access management plan or process for a *recreation and tourism RMZ*, the *FSP holder* will conduct *road* construction, maintenance and deactivation within that *recreation and tourism RMZ* consistent with the direction provided in that approved access management plan or process, to the extent that it is *practicable* to do so.

# 5.16 KHLPO Remote Recreation and Tourism Zones

## **Background Information**

Source of Objective: KHLPO section 2.6.1.4

Extractive uses are permitted providing they are consistent with the objectives of the resource management zone.

### 5.16.1 Definitions

For the purpose of this result or strategy:

"remote recreation and tourism RMZ" means the following areas identified on KLRMP Figure 11: Special Resource Management Recreation and Tourism as Recreation and Tourism Resource Management Zones, and designated as Management Category: Remote in KLRMP section 2.6.2 Area-Specific Objectives and Strategies:

- a) R2. Bischoff;
- b) R4. Bone; and
- c) R7. North Thompson Glacier.

# 5.16.2 Result or Strategy for KHLPO Remote Recreation and Tourism Zones

Applicable *FDU*: Kamloops

For the objective set by government for remote recreation and tourism zones, where the FSP holder harvests a cutblock or constructs a road within a remote recreation and tourism RMZ, the FSP holder will ensure that:

- 1. at the conclusion of harvesting that *cutblock*, the structural characteristics of that *cutblock* resemble an opening that would result from a natural disturbance, to the extent that it is *practicable* to do so; and
- 2. access is managed consistent with the strategy specified in FSP Paragraph 5.15.2 [Result or Strategy for KHLPO Recreation and Tourism Zones].

# 5.17 KHLPO Settlement Resource Management Zones

# **Background Information**

Source of Objective: KHLPO section 2.2

Manage land within community growth boundary to meet the objectives set out in approved community land use plans.

#### 5.17.1 Definitions

For the purpose of this result or strategy:

"settlement resource management zones" means the areas identified on KLRMP Figure 7: Settlement Resource Management Zones labeled as "Settlement" and listed in Table 5.17.1 below:

Table 5.17.1 Settlement Resource Management Zones										
Ashcroft Campbell Creek Lac Le Jeune Paul Lake										
Ashcroft Manor	Cherry Creek	Logan Lake	Pinantan							
Avola	City of Kamloops	Louis Creek	Pritchard							
Barriere	Clearwater	McLure	Savona							
Blackpool	Duck Range	Martin Prairie	Six Mile							

Blue River	East Clearwater	Mesa Vista	Sullivan (Knouff) Lake
Boston Flats	Heffley Creek	Monte Creek	Sunshine Valley
Cache Creek	Knutsford	North of Heffley Creek	Vinsula/Black Pines

## 5.17.2 Result or Strategy for KHLPO Settlement Resource Management Zones

Applicable FDU: Kamloops

For the objective set by government for *Settlement Resource Management Zones*, where government has developed and approved a community land use plan within an area identified as a *settlement resource management zone*, the *FSP holder* will conduct *cutblock* harvesting and *road* construction within that *settlement resource management zone* consistent with the objectives set out in the approved community land use plan, to the extent that it is *practicable* to do so.

# 5.18 KHLPO Range

Background Information
Source of Objective: KHLPO section 2.1.10
Minimize tree/grass/cattle conflicts through integrated management practices.

#### 5.18.1 Definitions

For the purposes of this result or strategy:

"road deactivation project" means a project conducted by the FSP holder which is unrelated to cutblock harvesting or road construction, and that has the potential to reduce existing road access for cattle management.

"range referral" means communication to a range agreement holder or the Ministry responsible for range that:

- a) identifies the location of that proposed cutblock harvesting, road construction, or road deactivation project;
- b) includes a request that the *range agreement* holder or the Ministry responsible for range identify potential conflicts between cattle management and the proposed *cutblock* harvesting, *road* construction, or *road deactivation project*; and
- c) specifies a *timeline* to respond to the referral.

"forest and range integrated practices plan" means a plan developed by a qualified professional as a result of a range referral, with the goal of minimizing potential conflicts between cattle management activities and primary forest activities, by undertaking integrated management practices such as installing or constructing range improvements, timing operations, managing cattle and equipment access and modifying reforestation practices. The plan will specify:

- a) what practices are to be undertaken;
- b) who is responsible for undertaking the practices;
- c) where the actions practices will occur; and
- d) when the practices will be completed.

### 5.18.2 Result or Strategy for KHLPO Range

Applicable FDU: Kamloops

For the objectives set by government to minimize tree/grass/cattle conflicts through integrated management practices, the FSP holder will:

- 1. prior to harvesting a *cutblock*, constructing a *road* or conducting a *road deactivation project* to which this *FSP* applies, that is located within *Crown range*:
  - a) conduct a *range referral* with the holder of a *range agreement* on that *Crown range* or the Ministry responsible for range, where a *range agreement* is not in place on that *Crown range*;
  - b) where the *range agreement* holder or Ministry responsible for range responds within the *timeline* specified in the *range referral* and identifies potential cattle management and primary forest activity conflicts, ensure that a *forest and range integrated practices plan* is developed which addresses the potential conflicts identified, to the extent that it is *practicable* to do so;
  - c) communicate the *forest and range integrated practices plan* to the *range agreement* holder or Ministry responsible for range, as the case may be; and
- 2. where the FSP holder is identified within the forest and range integrated practices plan as being responsible for undertaking a practice, ensure that the practice is undertaken consistent with the forest and range integrated practices plan.

# **6 MEASURES**

#### 6.1 Invasive Plants

#### **Background Information**

### Source of Legal Requirements:

#### FRPA section 47

A person carrying out a forest practice or a range practice must carry out measures that are

- (a) specified in the applicable operational plan, or
- (b) authorized by the *minister* to prevent the introduction or spread of prescribed species of invasive plants.

#### FPPR section 17

For the purposes of section 47 [invasive plants] of the Act, a person who prepares a forest stewardship plan must specify measures in the plan to prevent the introduction or spread of species of plants that are invasive plants under the Invasive Plants Regulation, if the introduction or spread is likely to be the result of the person's forest practices.

#### 6.1.1 Definition

For the purposes of this measure:

"invasive plant" means a species of plant prescribed in section 2 of the FRPA Invasive Plant Regulation.

"Invasive Alien Plant Program" or "IAPP" means the invasive plant management program or successor, delivered and maintained by the ministry responsible for Forests.

"invasive plant occurrence site" means a location of an invasive plant that is identified by the IAPP or personnel working on behalf of the FSP holder.

"invasive plant zone" means a zone determined by the FSP holder, encompassing an invasive plant occurrence site, and the area within a 500 meter radius (horizontal distance) of that site.

"grass seed" means Canada Common #1 or higher standard forage mixture, as defined by the Canada Seeds Act, and applied at manufacturer's prescribed rates.

"personnel" means persons working on behalf of the FSP holder within the FDU to which this FSP applies, and conducting any of the following activities:

- a) road and cutblock development;
- b) *cutblock* harvesting and *road* construction supervision;
- c) silviculture surveys; and
- d) road inspections.

"insufficiently revegetated" means an amount of vegetative cover that is inadequate to prevent the introduction or establishment of invasive plants, as determined by a qualified professional.

# 6.1.2 Invasive Plants Measures

Applicable FDU: Kamloops

For the requirement established by government to specify measures to prevent the introduction or spread of invasive plants, the *FSP holder* will ensure that:

1. *personnel* are trained in the identification of the priority *invasive plants* specified in Table 6.1.2a, within one year of either:

- a) the FSP commencement date: or
- b) the initial commencement of their activities on behalf of the FSP holder, if those activities occur after the FSP commencement date:
- 2. *personnel* report a previously unidentified infestation of a *priority invasive plant* through the Report-A-Weed application (<a href="www.gov.bc.ca/invasive-species">www.gov.bc.ca/invasive-species</a>), within 60 days of that new infestation being identified;
- 3. an *invasive plant zone* is documented within the Site Plan that applies to a *cutblock* or *road*, where an *invasive plant occurrence site* is located within 500 meters of the *cutblock* or *road*;
- 4. contractors and *personnel*:
  - a) visually inspect for and manually remove any vegetation from vehicles, mechanized equipment, culverts, bridges and cattle guards prior to transport to or from a *road* or *cutblock* to which this *FSP* applies;
  - b) do not park vehicles or equipment or locate log decks on *invasive plant* infestations, to the extent that it is *practicable* to do so;
- 5. *grass seed* is applied to areas of exposed mineral soil that are the result of the *FSP* holders' road construction or timber harvesting activities to which this *FSP* applies, based on the criteria specified in Table 6.1.2b;
- 6. despite subparagraph 5, *grass seed* application is not required on areas where doing so is unlikely to increase vegetative cover, due to the exposure site consisting of:
  - a) compact glacial till;
  - b) rock;
  - c) steep road cuts where grass seed will not adhere; or
  - d) some other substrate that is unsuitable for supporting vegetation; and
- 7. if, within 24 months of the initial *grass seed* application on an area it is identified during a road inspection that the area is *insufficiently revegetated*, then *grass seed* will be applied to that area one additional time, within 12 months of that road inspection.

