

**Ainsworth Kamloops
Forest Stewardship Plan
PA 16 and NRFL A82234, NRFL A61109
and CFA K2E**

Amendment #3

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1 INTERPRETATION

1.1 DEFINITIONS

In this FSP:

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

“**Evaluation**” means an assessment conducted by a **Qualified Registered Professional** that examines, on a site specific basis, the social, economic and environmental factors as well as relevant factors as described in **FPPR** Schedule 1. An evaluation includes the development of alternative results or strategies that are consistent with the intent of the applicable objective.

“**FDU**” means the forest development unit identified under this **FSP**;

“**FPPR**” means the *Forest and Range Practices Regulation*, consolidated to December 31, 2004, and as amended from time to time;

“**FRPA**” means the *Forest and Range Practices Act*, SBC 2002, c. 69, as amended from time to time;

“**FSP**” means this Forest Stewardship Plan;

“**Kamloops LRMP**” means the Kamloops Land and Resource Management Plan approved by the government in 1995;

“**NRFL**” means non-renewable forest license

“**Qualified Registered Professional**” means;

(1) A person with the prescribed qualifications, and is licensed by one or more of the following;

(a) an agrologist under the *Agrologists Act*,

(b) a professional biologist under the *College of Applied Biology Act*,

(c) a professional engineer or professional geoscientist/hydrologist under the *Engineers and Geoscientists Act*, or

(d) a forest professional under the *Foresters Act* and being authorized under that Act to practice as a professional in relation to the subject matter prescribed under that paragraph or those paragraphs, as the case may be, and;

(2) has the appropriate education, experience and training to carry out the activity.

“**Submission**” means the electronic submission of a cutting permit or road permit to the Forest Tenures Administration (FTA) system for approval:

“**Submission Date**” means the date specified in Paragraph 2.1;

“**Term**” means the period specified in Paragraph 2.2;

1.2 DEFINITIONS UNDER ENACTMENTS

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

2 SUBMISSION DATE, TERM & COMMENCEMENT DATE OF THIS FSP

2.1 SUBMISSION DATE

The date of submission of this **FSP** is the date it was submitted to the district.

2.2 COMMENCEMENT DATE (FRPA S. 6(1)(B)) AND TERM (FRPA S. 6(1)(A))

The **Commencement Date** for the Term of this **FSP** is the date it is Approved. The Term of this **FSP** will be 5 years beginning on the **Commencement Date**.

3 APPLICATION OF THIS FSP

3.1 FSP HOLDER

The holder of this **FSP** is Ainsworth Engineered Canada LP.

3.2 APPLICATION OF THIS FSP (FRPA S. 3(4))

This **FSP** applies to the area of Pulpwood Agreement 16 and NRFL A82234 within the Kamloops TSA.

4 FOREST DEVELOPMENT UNITS IN EFFECT ON THE DATE OF SUBMISSION OF THIS FSP (FPPR S. 14(1)(B))

Figure 1 outlines the two FDUs that exist within this FSP as well as identifying the Logan Lake CFA area that is being added to the Kamloops FDU. Clearwater FDU is the FDU approved July 18, 2008 (Amendment #1), while the Logan Lake CFA area is being added to Kamloops FDU within this amendment

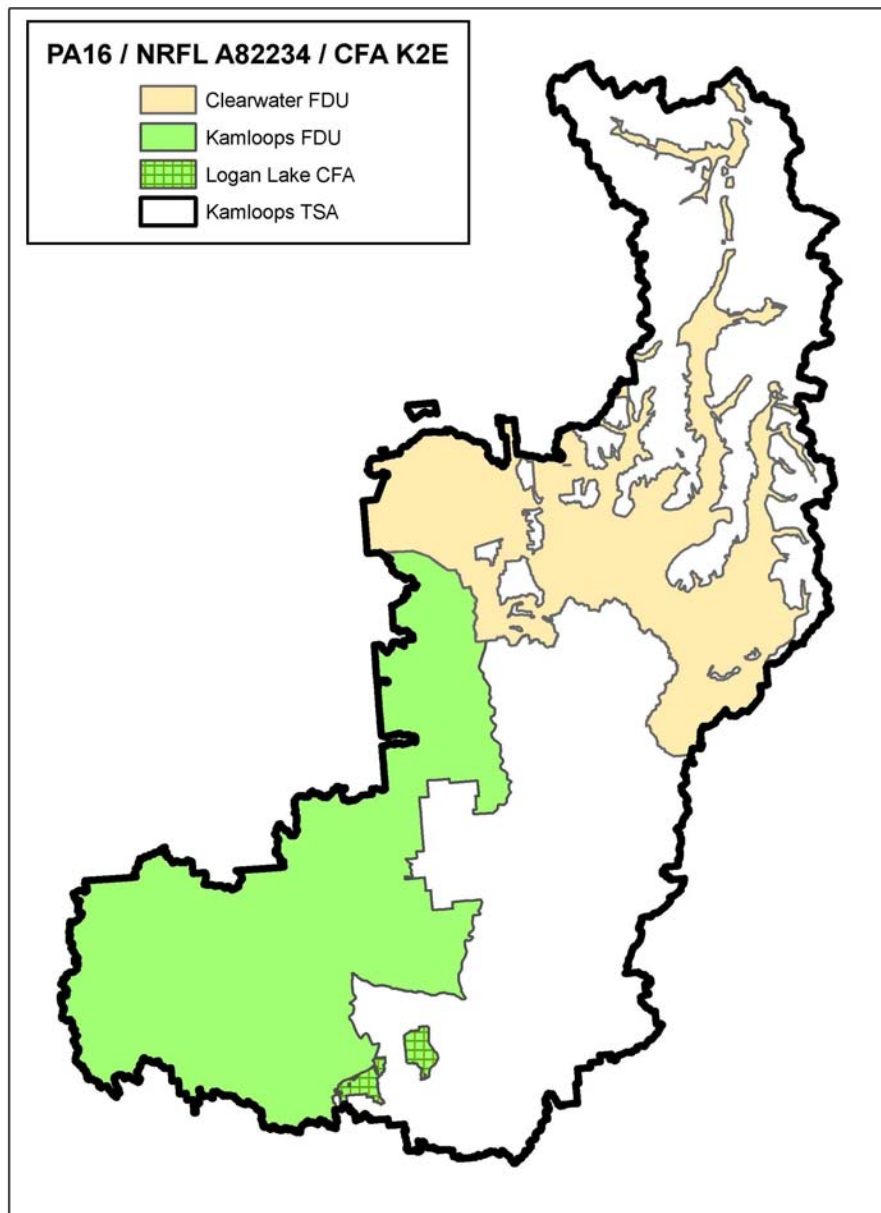


Figure 1. Clearwater and Kamloops FDUs.

4.1 ITEMS IDENTIFIED IN THE FDU

FSP maps (Appendix G) identify locations of the following items that were in effect on the **Submission Date** as per section 14(2) and (3) of the **FPPR**:

- Ungulate winter range areas, wildlife habitat areas, fisheries sensitive watersheds¹, lakeshore management zones², scenic areas, L1 lakes, community watersheds, old growth management areas, and areas where commercial timber harvesting is prohibited by an enactment.

In addition, the areas within the **FDU's** that are subject to a Forest Licence to Cut (FLTC) or a Road Permit (RP) granted to the Holder of this **FSP** are those FLTCs and RPs that are in effect at the **Commencement Date** of this **FSP**.

5 AREAS WITHIN FDU'S THAT ARE SUBJECT TO FLTC'S AND RP'S

Forest Licence To Cut's and Road Permits that have been approved prior to the approval date of this FSP are considered in effect (Section FPPR Sec 14 (3) (j)) and will be implemented under the Forest Practices Code (FRPA Sec 197 (7)).

6 KAMLOOPS TSA RESULTS OR STRATEGIES

6.1 INCORPORATION OF LRMP OBJECTIVES INTO THE FSP

On January 23, 2006 the Minister of Agriculture and Lands signed the Order amending the "original order" dated January 23, 1996 which declared the **Kamloops LRMP** to be a Higher Level Plan (HLP). The purpose of the order is to facilitate implementation of the **Kamloops LRMP** in the context of the **FRPA** and **FSP** content requirement. The order clarifies which provisions regarding zones, objectives and strategies from the **Kamloops LRMP** constitute the HLP objective and establish the area, or (Special) Resource Management Zone, to where the objective applies.

6.2 SOIL MANAGEMENT AND CONSERVATION OBJECTIVE

Objective	Source
The objective set by government for soils is, without unduly reducing the supply of timber from British Columbia's forests, to conserve the productivity and the hydrologic function of soils.	FPPR Sec. 5
Applicable Area <ul style="list-style-type: none">• Within the FDU's.	

¹ No Fisheries Sensitive Watersheds (FSWs) have been identified in the Kamloops TSA and so there are no FSWS displayed on the FSP Maps.

² No objectives have been set for Lakeshore Management Zones (LMZs) and so the LMZs have not been displayed on the FSP maps.

Result or Strategy

Approach to Harvesting and Roads

If the Holder of this **FSP** conducts Primary Forest Activities, the Holder will undertake to comply with Sections 35 & 36 of the **FPPR**.

6.3 WATER OBJECTIVES

6.3.1 Community Watersheds

Objective	Source
The objective set by government for water being diverted for human consumption through a licensed waterworks in a community watershed is, without unduly reducing the supply of timber from British Columbia's forests, to prevent 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.	FPPR Sec. 8.2
Applicable Area Within the FDU's and within Designated Community Watershed areas.	

Result or Strategy

Definitions

1.1 In Paragraph 1.2:

- (a) “**Community Watershed Objective**” means the objectives set by government for water in community watersheds as described in Section 8.2 of the **FPPR**;
- (b) “**Designated Community Watersheds**” means the Cornwall, Tranquille, Nelson, Peterson, Rosen, and Jimmies community watersheds in the Kamloops Forest District and the Avola Community Watershed in the Headwaters Forest District.

Approach to Harvesting and Roads

Note: Through the development of the following strategies, the Holder of this FSP requests an exemption to the cumulative effects component of Sections 59, 60(2) and 61 of FPPR within community watersheds, as permitted through Section 12.32 of FPPR.

1.2 If the Holder of this **FSP** carries out timber harvesting or road construction within **Designated Community Watersheds**, the Holder will:

- (a) utilize a **Qualified Registered Professional** to complete watershed assessments; and
- (b) implement the recommendations of the Community Watershed Assessment.

6.3.2 General Water Resources

Objective	Source
Ensure implementation of a referral process to notify all potentially impacted water licensees when development is proposed.	Kamloops LRMP HLP Order dated January 23, 2006 Sec. 2.1.2
Applicable Area <ul style="list-style-type: none">• Within the FDU's.	
Result or Strategy <u>Approach to Harvesting and Roads</u> Within each of the FDU's , if the Holder of this FSP carries out timber harvesting or road construction, the Holder will contact water licensees during the preparation of site plans if it is determined that the water use associated with the licensee may be potentially (as determined through an evaluation) impacted by the timber harvesting or road construction.	

6.4 RIPARIAN MANAGEMENT OBJECTIVES

6.4.1 Lakeshore Management

Objective	Source
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.	Kamloops LRMP HLP Order dated January 23, 2006 Sec 2.1.2.1
Applicable Area <ul style="list-style-type: none"> • Within the FDU's 	
Result or Strategy <p><u>Definitions</u></p> <p>1.1 In Paragraph 1.2, "Lakes LRUPs" means the Kamloops Forest District <i>Lakes Local Resource Use Plan – Lakeshore Management Guidelines</i> dated December 20, 2001 and the <i>Clearwater Forest District Lakes Local Resource Use Plan – Lakeshore Management Guidelines</i> dated August 1, 2001.</p> <p><u>Approach to Harvesting and Roads</u></p> <p>1.2 If the Holder of this FSP carries out or authorizes primary forest activities within the ±190 m lakeshore management zone around classified lakes, the Holder will:</p> <p>(a) ensure that, exclusive of the need for referrals, consultation and the submission of variance approvals, the timber harvesting and road construction is consistent with the intent of the harvesting guidelines found within the Lakes LRUPs;</p> <p>(b) ensure that rational for variances permitted within the Lakes LRUPs will be developed and documented by a Qualified Registered Professional.</p>	

6.4.2 Riparian

Objective	Source
The objective set by government for water, fish, wildlife and biodiversity within riparian areas is, without unduly reducing the supply of timber from British Columbia's forests, to conserve, at the landscape level, the water quality, fish habitat, wildlife habitat and biodiversity associated with those riparian areas.	FPPR Sec. 8
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.	Kamloops LRMP HLP Order dated January 23, 2006 Sec 2.1.2.1

Applicable Area

- Within the FDU's.

Result or Strategy

Definitions

- 1.1 In Paragraph 1.3 “**Riparian Unit**” means a section of contiguous Riparian Management Area that is subject to a riparian **Evaluation**.

Approach to Harvesting and Roads – Riparian Management

- 1.2 Subject to Paragraph 1.3, if the Holder of this FSP conducts Primary Forest Activities, the Holder will comply with practice requirements as specified in Sections 47 to 51, 52(2) and 53 of the *Forest Planning and Practices Regulation* (B.C. Reg. 14/2004);
- 1.3 Riparian Reserve Zone specifications in Paragraph 1.2 will not apply where an **Evaluation** has been carried out prior to Cutting Permit or Road Permit **Submission** on a **Riparian Unit** and has determined that modifications to the Riparian Reserve Zone due to conditions or requirements in addition to those found in FPPR Sec 51(1) that include 1) road construction or 2) topography, as it specifically relates to topographic breaks and the stability or windfirmness of stems within the riparian reserve zone , that will allow for consistency with *FPPR s. 8*. The recommendations of this **Evaluation** will be implemented during the planning of harvesting or road construction.

Approach to Harvesting and Roads – Basal Area Retention

- 1.4 If the Holder of this FSP conducts Primary Forest Activities, the Holder will comply with Section 12(3) of the *Forest Planning and Practices Regulation* (B.C. Reg. 14/2004) by conducting an **Evaluation** prior to Cutting Permit or Road Permit **Submission** and implementing resulting tree retention strategies based on the following targets and ensure that standing trees are reasonably representative of the physical structure of the riparian management zone as it was prior to harvest, to the extent practicable:

Riparian Class	Basal Area Retention Within Riparian Management Zones (%)
S1 Stream	≥ 20
S2 Stream	≥ 20
S3 Stream	≥ 20
S4 Stream	≥ 10
S5 Stream	≥ 10
S6 Stream	Not Applicable
All classes of wetlands and lakes	≥ 20

6.5 BIODIVERSITY OBJECTIVES

6.5.1 Landscape Level Biodiversity

Objective	Source
The objective set by government for wildlife and biodiversity at the landscape level is, without unduly reducing the supply of timber from British Columbia's forests and to the extent practicable, to design areas on which timber harvesting is to be carried out that resemble, both spatially and temporally, the patterns of natural disturbance that occur within the landscape.	FPPR Sec. 9
<p>Applicable Area</p> <ul style="list-style-type: none"> • Within the FDU's. 	
<p>Result or Strategy</p> <p><u>Approach to Harvesting and Roads</u></p> <p>If the Holder of this FSP conducts Primary Forest Activities, the Holder will undertake to comply with the practice requirements outlined in Sections 64 and 65 of the FPPR.</p>	

Objective	Source
Maintain old growth attributes within landscape units.	Kamloops LRMP Interpretive Guidance dated: Draft February 20, 2012
<p>Applicable Area</p> <ul style="list-style-type: none"> • Within the FDU's. 	
<p>Result or Strategy</p> <p><u>Approach to Harvesting and Roads</u></p> <p>Before the Holder of this FSP carries out timber harvesting or road construction the Holder will ensure that the design for the development conforms to the requirements of the Kamloops Land and Resource Management Plan Land Act Objectives-Land Use Order "Establishing Old Growth Management Areas- Interpretive Guidance DRAFT February 23, 2012.</p>	

6.5.2 Stand Level Biodiversity

Objective	Source
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.	FPPR Sec. 9.1
<p>Applicable Area</p> <ul style="list-style-type: none"> • Within the FDU's. 	
<p>Result or Strategy</p> <p><u>Approach to Harvesting and Roads</u></p> <p>1.1 If the Holder of this FSP conducts Primary Forest Activities, the Holder will ensure that:</p> <p>(a) at least 80% of the cutblocks greater than 10 hectares harvested during the 12 month period beginning on April 1 of any calendar year will have one or more Wildlife Tree Retention Areas associated with the cutblock;</p> <p>(b) for each cutblock, the distance from a Wildlife Tree Retention Area to another Wildlife Tree Retention Area or to an area with attributes of a Mature Forest will not exceed 500 metres.</p> <p>1.2 The Holder of this FSP will not harvest within Wildlife Tree Retention area unless:</p> <p>(a) the trees on the Net Area to be Reforested of the cutblock to which the Wildlife Tree Retention relates have developed attributes that are consistent with a mature forest;</p> <p>(b) access to future harvest is limited by the Wildlife Tree Retention; or</p> <p>(c) an Evaluation has been carried out.</p> <p>1.3 Wildlife Tree Retention area harvested under Section 1.2 (b) and (c) will be replaced with equivalent or other suitable Wildlife Tree Retention.</p>	

6.5.3 Biodiversity – General

Objective	Source
To conserve the diversity and abundance of native species and their habitats throughout the Kamloops LRMP	Kamloops LRMP HLP Order dated January 23, 2006 Sec 2.1.3.1
<p>Applicable Area</p> <ul style="list-style-type: none"> • Within the FDU's. 	

