

British Columbia Timber Sales Chinook Business Area



BCTS

BC Timber Sales
Chinook



Forest Stewardship Plan Amendment#11

Sea to Sky District (Squamish Forest District) BC Timber Sales

FSP Original

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Table of Contents

1 INTERPRETATION.....	04
2 RESULTS or STRATEGIES.....	07
2.1 SOILS.....	07
2.2 WILDLIFE.....	08
2.3 WATER.....	09
2.4 FISH.....	09
2.5 BIODIVERSITY.....	10
2.6 CULTURAL HERITAGE RESOURCES.....	11
2.7 RECREATION RESOURCES.....	13
2.8 VISUAL QUALITY.....	14
3 ADDITIONAL FSP INFORMATION.....	15
3.1 PROTECTION OF CUTBLOCKS AND ROADS FROM AN FDP TO AN FSP.....	15
3.2 STOCKING STANDARDS.....	15
3.3 MEASURES TO PREVENT THE INTRODUCTION &SPREAD OF INVASIVE PLANTS.....	16
3.4 NATURAL RANGE BARRIERS.....	16
 Appendix A Stocking Standards.....	 17
Appendix B FSP Maps, FDU, Declared Areas.....	25
Table B1: FSP Maps.....	25
Table B2: Forest Development Units.....	25
Table B3: Declared Areas.....	26
Table B4: Road permits in effect.....	26
Table B5: FSP Amendment Log.....	26
Appendix C Biodiversity.....	27
Appendix D UWR U2-002.....	51

1 Interpretation

1.1 Definitions

In this FSP:

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

“**FPPR**” means the Forest Planning and Practices Regulation BC Reg 14/2004;

“**FRPA**” means the *Forest and Range Practices Act* SBC 2002, c.69;

“**FSP**” means this forest stewardship plan;

“**GAR**” means the Government Action Regulation;.

“**RP**” means road permit;

“**Species at Risk Notice**” means the notice under section 7 (2) of the FPPR entitled
“*Indicators of the amount, distribution and attributes of wildlife habitat required for the survival of species at risk in the Squamish Forest District*” dated December 2004;

“**TSL**” means timber sale licence;

“**TSM**” means the Timber Sales Manager for the BC Timber Sales’ Chinook Business Area;

“**WHA**” means Wildlife Habitat Area.

1.2 Term of the Forest Stewardship Plan

The term of the plan has been extended for another five years to May 3rd, 2017.