Table 6.1.2a Priority Invasive Plants											
Baby's breath	Hoary alyssum	Scotch broom									
Black knapweed	Hoary cress	Scotch thistle									
Blueweed	Leafy spurge	Spotted knapweed									
Brown knapweed	Orange hawkweed	Sulphur cinquefoil									
Common tansy	Perennial pepperweed	Tansy ragwort									
Field scabious	Rush skeletonweed	Teasel									

Table 6.1.2b Grass Seed Application Criteria										
Activity that results in mineral soil exposure	Description of Soil Exposure Areas to be Seeded	Grass seed application timing post exposure								
Permanent <i>road</i> construction, deactivation	Road cut slopes, fill slopes, ditch lines, end haul waste sites and permanent landings	within 12 months of exposure and during the first available spring or fall, where practicable								
Timber Harvesting	Excavated trails, yarding and skidding corridors, and debris pile burn areas, that are at least 0.2 ha of contiguous area, except areas that the FSP holder is contractually obligated to reforest	within 12 months of exposure and during the first available spring or fall, where practicable								

# 6.2 Natural Range Barriers

# Source of Legal Requirements:

## FRPA section 48

A person carrying out

- (a) a forest practice, or
- (b) a range practice that directly or indirectly removes or renders ineffective a natural range barrier must carry out measures that are
- (c) specified in an operational plan for the area, or
- (d) authorized by the *minister* to mitigate the removal or the ineffectiveness of the natural range barrier.

# FPPR section 18

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

#### 6.2.1 Definition

For the purposes of this measure:

"natural range barrier" or "NRB" means a naturally occurring feature such as a river, rock face, or dense timber that stops or impedes livestock movement to and from an adjacent area, for range management purposes.

"NRB referral" means communication to a range agreement holder or the Ministry responsible for range that:

- a) identifies the location of proposed *cutblock* harvesting and *road* construction;
  - includes a request that the range agreement holder or the Ministry responsible for range identify: the location of natural range barriers that may be rendered ineffective by the proposed cutblock harvesting or road construction;
  - (ii) preferred actions to mitigate a potential *NRB* breach;
  - (iii) preferred timing to undertake the mitigation actions; and
- b) specifies a timeline to respond to the referral.

"mitigation action" means a structure or activity that has the purpose of replacing a natural range barrier rendered ineffective by the FSP holder's cutblock harvesting or road construction, including:

- a) range developments such as:
  - (i) logging debris fences;
  - (ii) remedial fences; and
  - (iii) cattle guards; that are
    - i. subject to MFLNRORD approval;
    - ii. constructed or installed consistent with MFLNRORD standards; and
    - iii. eligible to be cost captured in an upcoming Cutting Permit appraisal; or
- b) adjusting *cutblock* boundaries or *road* locations prior to cutting permit approval.

"NRB mitigation strategy" is a plan developed by a qualified professional to mitigate removal or the rendering ineffective of a natural range barrier, that specifies:

- a) what mitigation actions are to be undertaken;
- b) who is responsible for undertaking the *mitigation actions*;
- c) where the mitigation actions will occur; and
- d) when the *mitigation actions* will be completed.

## 6.2.2 Natural Range Barrier Measures

Applicable FDU: Kamloops

For the requirement established by government to specify measures to mitigate the effect of removing or rendering ineffective *natural range barriers*, the *FSP holder* will:

- 1. where a *range agreement* is assigned to an area of *Crown range*, prior to harvesting a *cutblock* or constructing a *road* within that *range agreement* area:
  - a) conduct a *NRB referral* with respect to the proposed *cutblock* harvesting or *road* construction with the potentially affected *range agreement holder*;
  - b) where that range agreement holder responds within the timeline specified in the NRB referral and identifies a natural range barrier that will be removed or rendered ineffective by that cutblock harvesting or road construction, ensure that a NRB mitigation strategy is developed that incorporates the information communicated to the FSP holder, to the extent that it is practicable to do so;
  - c) communicate the *NRB mitigation strategy* to the *range agreement holder;* or Ministry responsible for range, as the case may be; and
- 2. where the FSP holder is identified within the NRB mitigation strategy as being responsible for undertaking a mitigation action, undertake that mitigation action consistent with the NRB mitigation strategy.

# 7 STOCKING STANDARDS

## **Background Information Regarding - Stocking Standards**

Legal Reference: FPPR sections 16, 44, and 45; FRPA section 29(1).

Note: These stocking standards, as previously approved, will remain in effect until changes are required to implement the updated Biogeoclimatic Ecosystem Classification (BEC) and associated Land Management Handbooks. When required, an amendment will be made to incorporate the stocking standards and variations, as developed by the Thompson Okanagan Stocking Standards Working Group.

## 7.1 Definitions

**'Cutblock'** means an area that a Holder of this *FSP* holds silviculture obligations under an operational plan or section 7 of this *FSP*;

"Disturbance From Other Causes" means disturbance not caused by a Holder; and

- (a) caused by human activities including, but not limited to, road construction, mineral exploration, cattle management, or forest management activities of a party other than a Holder:
- (b) natural events including, but not limited to, wind, water, fire, earthquake, landslide, drought, animal activities (e.g. beaver dams); or
- (c) a combination of any of events in (a) or (b);

"High Cattle Use" means those areas within a Cutblock that:

- (a) have evidence of frequent cattle use such as recent foot prints, established trails, manure, bedding sites and rub trees;
- (b) have forage stubble heights less than 3 cm from continuous grazing;

"SU" means Standards Unit as indicated in an operation plan;

"Unmappable Area of Non-productive" means those small naturally occurring areas of NP, NCBr that are too small to map at an operational scale.

# 7.2 Stocking Standards – Election

For the purposes of section 16(1) of the *FPPR* and section 29(1) of *FRPA*, section 44(1) of the *FPPR* will apply to each Standards Unit or Cutblock to which this *FSP* applies where a Holder of this *FSP* is required to establish a Free Growing stand.

# 7.3 Stocking Standards – General

Subject to paragraph 7.5, for the purposes of section 16(3) of the *FPPR*, for each Standards Unit or Cutblock to which this *FSP* applies where a Holder of this *FSP* is required under section 29(1) of *FRPA* to establish a free growing stand, a Holder will do so in accordance with the stocking standards set out in **Appendix A** of this *FSP*.

# 7.4 Stocking standards – Intermediate Cutting or Harvest of Special Forest Products

For timber harvesting referred to in section 16(4) and 44(4) of the *FPPR*, 50% or more of the basal area of the stand immediately before harvesting will be retained at the conclusion of harvesting. For species and stocking levels see Table B - stocking standards for single tree near end of Appendix 5.

# 7.5 Stocking Standards - Variations

Despite Paragraphs 7.3 and 7.4 a Holder of this *FSP* may apply the following stocking standards in the following circumstances.

## 7.5.1 Deviation from Footnotes for Species Occurring Naturally on a Site

Variances to the footnotes will be accepted where:

- (a) the pre-harvest species occurrence is contrary to the existing footnote; and
- (b) the performance of the existing species meets timber supply assumptions.

The variance will apply up to the percent that that species contributed to the pre-harvest inventory of merchantable conifers in the block or stand.

#### 7.5.2 Minimum Inter-tree Distance

The minimum inter-tree distance will be:

- (a) 0.80 meters on sites that:
  - (i) have high water tables; or
  - (ii) cold soils which create hummocky stumps from trees growing on raised microsites; or
  - (iii) have slopes greater than 40% and snow depths greater than 1m; or
  - (iv) areas with thin soils and exposed bedrock where trees are frequently found to be growing in clumps;
- (b) 1.6 meters on sites that:
  - (i) have stumps pulled from the soil; or
  - (ii) have High Cattle Use and trees are planted utilizing obstacles; or
  - (iii) are difficult to raw plant (heavy debris or rocky soils) and obstacle utilization is needed; or
  - (iv) on Cutblocks or SU's which are replanted; and
- (c) 2.0 meters on all other sites.

# 7.5.3 Regeneration Dates

#### 7.5.3.1 Definitions

"Target Regeneration Date" means a Holder's target date for regeneration of a SU or Cutblock;

### 7.5.3.2 Target Regeneration Date

The Target Regeneration Date will be 36 months for 95% of the net area to be reforested.

#### 7.5.4 Late Free Growing

The late free growing duration will be 20 years from the commencement of harvesting for each Cutblock, unless an amendment to extend the late free growing duration has been accepted by the statutory decision maker.

# 7.5.5 Declaration of Free Growing

A Cutblock or SU may be declared free growing when the stand has attained the free growing standards defined for it, and the stand is reasonably expected to continue to meet or exceed those standards.