Result or Strategy

Approach to Harvesting and Roads

The Holder of this **FSP** undertakes to comply with the results or strategies developed for the objectives found in the following sections:

- Section 6.5.1 - Landscape Level Biodiversity
- Section 6.5.2 – Wildlife Tree Retention
- Section 6.5.1 - Old Growth Management Areas
- Section 0 - Riparian Management
- Section 0 - Wildlife and Species at Risk

6.6 RECREATION

6.6.1 Recreation Sites and Trails

Objective	Source
Manage known recreation sites and trails in accordance with established objectives.	FRPA Sec. 180 GAR Sec. 5
Note: Within the original Kamloops FDU, although Recreation sites and trails have been legally established, no formal objectives (s required by FRPA section 181) were established and therefore no Result or Strategy is required in the Kamloops FDU. A list of legally established Recreation Sites/Trails with legal established objectives that overlap with the Clearwater FDU are included in Appendix J	
Applicable Area <ul style="list-style-type: none">• Clearwater FDU	
Result or Strategy <u>Approach to Harvesting and Roads</u> If the Holder of this FSP undertakes primary forest activities within 100 m of a designated Recreation Sites or Trails, the Holder will ensure that activities are carried out in a manner that is consistent with the legally established objectives for the associated Recreation Site or Trail	

6.6.2 Walk in Lakes

Objective	Source
Maintain a mosaic of angling opportunities within the recreational spectrum (i.e. walk-in lakes, drive to lakes, trophy lakes)	Kamloops LRMP HLP Order dated January 23, 2006 Sec 2.1.5

<p>Applicable Area</p> <ul style="list-style-type: none"> • Within the FDU's
<p>Result or Strategy</p> <p><u>Definitions</u></p> <p>1.1 In paragraph 1.2</p> <p>(a) “Walk-in Lakes” means a lake that has been identified as a Walk-in Lake as outlined in Appendix H-WALK-IN LAKES.</p> <p>(b) “Lakes LRUP” means the Lakes Local Resource Use Plans that were developed for the Kamloops Forest District, dated December 20, 2001 and the Clearwater Forest District dated August 1, 2001.</p> <p><u>Approach to Harvesting and Roads</u></p> <p>1.2 If the Holder of this FSP conducts Primary Forest Activities, the Holder will implement the intent of the access management recommendations as outlined in the Lakes LRUP's for identified Walk-in Lakes;</p>

6.6.3 Recreation and Tourism Zones

Objective	Source
Maintain viewscales in Recreation and tourism areas to a standard that does not detract from the recreational enjoyment of users.	Kamloops LRMP HLP Order dated January 23, 2006 Sec 2.6.1
<p>Applicable Area All Special Resource Management – Recreation and Tourism Zones as identified in Figure 11 of the Kamloops LRMP, that fall within the original Kamloops FDU including Blustery, Lac Le Jeune, Taweel and Thompson Rivers Zones.</p>	
<p>Result or Strategy</p> <p><u>Approach to Harvesting and Roads</u></p> <p>The results or strategies in following sections of this FSP are the results or strategies for this objective:</p> <ul style="list-style-type: none"> • Section 0 – Visual Objectives. 	

Objective	Source
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.	Kamloops LRMP HLP Order dated January 23, 2006 Sec 2.6.1
<p>Applicable Area</p> <p>All Special Resource Management – Recreation and Tourism Zones as identified in Figure 11 of the Kamloops LRMP, that fall within the original Kamloops FDU including Blustery, Lac Le Jeune, Taweel and Thompson Rivers Zones.</p>	
<p>Result or Strategy</p> <p><u>Approach to Harvesting and Roads</u></p> <p>If the Holder of this FSP carries out or authorizes timber harvesting or road construction, the Holder will ensure that the activity is designed and carried out in a manner that is consistent with existing direction from an approved plan, local process or enhanced referral.</p>	

6.7 WILDLIFE OBJECTIVES

The following section outlines general wildlife objectives as well as species and area specific objectives from two sources:

- **FRPA** – General Objective in **FPPR** and related Section 7(2) Notices
- **Kamloops LRMP** HLP Objectives

In many cases these objectives are mutually supportive or consistent and are addressed through similar Results and Strategies. In support of this reality, objectives are organized by species. The objectives and strategies found within the **Kamloops LRMP** and **FPPR** Section 7 are referenced a number of times along with species specific objectives.

Table 1 details the wildlife species considered in this **FSP**.

Table 1. Wildlife related objectives in the Kamloops TSA.

Species	FRPA	Kamloops LRMP	Applicable Area for Results and Strategies
Mule Deer	No "Section 7 Notice" exists for mule deer. No WHAs designated.	Kamloops LRMP Section 2.1.12.1 – Higher Level Plan Order (January 23, 2006)	Critical Deer Winter Range as outlined in Figure 4, Kamloops LRMP.
Moose	No "Section 7 Notice" exists for moose. No WHAs designated.	Kamloops LRMP Section 2.1.12.2 – Higher Level Plan Order (January 08, 2009)	Critical Moose Winter Range as outlined in Figure 4, Kamloops LRMP
Mountain Goat	Notice Under FRPA Sec 7(2)	N/A	A maximum of 25,998 ha within Kamloops TSA
Flammulated Owl	No "Section 7 Notice" exists for Flammulated Owl. No WHAs designated.	Background Information for Wildlife Habitat for Species at Risk in support of the Kamloops LRMP Section 2.1.12 – Higher Level Plan Order (Jan 23, 2006)	Figure 3, General Resource Management Zone
"Interior" Western Screech Owl	No "Section 7 Notice" exists for "Interior" Western Screech Owl. Three WHAs currently exist (3-030, 3-031, 3-069)	Background Information for Wildlife Habitat for Species at Risk in support of the Kamloops LRMP Section 2.1.12 – Higher Level Plan Order (Jan 23, 2006)	Figure 3, General Resource Management Zone
Lewis's Woodpecker	No "Section 7 Notice" exists for Lewis's Woodpecker. Twenty-one WHAs currently exist (3-071, 3-072, 3-073, 3-075, 3-076, 3-077, 3-078, 3-079, 3-084, 3-087, 3-088, 3-102, 3-105, 3-106, 3-107, 3-108, 3-109, 3-153, 3-154, 3-155, 3-157).	Background Information for Wildlife Habitat for Species at Risk in support of the Kamloops LRMP Section 2.1.12 – Higher Level Plan Order (Jan 23, 2006)	Figure 3, General Resource Management Zone
Badger	No "Section 7 Notice" exists for Badger. No WHAs designated.	Background Information for Wildlife Habitat for Species at Risk in support of the Kamloops LRMP Section 2.1.12 – Higher Level Plan Order (Jan 23, 2006)	Figure 3, General Resource Management Zone
Spotted Bat	No "Section 7 Notice" exists for Spotted Bat. A single WHA currently exists (3-115).	Background Information for Wildlife Habitat for Species at Risk in support of the Kamloops LRMP Section 2.1.12 – Higher Level Plan Order (Jan 23, 2006)	Figure 3, General Resource Management Zone
Williamson's Sapsucker	"Section 7(2) Notice" exists for Williamson's Sapsucker. Two WHA's currently exist (3-096 and 3-127).	Background Information for Wildlife Habitat for Species at Risk in support of the Kamloops LRMP Section 2.1.12 – Higher Level Plan Order (Jan 23, 2006)	Figure 3, General Resource Management Zone Williamson's Sapsucker WHA's as identified on the attached FSP Maps.

Species	FRPA	Kamloops LRMP	Applicable Area for Results and Strategies
Great Basin Spadefoot	"Section 7(2) Notice" exists for Great Basin Spadefoot Two WHA's currently exist (3-124 and 3-125).	Background Information for Wildlife Habitat for Species at Risk in support of the Kamloops LRMP Section 2.1.12 – Higher Level Plan Order (Jan 23, 2006)	Figure 3, General Resource Management Zone Great Basin Spadefoot WHA's as identified on the attached FSP Maps.

In addition to the Wildlife Habitat Areas for the species listed in the above table, there are ten (10) additional WHA areas that are considered "Data Sensitive". The species targeted for protection is not identified and the WHA areas are typically broad. Though not specifically addressed in the Results and Strategies below, the Holder of this FSP will ensure that activities are planned and conducted in a manner that is consistent with the objectives of these Data Sensitive WHAs. The ten WHAs (3-050, 3-055, 3-056, 3-057, 3-059, 3-063, 3-110, 3-111, 3-112 and 3-114) referred to in the paragraph above have been identified on the FSP maps.

6.7.1 Deer

The following objectives and associated results or strategies pertain to the Critical Deer Winter Range areas as outlined in the Kamloops LRMP.

Objective	Source
Critical Deer Winter Range - Maintain or enhance forage production and habitat requirements in critical deer winter range	Kamloops LRMP HLP Order dated January 23, 2006 Sec. 2.1.12.1
Critical Deer Winter Range – Disperse the timber harvest throughout the winter range and spread it out evenly over the rotation	Kamloops LRMP HLP Order dated January 23, 2006 Sec. 2.1.12.1
Critical Deer Winter Range – Maintain at least 25% of forested area in the thermal cover. Link thermal cover units together with suitable travel corridors, especially mature Douglas fir vets on ridges	Kamloops LRMP HLP Order dated January 23, 2006 Sec. 2.1.12.1
The overall objective of special resource management zones for habitat and wildlife management areas is to: maintain or enhance identified wildlife habitat areas.	Kamloops LRMP HLP Order dated January 23, 2006 Sec. 2.5.1
Skull Wildlife Habitat – Maintain or enhance forage production and habitat requirements in critical deer winter range	Kamloops LRMP HLP Order dated January 23, 2006 Sec. 2.5.2

Applicable Area

- Within the **FDU's** and within the Critical Deer Winter Range (March 31, 1996)¹

Result or Strategy

Definitions

1.1 In Paragraphs 1.2 and 1.3:

- (a) “**Deer Winter Range**” means areas identified as critical deer winter range in the **Kamloops LRMP**;
- (b) “**Snow Interception Cover**” means properties of the overstorey that prevent snow to accumulation on the ground. **Snow interception Cover** is assumed to also provide security cover and thermal cover. In order of priority, **Snow Interception Cover** can be:
 - i. green, mature or older Douglas-fir (*Pseudotsuga menziesii*)-dominated stands with a moderately high crown closure;
 - ii. partially killed, mature or older Douglas-fir-dominated stands;
 - iii. younger green Douglas-fir-dominated stands;
 - iv. other green conifer stands and green standing timber; and,
 - v. green, non-deciduous stands immediately adjacent to **Deer Winter Range**, but within the perimeter of a burned area.

Approach to Harvesting and Roads

1.2 If the Holder of this FSP carries out or authorizes primary forest activities in an area within Deer Winter Range that is not impacted by wildfire, the Holder will ensure that:

- (a) the timber harvesting is dispersed throughout the deer winter range and is spread out evenly over the rotation (LRMP 2.1.12.1),
- (b) at least 25% of the forested area is maintained in **Snow Interception Cover** (LRMP 2.1.12.1),
- (c) where feasible, **Snow Interception Cover** units are linked together with suitable travel corridors (LRMP 2.1.12.1),
- (d) uneven aged management is practiced when species composition, stand condition/structure and site conditions are suitable (LRMP 2.1.12.1),
- (e) clearcuts smaller than 5 hectares are utilized where uneven-aged management is not possible (LRMP 2.1.12.1), and
- (f) mixed species reforestation and management are implemented where it is ecologically suitable (LRMP 2.1.12.1).

¹ Includes the Skull Wildlife Habitat Management Area (July 28, 1995)

1.3	<p>If the Holder of this FSP carries out or authorizes primary forest activities in an area within Deer Winter Range that is impacted by wildfire, the Holder will ensure that</p> <p>(a) harvesting is focused on the removal of dead and dying timber, while allowing incidental removal of green trees for access and safety (LRMP 2.1.12.1),</p> <p>(b) areas equal to or greater than 25% of the area are retained as dispersed, unharvested patches with attributes that best serve the needs of Snow Interception Cover and security cover (LRMP 2.1.12.1);</p> <p>(c) patches, clumps or groups of trees that provide security cover for deer are retained and, where practicable, located equal to or greater than 250 metres apart or from another unharvested area (LRMP 2.1.12.1) and;</p> <p>(d) temporary access structures are used where ever practicable to minimize the amount of area occupied by permanent access (LRMP 2.1.12.1).</p>
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6.7.2 Moose

The following objectives and associated results or strategies pertain to the Moose Winter Range areas as identified in the **Kamloops LRMP**.

Objective	Source
Critical Moose Winter Range – Maintain thermal and visual cover for moose, and enhance browse production.	Kamloops LRMP HLP Order dated January 8, 2009 Sec. 2.1.12.2
Critical Moose Winter Range – Maintain suitable forest cover attributes with respect to thermal cover and forage production.	Kamloops LRMP HLP Order dated January 8, 2009 Sec. 2.1.12.2
The overall objective of special resource management zones for habitat and wildlife management areas is to: maintain or enhance identified wildlife habitat areas.	Kamloops LRMP HLP Order dated January 8, 2009 Sec. 2.1.12.2
Skwilatin Wildlife Habitat – Maintain or enhance forage production and habitat requirements in critical moose winter range	Kamloops LRMP HLP Order dated January 8, 2009 Sec. 2.5.2
<p>Applicable Area</p> <ul style="list-style-type: none"> • Within the FDU's and in Critical Moose Winter Range (March 31, 1996)¹. 	

¹ Includes the Swilatin RMZ (July 28, 2005) within the FDU.

Result or Strategy

Definitions

1.1 In Paragraph 1.2:

- (a) “**Extended Use Roads**” means newly constructed roads that are planned for more than 2 years of use for forestry activities;
- (b) “**Moose Forage**” means palatable species of plants that are a food source for Moose. These plants include Salix spp., red-osier dogwood and Betula spp.;
- (c) “**Moose Habitat**” means wetlands in **Moose Winter Range** that are either 200 metres in length or greater than one hectare in size and that contain habitat features required by Moose as defined by a **Qualified Registered Professional**;
- (d) “**Moose Winter Range**” means areas identified in Figure 4 of the **Kamloops LRMP** as critical moose winter range;
- (e) “**Moose Management Unit**” means a 200 metre buffer around **Moose Habitat**;
- (f) “**Visual Screening**” means vegetation and/or topography providing visual obstruction that makes it difficult to see into adjacent areas from the roadbed.
- (g) “**Thermal Cover**” means a forested area within Critical Moose Winter Range:
 - In which average height of standing timber is greater than 16 meters
 - That has a canopy closure greater than 33% and;
 - That is greater than one hectare in size;

Approach to Harvesting and Roads

1.2 If the holder of this **FSP** carries out timber harvesting or road construction within an area in the **FDU** that is in **Moose Winter Range**, the holder will:

- (a) within each **Moose Management Unit**, retain at least 67% of the forested area equal to or greater than 20 years of age;
- (b) where present, retain **Visual Screening** along those **Extended Use Roads** that are located within 100 meters of a **Moose Management Unit**, and
- (c) retain **Moose Forage** during silviculture activities (including brushing, weeding and stand tending) unless retaining **Moose Forage** impedes the ability of a stand to reach free growing status.
- (d) ensure the area of Mature **Thermal Cover** in each contiguous portion of the **Moose Winter Range** to be greater than 33% of the forested area in that portion of the Moose Winter Range.
- (e) Consider Moose Management Units (MMU's) when establishing WTRA's

6.7.3 Flammulated Owl

Objective	Source
Ensure habitat needs naturally occurring wild species are provided for. Special attention will be paid to those red and blue listed species, as defined by BC Environment, and species designated as regionally important.	Kamloops LRMP HLP Order dated January 23, 2006 – LRMP Sec. 2.1.12
<p>Applicable Area</p> <ul style="list-style-type: none"> • Within the FDU's and within Flammulated Owl habitat 	
<p>Result or Strategy</p> <p><u>Definitions</u></p> <p>1.1 In Paragraphs 1.2 and 1.3:</p> <p>(a) “Flammulated Owl Known Locations” means areas where this species is found;</p> <p>(b) “Total Habitat Required” means 3,300 ha of habitat specified in the Species at Risk Background Information Document (Nov 29, 2005).</p> <p><u>Approach to Harvesting and Roads</u></p> <p>1.2 Subject to Paragraph 1.3, if the holder of this FSP carries out timber harvesting or road construction within an area occupied by Flammulated Owls, the Holder will:</p> <p>(a) refer to the Flammulated Owl <i>Accounts and Measures for Managing Identified Wildlife</i> (Identified Wildlife Management Strategy Version 2004) and/or other pertinent information for guidance during the development of strategies to conserve sufficient habitat in that area; and</p> <p>(b) consider Flammulated Owl Known Locations when establishing Wildlife Tree Retention.</p> <p><u>Amount of Area Affected</u></p> <p>1.3 The amount of area subject to Paragraph 1.2 is the Total Habitat Required.</p>	

6.7.4 “Interior” Western Screech Owl

Objective	Source
Ensure habitat needs naturally occurring wild species are provided for. Special attention will be paid to those red and blue listed species, as defined by BC Environment, and species designated as regionally important.	Kamloops LRMP HLP Order dated January 23, 2006 – LRMP Sec. 2.1.12

Applicable Area

- Within the **FDU's**.

Result or Strategy

Definitions

1.1 In Paragraphs 1.2 and 1.3:

- (a) “**Interior Western Screech Owl Known Locations**” means areas where this species is found;
- (b) “**Total Habitat Required**” means 60 ha of habitat specified in the Species at Risk Background Information Document Nov 29, 2005)

Approach to Harvesting and Roads

1.2 Subject to Paragraph 1.3, if the holder of this **FSP** carries out timber harvesting or road construction within an area occupied by “Interior” western Screech Owls, the Holder will:

- (a) refer to the “Interior” Western Screech Owl *Accounts and Measures for Managing Identified Wildlife* (Identified Wildlife Management Strategy Version 2004) and /or other pertinent information for guidance during the development of strategies to conserve sufficient habitat in that area; and
- (b) consider **Interior Western Screech Owl Known Locations** when establishing **Wildlife Tree Retention**.

Amount of Area Affected

1.3 The amount of area subject to Paragraph 1.2 is the **Total Habitat Required**. The **Total Habitat Required** of 60 ha’s has been met.