#### 7.5.6 Maximum Densities

The following maximum densities apply:

- (a) when there are at least 25,000 countable conifers per hectare for stands where Lodgepole pine makes up 80% or more of the inventory of the stand; or
- (b) 10,000 countable conifers per hectare for all other stands.

# 7.5.7 Post Treatment Density

If spacing activities are necessary a Holder of this *FSP* will select a post treatment density of 1200 to 4500 countable crop trees per hectare considering:

- (a) species composition;
- (b) future health concerns;
- (c) forest product expectations; and
- (d) other forest management factors of the local area.

## 7.5.8 Cobble & Boulder/Heavy Slash/Shallow Soil/Wet Organic Soil SU's

#### 7.5.8.1 Definitions

"Area Limited by Site Factors" means an area in a Cutblock determined, through professional assessment and rationale, to have one or more the following:

- (a) dispersed mappable and un-mappable areas of cobble, exposed bedrock and /or boulders on 30% or more of a SU:
- (b) shallow soil over rock (ie soil < 20 cm deep on 30% or more of a SU);
- (c) age class 8 & 9 cedar or hemlock leading stands that have heavy slash loads, are inoperable to post harvest mechanical site preparation and are harvested by cable and/or heli harvest methods; or
- (d) subhygric to hydric wet, organic, soils that may be identified by, but not limited to the presence of sphagnum moss, lady fern or bracken fern, skunk cabbage, alder (or a combination of all), high water table or other similar vegetation on 30% or more of the SU that is inoperable to post harvest mechanical site preparation;

# **Result or Strategy**

The total Area Limited by Site Factors within a Cutblock will:

- (a) not exceed 5.0 hectares of the net area to be reforested; and
- (b) for those species specified in the stocking standards in Appendix 5, the stocking levels will have:
  - (i) a target of 800 stems per hectare;
  - (ii) a minimum of 400 stems per hectare of the preferred and acceptable species; and
  - (iii) a minimum of 300 stems per hectare of the preferred species.

### 7.5.9 Use of Western Larch

Where western larch is listed for use in the Chief Foresters guidance for western larch, its use to meet stocking density will be limited to 30% of the TSS. Western larch will be considered a preferred species when planted, and where larch planting trials have been successful in the ICH mw3, wk1 and vk1 subzones.

#### 7.5.10 Use of Western White Pine

Where western white pine is listed for use in the Chief Foresters guidance for white pine, its use to meet stocking density will be limited to 30% of the TSS. When western white pine is planted, "A" class seed will be used and it will be considered a preferred species.

### 7.5.11 Use of Western Hemlock

Where western hemlock is not already considered by the stocking standards to be preferred or acceptable, it will be considered preferred when planted in the ICHwk or ICHvk subzones and acceptable in the ICHmw3 01 and O5 site series where:

- a) the pre-harvest stand has more than 10% western hemlock;
- b) western hemlock has grown successfully on similar sites; and
- the signing forester is confident that western hemlock will also grow successfully on the site.

# 7.5.12 Stocking in Site Series Complex

Where more than one site series is located within a SU, and they exist as a mosaic or complex:

- (a) the stocking standard in **Appendix A** applicable to the dominant site series will be applied; or
- (b) if there are additional preferred and acceptable species specified in the stocking standard for the subdominant site series, those species may also be applied.

# **SIGNATURES**

# 8.1 Signature of Preparing Forester

Preparing Forester										
"I certify that the work described herein fulfills the standards expected of a member of the Association of British Columbia Forest Professionals and that I did personally supervise the work"										
8.2 Signature of Person Required to Prepare the Plan										
Authorized Licencee Signature										

# **APPENDICES**

# **Appendix A – Stocking Standards**

# Table A: Even Aged Stocking Standards

# Gilbert Smith Forest Products Ltd. FLA56291 / FLA18692 / T0713 Stocking Standards

				<u> </u>								
									F	ree Grov	ving Guide	
	BG0 Classific			ecies nifer		Stocki	ng (i)		Asses	sment	Min. Height (ii)	
Stocking Standard					Target well spaced	MIN	MIN	Delay (max	Earliest	Latest		Ht
ID No.	Zone/SZ	Series	Preferred (p)	Acceptable (a)	per ha	pa	р	yrs)	(yrs)	(yrs)	Species	(m)
	ESSFdc2	01	PI Se	BI	1200	700	600	4	1	20	PI Others	1.6 0.8
		03	Pl	Bl <sup>13</sup> Pa <sup>9,17</sup> Se	1000	500	400	7	1	20	PI Others	1.2 0.6
		04	Pl	BI <sup>13</sup> Se	1000	500	400	7	1	20	PI Others	1.2 0.6
		05	PI Se	BI <sup>10,13</sup>	1000	500	400	7	1	20	PI Others	1.2 0.6
		06	PI Se	BI	1200	700	600	4	1	20	PI Others	1.6 0.8
		07	PI Se <sup>32</sup>	BI	1200	700	600	4	1	20	PI Others	1.6 0.8
		08	PI <sup>1</sup> Se <sup>1,32</sup>	Bl <sup>1,32</sup>	1000	500	400	4	1	20	PI Others	1.2 0.6
	ESSFwc2	01	Bl Se	PI <sup>17,34</sup>	1200	700	600	4	1	20	PI Others	1.6 0.8
		02	PI <sup>17</sup> Se <sup>10,13</sup>	BI <sup>10,13,14</sup>	1000	500	400	7	1	20	PI Others	1.2 0.6
		03	Se PI <sup>17,34</sup>	BI <sup>10,13,14</sup>	1000	500	400	7	1	20	PI Others	1.2 0.6
		04	Bl Se	PI <sup>17,34</sup>	1200	700	600	7	1	20	PI Others	1.6 0.8
		05	BI Se	Pl <sup>23,34</sup>	1200	700	600	7	1	20	PI Others	1.6 0.8
		06	Bl <sup>32</sup> Se <sup>32</sup>	Pl <sup>23,34</sup>	1200	700	600	4	1	20	PI Others	1.6 0.8
		07	BI Se	Pl <sup>23,34</sup>	1200	700	600	4	1	20	PI	1.6

	İ									Others	0.8	
	08	BI <sup>1,32</sup> Se <sup>1,32</sup>	Pl <sup>23,34</sup>	1000	500	400	4	1	20	PI Others	1.2 0.6	
	09*	PI <sup>1</sup> Se <sup>1,32</sup>	BI <sup>1,32</sup>	400	200	200	4	1	20	Pl	1.2	
										Others	0.6	
ICHmk1	01	Fd <sup>9,14,32</sup>	BI <sup>10,13</sup> Cw <sup>10,13,32</sup>	1200	700	600	7	1	20	PI, Lw	2.0	
		Lw <sup>9,14,32</sup> PI Sx <sup>10,13</sup>								Fd Others	1.4 1.0	
	02	Fd Pl	BI <sup>10,13</sup> Sx <sup>10,13</sup>	600	400	400	7	1	20	PI	1.4	
		Lw Fd Lw Pl								Fd	1.0	Lw added as preferable
	03	Sx <sup>10,13</sup>	BI <sup>10,13</sup> Cw <sup>10,13</sup>	1000	500	400	7	1	20	PI, Lw	1.4	
										Fd Others	1.0 0.8	
		Fd <sup>32</sup> Lw <sup>32</sup> PI Sx <sup>10,13</sup>										
	04	Sx <sup>10,13</sup>	BI <sup>10,13</sup> Cw <sup>10,13,32</sup>	1200	700	600	7	1	20	PI, Lw Fd	2.0 1.4	
										Others	1.0	
		PI Sx Fd <sup>9,14,32</sup>										
	05	Lw <sup>9,14,32</sup>	BI Cw <sup>32</sup>	1200	700	600	4	1	20	PI, Lw	2.0	
										Fd	1.4	
		PI Sx								Others	8.0	
	00	Fd <sup>9,14,32</sup> Lw <sup>9,14,32</sup>	BI Cw <sup>32</sup>	4000	700	000	4		00	DI I	0.0	
	06	LW*/	BI CM.	1200	700	600	4	1	20	PI, Lw Fd	2.0 1.4	
										Others	0.8	
	07	PI <sup>1</sup> Sx <sup>1</sup> Lw <sup>1,32</sup> Fd <sup>1,32</sup>	Bl <sup>1</sup> Cw <sup>32</sup>	1000	500	400	4	1	20	PI, Lw	1.4	
	07	LW 1d	DI CW	1000	300	400	4	'	20	Fd	1.0	
										Others	0.8	
ICHmk2	01	Fd <sup>9,14,32</sup> Pl	BI <sup>10,13</sup> Cw	1200	700	600	7	1	20	DI I	2.0	
ICHIIKZ	01	Sx Lw	DI CW	1200	700	000	′	'	20	PI, Lw Fd	1.4	Lw added as preferable
										Sx	0.8	·
	02	Fd Pl	Sx <sup>10,13</sup>	600	400	400	7	1	20	Others Pl	1.0 1.4	
		Lw								Fd	1.0	Lw added as preferable
	03	Fd PI Sx <sup>10,13</sup>	Cw <sup>10,13</sup>	1000	500	400	7	1	20	Others PI	0.8 1.4	
		Lw						·		Fd	1.0	Lw added as preferable
	04	Fd Pl Sx	BI <sup>10,13</sup> Cw <sup>10,13</sup>	1200	700	600	7	1	20	Others Pl, Lw	0.8 2.0	
		Lw	51	1200	, 50			'	20	Fd	1.4	Lw added as preferable
										Sx Others	0.8 1.0	
	<u> </u>				l	l			l	Others	1.0	

	1	e 19 14 32 e 1					1	ı	1	T		
	05	Fd <sup>9,14,32</sup> PI Sx	Bl <sup>13</sup> Cw <sup>32</sup>	1200	700	600	4	1	20	PI Fd Others	2.0 1.4 1.0	
	06	Pl <sup>1</sup> Sx <sup>1</sup> Fd <sup>1,32</sup>	Bl <sup>1</sup> Cw <sup>32</sup>	1000	500	400	4	1	20	PI Fd Others	1.4 1.0 0.8	
ICHmw3 & ICHdw3	01	Fd Sx <sup>10,13</sup> Cw <sup>10,13</sup>	PI <sup>51</sup> BI <sup>10,13</sup> Pw <sup>31</sup> Hw	1200	700	600	4	1	20	PI, Pw Lw Fd	2.0 2.0 1.4	Lw added as preferred, Hw moved from tertiary to acceptable
	02	Fd Pl Lw	Cw <sup>10,13</sup> Pw <sup>31</sup>	1000	500	400	7	1	20	Others PI, Pw Fd Others	1.0 1.4 1.0 0.8	Lw added as preferred,
	03	Fd <sup>32</sup> Pl Lw	Cw <sup>10,13</sup> Pw <sup>31</sup> Sx <sup>10,13</sup> Bl <sup>10,13</sup>	1000	500	400	7	1	20	PI, Pw Lw Fd Others	1.4 1.4 1.0 0.8	Lw added as preferred
	04	Fd Pl <sup>51</sup> Lw	Cw <sup>10,13</sup> Pw <sup>31</sup> Sx <sup>10,13</sup>	1200	700	600	7	1	20	PI, Pw Lw Fd Others	2.0 2.0 1.4 1.0	Lw added as preferred
	05	Fd Cw <sup>10,13</sup> Sx <sup>10,13</sup>	BI <sup>10,13</sup> PI <sup>51</sup> Pw <sup>31</sup> Lw, Hw	1200	700	600	7	1	20	PI, Pw Lw Fd Others	2.0 2.0 1.4 1.0	Lw added as acceptable. Hw moved to acceptable
	06	Cw Fd <sup>14</sup> Hw Sx	BI <sup>10,13</sup> PI <sup>51</sup> Pw <sup>31</sup> Lw	1200	700	600	4	1	20	PI, Pw Lw Fd Others	2.0 2.0 1.4 1.0	Lw added as acceptable
	07	Cw <sup>32</sup> Sx Fd <sup>1,32</sup>	BI Hw <sup>32</sup> Pl <sup>51</sup> Pw <sup>31</sup> Lw	1200	700	600	4	1	20	PI, Pw Lw Fd Others	2.0 2.0 1.4 1.0	Lw added as acceptable
	08	Cw <sup>1,32</sup> Hw <sup>1,32</sup> Pl <sup>1,51</sup> Sx <sup>1</sup>	Bl <sup>1</sup> Pw <sup>31</sup>	1000	500	400	4	1	20	PI, Pw Others	1.4 0.8	
ICHvk1	01	Cw <sup>32</sup> Sx	Bl <sup>13</sup> Fd <sup>1,9,14,32,34</sup> Pw <sup>31</sup> Hw <sup>32</sup>	1200	700	600	4	1	20	Pw	2.0	

			Lw							Fd Others	1.4 1.0	Lw added as acceptable
	02	Fd <sup>9</sup> Cw Sx	BI Hw Pw <sup>31</sup> Lw	1200	700	600	4	1	20	PI, Pw Lw Fd Others	2.0 2.0 1.4 1.0	Lw added as acceptable
	03	Cw Fd <sup>9,14,34</sup> Hw Sx	Bl <sup>10,13</sup> Pw <sup>31</sup> Lw	1200	700	600	4	1	20	Pw, Lw Fd Others	2.0 1.4 1.0	Lw added as acceptable
	04	Cw Fd <sup>9,14</sup> Hw Sx	BI <sup>13</sup> Pw <sup>31</sup> Lw	1200	700	600	4	1	20	Pw, Lw Fd Others	2.0 1.4 1.0	Lw added as acceptable
	05	Cw <sup>1,32</sup> Sx <sup>1</sup>	Hw Bl <sup>1</sup> Pw <sup>1,31</sup>	1000	500	400	4	1	20	Pw Others	1.4 0.8	
	06	Cw <sup>1,32</sup> Hw <sup>1,32</sup> Sx <sup>1</sup>	BI <sup>1</sup> Pw <sup>1,31</sup>	1000	500	400	4	1	20	PI Others	1.4 0.8	
ICHwk1	01	Cw Fd <sup>9,14</sup> Hw Sx	BI <sup>10,13</sup> Pw <sup>31</sup> Lw	1200	700	600	4	1	20	PI, Pw Lw Fd Others	2.0 2.0 1.4 1.0	Lw added as acceptable
	02	Fd Pl <sup>51</sup> Cw <sup>10,13</sup>	Pw <sup>31</sup> Sx <sup>10,13</sup> Lw,	1000	500	400	7	1	20	PI, Pw Fd Others	1.4 1.0 0.8	Lw added as acceptable
	03	Fd Cw <sup>10,13</sup>	Hw <sup>10,13</sup> Pw <sup>31</sup> Sx <sup>10,13</sup> Lw	1200	700	600	4	1	20	Pw, Lw Fd Others	2.0 1.4 1.0	Lw added as acceptable
	04	Fd <sup>9,14</sup> Cw Sx <sup>10,13</sup>	Hw Pw <sup>31</sup> Lw	1200	700	600	4	1	20	PI, Pw Lw Fd Others	2.0 2.0 1.4 1.0	Lw added as acceptable
	05	Cw <sup>32</sup> Sx	BI Fd <sup>1,14,32</sup> Hw <sup>32</sup> Pw <sup>31</sup> Lw	1200	700	600	4	1	20	PI, Pw Lw Fd Others	2.0 2.0 1.4 1.0	Lw added as acceptable
	06	Cw <sup>1,32</sup> Sx <sup>1</sup>	Bl <sup>1</sup> Hw <sup>1,32</sup> Pw <sup>1,31</sup>	1000	500	400	4	1	20	PI, Pw Others	1.4 0.8	
	07	Cw <sup>1,32</sup> Hw <sup>1,32</sup> Sx <sup>1</sup>	Bl <sup>1</sup>	1000	500	400	4	1	20	PI Others	1.4 0.8	