6.7.5 Lewis's Woodpecker

Objective	Source
Ensure habitat needs naturally occurring wild species are provided for. Special attention will be paid to those red and blue listed species, as defined by BC Environment, and species designated as regionally important.	Kamloops LRMP HLP Order dated January 23, 2006 – LRMP Sec. 2.1.12
<p>Applicable Area</p> <ul style="list-style-type: none"> • Within the FDU's. 	
<p>Result or Strategy</p> <p><u>Definitions</u></p> <p>1.1 In Paragraphs 1.2 and 1.3:</p> <p>(a) “Lewis's Woodpecker Known Locations” means areas where Lewis's Woodpeckers have been identified in the Kamloops TSA from the spatial data from the Land and Resource Data Warehouse;</p> <p>(b) “Total Habitat Required” means 650 ha of habitat specified in the Species at Risk Background Information Document (Nov 29, 2005).</p> <p><u>Approach to Harvesting and Roads</u></p> <p>1.2 Subject to Paragraph 1.3, if the holder of this FSP carries out timber harvesting or road construction within an area occupied by Lewis's Woodpeckers, the Holder will:</p> <p>(a) refer to the Lewis's Woodpecker <i>Accounts and Measures for Managing Identified Wildlife</i> (Identified Wildlife Management Strategy Version 2004) and/or other pertinent information for guidance during the development of strategies to conserve sufficient habitat in that area; and</p> <p>(b) consider Lewis's Woodpecker Known Locations when establishing Wildlife Tree Retention.</p> <p><u>Amount of Area Affected</u></p> <p>1.3 The amount of area subject to Paragraph 1.2 is the Total Habitat Required.</p>	

6.7.6 Badger

Objective	Source
<p>Ensure habitat needs naturally occurring wild species are provided for. Special attention will be paid to those red and blue listed species, as defined by BC Environment, and species designated as regionally important.</p>	<p>Kamloops LRMP HLP Order dated January 23, 2006 – LRMP Sec. 2.1.12</p>
<p>Applicable Area</p> <ul style="list-style-type: none"> • Within the FDU's. 	
<p>Result or Strategy</p> <p><u>Definitions</u></p> <p>1.1 In Paragraphs 1.2 and 1.3:</p> <p>(a) “Badger Known Locations” means areas where this species is found</p> <p>(b) “Total Habitat Required” means 35 ha of habitat specified in the Species at Risk Background Information Document (Nov 29, 2005).</p> <p><u>Approach to Harvesting and Roads</u></p> <p>1.2 Subject to Paragraph 1.3, if the holder of this FSP carries out timber harvesting or road construction in an area occupied by Badgers the Holder will</p> <p>(a) refer to the <i>Badger Accounts and Measures for Managing Identified Wildlife</i> (Identified Wildlife Management Strategy Version 2004) and/or other pertinent information for guidance during the development of strategies to conserve sufficient habitat; and,</p> <p>(b) consider Badger Known Locations when establishing Wildlife Tree Retention.</p> <p><u>Amount of Area Affected</u></p> <p>1.3 The amount of area subject to Paragraph 1.2 is the Total Habitat Required. The Total Habitat Required of 35 ha’s has been met for Badger</p>	

6.7.7 Spotted Bat

Objective	Source
Ensure habitat needs naturally occurring wild species are provided for. Special attention will be paid to those red and blue listed species, as defined by BC Environment, and species designated as regionally important.	Kamloops LRMP HLP Order dated January 23, 2006 – LRMP Sec. 2.1.12
<p>Applicable Area</p> <ul style="list-style-type: none"> • Within the FDU's. 	
<p>Result or Strategy</p> <p><u>Definitions</u></p> <p>1.1 In Paragraphs 1.2 and 1.3:</p> <p>(a) “Spotted Bat Known Locations” means areas where this species is found;</p> <p>(b) “Total Habitat Required” means 120 ha of habitat specified in the Species at Risk Background Information Document (Nov 29, 2005).</p> <p><u>Approach to Harvesting and Roads</u></p> <p>1.2 Subject to Paragraph 1.3 , if the holder of this FSP carries out timber harvesting or road construction within an area occupied by Spotted Bats the Holder will:</p> <p>(a) refer to the Spotted Bat <i>Accounts and Measures for Managing Identified Wildlife</i> (Identified Wildlife Management Strategy Version 2004) and/or other pertinent information for guidance during the development of strategies to conserve sufficient habitat; and</p> <p>(b) consider Spotted Bat Known Locations when establishing Wildlife Tree Retention.</p> <p><u>Amount of Area Affected</u></p> <p>1.3 The amount of area subject to Paragraph 1.2 is the Total Habitat Required.</p>	

6.7.8 Williamson’s Sapsucker

Objective	Source
Ensure habitat needs naturally occurring wild species are provided for. Special attention will be paid to those red and blue listed species, as defined by BC Environment, and species designated as regionally important.	Kamloops LRMP HLP Order dated January 8, 2009– LRMP Sec. 2.1.12

Applicable Area

Within identified WHA's within the **FDU's**.

Result or Strategy

Definitions

- 1.1 In Paragraphs 1.2 and 1.3:
- (a) "**Williamson's Sapsucker Locations**" means areas where this species is found as per Order Wildlife Habitat Areas #3-096 and 3-127 identified in the Kamloops TSA as shown on spatial data from the Land and Resource Data Warehouse;

Approach to Harvesting and Roads

- 1.2 Subject to Paragraph 1.3, if the holder of this **FSP** carries out timber harvesting or road construction within an area occupied by Williamson's Sapsucker the Holder will:
- (a) refer to the Williamson's Sapsucker Order-Wildlife Habitat Areas 3-096 and 3-127-Kamloops Forest District (July 25,2009) and Williamson's Sapsucker *Accounts and Measures for Managing Identified Wildlife* (Identified Wildlife Management Strategy Version 2004) and/or other pertinent information for guidance during the development of strategies to conserve sufficient habitat; and
 - (b) consider **Williamson's Sapsucker Locations** when establishing **Wildlife Tree Retention Areas**; focus WTRA`s on areas with large Western Larch, ponderosa pine, Douglas-fir, trembling aspen and black cottonwood snags (>30cm DBH) focusing on trembling aspen (live and dead)
 - (c) Not plan or conduct and primary forest activities within approved WHA's

Amount of area affected

- 1.3 The amount of area subject to Paragraph 1.1 is the **Williamson's Sapsucker Locations**.

6.7.9 Great Basin Spadefoot

Objective	Source
<p>Ensure habitat needs naturally occurring wild species are provided for. Special attention will be paid to those red and blue listed species, as defined by BC Environment, and species designated as regionally important.</p>	<p>Kamloops LRMP HLP Order dated January 8, 2009– LRMP Sec. 2.1.12</p>
<p>Applicable Area</p> <p>Within identified WHA's within the FDU's.</p>	
<p>Result or Strategy</p> <p><u>Definitions</u></p> <p>1.1 In Paragraphs 1.2 and 1.3:</p> <p>(a) “Great Basin Spadefoot” means areas where this species is found as per ORDER-Wildlife Habitat Areas #3-096 and 3-127; identified in the Kamloops TSA as shown on spatial data from the Land and Resource Data Warehouse.</p> <p><u>Approach to Harvesting and Roads</u></p> <p>1.2 Subject to Paragraph 1.3, if the holder of this FSP carries out timber harvesting or road construction in an area occupied by Great Basin Spadefoot the Holder will</p> <p>(a) refer to the Great Basin Spadefoot Order-Wildlife Habitat Areas 3-124 and 3-125-Kamloops Forest District (July 25,2009) and Great Basin Spadefoot <i>Accounts and Measures for Managing Identified Wildlife</i> (Identified Wildlife Management Strategy Version 2004) and/or other pertinent information for guidance during the development of strategies to conserve sufficient habitat; and</p> <p>(b) consider Great Basin Spadefoot Locations when establishing Wildlife Tree Retention.</p> <p>(c) Not plan or conduct any primary forest activities within approved WHA's</p> <p><u>Amount of Area Affected</u></p> <p>1.3 The amount of area subject to Paragraph 1.1 is the Great Basin Spadefoot Locations.</p>	

6.7.10 Mountain Caribou

	Source
<p>Applicable Area</p> <p>No portion of the area indentified as Mountain Caribou- Wells Gray Planning Unit (GAR U-3-004) is within FDU`s covered by this FSP.</p>	<p>Ungulate Winter Range GAR #U-3-004</p>

6.7.11 Mountain Goat

	Source
<p>Applicable Area</p> <p>No portion of the area indentified as Mountain Goat is within FDU`s covered by this FSP.</p>	<p>FPPR Sec 7(2)</p>

6.8 VISUAL OBJECTIVES

6.8.1 Visually Sensitive Areas in the Kamloops Forest District (Kamloops TSA)

#	Objective	Source
	<p>Grandparented Objective: Known scenic areas with established VQOs.</p>	<p>FRPA Sec.180 and 181</p>
	<p>The primary objective of management 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.</p>	<p>Kamloops LRMP HLP Order dated January 23, 2006 Sec. 2.1.14.1</p>
<p>Applicable Area</p> <ul style="list-style-type: none"> Scenic Areas within FDU`s. 		

Result or Strategy

Definitions

- 1.1 In Paragraph 1.2 “**Visually Sensitive Area**” means the area.
- (a) presented in Figure 5 (July 28, 1995) of the Kamloops LRMP and including
 - (b) additional areas established under District Manager direction and as displayed in 7.7 Appendix G (A-E) – FSP Plan Map.

Approach to Harvesting and Roads

- 1.2 Subject to Paragraph 1.3, the Holder of this **FSP** will only carry out timber harvesting or road construction in a **Visually Sensitive Area** if the Holder ensures that the design of the cutblock or road is consistent with the following:
- (a) the Visual Quality Objectives; and
 - (b) the visual quality guidelines for timber harvesting outlined in Appendix 8 of the **Kamloops LRMP**.

Effects of Other Circumstances

- 1.3 Paragraph 1.2 does not apply:
- (a) Where, outside the control of the Holder of this FSP, natural events or actions by third parties following Cutting Permit and/or Road Permit **Submission** have impacted the ability to meet the visual quality objectives.

6.8.2 Areas Outside Visually Sensitive Areas within the Kamloops TSA

#	Objective	Source
	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 comparable to natural occurrences.	Kamloops LRMP HLP Order dated January 23, 2006 Sec. 2.1.14.1
Applicable Area		
<ul style="list-style-type: none">• Areas outside the identified visually sensitive areas within the FDU's.		

Result or Strategy

Definitions

1.1 In Paragraphs 1.2 and 1.3, “**Visually Sensitive Areas**” means areas identified as of October 1994 and presented in Figure 5, July 28, 1995, of the **Kamloops LRMP**.

Approach to Harvesting and Roads

1.2 Subject to Paragraph 1.3, within an area in the **FDU** that is outside of the identified Visually Sensitive Areas, the Holder of this **FSP** will only carry out timber harvesting or road construction if the Holder ensures that the design of the cutblock or road complements naturally occurring landscape characteristics by using a variety of openings (in size, shape and distribution) and following natural boundaries, lines and forms such as ridgelines, creeks, draws, rock outcrops or timber types etc. to ensure that naturally appearing boundaries are retained.

Effects of Other Circumstances

1.3 Paragraph 1.2 does not apply
(a) Where, outside the control of the Holder of this FSP, natural events or actions by third parties following Cutting Permit and/or Road Permit **Submission** have impacted the ability to meet the visual quality objectives.

6.8.3 Scenic Areas and Visually Sensitive Areas in the Headwaters Forest District part of the Kamloops TSA

#	Objective	Source
FRPA 9.2	The objective set by government in relation to visual quality for a scenic area , that a) was established on or before October 24, 2002, and b) for which there is no visual quality objective is to ensure that the altered forest landscape for the scenic area c) in visual sensitivity class 1 is in either the preservation or retention category, d) in visual sensitivity class 2 is in either the retention or partial retention category, e) in visual sensitivity class 3 is in either the partial retention or modification category, f) in visual sensitivity class 4 is in either the partial retention or modification category, g) in visual sensitivity class 5 is in either the modification	FPPR Sec 9.2(2)

	or maximum modification category						
LRMP 2.1.14.2	The primary objective of management 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.	Kamloops LRMP HLP Order dated January 23, 2006					
Applicable Area							
Scenic Areas within the Clearwater FDU.							
Result or Strategy							
<u>Definitions</u>							
1.1 Visually Sensitive Area (VSA) – as defined by the KLRMP and the HLP order in effect Scenic Area – a construct used in relation to FPC and FRPA In - in both a VSA and a Scenic area Out - Out of a VSA but in a Scenic Area NVS- “Non Visually Sensitive” areas are those areas that lie outside the scenic area, but may lie within or outside of the KLRMP VSA. <u>Approach to Harvesting and Roads to meet both KLRMP and FPPR s 9.2 objectives</u>							
1.2 Subject to Paragraph 1.3, the holder of this FSP will only carry out or authorize primary forest activities in a Visually Sensitive Area and/or Scenic Area if the holder of this FSP ensures that the design of the cutblock or road is consistent with the following:							
		Scenic Area- 1999 Inventory-FPPR 9.2					
		VSC=1	VSC=2	VSC=3	VSC=4	VSC=5	NVS
VSA	In	P or R	R or PR	PR or M	PR or M	M or MM	M
	Out	P or R	R or PR	PR or M	PR or M	M	M
<u>Effects of Other Circumstances:</u>							
1.3 Paragraph 1.2 does not apply: (a) Where, outside the control of the Holder of this FSP, natural events or actions by third parties following Cutting Permit and/or Road Permit Submission have impacted the ability to meet the visual quality objectives.							

6.9 CULTURAL HERITAGE OBJECTIVES

Objective	Source
<p>The objective set by government for cultural heritage resources¹ is to conserve, or, if necessary, protect cultural heritage resources that are:</p> <ul style="list-style-type: none"> 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 	<p>FPPR Sec. 10</p>
<p>Applicable Area</p> <ul style="list-style-type: none"> • Within the FDU's. 	
<p>Result or Strategy</p> <p><u>Definitions</u></p> <p>1.1 In Paragraph 1.2:</p> <ul style="list-style-type: none"> (a) “Affected Cultural Heritage Resource” means a cultural heritage resource to which the objective set by government in section 10 of the FPPR pertains; (b) “Cultural Heritage Resource Evaluation” means a process conducted by an authorized member of the affected First Nations or qualified professional to assess the existence and significance of an Affected Cultural Heritage Resource; (c) “Culturally Modified Tree” means trees that have been altered by aboriginal people as part of their traditional use of the forests; <p><u>Approach to Harvesting and Roads</u></p> <ul style="list-style-type: none"> (a) before carrying out or authorizing primary forest activities, the holder of this FSP will refer to potentially affected First Nations the area identified for proposed forest harvesting and road construction and request information cultural heritage resource values; (b) If the holder of this FSP is made aware of the presence of an affected cultural heritage resource in or adjacent to a proposed cutblock or road the holder of this FSP will: <ul style="list-style-type: none"> (i) evaluate and work to mitigate the direct impact of the road or cutblock on the affected Cultural Heritage Resource based on: <ul style="list-style-type: none"> a) the relative value or importance of the affected Cultural Heritage Resource to a traditional use by aboriginal people; 	

¹ “cultural heritage resource” refers only to those resources that are the focus of a traditional use by an aboriginal people that is of continuing importance to that people, and not regulated under the Heritage Conservation Act.

b) the relative abundance or scarcity of the affected **Cultural Heritage Resource**

c) the historical extent of the traditional use of the **Cultural Heritage Resource** and

d) the impact that conserving or protecting the **Cultural Heritage Resource** has on the holder of the FSP ability to sell timber or an Agreements Holder's timber harvesting rights..

(ii) work with affected First Nations who provided cultural heritage resource information, on the development of strategies for mitigating potential impacts to those values;

(iii) where practicable implement the recommended management strategies.

(c) if a previously unidentified **Affected Cultural Heritage Resource** is encountered during harvesting, road construction or site preparation that is carried out or authorized by the Holder of this FSP, the holder will require operations to cease to the extent necessary to protect the affected cultural heritage resource until a **Cultural Heritage Resource Evaluation** can be carried out.

(d) If the **Cultural Heritage Resource Evaluation** determines that the previously unidentified **Cultural Heritage Resource** consists of only **Culturally Modified Trees**, then the holder will ensure

- (i) Primary Forest activities, if active, are stopped in the area and the affected first nation is advised of the Culturally Modified Trees
- (ii) a survey to identify **Culturally Modified Trees** is carried out, and
- (iii) the survey results are provided to affected First Nation

(e) If the **Cultural Heritage Resource Evaluation** determines the previously unidentified **Cultural Heritage Resource** is not a **Culturally Modified Tree** then the holder of the FSP will

- (i) evaluate the direct impact of the forest practice on the Cultural Heritage resource, and
- (ii) in accordance with paragraph (b), prepare and implement recommendations to mitigate the impact on conserve or, if necessary, protect the cultural heritage resource; and
- (iii) communicate the outcomes of this evaluation to the First Nation in whose asserted traditional territory the area lies.

Objective	Source
Undertake archaeological assessments in all High and Medium Potential areas identified in the Archaeological Overview Assessment	Kamloops LRMP HLP Order dated January 23, 2006 Sec. 2.1.16
<p>Applicable Area</p> <ul style="list-style-type: none"> • Within the FDU's. 	
<p>Result or Strategy</p> <p><u>Definitions</u></p> <p>1.1 In Paragraph 1.2:</p> <p>(a) “Archaeological Assessments” means assessments initiated in response to proposed development projects which will disturb or alter the landscape, thereby potentially endangering archaeological sites. Assessments may include but are not limited to archaeological overview assessment, archaeological impact assessment, cultural heritage overview assessment or culturally modified tree assessment;</p> <p>(b) “Kamloops TSA Archaeological Overview Assessment” means the process developed to guide forest development planning in the Kamloops TSA as amended from time to time (2010)</p> <p><u>Approach to Harvesting and Roads</u></p> <p>1.2 If the Holder of this FSP carries out timber harvesting or road construction within an FDU, the Holder will:</p> <p>(a) solicit input from affected First Nations through referral process;</p> <p>(b) comply with Forest and Range Agreements (FRA) with regard to unique referral processes as they pertain to those agreements;</p> <p>(c) for participating First Nation Bands comply with the Kamloops TSA Archaeological Overview Assessment process for Forest Development Planning in the Kamloops TSA;</p> <p>(d) conduct Archeological Impact Assessment on areas recommended through the Kamloops TSA Archaeological Overview Assessment process;</p> <p>(e) implement recommendations of the Kamloops TSA Archaeological Overview Assessment, where significant sites are found, through measures such as establishing no harvest buffers, redesign of cutblock boundaries, combining into wildlife tree patches or riparian reserves.</p>	

(f) for those bands who are not participating in the Kamloops TSA Archaeological Overview Assessment process, conduct archaeological assessments in all high and medium potential areas identified in Figure 6 of the Kamloops Land and Resource Management Plan (1995).

6.10 SETTLEMENT AREA OBJECTIVE

Objective	Source
Manage land within community growth boundary to meet the objectives set out in approved community land use plans	Kamloops LRMP HLP Order dated January 23, 2006 Sec. 2.2
<p>Applicable Area</p> <p>Within the FDU and Settlement Resource Management Zones: Alpine Valley, Ashcroft, Cache Creek, Heffley, Kamloops, Little Fort, Rayleigh, and Savona. Avola, Barriere, Blackpool, Blue River, Boston Flats, Cache Creek, Campbell Creek, Cherry Creek, City of Kamloops, Clearwater, Duck Range, East Clearwater, Heffley Creek, Knutsford, Lac Le Jeune, Logan Lake, Louis Creek, McLure, Martin Prairie, Mesa Vista, Monte Creek, North of Heffley Creek, Paul Lake, Pinantan, Pritchard, Savona, Six Mile, Sullivan (Knouff) Lake, Sunshine Valley and Vinsula/Black Pines</p>	
<p>Result or Strategy</p> <p><u>Approach to Harvesting and Roads</u></p> <p>Before the Holder of this FSP carries out timber harvesting or road construction in the Settlement Resource Management Zones, the Holder will incorporate relevant direction from any approved community land use plans that are applicable.</p>	

6.11 RANGE OBJECTIVE

Objective	Source
Minimize tree/grass/cattle conflicts through integrated management practices.	Kamloops LRMP HLP Order dated January 23, 2006 Sec. 2.1.10
<p>Applicable Area</p> <p>Within the FDU's.</p>	
<p>Strategy</p> <p><u>Approach to Harvesting and Roads</u></p> <p>1.1 The Holder of this FSP, prior to Road Permit or Cutting Permit Submission, will inform the range holder of primary forest activities within or adjacent to their range tenure and work with the Range Tenure Holder to develop and implement mitigation measures (including timing of those measures) based on integrated management practices where tree/grass/cattle conflicts are anticipated.</p>	

6.12 RANGE AND NOXIOUS WEED MEASURES

6.12.1 Measures to Mitigate the Loss of Natural Range Barriers

Requirement	Source
The FSP Holder must specify measures to mitigate the effect of removing or rendering ineffective natural range barriers.	FPPR Sec. 18
<p>Applicable Area</p> <ul style="list-style-type: none"> • Within the FDU's. 	
<p>Result or Strategy</p> <p><u>Definitions</u></p> <p>1.2 In Paragraphs 1.2, “Natural Range Barrier” means a naturally occurring feature that prohibits the movement of cattle</p> <p><u>Approach to Harvesting and Roads</u></p> <p>1.3 The Holder of this FSP, prior to Road Permit or Cutting Permit Submission, will inform the range holder of associated planned primary forest activities within or adjacent to their range tenure and work with the Range Tenure Holder to develop and implement mitigation measures (including timing of those measures) where impacts to Natural Range Barriers are anticipated.</p>	

6.12.2 Invasive Plants – Measures

Requirement	Source
A person who prepares a forest stewardship plan must specify measures in the plan to prevent the introduction or spread of species of plants that are invasive plants under the Invasive Plants Regulation, if the introduction is likely to be a result of the person's forest practices.	FPPR Sec. 17
<p>Applicable Area</p> <ul style="list-style-type: none"> • Within the FDU's. 	
<p>Result or Strategy</p> <p><u>Approach to Harvesting and Roads</u></p> <p>If the Holder of this FSP conducts Primary Forest Activities, the Holder will work to prevent the introduction or spread of invasive plant species by;</p> <p>(a) prior to Cutting Permit or Road Permit Submission, reference the Ministry of Forests and Range staff and/or database system and/or other sources of information on the presence of invasive plant species in the area proposed for development;</p>	

- (b) Where the risk of invasive plant introduction or spread is likely, as identified in (a), grass seed, using invasive plant free seed, on disturbed contiguous areas of exposed mineral soil, that is not subject to reforestation activities and is not a part of the running surface of an active road, within 2 years or as soon as practicable.
- (c) Should it be found that new infestations have developed within the area of the Primary Forest Activities, the Ministry of Forests and Range – Range Branch will be notified.
- (d) An **Evaluation** will be carried out within 2 years of initial seeding outlined in (b), to determine the necessity of, and if required, conduct re-seeding.

7 STOCKING REQUIREMENTS

All stocking requirements are applicable across the entire **FDU**.

7.1 GENERAL STANDARDS

7.1.1 Preamble

Unless otherwise specified by this **FSP**, the **FSP** has adopted the following stocking standards:

- Even-aged stocking standards (Appendix A) Ainsworth Lumber Company Ltd.'s Kamloops Pulpwood Agreement 16 FDP Stocking Standards - Approved 2004
- Uneven-aged stocking standards (Appendix B) Ainsworth Lumber Company Ltd.'s Kamloops Pulpwood Agreement 16 FDP Stocking Standards - Approved 2004
- Partial Cutting stocking standards (Appendix C) MOFR "Deviation from Potential"
- Broadleaf stocking standards (Appendix D) Ainsworth Lumber Company Ltd.'s Kamloops Pulpwood Agreement 16 FDP Stocking Standards - Approved 2004
- Mixedwood stocking standards (Appendix E) Ainsworth Lumber Company Ltd.'s Central Cariboo Forest District Pulpwood Agreement 16 Stocking Standards – Approved 2003

The following criteria apply:

- **FPPR** Section 16(1): Ainsworth Kamloops Pulpwood Agreement 16 FDP Stocking Standards - Approved 2004 Even-aged Stocking Standards, Ainsworth Kamloops Pulpwood Agreement 16 FDP Stocking Standards - Approved 2004 Uneven-aged Stocking Standards, Ainsworth Kamloops Pulpwood Agreement 16 FDP Stocking Standards - Approved 2004 Broadleaf Stocking Standards, Ainsworth Central Cariboo Forest District Pulpwood Agreement 16 – Approved 2003 Mixed Wood Stocking Standards and **FPPR** Section 44 (free growing stands generally) applies to all **FDUs**.
- **FPPR** Section 16(3): **FPPR** Section 44(1) applies to all areas with a free growing obligation in the **FDU**.
- **FPPR** Section 16(4): MOFR "Deviation from Potential" Partial Cutting stocking standards for intermediate cutting will be applied to areas referred to in **FPPR** Section 44(4) for the **FDU**.

The above standards and criteria support stocking areas with ecologically suitable species that address immediate and long-term forest health issues on the area to a density that (in either case) is consistent with:

- (a) maintaining or enhancing an economically valuable supply of commercial timber from British Columbia's forests; and

- (b) the timber supply analysis and forest management assumptions that apply to the area covered by the plan on the **Submission Date**.

7.1.2 Even-aged Stocking Standards

Even-aged stocking standards, for the appropriate biogeoclimatic zone and site series, will be applied, as permitted under this **FSP**, where no significant residual tree retention has been identified.

7.1.3 Uneven-aged Stocking Standards

Uneven-aged stocking standards for the appropriate biogeoclimatic zone and site series will be applied as permitted under this **FSP** where significant residual tree retention has been identified and the tree retention is not a result of commercial thinning, removal of individual trees, or a similar type of intermediate cutting.

7.1.4 Mixedwood Stocking Standards

Mixedwood stocking standards for the appropriate biogeoclimatic zone and site series may be applied as permitted under this **FSP** where neither the broadleaf nor the conifer tree species comprise more than 80% of the cruise gross basal area or volume of the stand. It is estimated this standard will influence less than 5% of the free growing obligation area.

7.1.5 Broadleaf Stocking Standards

Broadleaf stocking standards for the appropriate biogeoclimatic zone and site series may be applied as permitted under this **FSP** where the broadleaf tree species comprise more than 80% of the cruise gross basal area or volume of the stand. It is estimated this standard will influence less than 5% of the free growing obligation area.

7.1.6 Partial Cutting Stocking Standards

Partial cutting stocking standards for the appropriate biogeoclimatic zone and site series will be applied as permitted under this **FSP** where significant residual tree retention has been identified and is a result of commercial thinning, removal of individual trees, or a similar type of intermediate cutting. It is estimated this standard will influence less than 2% of the free growing obligation area.

Details of the methodology and process are contained in Appendix C.

7.1.7 Minimum Stocking Standards (MSSpa and MSSp)

If the SP does not specify any acceptable species, MSSp equals MSSpa.

7.1.8 Minimum Inter-Tree Distance

The stocking standard minimum inter-tree distance (MITD) options are as follows:

Option:	MITD (m)
1	2.0
2	1.7
3	1.5
4	1.0
5	0.8

Unless otherwise specified by this FSP, the MITD defaults to 2.0m for all stocking standards.

Subject to an **Evaluation** and as identified in a SP, the MITD may be reduced down to 0.8m to provide an opportunity to advance the level of stocking standard achievement (improve seedling survival and growth and site occupancy) associated with the following:

“Non-broadcast site conditions” that are negatively impacting the achievement of the stocking standard objective:

- hygric or wetter sites
- very rocky sites
- areas with expected significant cattle trampling damage to seedlings
- sites with a significant number of wildlife trees
- riparian areas with a high residual component
- sites that will be stumped to manage root rot
- areas with an abundance of residual regeneration
- areas with abundance of unavoidable slash loading
- very harsh sites where protected microsites are critical (e.g. shade, snow creep)

“Broadcast site conditions” that are negatively impacting the achievement of the stocking standard objective:

- cluster planting (e.g. Grizzly habitat, Caribou Management Guidelines)
- coppice-regenerating birch: two trees within each clump may be tallied as well-spaced regardless of their inter-tree distance. However, the next well-spaced tree must be at least 2m away.

7.1.9 Crop Tree/Brush Ratio

% Height above Brush	Biogeoclimatic Zone
125	ESSF, IDF, MS, SBPS

Application of the crop tree/brush ration must also take into consideration the following:

- Up to 1,000 stems/ ha of new aspen regeneration (post-harvest) will be considered non-deleterious to crop trees at the time of free-growing.
- WSSpa broadleaf species in mixedwood managed stands will not be considered competing vegetation for conifers.
- Broadleaf species in mixedwood managed stands greater than or equal to 1m from bole to bole of a conifer will not be considered competing with the conifer.
- At the time of an **Evaluation**, broadleaf trees cannot be disproportionately negatively impacting the conifer crop trees.

7.1.10 Characteristics of Residual Mature and Pole Layer Crop Trees

Unless otherwise specified by this **FSP**, the minimum characteristics of any leave trees, including, form, health and vigor are as per the guideline criteria outlined in Section 7f of *Acceptability guidelines for residual mature and pole layer crop trees* in FS 660-1 HFP 01 and the *Tree Wounding Guidebook*.

7.1.11 Broadleaf Free Growing Heights

Unless otherwise specified by this **FSP**, the broadleaf free growing height will be equal to the tallest conifer height for the site series/ stocking standard ID.

7.1.12 Regeneration Delay

Up to a maximum of 7 years regeneration delay is applied to all stocking standards where harvesting has resulted in an obligation to establish a free growing stand. Where harvesting has not resulted in an obligation to establish a free growing stand as a result of commercial thinning, removal of individual trees, or a similar type of intermediate cutting, a two year regeneration is applied. In practice, the most suitable earlier regeneration delay period will be applied considering applicable TSR assumptions, site conditions and operational situations.

7.1.13 Maximum Density

- Unless otherwise specified by this FSP, the maximum density for Interior Lodgepole pine leading stands is 25,000 countable stems per hectare. Lodgepole pine leading stands are stands where Lodgepole pine is greater than and equal to 80% of the inventory.
- Unless otherwise specified by this FSP, the maximum density number for all other conifer species in non-lodgepole pine leading stands and mixed Lodgepole pine stands is 10,000 countable stems per hectare. Broadleaf density will not contribute towards stand conifer density reduction thresholds.
- Unless otherwise specified by this FSP, no maximum density number is defined for broadleaf tree species. Broadleaf species rapid self-thinning characteristics lend themselves well for natural thinning.

7.1.14 Free Growing Damage Criteria

- Even aged age class 1 stands: unless otherwise specified by this **FSP**, at the time of the free growing survey, the following free growing damage criteria will apply: Appendix 5 of *Establishment to Free Growing Guidebook* (revised edition May 2000, Kamloops Forest Region) and/or Appendix 5 of *Establishment to Free Growing Guidebook* (version 2.3, Cariboo Forest Region, January 2002).
- Uneven-aged stands, layer 3 & 4 advance regeneration: unless otherwise specified by this **FSP**, at the time of the free growing survey the following free growing damage criteria will apply: Appendix 10, Table A10-1 of the *Establishment to Free Growing Guidebook* (revised edition May 2000, Kamloops Forest Region) and/ or Appendix 10, Table A10-1 of the *Establishment to Free Growing Guidebook* (version 2.3, Cariboo Forest Region, January 2002).
- A tree susceptible to dwarf mistletoe that is located within 10 m of an overtopping tree, which is infected with dwarf mistletoe, will not be considered susceptible if the overtopping infected tree is part of an approved cut block boundary or is reserved from harvest within the harvestable area to address other non-timber objectives, as permitted under this FSP.

7.1.15 Tree Species Mix

- To help maintain a similar tree species mix within a landscape unit, commercially valuable dominant and co-dominant conifer species having greater than 20% of the gross cruise basal area or volume will be considered a “preferred” species.
- To help maintain a similar tree species mix within a landscape unit for broadleaf and mixedwood managed stands, commercially valuable dominant and co-dominant broadleaf species having at least 10% of the gross cruise basal area or volume will be considered a “preferred” species, and an “acceptable” species if the gross cruise basal area or volume is less than 10%.

7.1.16 White Pine

- Where Pw is listed as an acceptable species, planted rust resistant stock will be considered preferred to a maximum of 50% of the total preferred and acceptable well spaced stems.
- To reduce white pine blister rust infections, non-rust resistant Pw is to be pruned to 1.3 metre height where it makes up more than 5% of the minimum free growing number. SU with less than 5% non-resistant Pw contributing to the minimum free growing number require no pruning and can be accepted as free growing.

7.1.17 Free Growing Standard Adjustment

Based on an **Evaluation** at the time of the development of the SP or within two years after the completion of harvest, the stocking standard target and minimum WSS values and minimum height criteria may be reduced. The reduction is to address the resulting impacts of established non-timber objectives that restrict the ability to achieve the WSS and height values for the stocking standard. This adjustment is to be applied where the stocking standard is not correct for the planned or resulting stand structure or site condition due to:

- modifying a silviculture system to address visuals, wildlife, adjacency, cattle, grassland, First Nations cultural heritage, beetle management areas with lower levels of beetle attack, and/or susceptible host trees;
- dispersed non-plantable ground having site conditions and limiting factors associated with soil moisture, soil temperature, soil nutrients, climatic conditions, tree species and stock type to be planted, site occupancy target, and growing space.

It is estimated the standard adjustment will influence less than 2 % of the silviculture obligation area. Refer to the “Background Document for Government” for methodology and assessment procedure.

7.1.18 Species Suitability

Unless specified otherwise in this **FSP**, the species suitability identified in the even-aged stocking standards applies to the other stocking standards within this **FSP**.

7.2 APPENDIX A – REFERENCE GUIDE FOR STOCKING STANDARDS IN CONIFER EVEN-AGED STANDS

BGC		
Classification		
Zone/SZ	Series	Standards ID
ESSFdc1	01	82000
	02	82001
	03	82002
	04	82003
	05	82004
	06	82005
	07	-

Regeneration Guide						
Species		Stocking(i)			Regen Delay (Max yrs)	
Conifer		Target	MIN pa	MIN p		
Preferred (p)	Acceptable (a)	(well-spaced/ha)				
PI Se	BI	1200	700	600	7	
PI	BI ¹³ Se	1000	500	400	7	
PI	BI ¹³ Se	1000	500	400	7	
PI Se	BI	1200	700	600	7	
PI Se	BI ^{10,13}	1000	500	400	7	
PI ¹ Se ^{1,32}	BI ^{1,32}	1000	500	400	7	
non-forested		-	-	-	-	

Free Growing Guide			
Assessment		Min. Height(ii)	
Earliest	Latest	Species	Ht
(yrs)	(yrs)		(m)
1	20	PI	1.6
		Others	0.8
1	20	PI	1.2
		Others	0.6
1	20	PI	1.2
		Others	0.6
1	20	PI	1.6
		Others	0.8
1	20	PI	1.2
		Others	0.6
1	20	PI	1.2
		Others	0.6
-	-	-	-

BGC		
Classification		
Zone/SZ	Series	Standards ID
ESSFdc2	01	82006
	02*	-
	03	82007
	04	82008
	05	82009
	06	82010
	07	82011
	08	82012
	09	-
ESSFdv	01	82013
	02*	82014
	03	82015
	04	82016
	05	82017
	06	82018

Regeneration Guide						
Species		Stocking(i)			Regen Delay (Max yrs)	
Conifer		Target	MIN pa	MIN p		
Preferred (p)	Acceptable (a)	(well-spaced/ha)				
PI Se	BI	1200	700	600	7	
PI ⁵²	BI ¹³ Se	-	-	-	-	
PI	BI ¹³ Pa ^{9,17} Se	1000	500	400	7	
PI	BI ¹³ Se	1000	500	400	7	
PI Se	BI ^{10,13}	1000	500	400	7	
PI Se	BI	1200	700	600	7	
PI Se ³²	BI	1200	700	600	7	
PI ¹ Se ^{1,32}	BI ^{1,32}	1000	500	400	7	
non-forested		-	-	-	-	
PI Se	BI ¹³	1200	700	600	7	
PI	BI Se	400	200	200	7	
PI	BI Se	1000	500	400	7	
PI Se	BI ^{10,13}	1000	500	400	7	
PI Se ³²	BI ³²	1200	700	600	7	
PI ¹ Se ^{1,32}	BI ^{1,32}	1000	500	400	7	

Free Growing Guide			
Assessment		Min. Height(ii)	
Earliest	Latest	Species	Ht
(yrs)	(yrs)		(m)
1	20	PI	1.6
		Others	0.8
-	-	-	-
1	20	PI	1.2
		Others	0.6
1	20	PI	1.2
		Others	0.6
1	20	PI	1.2
		Others	0.6
1	20	PI	1.6
		Others	0.8
1	20	PI	1.6
		Others	0.8
1	20	PI	1.2
		Others	0.6
1	20	PI	1.6
		Others	0.8
1	20	PI	1.2
		Others	0.6

BGC		
Classification		
Zone/SZ	Series	Standards ID
ESSFvc	01	82027
	02	82028
	03	82029
	04	82030
	05	82031
	06	-
ESSFvv	01	82032
	02	82033
	03	82034
	04	82035
	05	-

Regeneration Guide						
Species		Stocking(i)			Regen Delay (Max yrs)	
Conifer		Target	MIN pa	MIN p		
Preferred (p)	Acceptable (a)	(well-spaced/ha)				
BI Se	Hm	1200	700	600	7	
Se	BI Hm	1000	500	400	7	
BI Se	Hm	1000	500	400	7	
BI Se	Hm	1200	700	600	7	
BI ^{1,32} Se ^{1,32}	Hm ¹	1000	500	400	7	
non-forested		-	-	-	-	
BI ³² Se ³²	Hm ¹⁶	1200	700	600	7	
BI ³² Se ³²	Hm ¹⁶ Pl ³⁴	600	400	400	7	
BI ³² Se ³²	Hm ¹⁶	1000	500	400	7	
BI ³² Se ³²	Hm ¹⁶	600	400	400	7	
non-forested		-	-	-	-	