 		37	_ 914 _ 1013									
IDFdk2	01	Fd <sup>32</sup> Pl	Py <sup>9,14</sup> Sx <sup>10,13</sup>	1000	500	400	7	1	20	PI, Lw	1.0	
										Fd	8.0	
										Sx	0.6	
										Ру	0.6	
	02	Fd <sup>27</sup> Py <sup>14</sup>		600	400	400	7	1	20	Fd	0.8	
		-								Ру	0.6	
	03	Fd <sup>27</sup> Pl	Py <sup>14</sup>	1000	500	400	7	1	20	Ρĺ	1.0	
			. ,	.000			•			Fd	0.8	
										Py	0.6	
		Fd <sup>32</sup> PI			1					ı y	0.0	
	04	Sx <sup>10,13</sup>	Py <sup>9,14</sup>	1200	700	600	7	1	20	PI, Lw	1.4	
	04	SX '	Py	1200	700	600	1	'	20			
										Fd	1.0	
		- 32:	- 32					_		Py	0.8	
	05	Fd <sup>32</sup> Sx PI	Cw <sup>32</sup>	1200	700	600	4	1	20	PI, Lw	1.4	
										Fd	1.0	
										Others	8.0	
	06	Pl <sup>1</sup> Sx <sup>1</sup> Fd <sup>1,32</sup>		1000	500	400	4	1	20	PI	1.0	
										Fd	0.8	
										Others	0.6	
	07	Pl <sup>1</sup> Sx <sup>1</sup>	Cw <sup>32</sup>	1000	500	400	4	1	20	PI	1.0	
			<b>.</b>	.000			•			Others	0.6	
					1				1	Ottrioro	0.0	<u> </u>
			Cw <sup>10,13</sup> Sx <sup>10,13</sup>									
IDFmw2	01	Fd Pl	BI <sup>10,13</sup>	1200	700	600	7	1	20	PI, Lw	1.6	
	_									Fd	1.0	
										Others	0.8	
	02	Fd <sup>27</sup> Pl	Py <sup>9,14,16,23</sup>	600	400	400	7	1	20	PI	1.2	
	02	14 11	ı y	000	700	400	'		20	Fd	0.8	
										Py	0.6	
			Py <sup>9,14,16</sup> Cw <sup>10,13</sup>		-					ГУ	0.0	
	00	Fd <sup>14</sup> Pl	Sx <sup>10,13</sup>	4000	500	400	-		00	DI I	4.0	
	03	Fa Pi	Sx	1000	500	400	7	1	20	PI, Lw	1.6	
										Fd	1.0	
		22	- 20.27							Others	8.0	
	04	Fd <sup>32</sup> Sx Pl	Cw <sup>32,37</sup>	1200	700	600	4	1	20	PI, Lw	1.6	
										Fd	1.0	
										Others	8.0	
	05*	Sx <sup>1</sup> Pl <sup>1</sup>	Cw <sup>1,32</sup>	400	200	200	4	1	20	PI	1.2	
										Others	0.6	
		= 2/ =										
IDFxh2	01	Fd <sup>27</sup> Py Py <sup>27</sup> Fd <sup>27</sup> Py <sup>27</sup> Fd <sup>27</sup>		1000	500	400	7	1	20	All	0.6	
	02	Py <sup>2</sup> ′ Fd <sup>2</sup> ′		400	200	200	7	1	20	All	0.6	
	03	Py <sup>2</sup> ' Fd <sup>2</sup> '		400	200	200	7	1	20	All	0.6	
	04	Py_Fd <sup>27</sup>		600	400	400	7	1	20	All	0.6	
	05	Fd <sup>27</sup> Py		1000	500	400	7	1	20	All	0.6	
	06	Fd Py		1200	700	600	7	1	20	All	0.6	
	07	Fd <sup>32</sup> Sx	Py <sup>32</sup> Cw <sup>32</sup>	1200	700	600	4	1	20	All	0.6	
	08	Sx <sup>1</sup> Fd <sup>1,32</sup>	PI <sup>1,23</sup>	1000	500	400	4	1	20	PI	0.8	
										Others	0.6	
					1				1			
		PI Sx	10.10							1		
MSdm2	01	Fd <sup>9,14,32</sup>	BI <sup>10,13</sup>	1200	700	600	7	1	20	PI, Lw	1.4	

1	ĺ	ĺ							ĺ	ĺ	Others	0.8	1
		03	Fd <sup>9,14</sup> PI	BI <sup>10,13</sup> Sx <sup>10,13</sup>	1000	500	400	7	1	20	PI	1.0	
											Others	0.6	
			PI Fd <sup>9,14,32</sup>										
		04	Sx <sup>10,13</sup>	BI <sup>10,13</sup>	1200	700	600	7	1	20	PI, Lw	1.4	
											Others	0.8	
			PI Sx	22									
		05	Fd <sup>9,14,32</sup>	BI Cw <sup>32</sup>	1200	700	600	4	1	20	PI, Lw	1.4	
											Others	0.8	
		00	PI Sx Fd <sup>9,14,32</sup>	6	1000	700	000		_	-00	D		
		06	Fd	BI	1200	700	600	4	1	20	PI, Lw	1.4	
		07	DI C.:	DI	4000	500	400	4	4	20	Others	0.8	
		07	PI Sx	BI	1000	500	400	4	1	20	PI Others	1.0 0.6	
l l											Others	0.6	
			PI Sx										
!	SBSmm	01	Fd <sup>9,14,32</sup>	BI <sup>10,13</sup>	1200	700	600	7	1	20	PI, Lw	2.0	
											Fd	1.4	
			0.40.20	40.40							Others	1.0	
		02	PI Fd <sup>9,13,32</sup>	Sx <sup>10,13</sup>	1000	500	400	7	1	20	PI	1.4	
											Fd	1.0	
			E 19 14 32 DI	0 1013	1000	500	400		4		Others	0.8	
		03	Fd <sup>9,14,32</sup> PI	Sx <sup>10,13</sup>	1000	500	400	7	1	20	PI	1.4	
											Fd	1.0	
		04	PI Fd <sup>9,13,32</sup>	Sx <sup>10,13</sup>	1000	500	400	7	1	20	Others PI	0.8 1.4	
		04	FIFU	SX	1000	300	400	′	'	20	Fd	1.0	
											Others	0.8	
			PI Fd <sup>9,14,32</sup>								Otricis	0.0	
		05	Sx	BI <sup>10,13</sup>	1200	700	600	7	1	20	PI, Lw	2.0	
								•	-		Fd	1.4	
											Others	1.0	
			PI Sx										
		06	Fd <sup>9,14,32</sup>	BI <sup>10,13</sup>	1200	700	600	7	1	20	PI, Lw	2.0	
											Fd	1.4	
											Others	1.0	
			PI Sx	DI 0 32	4000								
		07	Fd <sup>9,14,32</sup>	BI Cw <sup>32</sup>	1200	700	600	4	1	20	PI	2.0	
											Fd	1.4	
		00	DI <sup>1</sup> C <sup>1</sup>	DI <sup>1</sup>	4000	500	400	4		- 00	Others	1.0	
		80	Pl <sup>1</sup> Sx <sup>1</sup>	Bl <sup>1</sup>	1000	500	400	4	1	20	PI	1.4	
											Others	8.0	

# **Additional Reference Standards**

#### **Minimum Inter-tree Distance**

Trees must be the greater than the approved minimum inter-tree distance apart in order to be well spaced:

#### Minimum inter-tree distance (m)

2.0

#### Location/rationale

Minimum inter-tree spacing will be 2.0m unless the following conditions below occur, however other minimum spacings stated below will be used when required in order to optimize microsite selection and tree performance in the following circumstances:

#### Minimum inter-tree distance (m)

1.6

#### Location/rationale

A minimum inter-tree distance of 1.6m will be utilized throughout all blocks for the following situations:

- 1. To optimize the use of obstacles for seedling protection from snow creep, brush, and for microsite warming;
- 2. To allow for higher densities of trees around and to compensate for non-productive brush patches, rock and slash;
- 3. To utilize the best microsites (i.e. on raised microsites.), particularly on those areas that have had raised microsites created by mechanical site prep;
- 4. On areas where suitable microsites are limited by slash and brush and they are not able to be able to be site prepped due to slope or other site limiting factors.

#### Minimum inter-tree distance (m)

1.0

#### Location/rationale

Minimum inter-tree spacing may be reduced to 1.0m for areas with dispersed NP ground consisting of unmappable rock wet ground or other naturally occurring non-productive sites found scattered throughout the block.

#### **Height of Trees Above Brush**

Trees must be greater than the approved minimum percentage height above brush in order to be free growing:

% Ht above brush	Location/condition
125%	BG ESSF IDF MH MS PP BGC zones
150%	all other areas

#### **Stocking Standards for Ecosystem Complexes**

Stocking standards for Standard's Units with ecosystem complexes will be determined by the prescribing forester when writing the Site Plan.

The stocking standards as approved for the applicable ecosystems will be used as a guide and applied accordingly given the site characteristics and limitations.

The stocking standards for the most dominant ecosystem will be utilized unless the prescribing forester provides a documented rationale in the Site Plan.

#### **Early Free Growing Date Amendments**

The current Free Growing Early Assessment Date stated in the stocking standards will be the same as the regeneration delay date specified.

The Free Growing Early Assessment Date will only be reduced however if there are no significant forest health issues or the trees are not at risk of being inhibited by competing vegetation before the currently approved Early Free Growing Assessment Date.

#### **Maximum Density**

The maximum number of stems per hectare for all coniferous species except lodgepole pine will be 10,000 at the Late Free Growing Date unless a higher number is specified by the Regional Manager. In that case the Regional Managers number will be utilized.

The maximum number of stems per hectare for all lodgepole pine will be 25,000 at the Late Free Growing Date unless a different number is specified by the Regional Executive Director in which case the Regional Executive Director's number will be utilized.

#### **Post Spacing Density**

Where maximum density standards are exceeded, stand tending activities will be carried out to reduce the number of stems to no less than the target stocking standard and no more than 2500 sph.

## **Leave Tree Acceptability**

The minimum characteristics for "leave" trees and advance regeneration will be as per the 2000 Kamloops Region Establishment to Free Growing Guidebook - Appendix 10 table A10-1, A10-2 and Appendix 5 "Free Growing Damage Criteria for British Columbia.

#### White Pine Acceptability

White Pine may be counted up to a maximum of 10% of the Target Well Spaced or Free Growing trees during surveys due to its susceptibility to blister rust.