Free Growing Guide			
Assessment		Min. Height(ii)	
Earliest	Latest	Species	Ht
(yrs)	(yrs)		(m)
1	20	All	0.8
1	20	PI	1.2
		Others	0.6
1	20	All	0.6
1	20	All	0.8
1	20	All	0.6
-	-	-	-
1	20	All	0.8
1	20	PI	1.2
		Others	0.6
1	20	All	0.6
1	20	All	0.6
-	-	-	-

BGC		
Classification		
Zone/SZ	Series	Standards ID
ESSFwc2	01	82040
	02	82041
	03	82042
	04	82043
	05	82044
	06	82045
	07	82046
	08	82047
	09*	82048
	10	-

Regeneration Guide						
Species		Stocking(i)			Regen Delay (Max yrs)	
Conifer		Target	MIN pa	MIN p		
Preferred (p)	Acceptable (a)	(well-spaced/ha)				
BI Se	PI ^{17,34}	1200	700	600	7	
PI ¹⁷ Se ^{10,13}	BI ^{10,13,14}	1000	500	400	7	
Se PI ^{17,34}	BI ^{10,13,14}	1000	500	400	7	
BI Se	PI ^{17,34}	1200	700	600	7	
BI Se	PI ^{23,34}	1200	700	600	7	
BI ³² Se ³²	PI ^{23,34}	1200	700	600	7	
BI Se	PI ^{23,34}	1200	700	600	7	
BI ^{1,32} Se ^{1,32}	PI ^{23,34}	1000	500	400	7	
PI ¹ Se ^{1,32}	BI ^{1,32}	400	200	200	7	
non-forested		-	-	-	-	

Free Growing Guide			
Assessment		Min. Height(ii)	
Earliest	Latest	Species	Ht
(yrs)	(yrs)		(m)
1	20	PI	1.6
		Others	0.8
1	20	PI	1.2
		Others	0.6
1	20	PI	1.2
		Others	0.6
1	20	PI	1.6
		Others	0.8
1	20	PI	1.6
		Others	0.8
1	20	PI	1.6
		Others	0.8
1	20	PI	1.2
		Others	0.6
1	20	PI	1.2
		Others	0.6
-	-	-	-

BGC		
Classification		
Zone/SZ	Series	Standards ID
ESSFxc	01	82056
	02	82057
	03	-
	04	-
	05	82058
	06	82059
	07	82060
	08	82061
	09	-
	10	-
ESSFmm1	01	81061
	02	81062
	03	81063
	04	81064
	05	81065
	06	81066
	07*	81067

Regeneration Guide						
Species		Stocking(i)			Regen Delay (Max yrs)	
Conifer		Target	MIN pa	MIN p		
Preferred (p)	Acceptable (a)	(well-spaced/ha)				
PI Se ³²	BI ^{10,13}	1200	700	600	7	
PI	BI ¹³ Se	600	400	400	7	
non-forested		-	-	-	-	
non-forested		-	-	-	-	
PI	BI ¹³ Se	1000	500	400	7	
PI Se	BI ¹³	1200	700	600	7	
PI Se ³²	BI ³²	1200	700	600	7	
PI ¹ Se ^{1,32}	BI ^{1,32}	1000	500	400	7	
non-forested		-	-	-	-	
non-forested		-	-	-	-	
BI Se	PI	1200	700	600	7	
BI ²⁸ PI Se ²⁸		1000	500	400	7	
PI Se ²⁸	BI ²⁸	1000	500	400	7	
BI Se	PI	1200	700	600	7	
BI Se	PI	1200	700	600	7	
BI Se	PI	1200	700	600	7	
BI Se	PI	1200	700	600	7	
BI ^{1,32} Se ^{1,32}	PI ¹	400	200	200	7	

Free Growing Guide			
Assessment		Min. Height(ii)	
Earliest	Latest	Species	Ht
(yrs)	(yrs)		(m)
1	20	PI	1.6
		Others	0.8
1	20	PI	1.2
		Others	0.6
-	-	-	-
-	-	-	-
1	20	PI	1.2
		Others	0.6
1	20	PI	1.6
		Others	0.8
1	20	PI	1.6
		Others	0.8
1	20	PI	1.2
		Others	0.6
-	-	-	-
-	-	-	-
1	20	PI	1.60
		Others	0.80
1	20	PI	1.20
		Others	0.60
1	20	PI	1.20
		Others	0.60
1	20	PI	1.60
		Others	0.80
1	20	PI	1.60
		Others	0.80
1	20	PI	1.60
		Others	0.80
1	20	PI	1.20
		Others	0.60

BGC		
Classification		
Zone/SZ	Series	Standards ID
ESSFxv1	01	80028
	02*	80029
	03*	80030
	04	80031
	05	80032
	06	80033
	07	80034
	08	80035
	09	80036

Regeneration Guide						
Species		Stocking(i)			Regen Delay (Max yrs)	
Conifer		Target	MIN pa	MIN p		
Preferred (p)	Acceptable (a)	(well-spaced/ha)				
PI ³² Se ³²	Bl ^{32,50} Pa	1200	700	600	7	
PI Pa	Bl ²⁸	800	500	400	7	
PI Pa		800	500	400	7	
PI Pa	Bl ²⁸ Se ²⁸	1000	600	500	7	
PI Pa	Bl ²⁸ Se ²⁸	1200	700	600	7	
PI Se ³²	Bl ³²	1200	700	600	7	
PI ³² Se ³²	Bl ³²	1200	700	600	7	
PI ^{1,32} Se ^{1,32}	Bl ^{1,32}	600	400	300	7	
Se ^{1,32} Bl ^{1,32}	PI ¹	800	500	400	7	

Free Growing Guide			
Assessment		Min. Height(ii)	
Earliest	Latest	Species	Ht
(yrs)	(yrs)		(m)
1	20	PI	1.0
		Others	0.8
1	20	PI	0.8
		Others	0.6
1	20	PI	0.8
		Pa	0.6
1	20	PI	0.8
		Others	0.6
1	20	PI	1.0
		Others	0.8
1	20	PI	1.0
		Others	0.8
1	20	PI	1.0
		Others	0.8
1	20	PI	0.8
		Others	0.6
1	20	PI	0.8
		Others	0.6

BGC		
Classification		
Zone/SZ	Series	Standards ID
ICHdw	01a	83041
	01b	83042
	02	83043
	03	83044
	04	83045

Regeneration Guide							Free Growing Guide			
Species		Stocking(i)			Regen Delay (Max yrs)	Assessment		Min. Height(ii)		
Conifer		Target	MIN pa	MIN p		Earliest	Latest	Species	Ht	
Preferred (p)		(well-spaced/ha)				(yrs)	(yrs)		(m)	
Acceptable (a)										
Fd ⁵⁸ Lw Py Pw ^{31,49,57}	Bg ²⁸ PI Cw Sx ^{10,13}	1200	700	600	7	1	20	PI, Pw	2.0	
Fd ⁵⁸ Lw PI Py ^{9,14} Cw Pw ^{31,49,57} Sx ^{10,13}		1200	700	600	7	1	20	Lw	2.0	
								Fd	1.4	
								Others	1.0	
Fd ⁵⁸ Lw Py	Cw	1000	500	400	7	1	20	PI, Pw	2.0	
								Lw	2.0	
								Fd	1.4	
								Others	1.0	
Fd ^{1,32,58} Lw ^{1,32} Sx Cw ³² Pw ^{31,49,57}	Bg ³² Hw ³² PI ¹	1200	700	600	7	1	20	PI, Pw	2.0	
								Lw	2.0	
								Fd	1.4	
								Others	1.0	
Cw ³² Sx Fd ^{1,32,58} Lw ^{1,32} Pw ^{1,31,49,57}	Bg ^{1,32} PI ¹	1200	700	600	7	1	20	PI, Pw	2.0	
								Lw	2.0	
								Fd	1.4	
								Others	1.0	

BGC		
Classification		
Zone/SZ	Series	Standards ID
ICHmk2	01	82070
	02	82071
	03	82072
	04	82073
	05	82074
	06	82075

Regeneration Guide							Free Growing Guide			
Species		Stocking(i)			Regen Delay (Max yrs)	Assessment		Min. Height(ii)		
Conifer		Target	MIN pa	MIN p		Earliest	Latest	Species	Ht	
Preferred (p)		(well-spaced/ha)				(yrs)	(yrs)		(m)	
Acceptable (a)										
Fd ^{9,14,32} PI Sx	BI ^{10,13} Cw	1200	700	600	7	1	20	PI, Lw	2.0	
Fd PI	Sx ^{10,13}	600	400	400	7	1	20	Fd	1.4	
Fd PI Sx ^{10,13}	Cw ^{10,13}	1000	500	400	7	1	20	Sx	0.8	
Fd PI Sx	BI ^{10,13} Cw ^{10,13}	1200	700	600	7	1	20	Others	1.0	
Fd ^{9,14,32} PI Sx	BI ¹³ Cw ³²	1200	700	600	7	1	20	PI	1.4	
PI ¹ Sx ¹ Fd ^{1,32}	BI ¹ Cw ³²	1000	500	400	7	1	20	Fd	1.0	
								Others	0.8	

BGC		
Classification		
Zone/SZ	Series	Standards ID
ICHmw3	01	82084
	01-YC	82085
	02	82086
	03	82087
	04	82088
	05	82089
	06	82090
	07	82091
	08	82092
	09	-

Regeneration Guide						
Species		Stocking(i)			Regen Delay (Max yrs)	
Conifer		Target	MIN pa	MIN p		
Preferred (p)	Acceptable (a)	(well-spaced/ha)				
Fd Sx ^{10,13} Cw ^{10,13}	PI ⁵¹ BI ^{10,13} Pw ³¹	1200	700	600	7	
Fd Cw ^{10,13} Sx ^{10,13}	BI ^{10,13} Hw ^{10,13} PI ⁵¹ Pw ³¹	1200	700	600	7	
Fd PI	Cw ^{10,13} Pw ³¹	1000	500	400	7	
Fd ³² PI	Cw ^{10,13} Pw ³¹ Sx ^{10,13} BI ^{10,13}	1000	500	400	7	
Fd PI ⁵¹	Cw ^{10,13} Pw ³¹ Sx ^{10,13}	1200	700	600	7	
Fd Cw ^{10,13} Sx ^{10,13}	BI ^{10,13} PI ⁵¹ Pw ³¹	1200	700	600	7	
Cw Fd ¹⁴ Hw Sx	BI ^{10,13} PI ⁵¹ Pw ³¹	1200	700	600	7	
Cw ³² Sx Fd ^{1,32}	BI Hw ³² PI ⁵¹ Pw ³¹	1200	700	600	7	
Cw ^{1,32} Hw ^{1,32} PI ^{1,51} Sx ¹	BI ¹ Pw ³¹	1000	500	400	7	
non-forested		-	-	-	-	

Free Growing Guide				
Assessment		Min. Height(ii)		
Earliest	Latest	Species	Ht	
(yrs)	(yrs)		(m)	
1	20	PI, Pw	2.0	
		Lw	2.0	
		Fd	1.4	
		Others	1.0	
1	20	PI, Pw	2.0	
		Lw	2.0	
		Fd	1.4	
		Others	1.0	
1	20	PI, Pw	1.4	
		Fd	1.0	
		Others	0.8	
1	20	PI, Pw	1.4	
		Lw	1.4	
		Fd	1.0	
		Others	0.8	
1	20	PI, Pw	2.0	
		Lw	2.0	
		Fd	1.4	
		Others	1.0	
1	20	PI, Pw	2.0	
		Lw	2.0	
		Fd	1.4	
		Others	1.0	
1	20	PI	1.4	
		Others	0.8	
-	-	-	-	

BGC		
Classification		
Zone/SZ	Series	Standards ID
ICHmm	01	81116
	02	81117
	03	81118
	04	81119
	05	81120
	06	81121
	07*	81122
	08*	81123

Regeneration Guide							Free Growing Guide			
Species		Stocking(i)			Regen Delay (Max yrs)	Assessment		Min. Height(ii)		
Conifer		Target	MIN pa	MIN p		Earliest	Latest	Species	Ht	
Preferred (p)	Acceptable (a)	(well-spaced/ha)			(yrs)	(yrs)		(m)		
Fd PI Sx ³⁵ Cw	Bl ²⁹ Hw	1200	700	600	7	1	20	PI 2.00 Fd 1.40 Others 1.00		
Fd PI	Hw Cw Sx	1000	500	400	7	1	20	PI, Fd 1.40 Others 0.80		
Fd Hw PI Sx	Bl ²⁹ Cw	1200	700	600	7	1	20	PI 2.00 Fd 1.40 Others 1.00		
Cw ³² Hw ³² Sx ³⁵ Fd ³²	Bl ²⁹ PI Pw ³¹	1200	700	600	7	1	20	PI, Pw 2.00 Fd 1.40 Others 1.00		
Cw ³² Hw ³² Sx ³⁵ Fd ^{1,32}	Bl ²⁹ PI ¹	1200	700	600	7	1	20	PI 2.00 Fd 1.40 Others 1.00		
Cw ^{1,32} Hw ^{1,32} PI ¹ Sx ^{1,32,35}	Bl ^{1,29}	1000	500	400	7	1	20	PI 1.40 Others 0.80		
PI ¹ Sb ¹ Sx ^{1,32,35}		400	200	200	7	1	20	PI 1.40 Others 0.80		
Cw ^{1,32} Hw ^{1,32} Sx ^{1,32,35}	Bl ^{1,29,32} PI ¹	400	200	200	7	1	20	PI 1.40 Others 0.80		

BGC			Regeneration Guide					Free Growing Guide				
Classification			Species		Stocking(i)			Regen Delay (Max yrs)	Assessment		Min. Height(ii)	
Zone/SZ	Series	Standards ID	Conifer	Decid	Target	MIN pa	MIN p		Earliest	Latest	Species	Ht
			Preferred (p)	Acceptable (a)	(well-spaced/ha)			(yrs)	(yrs)		(m)	
ICHvk1	01	82093	Cw ³² Sx	Bl ¹³ Fd ^{1,9,14,32,34} Pw ³¹ Hw ³²	1200	700	600	7	1	20	Pw	2.0
	02	82094	Fd ⁹ Cw Sx	Bl Hw Pw ³¹	1200	700	600	7	1	20	Fd	1.4
	03	82095	Cw Fd ^{9,14,34} Hw Sx	Bl ^{10,13} Pw ³¹	1200	700	600	7	1	20	Others	1.0
	04	82096	Cw Fd ^{9,14} Hw Sx	Bl ¹³ Pw ³¹	1200	700	600	7	1	20	PI, Pw	2.0
	05	82097	Cw ^{1,32} Sx ¹	Bl ¹ Hw ^{1,32} Pw ^{1,31}	1000	500	400	7	1	20	Lw	2.0
	06	82098	Cw ^{1,32} Hw ^{1,32} Sx ¹	Bl ¹ Pw ^{1,31}	1000	500	400	7	1	20	Fd	1.4
											Others	1.0
											Pw, Lw	2.0
											Pw	1.4
											Others	0.8
											PI	1.4
											Others	0.8

BGC		
Classification		
Zone/SZ	Series	Standards ID
ICHwk1	01	82099
	02	82100
	03	82101
	04	82102
	05	82103
	06	82104
	07	82105
	08	-

Regeneration Guide						
Species		Stocking(i)			Regen Delay (Max yrs)	
Conifer		Target	MIN pa	MIN p		
Preferred (p)		Acceptable (a)				
		(well-spaced/ha)				
Cw Fd ^{9,14} Hw Sx	BI ^{10,13} Pw ³¹	1200	700	600	7	
Fd Pl ⁵¹ Cw ^{10,13}	Pw ³¹ Sx ^{10,13}	1000	500	400	7	
Fd Cw ^{10,13}	Hw ^{10,13} Pw ³¹ Sx ^{10,13}	1200	700	600	7	
Fd ^{9,14} Cw Sx ^{10,13}	Hw Pw ³¹	1200	700	600	7	
Cw ³² Sx	BI Fd ^{1,14,32} Hw ³² Pw ³¹	1200	700	600	7	
Cw ^{1,32} Sx ¹	BI ¹ Hw ^{1,32} Pw ^{1,31}	1000	500	400	7	
Cw ^{1,32} Hw ^{1,32} Sx ¹	BI ¹	1000	500	400	7	
non-forested		-	-	-	-	

Free Growing Guide			
Assessment		Min. Height(ii)	
Earliest	Latest	Species	Ht
(yrs)	(yrs)		(m)
1	20	PI, Pw	2.0
		Lw	2.0
		Fd	1.4
		Others	1.0
1	20	PI, Pw	1.4
		Fd	1.0
		Others	0.8
1	20	PI, Lw	2.0
		Fd	1.4
		Others	1.0
1	20	PI, Pw	2.0
		Lw	2.0
		Fd	1.4
		Others	1.0
1	20	PI, Pw	1.4
		Others	0.8
1	20	PI	1.4
		Others	0.8
-	-	-	-

BGC		
Classification		
Zone/SZ	Series	Standards ID
ICHmk3	01	80056
	02*	80057
	03	80058
	04	80059
	05	80060
	06	80061
	07	80062

Regeneration Guide						
Species		Stocking(i)			Regen Delay (Max yrs)	
Conifer		Target	MIN pa	MIN p		
Preferred (p)	Acceptable (a)	(well-spaced/ha)				
Fd PI Sx	BI Cw ³⁷	1200	700	600	7	
Fd PI	Sx ²⁸	1000	500	400	7	
Fd PI	Cw ²⁸ Sx ²⁸	1000	500	400	7	
Fd ³² Sx	BI Cw ^{32,37} PI	1200	700	600	7	
Sx ³² PI	Cw ^{32,37} BI ³²	1200	700	600	7	
Fd ^{32,34} Sx ³⁴ Cw ^{32,34,37}	BI ³⁴ PI ³⁴	1200	700	600	7	
Sx ^{1,32} Cw ^{1,32,37}	BI ^{1,32} PI ¹	1000	500	400	7	

Free Growing Guide			
Assessment		Min. Height(ii)	
Earliest	Latest	Species	Ht
(yrs)	(yrs)		(m)
1	20	PI	2.0
		Fd	1.4
		Others	1.0
1	20	PI	1.4
		Fd	1.0
		Others	0.8
1	20	PI	1.4
		Fd	1.0
		Others	0.8
1	20	PI	2.0
		Fd	1.4
		Others	1.0
1	20	PI	2.0
		Fd	1.4
		Others	1.0
1	20	PI	1.4
		Others	0.8

BGC		
Classification		
Zone/SZ	Series	Standards ID
IDFdk1	01	82106
	02	82107
	03	82108
	04	82109
	05	82110
	06	82111
	07	-
IDFdk1a	91	-
	92	-
	93	-
	94	82112

Regeneration Guide							Free Growing Guide			
Species		Stocking(i)			Regen Delay (Max yrs)	Assessment		Min. Height(ii)		
Conifer		Target	MIN pa	MIN p		Earliest	Latest	Species	Ht	
Preferred (p)		(well-spaced/ha)				(yrs)	(yrs)		(m)	
Acceptable (a)										
Fd ³² PI	Py ^{9,14} Sx ^{10,13}	1000	500	400	7	1	20	PI	1.0	
								Lw	1.0	
								Fd	0.8	
								Sx	0.6	
								Py	0.6	
Fd ²⁷ Py ^{9,14}		600	400	400	7	1	20	PI	1.0	
								Fd	0.8	
								Py	0.6	
Fd PI	Py ^{9,14,23}	600	400	400	7	1	20	PI	1.0	
								Fd	0.8	
								Py	0.6	
Fd PI	Py ^{9,14} Sx ^{10,13}	1000	500	400	7	1	20	PI	1.0	
								Fd	0.8	
								Others	0.6	
Fd ^{9,14,32} Sx	Bl ^{10,13} PI	1000	500	400	7	1	20	PI, Lw	1.0	
								Fd	0.8	
								Others	0.6	
Pl ¹ Sx ¹ Fd ^{1,32}	Bl ¹	1000	500	400	7	1	20	PI	1.0	
								Fd	0.8	
								Others	0.6	
non-forested		-	-	-	-	-	-	-	-	
non-forested		-	-	-	-	-	-	-	-	
non-forested		-	-	-	-	-	-	-	-	
Fd ³²	PI	1200	700	600	7	1	20	Fd	1.0	
								PI	1.4	

BGC			Regeneration Guide					Free Growing Guide				
Classification			Species		Stocking(i)			Regen Delay (Max yrs)	Assessment		Min. Height(ii)	
Zone/SZ	Series	Standards ID	Conifer	Target	MIN pa	MIN p	Earliest		Latest	Species	Ht	
			Preferred (p)	(well-spaced/ha)			(yrs)	(yrs)		(m)		
				Acceptable (a)								
IDFdk2	01	82113	Fd ³² PI	Py ^{9,14} Sx ^{10,13}	1000	500	400	7	1	20	PI, Lw	1.0
											Fd	0.8
											Sx	0.6
											Py	0.6
	02	82114	Fd ²⁷ Py ¹⁴		600	400	400	7	1	20	Fd	0.8
											Py	0.6
	03	82115	Fd ²⁷ PI	Py ¹⁴	1000	500	400	7	1	20	PI	1.0
											Fd	0.8
04	82116	Fd ³² PI Sx ^{10,13}	Py ^{9,14}	1200	700	600	7	1	20	PI, Lw	1.4	
										Fd	1.0	
										Py	0.8	
05	82117	Fd ³² Sx PI	Cw ³²	1200	700	600	7	1	20	PI, Lw	1.4	
										Fd	1.0	
										Others	0.8	
06	82118	PI ¹ Sx ¹ Fd ^{1,32}		1000	500	400	7	1	20	PI	1.0	
										Fd	0.8	
										Others	0.6	
07	82119	PI ¹ Sx ¹	Cw ³²	1000	500	400	7	1	20	PI	1.0	
										Others	0.6	
08	-	-	non-forested		-	-	-	-	-	-	-	-

BGC		
Classification		
Zone/SZ	Series	Standards ID
IDFdk3	01	82120
	02*	82121
	03*	82122
	04	82123
	07	82126
	08	82127
	09	82128

Regeneration Guide							Free Growing Guide			
Species		Stocking(i)			Regen Delay (Max yrs)	Assessment		Min. Height(ii)		
Conifer		Target	MIN pa	MIN p		Earliest	Latest	Species	Ht	
Preferred (p)		Acceptable (a)				(yrs)	(yrs)		(m)	
		(well-spaced/ha)								
Fd ^{27,32} PI	Sx ^{13,28}	1200	700	600	7	1	20	PI	1.4	
Fd ²⁷ PI		1000	500	400	7	1	20	Fd	1.0	
Fd ²⁷ PI		600	400	400	7	1	20	Sx	0.8	
Fd ²⁷ PI		1200	700	600	7	1	20	PI	1.0	
Fd ²⁷ PI								Fd	0.8	
Fd ³² PI Sx		1000	500	400	7	1	20	Fd	1.0	
Fd ³² PI Sx								PI	1.0	
Fd ³² PI Sx		1000	500	400	7	1	20	Fd	0.8	
Fd ³² PI Sx								Sx	0.6	
Sx ^{1,32} PI ¹		1000	500	400	7	1	20	PI	1.0	
Sx ^{1,32} PI ¹								Sx	0.6	

BGC		
Classification		
Zone/SZ	Series	Standards ID
IDFmw1	01	82135
	01-YC	82136
	02	82137
	03	82138
	04	82139
	05	82140
	06	82141

Regeneration Guide							Free Growing Guide			
Species		Stocking(i)			Regen Delay (Max yrs)	Assessment		Min. Height(ii)		
Conifer		Target	MIN pa	MIN p		Earliest	Latest	Species	Ht	
Preferred (p)		Acceptable (a)				(yrs)	(yrs)		(m)	
		(well-spaced/ha)								
Fd Lw	PI Py ^{9,14} Cw ^{10,13} Sx ^{10,13}	1200	700	600	7	1	20	PI, Lw	1.6	
Fd Lw PI	Py ^{9,14} Cw ^{10,13} Sx ^{10,13}	1200	700	600	7	1	20	Fd	1.0	
Fd ²⁷ Py	PI	600	400	400	7	1	20	Others	0.8	
Fd ²⁷ Py ^{9,14}	PI Lw ^{10,13}	600	400	400	7	1	20	PI, Lw	1.6	
Fd Lw PI	Py ^{9,14,16} Cw ^{10,13} Sx ^{10,13}	1000	500	400	7	1	20	Fd	1.0	
Fd ³² Lw ³² Sx	PI Cw	1200	700	600	7	1	20	Others	0.8	
Sx Fd ^{1,32} Lw ^{1,32}	Cw	1200	700	600	7	1	20	PI, Lw	1.6	
								Fd	1.0	
								Others	0.8	

BGC		
Classification		
Zone/SZ	Series	Standards ID
IDFmw2	01	82142
	01-YC	82143
	01-YS	82144
	02	82145
	03	82146
	04	82147
	05*	82148
IDFhx2	01	82165
	02	82166
	03	82167
	04	82168
	05	82169
	06	82170
	07	82171
	08	82172

Regeneration Guide							Free Growing Guide			
Species			Stocking(i)			Regen Delay (Max yrs)	Assessment		Min. Height(ii)	
Conifer			Target	MIN pa	MIN p		Earliest	Latest	Species	Ht
Preferred (p)			Acceptable (a)			(well-spaced/ha)	(yrs)	(yrs)		(m)
Fd PI	Cw ^{10,13}	Sx ^{10,13} Bl ^{10,13}	1200	700	600		7	1		
Fd PI	Bl ^{10,13}	Cw ^{10,13} Sx ^{10,13}	1200	700	600	7	1	20	Fd	1.0
Fd PI	Sx ^{10,13}	Bl ^{10,13} Cw ^{10,13}	1200	700	600	7	1	20	Others	0.8
Fd ²⁷ PI	Py ^{9,14,16,23}		600	400	400	7	1	20	PI, Lw	1.6
Fd ¹⁴ PI	Py ^{9,14,16}	Cw ^{10,13} Sx ^{10,13}	1000	500	400	7	1	20	Fd	1.0
Fd ³² Sx PI	Cw ^{32,37}		1200	700	600	7	1	20	Others	0.8
Sx ¹ PI ¹	Cw ^{1,32}		400	200	200	7	1	20	PI, Lw	1.6
Fd ²⁷ Py			1000	500	400	7	1	20	Fd	1.0
Py ²⁷ Fd ²⁷			400	200	200	7	1	20	Others	0.8
Py ²⁷ Fd ²⁷			400	200	200	7	1	20	PI	1.2
Py Fd ²⁷			600	400	400	7	1	20	Others	0.6
Fd ²⁷ Py			1000	500	400	7	1	20	PI	1.2
Fd Py			1200	700	600	7	1	20	Others	0.6
Fd ³² Sx	Py ³²	Cw ³²	1200	700	600	7	1	20	PI	1.2
Sx ¹ Fd ^{1,32}	PI ^{1,23}		1000	500	400	7	1	20	Others	0.6

BGC		
Classification		
Zone/SZ	Series	Standards ID
IDF_{xw}	01	82174
	02*	82175
	03*	82176
	04	82177
	05	82178
	06	82179
	07	82180
MS_{dm1}	01	83117
	02	83118
	03	83119
	04	83120
	05	83121
	06	83122
	07	83123
	08	83124
	09	-

Regeneration Guide							Free Growing Guide			
Species		Stocking(i)			Regen Delay (Max yrs)	Assessment		Min. Height(ii)		
Conifer		Target	MIN pa	MIN p		Earliest	Latest	Species	Ht	
Preferred (p)		Acceptable (a)			(well-spaced/ha)			(yrs)	(yrs)	(m)
Fd ²⁷	Py	1200	700	600	7	1	20	Fd, Py	0.8	
Fd ^{27,28}	Py ²⁸	600	400	400	7	1	20	Fd, Py	0.6	
Fd ^{27,28}	Py ²⁸	600	400	400	7	1	20	Fd, Py	0.6	
Fd ^{27,28}	Py ²⁸	600	400	400	7	1	20	Fd, Py	0.6	
Fd ²⁷		1200	700	600	7	1	20	Fd	0.8	
Fd	Sx	1000	500	400	7	1	20	Fd, Sx	0.6	
Fd ³²	Sx	1000	500	400	7	1	20	Fd, Sx	0.6	
PI Sx	BI Fd ^{9,14,32} Lw ^{9,14,32}	1200	700	600	7	1	20	PI, Lw	1.4	
Fd PI Lw		600	400	400	7	1	20	Others	0.8	
PI Fd ³² Lw ³²	Sx ^{10,13}	1000	500	400	7	1	20	PI, Lw	1.0	
Fd ^{14,32} Lw ^{14,32} PI	Sx ^{10,13}	1200	700	600	7	1	20	Others	0.6	
PI Sx	BI ^{10,13} Fd ^{9,14,32} Lw ^{9,14,32}	1200	700	600	7	1	20	PI, Lw	1.4	
PI Sx	BI Fd ^{9,14,32} Lw ^{9,14,32}	1200	700	600	7	1	20	Others	0.8	
PI ¹ Sx ¹	BI ¹	1000	500	400	7	1	20	PI	1.0	
PI Sx	BI Fd ^{9,14,32} Lw ^{9,14,32}	1200	700	600	7	1	20	Others	0.6	
non-forested	Cw ³²	-	-	-	-	-	-	PI, Lw	1.4	
								Others	0.8	
								-	-	

BGC		
Classification		
Zone/SZ	Series	Standards ID
MSdc1	01	82181
	02	82182
	03	82183
	04	82184
	05	-
MSdm1	01	82185
	02	82186
	03	82187
	04	82188
	05	82189
	06	82190
	07	82191
	08	-

Regeneration Guide						
Species		Stocking(i)			Regen Delay (Max yrs)	
Conifer		Target	MIN pa	MIN p		
Preferred (p)	Acceptable (a)	(well-spaced/ha)				
PI Sx Fd ^{9,14,32}	BI ^{10,13}	1200	700	600	7	
PI Fd ⁹	Sx ^{10,13}	1000	500	400	7	
PI Fd ^{9,14,32}	Sx ^{10,13}	1000	500	400	7	
PI Sx Fd ^{9,14,32}	BI ¹³	1200	700	600	7	
non-forested		-	-	-	-	
PI Sx Lw ^{9,14,32}	BI Fd ^{9,14,32}	1200	700	600	7	
Fd PI Lw		600	400	400	7	
PI Fd ³² Lw ³²	Sx ^{10,13}	1000	500	400	7	
Fd ^{14,32} Lw ^{14,32} PI	Sx ^{10,13}	1200	700	600	7	
PI Sx	BI ^{10,13} Fd ^{9,14,32} Lw ^{9,14,32}	1200	700	600	7	
PI Sx	BI Fd ^{9,14,32} Lw ^{9,14,32}	1200	700	600	7	
PI ¹ Sx ¹	BI ¹	1000	500	400	7	
non-forested		-	-	-	-	

Free Growing Guide			
Assessment		Min. Height(ii)	
Earliest	Latest	Species	Ht
(yrs)	(yrs)		(m)
1	20	PI	1.4
		Others	0.8
1	20	PI	1.0
		Others	0.6
1	20	PI	1.0
		Others	0.6
1	20	PI	1.4
		Others	0.8
-	-	-	-
1	20	PI, Lw	1.4
		Others	0.8
1	20	PI, Lw	1.0
		Fd	0.6
1	20	PI, Lw	1.0
		Others	0.6
1	20	PI, Lw	1.4
		Others	0.8
1	20	PI, Lw	1.4
		Others	0.8
1	20	PI, Lw	1.4
		Others	0.8
1	20	PI	1.0
		Others	0.6
-	-	-	-

BGC			Regeneration Guide					Free Growing Guide				
Classification			Species		Stocking(i)			Regen	Assessment		Min. Height(ii)	
MSdm2 ^{60,64,65}	01		PI Sx Fd ^{9,14,32}	BI ^{10,13} At ⁵³	1200	700	600	7	1	20	PI, Lw	1.4
	02*		non-forested		-	-	-	-	-	-	Others	0.8
	03		Fd ^{9,14} PI	BI ^{10,13} Sx ^{10,13} At ⁵³	1000	500	400	7	1	20	PI	1.0
	04		PI Fd ^{9,14,32} Sx ^{10,13}	BI ^{10,13} At ⁵³	1200	700	600	7	1	20	PI, Lw	1.4
	05		PI Sx Fd ^{9,14,32}	BI Cw ³² At ⁵³	1200	700	600	7	1	20	PI, Lw	1.4
	06		PI Sx Fd ^{9,14,32}	BI At ⁵³	1200	700	600	7	1	20	PI, Lw	1.4
	07		PI Sx	BI At ⁵³	1000	500	400	7	1	20	PI	1.0

BGC			Regeneration Guide					Free Growing Guide				
Classification			Species		Stocking(i)			Regen	Assessment		Min. Height(ii)	
Zone/SZ	Series	Standards ID	Conifer		Target	MIN pa	MIN p	Delay	Earliest	Latest	Species	Ht
			Preferred (p)	Acceptable (a)	(well-spaced/ha)			(Max yrs)	(yrs)	(yrs)		(m)
MSxk	01	82198	PI Fd ^{9,14,32} Sx ^{10,13}	BI ^{10,13}	1200	700	600	7	1	20	PI	1.4
	02	82199	PI Fd ^{9,14}	BI ^{10,13}	1000	500	400	7	1	20	Others	0.8
	03	-	non-forested		-	-	-	-	-	-	PI	1.0
	04	-	non-forested		-	-	-	-	-	-	Others	0.6
	05	82200	PI Fd ^{9,14}	BI ^{10,13} Sx ^{10,13}	1000	500	400	7	1	20	PI	1.0
	06	82201	PI Fd ^{9,14,32} Sx ^{10,13}	BI ^{10,13}	1200	700	600	7	1	20	PI, Lw	1.4
	07	82202	PI Fd ^{1,9,14,32} Sx	BI ^{10,13}	1200	700	600	7	1	20	Others	0.8
	08	82203	PI Sx Fd ^{9,14,32}	BI	1200	700	600	7	1	20	PI	1.4
	09	82204	PI ¹ Sx ¹	BI ¹	1000	500	400	7	1	20	Others	0.8
										PI	1.0	
										Others	0.6	

BGC		
Classification		
Zone/SZ	Series	Standards ID
SBPSmk	01	80178
	02*	80179
	03	80180
	04	80181
	05	80182
	06	80183
	07	80184
	08	80185

Regeneration Guide						
Species		Stocking(i)			Regen Delay (Max yrs)	
Conifer		Target	MIN pa	MIN p		
Preferred (p)	Acceptable (a)	(well-spaced/ha)				
Fd ^{14,32} PI Sx		1200	700	600	7	
Fd ^{14,28} PI	Sx ²⁸	1000	500	400	7	
Fd ²⁸ PI		1200	700	600	7	
Fd ^{14,28,32} PI Sx ²⁸		1200	700	600	7	
Fd ^{14,28} PI Sx ²⁸		1200	700	600	7	
PI Sx		1200	700	600	7	
Sx ^{1,32}	PI ¹ BI ^{1,32}	1000	500	400	7	
Sx ^{1,32} PI ¹	Sb ¹	400	200	200	7	

Free Growing Guide			
Assessment		Min. Height(ii)	
Earliest	Latest	Species	Ht
(yrs)	(yrs)		(m)
1	20	PI	1.6
		Fd	1.0
		Sx	0.8
1	20	PI	1.2
		Fd	0.8
		Sx	0.6
1	20	PI	1.6
		Fd	1.0
		PI	1.6
		Fd	1.0
		Others	0.8
1	20	PI	1.6
		Fd	1.0
		Sx	0.8
1	20	PI	1.2
		Others	0.6
1	20	PI	1.2
		Others	0.6

BGC		
Classification		
Zone/SZ	Series	Standards ID
SBSdh	01	81162
	02*	81163
	03*	81164
	04	81165
	05	81166
	06	81167
	07	81168
	08*	81169

Regeneration Guide							Free Growing Guide			
Species		Stocking(i)			Regen Delay (Max yrs)	Assessment		Min. Height(ii)		
Conifer		Target	MIN pa	MIN p		Earliest	Latest	Species	Ht	
Preferred (p)		(well-spaced/ha)				(yrs)	(yrs)		(m)	
Acceptable (a)										
Fd PI Sx	Bl ²⁹	1200	700	600	7	1	20	PI	2.00	
PI	Sx	1000	500	400	7	1	20	Fd	1.40	
Fd Lw ²³ PI	Pw ^{16,31}	1000	500	400	7	1	20	Others	1.00	
Fd PI Sx ²⁸		1200	700	600	7	1	20	PI	1.40	
PI	Sb Sx ³²	1200	700	600	7	1	20	Sx	0.80	
Fd Sx	Bl ²⁹ PI	1200	700	600	7	1	20	PI, Pw	1.40	
Fd ^{1,32} PI ¹ Sx ^{1,32}	Bl ^{1,29,32}	1000	500	400	7	1	20	Lw	1.40	
PI ¹ Sb ¹ Sx ^{1,32}		400	200	200	7	1	20	Fd	1.00	
								PI	2.00	
								Others	1.00	
								PI	2.00	
								Fd	1.40	
								Others	1.00	
								PI	1.40	
								Fd	1.00	
								Others	0.80	
								PI	1.40	
								Others	0.80	