Table B: Uneven-aged Stocking Standards\* -- Single-tree selection only

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

900	1	400	200	200	400	1	200	100	100
(all layers)	2	500	300	250		2	300	125	125
	3	700	400	300		3	300	150	150
	4	900	500	400		4	400	200	200

#### \*\* Stand Layer Definition

Layer 1	Mature	trees >= 12.5 cm dbh				
Layer 2	Pole	trees 7.5 cm to 12.4 cm dbh				
Layer 3	Sapling	trees >= 1.3 m height to 7.4 cm dbh				
Layer 4	Regeneration	trees < 1.3 m height				
*** pa - preferred and acceptable species p - preferred species						
Preferred and acceptab	ole species and "Target	from Table A standards' are as specified in Table A by biogeoclimatic ecosystem classification (BEC) site series.				

#### **Footnotes**

#### **Conifer Tree Species**

"Ba" means amabilis fir;

"Bg" means grand fir;

"BI" means subalpine fir;

"Bp" means noble fir;

"Cw" means western red cedar;

"Fd" means Douglas-fir;

"Hm" means mountain hemlock;

"Hw" means western hemlock;

"Lt" means tamarack;

"Lw" means western larch;

"Pa" means whitebark pine;

"PI" means lodgepole pine;

"Pw" means white pine;

"Py" means ponderosa pine;

"Sb" means black spruce;

"Se" means Engelmann spruce;

"Ss" means Sitka spruce;

"Sw" means white spruce;

"Sx" means hybrid spruce or interior spruce;

"Sxs" means hybrid Sitka spruce;

"Sxw" means hybrid white spruce;

"Yc" means yellow cedar.

#### **Broadleaf Tree Species**

"Acb" means balsam poplar;

"Act" means black cottonwood;

"At" means trembling aspen;

"Dr" means red alder:

"Ep" means common paper birch;

"Mb" means bigleaf maple;

"Qg" means garry oak;

"Ra" means arbutus;

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

#### "MIN or "Min" means minimum.

- <sup>1</sup> elevated microsites are preferred
- <sup>2</sup> suitable on thick forest floors
- <sup>3</sup> restricted to coarse-textured soils
- <sup>4</sup> restricted to medium-textured soils
- <sup>5</sup> footnote retired
- <sup>6</sup> restricted to nutrient-very-poor sites
- <sup>7</sup> restricted to nutrient-medium sites
- <sup>8</sup> restricted to steep slopes
- <sup>9</sup> restricted to southerly aspects
- <sup>10</sup> restricted to northerly aspects
- <sup>11</sup> restricted to crest slope positions
- <sup>12</sup> suitable on cold air drainage sites
- <sup>13</sup> restricted to upper elevations of biogeoclimatic unit
- <sup>14</sup> restricted to lower elevations of biogeoclimatic unit
- <sup>15</sup> restricted to northern portion of biogeoclimatic unit in region
- <sup>16</sup> restricted to southern portion of biogeoclimatic unit in region
- <sup>17</sup> restricted to western portion of biogeoclimatic unit in region
- <sup>18</sup> restricted to eastern portion of biogeoclimatic unit in region
- <sup>19</sup> restricted, not in Queen Charlotte Islands
- <sup>20</sup> restricted, not near outer coast
- <sup>21</sup> restricted to mainland
- <sup>22</sup> restricted to southern Gardner Canal-Kitlope area
- <sup>23</sup> restricted to trial use
- <sup>24</sup> suitable (as a major species) in wetter portion of biogeoclimatic unit
- <sup>25</sup> suitable on sites lacking salal
- <sup>26</sup> suitable minor species on salal-dominated sites
- <sup>27</sup> partial canopy cover required for successful establishment
- <sup>28</sup> limited by moisture deficit
- <sup>29</sup> risk of heavy browsing by moose
- <sup>30</sup> risk of porcupine damage
- <sup>31</sup> risk of white pine blister rust
- <sup>32</sup> limited by growing-season frosts
- 33 footnote retired and replaced with footnote 'a'
- <sup>34</sup> risk of snow damage

- <sup>35</sup> risk of weevil damage
- <sup>36</sup> suitable major species on salal-dominated sites
- <sup>37</sup> risk of heart rots
- <sup>38</sup> footnote retired
- 39 avoid exposed and windy sites
- 40 risk of redheart
- <sup>41</sup> limited by poorly drained soils
- <sup>42</sup> restricted to fresh soil moisture regimes
- <sup>43</sup> suitable on mainland coast only (QCI only)
- <sup>44</sup> suitable in areas with stronger maritime influence
- <sup>45</sup> suitable in areas with stronger continental influence
- <sup>46</sup> restricted to area north of the Dean Channel
- <sup>47</sup> risk of balsam wooly adelgid
- <sup>48</sup> risk of heavy browsing by deer
- <sup>49</sup> applies only to rust resistant, planted stock.
- <sup>50</sup> restricted to sites where the species occurs as a major species in a pre-harvest, natural stand
- <sup>51</sup> restricted to areas with proven PI performance
- <sup>52</sup> restricted to sheltered microsites with deep soil
- <sup>53</sup> minor component
- <sup>54</sup> risk of unsuccessful release of advance regeneration
- <sup>55</sup> acceptable in sx-sm portion of site series

### # Broadleaf Management Constraints

a productive, reliable, and feasible regeneration option

b limited in productivity, reliability and/or feasibility

#### # Localized Footnotes

- <sup>56</sup> Kalum forest district spruce content restricted to < 20% well-spaced and free growing trees on a standards unit due to leader weevil.
- <sup>57</sup> **Arrow** forest district Pw rust-resistant stock may be preferred to a max 50% of preferred and acceptable well-spaced stems.
- <sup>58</sup> Arrow forest district Fd limited to a max 50% of preferred and acceptable well-spaced stems due to root rot.
- <sup>59</sup> Prince George region max 1,400 total sph of aspen and cottonwood. Treat as 'ghost' trees in surveys.
- <sup>60</sup> **Squamish** forest district species is acceptable in Squamish forest district only.
- <sup>61</sup> **Squamish** forest district only acceptable on cold air drainage sites only.
- <sup>62</sup> S. Island forest district may only be used as acceptable species within the balsam woolly adelgid quarantine zone.
- <sup>63</sup> Queen Charlotte Islands forest district must meet district manager specified minimum well-spaced preferred stems per hectare and minimum height requirements for Cw and/or Yc
- 66 Mackenzie forest district may be preferred where risk of snow damage is low or where risk of frost damage is excessive on spruce
- <sup>67</sup> **Chilliwack** forest district species is acceptable in Chilliwack forest district only.
- <sup>68</sup> **Chilliwack** forest district species is preferred in Chilliwack forest district only.
- <sup>69</sup> Species is restricted to upper elevations when used in the southern portion of the biogeoclimatic unit.
- <sup>70</sup> **Pr Rupert** region Hw is restricted to a maximum of 50% of the well spaced stems at free growing

# Appendix B – Legal Objectives for Interpretive Forest Sites, Recreation Sites or Recreation Trails

Following are the legally established objectives for Interpretive Forest Sites, Recreation Sites and Recreation Trails that were legally designated under *FPC*. The site and trail legal designations are continued under *FRPA* Section 180, and the legal objectives for these sites and trail are continued under *FRPA* Section 181.