BGC		
Classification		
Zone/SZ	Series	Standards ID
SBSdw1	01	81180
	02*	81181
	03	81182
	04	81183
	05	81184
	06	81185
	07	81186
	08	81187
	09	81188

Regeneration Guide							Free Growing Guide			
Species		Stocking(i)			Regen Delay (Max yrs)	Assessment		Min. Height(ii)		
Conifer		Target	MIN pa	MIN p		Earliest	Latest	Species	Ht	
Preferred (p)		Acceptable (a)				(yrs)	(yrs)		(m)	
		(well-spaced/ha)								
Fd PI Sx ²⁸		1200	700	600	7	1	20	PI	2.00	
Fd ²⁸ PI		1000	500	400	7	1	20	Fd	1.40	
								Others	1.00	
Fd ²⁷ PI		1200	700	600	7	1	20	PI	1.40	
								Fd	1.00	
Fd ³² PI Sx ²⁸		1200	700	600	7	1	20	PI	2.00	
								Fd	1.40	
								Sx	1.00	
Fd PI Sx		1200	700	600	7	1	20	PI	2.00	
								Fd	1.40	
								Sx	1.00	
Fd PI Sx		1200	700	600	7	1	20	PI	2.00	
								Fd	1.40	
								Others	1.00	
Fd ^{1,32} PI Sx		1200	700	600	7	1	20	PI	2.00	
								Fd	1.40	
								Others	1.00	
Fd ^{1,32} Sx		1200	700	600	7	1	20	PI	2.00	
								Fd	1.40	
								Others	1.00	
Sx ^{1,32} PI ¹		1000	500	400	7	1	20	PI	1.40	
								Others	0.80	

BGC		
Classification		
Zone/SZ	Series	Standards ID
SBSmm	01	82218
	02	82219
	03	82220
	04	82221
	05	82222
	06	82223
	07	82224
	08	82225
	09	-

Regeneration Guide							Free Growing Guide			
Species		Stocking(i)			Regen Delay (Max yrs)	Assessment		Min. Height(ii)		
Conifer		Target	MIN pa	MIN p		Earliest	Latest	Species	Ht	
Preferred (p)	Acceptable (a)	(well-spaced/ha)				(yrs)	(yrs)		(m)	
PI Sx Fd ^{9,14,32}	BI ^{10,13}	1200	700	600	7	1	20	PI, Lw	2.0	
								Fd	1.4	
								Others	1.0	
PI Fd ^{9,13,32}	Sx ^{10,13}	1000	500	400	7	1	20	PI	1.4	
								Fd	1.0	
								Others	0.8	
Fd ^{9,14,32} PI	Sx ^{10,13}	1000	500	400	7	1	20	PI	1.4	
								Fd	1.0	
								Others	0.8	
PI Fd ^{9,13,32}	Sx ^{10,13}	1000	500	400	7	1	20	PI	1.4	
								Fd	1.0	
								Others	0.8	
PI Fd ^{9,14,32} Sx	BI ^{10,13}	1200	700	600	7	1	20	PI, Lw	2.0	
								Fd	1.4	
								Others	1.0	
PI Sx Fd ^{9,14,32}	BI ^{10,13}	1200	700	600	7	1	20	PI, Lw	2.0	
								Fd	1.4	
								Others	1.0	
PI Sx Fd ^{9,14,32}	BI Cw ³²	1200	700	600	7	1	20	PI	2.0	
								Fd	1.4	
								Others	1.0	
PI ¹ Sx ¹	BI ¹	1000	500	400	7	1	20	PI	1.4	
								Others	0.8	
non-forested										

The following are explanatory notes and/or rationale that correspond to references made for the above even-aged stocking standards:

1. Throughout the tables “Sx” is used to indicate all spruce.
2. The broadleaf species are included and are to be referenced for broadleaf and mixedwood stand management.
3. Lodgepole pine is included as a preferred species in the IDFdk1 02 based on local knowledge and experience. It is common to find lodgepole pine performing well in stands of this ecosystem within the PA 16 operating area.
4. Lodgepole pine is moved from acceptable to preferred in the IDFdk1 05 based on local knowledge and experience. It is common to find lodgepole pine performing well in stands of this ecosystem within the PA 16 operating area.
5. Stocking standards listed as “Complex” represent the possible mix of site series within a standard unit. The complex stocking standard will be prescribed in the Site Plan when unique site series become blended and cannot be mapped out. The selection of which complex stocking standard is applied to the site will reflect the predominant site series as assessed from field information.
6. Ponderosa pine is included as an acceptable species in the IDFdk3 01 based on local knowledge and experience. It has been observed to find for ponderosa pine performing well in stands of this ecosystem within the PA 16 operating area.
7. Ponderosa pine is included as a preferred species in the IDFdk3 02 and 03 based on local knowledge and experience. It has been observed to find for ponderosa pine performing well in stands of this ecosystem within the PA 16 operating area.
8. Stocking standards associated with the SBPSmk biogeoclimatic zone are taken from the *Establishment to Free Growing Guidebook*, Cariboo Forest Region, January 2002, version 2.3.
9. Stocking levels are adjusted down for the MSxk 08. The MSSpa and MSSp are reduced from 700 to 500 and from 600 to 400 well spaced/ ha respectively. These sites are typically considered problem sites within the PA 16 operating area. In addition, site productivity is also lower in these wet sites based on local knowledge and experience.
10. Stocking levels are adjusted down for the MSxk 09. The MSSpa and MSSp are reduced from 500 to 400 and from 400 to 300 well spaced/ ha respectively. These sites are typically considered problem sites within the PA 16 operating area. In addition, site productivity is also lower in these wet sites based on local knowledge and experience.

7.3 APPENDIX B - REFERENCE GUIDE FOR STOCKING STANDARDS IN CONIFER UNEVEN-AGED MANAGED STANDS

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

MIN - minimum

****Stand Layer Definition**

Layer 1	Mature	trees \geq 12.5 cm dbh
Layer 2	Pole	trees 7.5 cm to 12.4 cm dbh
Layer 3	Sapling	trees \geq 1.3 m height and $<$ 7.5 cm dbh
Layer 4	Regeneration	trees $<$ 1.3 m height

*** pa - preferred and acceptable species p- preferred species

The maximum regeneration delay is 7 years.
 The late free growing date is 20 years.
 Free growing can be met 12 months after the completion of harvesting.
 The minimum free growing height is 40 cm for DFI. The free growing height for all other species is 70% of the minimum free growing height stated in the even-aged stocking standards for the species and site.

7.4 APPENDIX C – CONIFER PARTIAL CUTTING STOCKING STANDARDS

Preamble

The Ministry of Forests and Range recognized “Deviation from Potential” (DFP) stocking assessment method and standards is designed to assess regeneration stocking in partially cut stands in the BC interior. This method is especially relevant to stands with substantial variation in the size and spatial arrangement of live trees retained at harvest. Problems arise when British Columbia’s existing systems for assessing stocking are applied to highly vary structured stands.

Generally, varied structured stands materialize from managing short term non-timber objectives. The intent is to apply the DFP standard to a timber harvested area where a type of intermediate cutting is being used to meet established objectives, including but not limited to: visuals, wildlife, adjacency, beetle management areas with low levels of beetle attack and susceptible host trees. Specifically, the DFP will be applied to partial cut standard units (SU) with a minimum of 5m²/ha of residual basal area (Figure 1), managed under an even-aged silviculture system. The stocking evaluation will be based on the work completed by Bancroft *et. al.* (2003) and Martin (2004).

The DFP method could result in some residual structures having an acceptable stocking value that is below the stocking level necessary for optimal timber production. In these situations, to meet the TSR timber production expectation, it is assumed in most cases, the harvest is an intermediate cut. Subsequent harvesting and follow-up reforestation will occur in 20 – 30 years. Retaining these structures for longer periods will result in volume losses (Przeczek 2002).

Application Rules

Figure 1 should be consulted when assessing the suitability of a stand for the DFP approach. Figure 1 uses density (sph), basal area (m²/ha), and isolines of average stand diameter (after Gingrich 1967) as the basis for displaying:

Minimum Stocking Line

- Two minimum stocking lines are presented; one for sites with 700/1200 even-aged stocking standards and one for sites with 500/1000 even-aged stocking standards. The minimum stocking line represents the lowest residual stocking level of acceptable layer 1 stems (≥ 12.5 cm dbh) required to be considered stocked. If average stocking in a SU meets or exceeds the minimum stocking line, the SU will be considered SR or FG (if all other species selection, health, size, and damage criteria are met). In addition, $\geq 60\%$ of the area as determined by the % of plots within a SU must be acceptability stocked (Table 3).

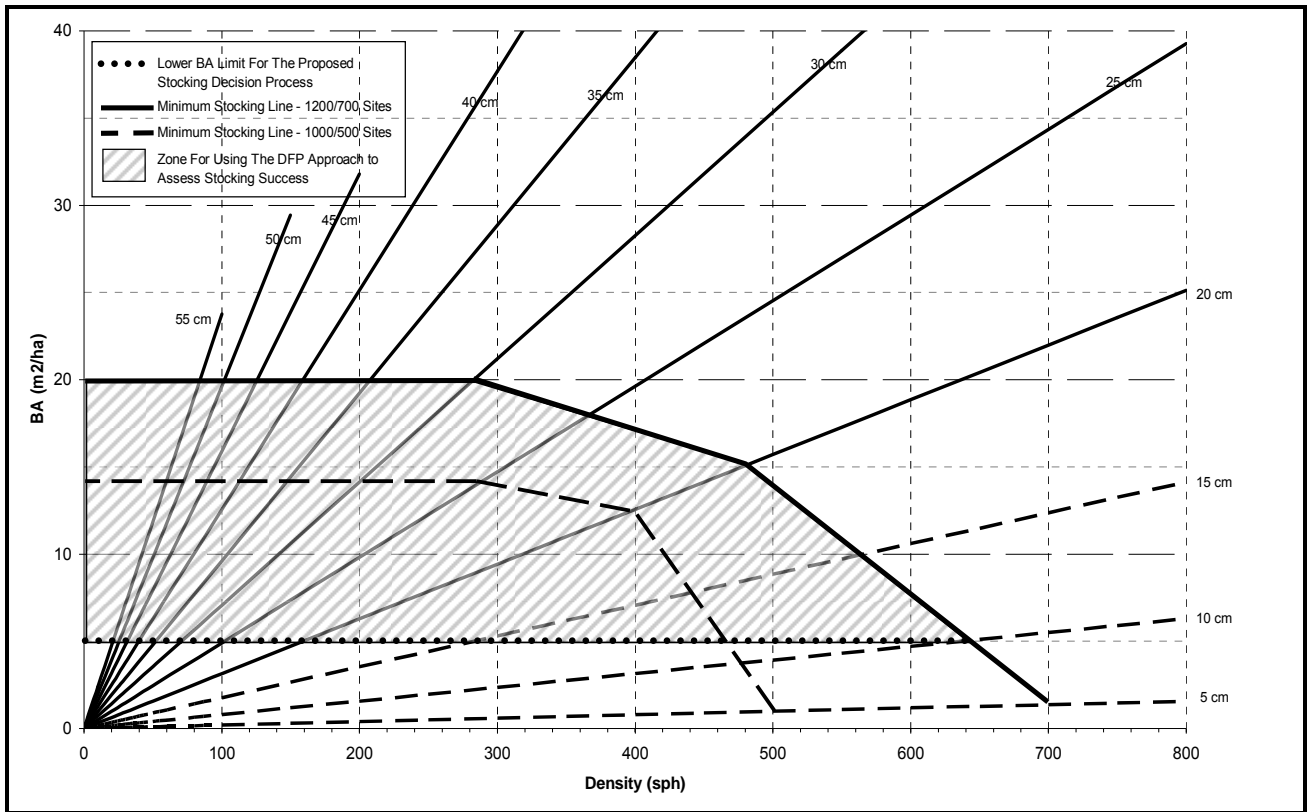


Figure 1. Stocking zone, lower basal area limit, minimum stocking line, and isolines of average stand diameter for assessing partial cut stands in Ainsworth - Kamloops TSA.

Lower Basal Area Limit

- The lower basal area line defines the lowest average residual basal area, including all layer 1 stems, ($\geq 5 \text{ m}^2/\text{ha}$) that a standards unit is allowed for the application of DFP stocking assessment. SU with residual basal areas $< 5 \text{ m}^2/\text{ha}$ should be assessed with current even-aged stocking standards.

Stocking Zone

- The stocking zone area represents the range of residual stand structures suited to the DFP approach.

Assessment Procedures

Plot assessments will be conducted as per standard even-aged regeneration and free growing assessments with the following modification:

Layer 1 stems ($\geq 12.5 \text{ cm dbh}$)

Initial indications suggest using a 3 - 5 BAF prism to collect Layer 1 stem information. All Layer 1 stems (except for dead and moribund stems) are used to calculate the DFP value for each plot. Tally the dead and moribund trees as separate classes. Because the minimum stocking line decision is based on acceptable Layer 1 stems, tally acceptable and unacceptable Layer 1 stems separately. The DFP stocking decision requires $\geq 80\%$ of the Layer 1 stems to be of acceptable quality.

Data Compilation

In addition to standard regeneration survey summary information, the following are required:

- Determine the minimum stocking line value: Compute basal area, density, and mean diameter of live acceptable L1 trees.
- Determine the Plot DFP value: Calculate the basal area (m2) and well-spaced sph for each plot and apply to Table 3.
- Determine the SU DFP value: Calculated the mean DFP value for each stratum along with the proportion (%) of stocked, partially stocked and “open” plots⁶.
- A stand table (m2/ha) could be prepared for each stratum to assist with the decision making, but it is not a survey requirement.

Table 2. Deviation from potential (DFP) volume by understory tree density and overstory basal area.

OS Basal Area (m2/ha)	Well-spaced trees in plot								
	0	1	2	3	4	5	6	7	8
0	1.00	0.76	0.52	0.34	0.22	0.13	0.07	0.03	0.00
1	0.98	0.74	0.51	0.34	0.21	0.13	0.07	0.03	0.00
2	0.96	0.73	0.50	0.33	0.21	0.13	0.07	0.03	0.00
3	0.93	0.71	0.49	0.32	0.20	0.12	0.07	0.03	0.00
4	0.90	0.68	0.47	0.31	0.20	0.12	0.06	0.03	0.00
5	0.86	0.65	0.45	0.30	0.19	0.11	0.06	0.02	0.00
6	0.82	0.62	0.43	0.28	0.18	0.11	0.06	0.02	0.00
7	0.77	0.58	0.40	0.27	0.17	0.10	0.05	0.02	0.00
8	0.72	0.55	0.38	0.25	0.16	0.09	0.05	0.02	0.00
9	0.67	0.51	0.35	0.23	0.15	0.09	0.05	0.02	0.00
10	0.62	0.47	0.32	0.21	0.14	0.08	0.04	0.02	0.00
11	0.57	0.43	0.30	0.20	0.12	0.07	0.04	0.02	0.00
12	0.52	0.39	0.27	0.18	0.11	0.07	0.04	0.01	0.00
13	0.47	0.35	0.24	0.16	0.10	0.06	0.03	0.01	0.00
14	0.42	0.32	0.22	0.15	0.09	0.05	0.03	0.01	0.00
15	0.38	0.28	0.20	0.13	0.08	0.05	0.03	0.01	0.00
16	0.33	0.25	0.17	0.11	0.07	0.04	0.02	0.01	0.00
17	0.29	0.22	0.15	0.10	0.06	0.04	0.02	0.01	0.00
18	0.26	0.19	0.13	0.09	0.06	0.03	0.02	0.01	0.00
19	0.22	0.17	0.12	0.08	0.05	0.03	0.02	0.01	0.00
20	0.19	0.14	0.10	0.07	0.04	0.02	0.01	0.01	0.00
21	0.16	0.12	0.08	0.06	0.04	0.02	0.01	0.00	0.00
22	0.13	0.10	0.07	0.05	0.03	0.02	0.01	0.00	0.00
23	0.11	0.08	0.06	0.04	0.02	0.01	0.01	0.00	0.00
24	0.09	0.07	0.05	0.03	0.02	0.01	0.01	0.00	0.00
25	0.07	0.05	0.04	0.02	0.02	0.01	0.00	0.00	0.00
26	0.05	0.04	0.03	0.02	0.01	0.01	0.00	0.00	0.00
27	0.04	0.03	0.02	0.01	0.01	0.00	0.00	0.00	0.00
28	0.02	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00
29	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Colour Stocking Class Growth Potential Opportunity

Open

High potential for additional volume growth
 ≥ 41% Additional stocking is required where timber production is the primary management objective

Partially Stocked

Moderate potential for additional volume production through additional stocking
 21 – 40% Assess options, additional stocking may be required

Stocked

Low potential for additional growth through additional stocking
 ≤ 20% No further treatments required

⁶ The % of plots calculation is a surrogate for the % of area. If the proportion or distribution of plots does not reflect the area for each DFP stocking class the calculation will be incorrect and another approach to estimating proportional area will have to be documented and applied.