Kamloops FDU Recreation Sites and Trails

D 4: 6:4		
Recreation Site or Trail continued		
Under FRPA	Project No.	
section 180	16660-20/	Recreation Site or Trail Objectives continued under FRPA section 181
Allan Creek Recreation Trail	4521	1997/03/24 Recreation Experience Objectives: To provide opportunities for semi-primitive motorized and modified <i>road</i> ed recreation experiences. Recreation Feature Objectives: To protect the alpine/high sub-alpine and small lake features. Recreation Activity Objectives: To provide opportunities for snowmobiling activities during winter season and hiking, scenic viewing and hunting (during the regulated season) during the remainder of the year. Public Recreation Objectives: Winter snowmobile trail head access is via a maintained public highway.
Boundary Lake	1993	1997/03/24 Recreation Experience Objectives: To provide opportunities for modified
Recreation Site		roaded recreation experiences. Recreation Feature Objectives: To protect the small lake, fish and developed campsite features. Recreation Activity Objectives: To provide opportunities for summer camping, sport fishing, canoeing and boating activities. Public Recreation Objective: To maintain summer, 2 wheel drive, forest road access to the site.
Chappel Recreation Trail	4555	1997/03/24 Recreation Experience Objectives: To provide opportunities for semi-primitive motorized and modified <i>road</i> ed recreation experiences. Recreation feature objective: To protect the small / mid lake and fisheries experience. Recreation activity objective: To provide opportunities for snowmobiling activities during winter season and hiking, scenic viewing and hunting. Public recreation objective: To maintain summer access to trailhead and winter access via maintained public highway.
Clemina Creek Recreation Trail	4703	1997/03/10 Recreation Experience Objectives: To provide opportunities for semi-primitive motorized and modified <i>road</i> ed recreation experiences. Recreation Feature Objectives: To protect the alpine/high sub-alpine, wetland vegetation and small lake features. Recreation Activity Objectives: To provide opportunities for snowmobiling activities during the winter season and hiking, scenic viewing and hunting (during the regulated season) during the remainder of the year. Public Recreation Access Objectives: Winter snowmobile trail head access is via a maintained public highway. Summer access is provided by Forest Service <i>road</i> (suitable for 4 wheel drive vehicles) to various points along the trail system beginning at approximately 3 km from the highway.
Coldscaur Lake North Recreation Site	1512	1997/03/24 Recreation Experience Objectives: To provide opportunities for modified roaded recreation experiences. Recreation Feature Objectives: To protect the mid-sized lake, fish and developed campsite features. Recreation Activity Objectives: To provide opportunities for summer camping, sport fishing and boating activities. Public Recreation Objectives: To maintain summer, 2 wheel drive, Forest Service road access to the site.
Coldscaur Lake South Recreation Site	1520	1997/03/24 Recreation Experience Objectives: To provide opportunities for modified roaded recreation experiences. Recreation Feature Objectives: To protect the mid-sized lake, rock arch, fish and developed campsite features. Recreation Activity Objectives: To provide opportunities for summer camping, sport fishing, canoeing, boating, scenic viewing and nature study/appreciation activities. Public Recreation Objectives: To maintain summer, 2 wheel drive, Forest Service road access to the site.
Dennis Lake Recreation Site	4506	1997/03/24 Recreation Experience Objectives: To provide opportunities for modified <i>road</i> ed recreation experiences. Recreation Feature Objectives: To protect the small lake, fish and developed campsite features. Recreation Activity Objectives: To provide opportunities for sport fishing, boating, canoeing, summer camping and scenic viewing activities. Public Recreation Objectives: To maintain summer, 2 wheel drive, Forest Service <i>road</i> access to the site.
Double Lakes Recreation Site	1908	1997/03/24 Recreation Experience Objectives: To provide opportunities for modified <i>road</i> ed recreation experiences. Recreation Feature Objectives: To protect the mid-sized lakes, fish and developed campsite features. Recreation Activity Objectives: To provide opportunities for summer camping, sport fishing, canoeing and boating activities. Public Recreation Access Objectives: To maintain summer, 2 wheel drive, Forest Service <i>road</i> access to the site.

Recreation Site or Trail continued Under FRPA section 180	Project No. 16660-20/	Recreation Site or Trail Objectives continued under <i>FRPA</i> section 181
East Maury Lake Recreation Site	1997	1997/03/24 Recreation Experience Objectives: To provide opportunities for modified roaded recreation experiences. Recreation Feature Objectives: To protect the mid-sized lake, fish and developed campsite features. Recreation Activity Objectives: To provide opportunities for summer camping, sport fishing, canoeing and boating activities. Public Recreation Objectives: To maintain summer, 2 wheel drive, forest road access to the site.
Ejas Lake Recreation Site	1514	1997/03/24 Recreation Experience Objectives: To provide opportunities for modified roaded recreation experiences. Recreation Feature Objectives: To protect the mid-sized lake, fish and developed campsite features. Recreation Activity Objectives: To provide opportunities for summer camping, sport fishing, canoeing and boating activities. Public Recreation Objectives: To maintain summer, 2 wheel drive, forest road access to the site.
Fowler Lake Recreation Site	1816	1997/03/10 Recreation experience objectives: To provide opportunities for natural <i>road</i> ed recreation experiences. Recreation feature objectives: To protect the small lake, fish and regenerating stand features. Recreation activity objectives: To provide opportunities for sport fishing, and canoeing and potential for future summer camping activities. Public recreation access objectives: To maintain summer, 2 wheel drive, forest <i>road</i> access to the vicinity of the site while managing the lake as a walk-in access.
Gannet Lake Recreation Site	4503	1997/03/24 Recreation Experience Objectives: To provide opportunities for modified roaded recreation experiences. Recreation Feature Objectives: To protect the small lake, fish and developed campsite features. Recreation Activity Objectives: To provide opportunities for summer camping, fishing, canoeing and boating activities. Public Recreation Objective: To maintain summer, 2 wheel drive, Forest Service Road and spur road access to the site.
Gordon Bay Recreation Site	4502	1997/03/24 Recreation Experience Objectives: To provide opportunities for modified roaded recreation experiences. Recreation Feature Objectives: To protect the large lake, fine textured beach, fish and developed campsite features. Recreation Activity Objectives: To provide opportunities for summer camping, beach activities, swimming/bathing, sport fishing, canoeing and boating activities. Public Recreation Objectives: To maintain summer, 2 wheel drive, Forest Service Road access to the site
Graffunder Lakes North Recreation Site	1509	1997/03/24 Recreation Experience Objectives: To provide opportunities for modified roaded recreation experiences. Recreation Feature Objectives: To protect the small lake, fish and developed campsite features. Recreation Activity Objectives: To provide opportunities for summer camping, sport fishing, canoeing and boating activities. Public Recreation Access Objective: To maintain summer, 2 wheel drive, Forest Service Road and spur road access to the site.
Grizzle Lake East Recreation Site	4570	1997/03/24 Recreation Experience Objectives: To provide opportunities for modified roaded recreation experiences. Recreation Feature Objectives: To protect the small lake, fish, developed and cabin features. Recreation Activity Objectives: To provide opportunities for summer camping, sport fishing, canoeing, and boating activities. Public Recreation Objectives: To maintain summer, 2 wheel drive, Forest Service road access to the site.
Honeymoon Bay Recreation Site	4610	1997/03/24 Recreation Experience Objectives: To provide opportunities for modified roaded recreation experiences. Recreation Feature Objectives: To protect the large lake, fine textures beach, fish and developed campsite features. Recreation Activity Objectives: To provide opportunities for summer camping, beach activities, swimming/bathing, sport fishing and boating activities. Public Recreation Objectives: To maintain summer, 2 wheel drive, Forest Service Road and 4 wheel drive spur road access to the site.
Italia Lake Recreation Site	1515	1997/03/24 Recreation Experience Objectives: To provide opportunities for modified roaded recreation experiences. Recreation Feature Objectives: To protect the mid-sized lake, fish and developed campsite. Recreation Activity Objectives: To provide opportunities for summer camping, sport fishing, canoeing and boating activities. Public Recreation Objectives: To maintain summer, 2 wheel drive, Forest Service road access to the site.
Kitty Anne Lake Recreation Site	1517	1997/03/24 Recreation Experience Objectives: To provide opportunities for modified roaded recreation experiences. Recreation Feature Objectives: To protect the small lake, fish and developed campsite features. Recreation Activity Objectives: To provide opportunities for summer camping, sport fishing canoeing, boating and scenic viewing activities. Public Recreation Objective: To maintain summer, 2 wheel drive, forest road access to the site.
Lawrence Lake East Recreation Site	1516	1997/03/24 Recreation Experience Objectives: To provide opportunities for modified roaded recreation experiences. Recreation Feature Objectives: To protect the small lake, fish and developed campsite. Recreation Activity Objectives: To provide opportunities for summer camping, sport fishing, boating and canoeing, activities. Public Recreation Objectives: To maintain summer, 2 wheel drive, Forest Service road access to the site.

Recreation Site or Trail continued Under FRPA section 180	Project No. 16660-20/	Recreation Site or Trail Objectives continued under <i>FRPA</i> section 181
Lawrence Lake West Recreation Site	4580	1997/03/24 Recreation Experience Objectives: To provide opportunities for modified roaded recreation experiences. Recreation Feature Objectives: To protect the small lake, fish and developed campsite features. Recreation Activity Objectives: To provide opportunities for summer camping, sport fishing, canoeing and boating activities. Public Recreation Objectives: To maintain summer, 2 wheel drive, Forest Service road access to the site.
Lolo Lake Recreation Site	1511	1997/03/24 Recreation Experience Objectives: To provide opportunities for modified roaded recreation experiences. Recreation Feature Objective: To protect the small lake, fish and developed campsite features. Recreation Activity Objective: To provide opportunities for summer camping, sport fishing, canoeing, boating and scenic viewing activities. Public Recreation Objective: To maintain summer, 2 wheel drive, forest road access to the site.
McCorvie Lake North Recreation Site	1519	1997/03/24 Recreation Experience Objectives: To provide opportunities for modified roaded recreation experiences. Recreation Feature Objectives: To protect the small lake and fish features. Recreation Activity Objectives: To provide opportunities for sport fishing, canoeing and potential or future summer camping activities. Public Recreation Objective: To maintain summer, 2 wheel drive, forest road access to the site.
Messiter Lake Recreation Site	4758	1997/03/24 Recreation Experience Objectives: To provide opportunities for modified roaded recreation experiences. Recreation Feature Objectives: To protect the small lake and fish features. Recreation Activity Objectives: To provide opportunities for sport fishing and canoeing with potential for future summer camping activities. Public Recreation Objectives: To maintain summer, 2 wheel drive, forest road access to the site.
Moira Lake North Recreation Site	1998	1997/03/24 Recreation experience objectives: To provide opportunities for modified roaded recreation experiences. Recreation Feature Objectives: To protect the mid-sized lake, fish and regenerating stand features. Recreation Activity Objectives: To provide opportunities for sport fishing, boating, canoeing and potential for future summer camping activities. Public Recreation Objectives: To maintain summer, 2 wheel drive, forest road access to the site.
Moira Lake South Recreation Site	1513	1997/03/24 Recreation Experience Objectives: To provide opportunities for modified roaded recreation experiences. Recreation Feature Objectives: To protect the mid-sized lake, fish and developed campsite features. Recreation Activity Objectives: To provide opportunities for summer camping, sport fishing, canoeing and boating activities. Public Recreation Objectives: To maintain summer, 2 wheel drive, forest road access to the site.
Moose Lake Recreation Site	4582	1997/03/24 Recreation Experience Objectives: To provide opportunities for modified roaded recreation experiences. Recreation Feature Objectives: To protect the small lake, fish and developed campsite features. Recreation Activity Objectives: To provide opportunities for summer camping, sport fishing and canoeing activities. Public Recreation Objectives: To maintain summer, 2 wheel drive, forest road access to the site.
Mud Lake Recreation Trail	1793	1997/03/24 Recreation Experience Objectives: To provide opportunities for modified roaded recreation experiences. Recreation Feature Objectives: To protect the large lake, fish and developed campsite and land trail features. Recreation Activity Objectives: To provide opportunities for summer camping, hiking, sport fishing, canoeing and boating. Public Recreation Objectives: To maintain summer, 2 wheel drive, Forest Service Road and 4 wheel drive spur road access to the site.
Mystery Lake Recreation Site	1740	1997/03/10 Recreation experience objectives: To provide opportunities for modified roaded recreation experiences. Recreation feature objectives: To protect the small lake, fish and developed campsite features. Recreation activity objectives: To provide opportunities for summer camping, sport fishing and canoeing. Public recreation objectives: To maintain summer, 2 wheel drive, Forest Service Road and 2 wheel drive spur road access to the site.
North Thompson Crossing Recreation Site	1901	1997/03/10 Recreation experience objectives: To provide opportunities for modified <i>roaded</i> recreation experiences. Recreation feature objectives: To protect the large river and fish features. Recreation activity objectives: To provide opportunities for sport fishing, and canoeing and potential for future summer camping activities. Public recreation access objectives: To maintain summer, 2 wheel drive, Forest Service <i>road</i> access to the site.
Raft Mountain Recreation Trail	4527	1997/03/24 Recreation Experience Objectives: To provide opportunities for semi-primitive, natural <i>road</i> ed and modified <i>road</i> ed recreation experiences. Recreation Feature Objectives: To protect the alpine/high sub-alpine and small lake features. Recreation Activity Objectives: To provide opportunities for primarily snowmobiling as well as snow sport activities during winter season and hiking, scenic viewing and hunting (during the regulated season) during the remainder of the year. Public Recreation Objectives: Winter snowmobile trail head access is via a maintained public <i>road</i> . Summer access is provided by maintained Forest Service <i>road</i> (suitable for 2 wheel drive vehicles) to Moilliett Creek in the Raft River and to Caligata Lake at the headwaters of Spahats Creek. Rough Forest Service <i>road</i> (suitable for 4 wheel drive vehicles) provides summer access to the upper

Recreation Site or Trail continued Under FRPA section 180	Project No. 16660-20/	Recreation Site or Trail Objectives continued under FRPA section 181
		elevation areas in the vicinity of Willis Lake.
Reflector Lake North Recreation Site	1524	1997/03/24 Recreation Experience Objectives: To provide opportunities for modified roaded recreation experiences. Recreation Feature Objectives: To protect the small lake and fish features. Recreation Activity Objectives: To provide opportunities for sport fishing, canoeing and potential for future summer activities. Public Recreation Objectives: To maintain summer, 2 wheel drive, Forest Service road access to the vicinity of the site.
Rocky Point Recreation Site	4705	1997/03/24 Recreation Experience Objectives: To provide opportunities for modified roaded recreation experiences. Recreation Feature Objectives: To protect the large lake, fish and developed campsite features. Recreation Activity Objectives: To provide opportunities for summer camping, swimming/bathing, sport fishing, canoeing and boating activities. Public Recreation Objectives: To maintain summer, 2 wheel drive, Forest Service Road and spur road access to the site.
Rock Island Recreation Site	4601	1997/03/24 Recreation Experience Objectives: To provide opportunities for modified roaded recreation experiences. Recreation Feature Objective: To protect the large lake, islets, fine textured beach and fish features. Recreation Activity Objectives: To provide opportunities for swimming/bathing, beach activities, nature study/appreciation, sport fishing, boating, canoeing activities with potential for future summer camping activities. Public Recreation Objectives: To maintain summer, 2 wheel drive, forest road access to the site.
Sicily Lake South Recreation Site	1518	1997/03/24 Recreation Experience Objective: To provide opportunities for modified <i>roaded</i> recreation experiences. Recreation Feature Objectives: To protect the small lake, fish and developed campsite. Recreation Activity Objectives: To provide opportunities for summer camping, sport fishing, boating and canoeing activities. Public Recreation Objectives: To maintain summer, 2 wheel drive, Forest Service <i>road</i> access to the site.
Silence Lake Recreation Site	1510	1997/03/24 Recreation Experience Objectives: To provide opportunities for natural <i>roaded</i> recreation experiences. Recreation Feature Objectives: To protect the mid-sized lake, fish and developed campsite features. Recreation Activity Objective: To provide opportunities for summer camping, sport fishing and boating activities. Public Recreation Access Objective: To maintain summer, 2 wheel drive, Forest Service <i>Road</i> and spur <i>road</i> access to the site.
Silvertip Falls Recreation Site	4600	1997/03/10 Recreation experience objectives: To provide opportunities for modified roaded recreation experiences. Recreation feature objectives: To protect the site specific waterfall, creek, developed trail and campsite features. Recreation activity objectives: To provide opportunities for summer camping, hiking and scenic viewing activities. Public recreation objectives: To maintain summer, 2WD Forest Service Road to the site.
Stukemapten Lake Recreation Site	4781	1997/03/24 Recreation Experience Objectives: To provide opportunities for modified roaded recreation experiences. Recreation Feature Objectives: To protect the small lake, fish and developed campsite features. Recreation Activity Objectives: To provide opportunities for summer camping, sport fishing, boating and canoeing activities. Public Recreation Objectives: To maintain summer, 2 wheel drive, Forest Service Road to the site.
Tsikwustum Creek North Recreation Site	4501	1997/03/24 Recreation Experience Objectives: To provide opportunities for modified roaded recreation experiences. Recreation Feature Objectives: To protect the large lake, fine textured beach, fish, creek and developed campsite features. Recreation Activity Objectives: To provide opportunities for summer camping, beach activities, swimming/bathing, sport fishing, canoeing and boating. Public Recreation Objectives: To maintain summer, 2 wheel drive, Forest Service Road access to the site.
Tsikwustum Creek South Recreation Site	1942	1997/03/24 Recreation Experience Objectives: To provide opportunities for modified roaded recreation experiences. Recreation Feature Objectives: To protect the large lake, fine textured beach, fish and developed campsite features. Recreation Activity Objectives: To provide opportunities for summer camping, beach activities, swimming/bathing, sport fishing, canoeing and boating. Public Recreation Objectives: To maintain summer, 2 wheel drive, Forest Service road and spur road access to the site.
White Lake Recreation Site	1991	1997/03/24 Recreation Experience Objectives: To provide opportunities for modified roaded recreation experiences. Recreation Feature Objectives: To protect the small lake, fish and developed campsite features. Recreation Activity Objectives: To provide opportunities for summer camping, sport fishing and canoeing activities. Public Recreation Objectives: To maintain summer, 2 wheel drive, forest road access to the site.
Windy Lake Recreation Site	1992	1997/03/24 Recreation Experience Objectives: To provide opportunities for modified roaded recreation experiences. Recreation Feature Objectives: To protect the small lake, fish and developed trail and campsite features. Recreation Activity Objectives: To provide opportunities for summer camping, sport fishing, boating and canoeing activities. Public Recreation Objectives: To maintain summer, 2 wheel drive, forest road access to the site.

# **Appendix C – Forest Stewardship Plan Maps**

Individual *FDU* maps comprising Appendix C of this *FSP* are separate from this document due to file size limitations.

# **Appendix D - Notice, Review and Comment**

Notice, review and comment information comprising Appendix E of this *FSP* are separate from this document due to file format limitations.