Stocking Decision Matrix

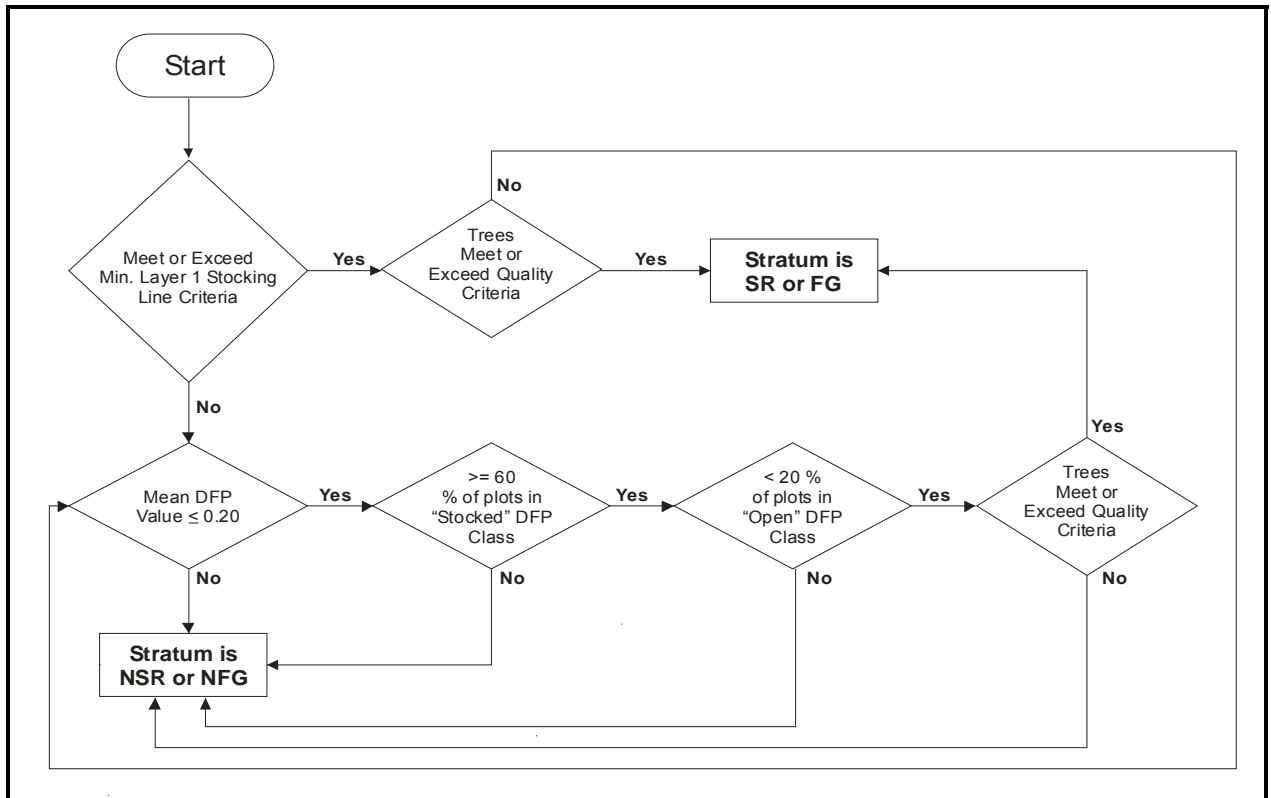


Figure 2. Stocking Decision Flowchart

Partial Cutting Stocking Standards

Minimum Stocking Line, DFP, and General Criteria

The DFP standards for this **FSP** are listed in Tables 4 and 5. These partial cutting standards do not apply to areas prescribed for single-tree silviculture system, NDT4 ecosystem restoration (open forest or open range), beetle proofing in lodgepole pine dominated stands, or where management objectives require long term overstory retention and a reduction in yield is acceptable.

Also, many of these harvested stands will have clumped irregular stocking patterns and considerable overstory, restricting the potential for augmenting stocking through planting. The resulting biological and financial constraints will result in some stands not meeting the stocking criteria. Strata with NSR openings ≥ 1.0 ha, that are not under significant overstory influence, will be reforested. The remaining other strata cannot be declared stocked or free-growing, and may require additional harvesting treatments before stocking levels in layer 4 can be augmented.

The DFP stocking standards are considered as a first approximation. Revisions to these standards can be expected as more experience is gained from using the system and as better information becomes available.

Table 3. Minimum partial-cutting stocking standards for site series with 700/1200 even- aged stocking standards

Minimum Stocking Line Criteria			Deviation from Potential (DFP) Criteria			General Criteria			
Average DBH (cm) ¹	MSS Density (sph)	MSS Basal Area (m ² /ha)	Maximum Mean DFP	Maximum % Partially Stocked Plots	Maximum % Open Plots	Min. Intertree Distance ²	Regen. Delay (max. yrs.) ³	FG Earliest (yrs.) ³	FG Latest (yrs.) ³
< 12.5			0.20	40	20	n/a + 2.0	2	1	2
15	560	10							
20	480	15							
25	360	17							
30	280	20							
35	210	20							
40	180	20							
45	150	20							
50 - 60	100	20							

Notes:

1. Calculation is based on stems \geq 12.5 cm dbhob; Average DBH is the weighted average for all acceptable stems.
2. No minimum intertree will be applied to layer 1 stems; a 2.0 minimum intertree distance will apply to layer 2, 3, and 4 stems.
3. Timeframes only apply where a stratum is declared SR or FG using the minimum stocking line and were chosen to allow up to 2 years for assessing windthrow damage prior to a free-growing declaration. If the minimum stocking line is not used, time frames will default to even-aged regeneration delay and free-growing delay periods.

Table 4. Minimum partial-cutting stocking standards for site series with 500/1000 even-aged stocking standards.

Minimum Stocking Line Criteria			Deviation from Potential (DFP) Criteria			General Criteria			
Average DBH (cm) ¹	MSS Density (sph)	MSS Basal Area (m ² /ha)	Maximum Mean DFP	Maximum % Partially Stocked Plots	Maximum % Open Plots	Min. Intertree Distance ²	Regen. Delay (max. yrs.) ³	FG Earliest (yrs.) ³	FG Latest (yrs.) ³
< 12.5			0.20	40	20	n/a + 2.0	2	1	2
15	440	8							
20	400	12.5							
25	290	14							
30	200	14							
35	150	14							
40	110	14							
45+	90	14							

Notes:

1. Calculation is based on stems \geq 12.5 cm dbhob; Average DBH is the weighted average for all acceptable stems.
2. No minimum intertree will be applied to layer 1 stems; a 2.0 minimum intertree distance will apply to layer 2, 3, and 4 stems.
3. Timeframes only apply where a stratum is declared SR or FG using the minimum stocking line and were chosen to allow up to 2 years for assessing windthrow damage prior to a free-growing declaration. If the minimum stocking line is not used, time frames will default to even-aged regeneration delay and free-growing delay periods.

Tree Acceptability Criteria

Table 5 provides a summary of the standards for tree acceptability for regeneration and free-growing assessments.

Table 5. Tree acceptability criteria partial cutting stocking assessment procedure.

Tree Acceptability Criteria	Regeneration Assessment	Free-growing Assessment
Species	All layer 1 stems will be considered as preferred species. Preferred and acceptable species for the site as per current even-aged stocking standards for other layers.	All layer 1 stems will be considered as preferred species. Preferred and acceptable species for the site as per current even-aged stocking standards for other layers.
MSS _p	Preferred species \geq 50% of the well-spaced stocking	Preferred species \geq 50% of the free-growing stocking
Health	Healthy	As per the Section 7f "Acceptability guidelines for residual mature and pole layer crop trees" from FS 660-1 HFP 01 and the Tree Wounding Guidebook. In stands that do not meet or exceed the minimum stocking line, \geq 80% of the total Layer 1 stems must be of acceptable quality.
Brush		Appropriate conifer/brush ratio
Height	Min. 30 cm	70% of the minimum free-growing height for the species and site
Advanced Regeneration		As per the Section 7f "Acceptability guidelines for residual pole layer crop trees" from FS 660-1 HFP 01 and the Tree Wounding Guidebook. For the layer 3 and layer 4 crop trees, default to the appropriate FSP free growing damage criteria for uneven-aged stands
Minimum Intertree Distance	2.0 m, no MITD for layer 1 stems	2.0 m, no MITD for layer 1 stems

Stocking Standards References

- Bancroft, Bryce, Ken Day, Pat Martin, Kim Peel and Ken Zielke. 2003. Partially Cut: Occupied or Not? What are my options? – A proposed survey approach. . Unpubl. FIA Rep. for Lignum Limited.
- B.C. Ministry of Forests. 2000. Establishment to free growing guidebook. Nelson Forest Region. Rev. ed., Version 2.2. For. Prac. Br., B.C. Min. For., Victoria, B.C. Forest Practices Code of British Columbia Guidebook.
- Gingrich, Samuel F. 1967. Measuring and evaluating stocking and stand density in upland hardwood forests in the Central States. For. Sci. 13: 38 – 53.
- Martin, Pat. 2004. Second approximation of the deviation from potential table. Unpubl. Information Sheet. 17pp.
- Przeczek, John E. 2002. Partial Cutting Effects Study: Modeling with Prognosis^{BC} and TASS to Assess Partial Cutting Impacts on Yield in the Invermere T.S.A.. Unpubl. FIA Rep. for Slocan Forest Products Ltd. and Tembec Industries Ltd. 21 pp. + append.

7.5 APPENDIX D – BROADLEAF STOCKING STANDARDS

Stocking Standards ¹ Reference Number	Target from Conifer Standards	Regeneration Guide					Free Growing Guide			
		Species	Stocking			Regen Delay (Max yrs)	Assessment		Min. Height	
			Target	MIN pa	MIN p		MIN p Conifers	Earliest ³ (yrs)	Latest ⁴ (yrs)	Species
16,498 ¹	1000	Broadleaf ² Act At Ep	1600	1000	800	N/A	1	20	All	1.2
16,499 ¹	1200	Broadleaf ² Act At Ep	2000	1200	1000	N/A	1	20	All	1.5

¹ Source: Ainsworth Kamloops Forest District Pulpwood Agreement 16 FDP Stocking Standards, Approved 2004

² A minimum of 10% pre-harvest stand composition, based on the gross timber cruise basal area or volume is required for a broadleaf species to qualify as preferred. If it is less than 10% the species will be considered acceptable.

³ Reduced from 12 years to 1 year

⁴ Increased from 15 years to 20 years

7.6 APPENDIX E – MIXEDWOOD STOCKING STANDARD

Stocking ¹ Standards Reference Number	Target from Conifer Standards	Regeneration Guide						Free Growing Guide			
		Species Broadleaf	Stocking				Regen Delay (Max yrs)	Assessment		Min. Height	
			Target	MIN pa	MIN p	MIN p Conifers ²		Earliest ³	Latest ⁴	Species	Ht (m)
			(well-spaced/ha)					(yrs)	(yrs)		
Conifer component = 41% and greater											
40,600	1000	Act At Ep	1200	700	600	400	7	1	20	All	1.2
40,601	1200	Act At Ep	1600	1000	800	600	7	1	20	All	1.5
Conifer component = 31% to 40%											
40,602	1000	Act At Ep	1300	800	650	300	7	1	20	All	1.2
40,603	1200	Act At Ep	1700	1050	850	400	7	1	20	All	1.5
Conifer component = 26% to 30%											
40,604	1000	Act At Ep	1400	900	700	250	7	1	20	All	1.2
40,605	1200	Act At Ep	1800	1100	900	300	7	1	20	All	1.5
Conifer component = 21% to 25%											
40,606	1000	Act At Ep	1500	950	750	150	7	1	20	All	1.2
40,607	1200	Act At Ep	1900	1150	950	200	7	1	20	All	1.5

¹ Source: Ainsworth Central Cariboo Forest District Pulpwood Agreement 16 Stocking Standards, Approved 2003

² Subject to the damage criteria applied to the conifer standards

³ Reduced to 1 year

⁴ Increased to 20 years

7.7 APPENDIX G (A-E) – FSP PLAN MAPS

Figure 3. FSP maps- see attached.

7.8 APPENDIX H – WALK-IN LAKES LIST

Lake #	Lake Name	Class_1	Access	Comments
773	Copper Lake	A	Maintain walk-in	
850	Lost lake	B	Walk-in	Defer Satellite Lake
874	Moosehead Lake	PA	Easy walk-in	Defer Satellite Lake
821	Grizzly Lake	A	Maintain walk-in	
872	Moose Lake	B	Easy walk-in	Defer Satellite Lake
1298		C	Walk-in	Used by meadow Lake Resort
811	Fourteen Mile	C	Walk-in must be maintained	Wild trout, lake integrity must be maintained
789	Donna Lake	B	Access concerns, walk-in	Wild rainbow, productive
1302	Little Thumb	B	Maintain walk-in access	Wild stock, manage as a group of lakes for access and visuals
511		B	Maintain walk-in access	Manage as a group of lakes with a total chance plan
839	Laurel Lake	B	Maintain walk-in	
934	Thumb lake	A	Maintain walk-in access	Wild stock, VQO is retention
948	Walkin Lake	C	Maintain existing walk-in	
963	Bendelin	C	Potential walk-in	MOE inventory
354	Tortoise lake	C	Walk-in	High priority MOE
1283		B	Maintain walk-in	
1708		C	Maintain walk-in	Swamp complex east of 1283
1012	Trails End Lake	B	Maintain walk-in (1.75km)	Recommend VMZ=C
1015	Boot Lake	B	Maintain walk-in (1.5km)	Recommend VMZ=C
1013	Summit Lake	B	Maintain walk-in (3/4km)	
1287	Gords Lake	C	Keep walk-in access	
1258	Scott	PA/C	Maintain walk-in access	Refer to Nehalliston LRUP, Zone 18 (High Lake), Livestock control concern
1255	Jeremy	PA	Maintain walk-in, road closures	Critical moose population, log after moose hunting season only, WINTER ONLY
1267	Linguist Ch.	B	Maintain walk-in access	Concern over VQO on canoe route
1041	Tibbetts Lake	B	Maintain walk-in access	LMZ=B, LVMZ=C
1678		C	Maintain walk-in	Important drainage for spawning
1266	Linguist Ch.	B	Maintain walk-in access	Concern over VQO on canoe route
1257		C	Maintain walk-in, deactivation	
1265	Linguist Ch.	C	Maintain walk-in access	Concern over VQO on canoe route
1238		C	Maintain existing walk-in	Wild rainbow trout
757	Boulangier Lake	C	Maintain existing walk-in access	
35	Bogmar Lake	C	Walk in	
377	Twin Lake	PA/B	Walk in	In Area "A" Check visual line is at PA bdry, check to see if B is a problem
275	Pothole Lake	B	Concerns, mainly walk-in	wild trout, resort use, just outside area "A"
114	Frankie Lake	PA	Walk in	in Area "A"
1049	Pocket Lake	PA/B	Walk in	
76	Dagger Lake	PA	Walk-in Lake	Within Bonaparte Protected Area
1211	Cherry Lake	PA/B	Walk in	Check visuals, concerned about MOE values, check with BC Parks
1213	Rubber boat	PA/B	Walk in	Review VQO's, Wild trout fishery
1212	Lost	PA	Walk in	Walk in
88	Donut Lake	B	Walk in	Tropy fish
1697		C+		Maintain walk-in
1198		C+		Walk in
1199		C+		Walk in
843	Little Badger	B	Walk in lake	High recreation, probable beetlw problem, horse logging potential
1196		W		Walk in
1197		W		Walk in
1594		D	Maintain walk-in access	Maintain integrity of area
1130		PA		Walk in
391	Warren Lake	B	Leave as walk-in	find out if lease is walkin, use sec 105 to restrict access, Jennifer will bring 105 bdry to table.
1315	Little Warren	C	Maintain as walk-in	
1111		PA		Walk in
1116		PA		Walk in
1123		D		Walk in
1106		D		Walk in
1086		PA		DU # 92-I-146 Area 7/Walk in
1177		D		DU #92-I-402/Walk in
1185		C		Walk in

7.9 APPENDIX I - SIGNATURES OF PREPARING FORESTER AND PERSON REQUIRED TO PREPARE PLAN

 <p>Duane Hennig, R.P.F. Integrated Pro-Action Corp.</p>	<p>Preparing Forester</p> <p><i>"I certify that I have determined that this work was performed to an acceptable standard"</i></p>
 <p>Mike Kennedy, R.P.F. Ainsworth Engineered Canada LP</p>	<p>Signature of Person Required to Prepare the Plan</p>

7.10 APPENDIX J – ESTABLISHED RECREATION SITES IN THE CLEARWATER FDU

Note: This list of rec sites/trails is those that overlap with the “Clearwater FDU” and have legal objectives established at the time of FSP submission.

Site/Trail Ref #	Site/Trail Name	Objectives
1509	Graffunder Lakes	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.
1510	Silence Lake	1997/03/24 Recreation Experience Objectives: To provide opportunities for natural roaded 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 Road and spur road access to the site.
1511	Lolo Lake	1997/03/24 Recreation Experience Objective: 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.
1512	Coldscaur Lake N	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.
1513	Moira Lake S	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.
1514	Ejas Lake	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.
1515	Italia Lake	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.
1516	Italia (Lawrence) Lake E	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.
1517	Kitty Anne Lake	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.
1518	Sicily Lake S	1997/03/24 Recreation Experience Objective: 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.
1519	McCorvie Lake North	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.
1524	Reflector Lake North	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.

Site/Trail Ref #	Site/Trail Name	Objectives
1793	Mud Lake	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.
1816	Fowler Lake	1997/03/10 Recreation experience objective: To provide opportunities for natural roaded recreation experiences. Recreation feature objective: To protect the small / mid lake and fisheries experience. Recreation activity objective: To provide opportunities for fishing, hiking, viewing and nature study / appreciation. Public recreation objective: To maintain summer access.
1901	North Thompson Crossing	1997/03/14 Recreation Experience Objectives: To provide opportunities for natural roaded recreation experiences. Recreation Feature Objectives: To protect the large river and fish features. Recreation Activity Objectives: To provide opportunities for sport fishing and canoeing with potential for future summer camping activities. Public Recreation Access Objectives: To maintain summer, 2 wheel drive, Forest Service road access to the site.
1908	Double Lakes	1997/03/24 Recreation Experience Objectives: To provide opportunities for modified roaded 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 road access to the site.
1942	Tsikwustum Creek South	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 .
1991	White Lake	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.
1992	Windy Lake	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.
1993	Boundary Lake	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 road access to the site.
1997	East Maury Lake	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.
1998	Moir Lake North	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 poential for future summer camping activities. Public Recreation Objectives: To maintain summer, 2 wheel drive, forest road access to the site.
4501	Tsikwustum Creek North (Silviculture Camp)	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..
4502	Gordon Bay	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.

Site/Trail Ref #	Site/Trail Name	Objectives
4503	Gannet Lake	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 Objectives: To maintain summer, 2 wheel drive, Forest Service Road and spur road access to the site.
4527	Raft Mountain	1997/03/24 Recreation Experience Objectives: To provide opportunities for semi-primitive, natural roaded and modified roaded 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 snowsport 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 road. Summer access is provided by maintained Forest Service road (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 road (suitable for 4 wheel drive vehicles) provides summer access to the upper elevation areas in the vicinity of Willis Lake.
4555	Chappel Creek	1997/03/24 Recreation Experience Objectives: To provide opportunities for semi-primitive motorized and modified roaded 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.
4570	Grizzly Lake East	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.
4580	Lawrence Lake West	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.
4582	Moose Lake	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.
4601	Rock Island	1997/03/24 Recreation Experience Objectives: To provide opportunities for modified roaded recreation experiences. Recreation Feature Objectives: 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.
4610	Honeymoon Bay	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.
4705	Rocky Point	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.
4738	Upper Messiter Lake	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.
4781	Stukemapten Lake	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.