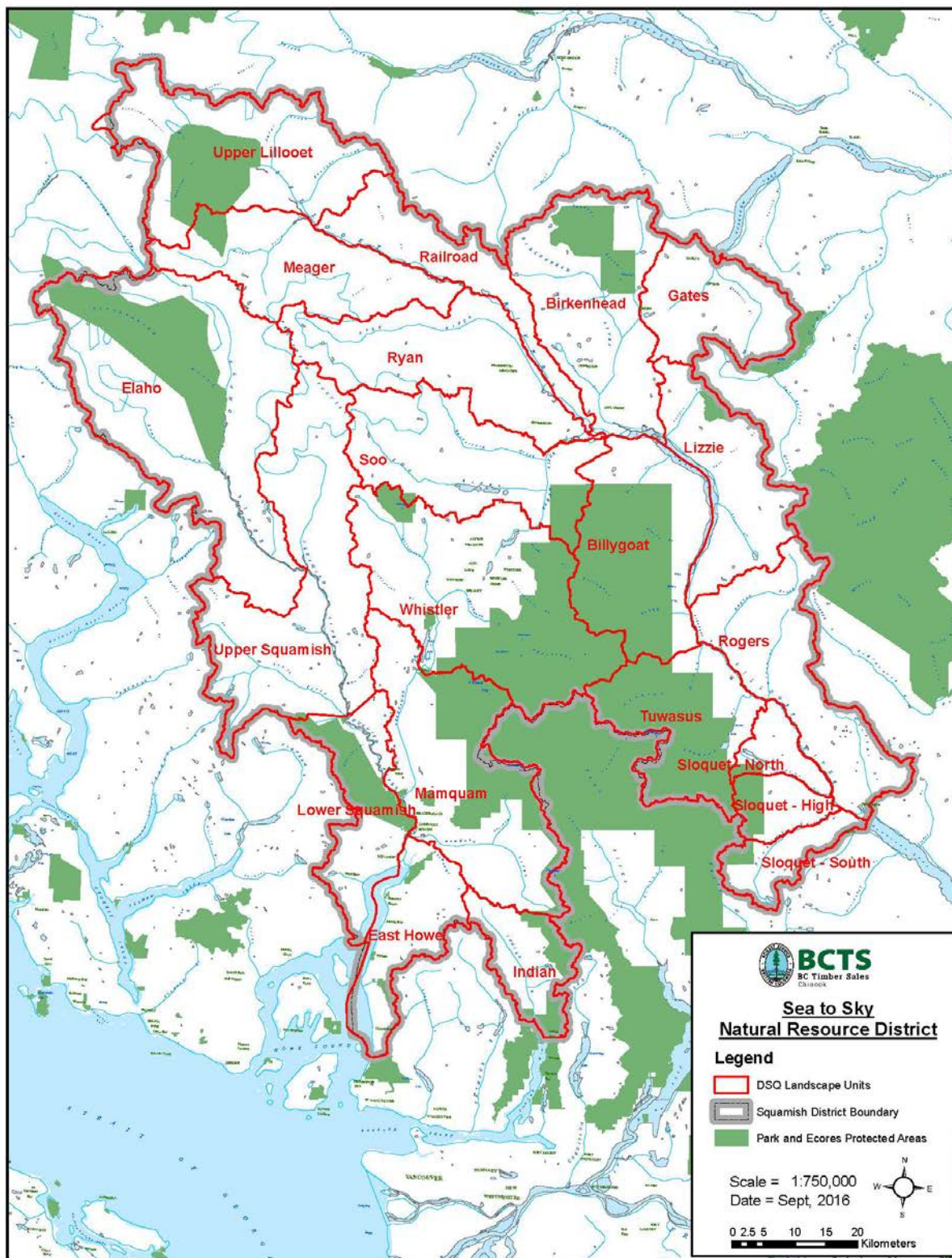
1.3 Forest Development Unit

The attached FSP maps, at a 1:50,000 scale, show the FDUs, agreements under the *Forest Act* and other features located within those FDUs.

All FDUs were in effect on the Date of submission of extension request for this FSP.

Figure 1 provides an overview map of the FSP area and the FDUs that have been in effect since the approval of this FSP on May 4th, 2007. Refer to the attached FSP maps for details.

Figure 1: FSP Overview Map - showing the extent of the Forest Development Units (not to scale).



The FSP maps identify the approved Category A cutblocks from the current Forest Development Plan. These blocks are deemed approved under Sec. 196 of the FRPA. The maps also identify TSLs in effect

Road Permits in effect are listed in Appendix B Table 4. Other cutblocks and roads that may be indicated are for reference purposes only

Table 1 identifies the land use designations for the applicable FDUs as per Section 14 (3) of the FPPR

Table 1: Designations

Designation	FDU	Date (Y/M/D)
S. 14(3)(a) UWR		
<i>Ungulate Winter Range #U2-002 (Mountain. Goat) Soo Timber Supply Area</i>	where Order Applies	2003/10/06
<i>Ungulate Winter Range #U2-005, (Deer and Moose Winter Range) Soo TSA</i>	where Order Applies	2005/02/28
<i>Ungulate Winter Range #U2-010, (Moose Winter Range) TFL 38</i>	where Order Applies	2005/03/17
S.14(3)(b) Grizzly Bear WHA (Order Wildlife Habitat Areas #2-172 to 2-175, 2-177 to 2-193, 2-204, 2-254 to 2-270)	where Order Applies	2006/05/23
S.14(3)(c) Fisheries sensitive watersheds	None in effect	
S.14(3)(d) lakeshore management zone	None in effect	
S.14(3)(e) Sea to Sky Scenic Area and VQO for Hwy 99 Corridor	All applicable FDUs	1995/12/xx
S.14(3)(f) Lake identified as an L1 lake	None in effect	
S.14(3)(g) Community Watersheds		
<i>Agnew Community Watershed (Agnew Creek)</i>	Whistler	1995/06/15
<i>Alberta Community Watershed (Alberta Creek)</i>	East Howe	1995/06/15
<i>Alpha Community Watershed</i>	Whistler	1995/06/15
<i>Blackcomb Community Watershed</i>	Whistler	1995/06/15
<i>Brew Community Watershed</i>	Whistler	1995/06/15
<i>Catiline Community Watershed</i>	Lizzie	1995/06/15
<i>Charles Community Watershed (Charles Creek)</i>	East Howe	1995/06/15
<i>D'Arcy Community Watershed</i>	Gates	1995/06/15
<i>Harvey Community Watershed (Harvey Creek)</i>	East Howe	1995/06/15
<i>Magnesia Community Watershed (Magnesia Creek)</i>	East Howe	1995/06/15
<i>Mashiter Community Watershed</i>	Mamquam	1995/06/15
<i>McCulloch Community Watershed</i>	Lizzie	1995/06/15
<i>Mineral Community Watershed</i>	East Howe	1995/06/15
<i>Newman Community Watershed (Newman Creek)</i>	East Howe	1995/06/15
<i>Pemberton Community Watershed</i>	Ryan	1995/06/15
<i>Peq Community Watershed</i>	Railroad	1995/06/15
<i>Rideau Community Watershed</i>	Whistler	1995/06/15
<i>Rogowski Community Watershed</i>	Birkenhead	1995/06/15
<i>Rundle Community Watershed (Rundle Creek)</i>	East Howe	1995/06/15
<i>Spruce Community Watershed</i>	Gates	1995/06/15
<i>Stawamus Community Watershed</i>	East Howe	1995/06/15
<i>Twenty-one Mile Community Watershed (Twenty-one mile Creek)</i>	Whistler	1995/06/15
<i>Whistler Community Watershed</i>	Whistler	1995/06/15
S.14(3)(h) Old Growth Management Areas		
<i>East Howe LUP, Indian LUP & Lower Squamish LUP</i>	Relevant FDUs	2003/08/20
<i>Rogers LUP</i>	Rogers	2004/04/14
<i>Ryan LUP, Billygoat LUP, Railroad LUP, Soo LUP, Meager LUP & Upper Lillooet LUP</i>	Relevant FDUs	2004/09/06
<i>Gates LUP & Birkenhead LUP</i>	Gates & Birkenhead	2005/05/09
S.14(3)(i) Prohibited Timber Harvesting by Enactment (area shown on map)	Applicable FDU	Various Dates
<i>TFL 38 Lava Creek Douglas Fir Grove (40ha)</i>	Elaho	
GAR S.9(3)&S10(1) Wildlife Habitat Areas #2-310 to 2-313, 2-315 Marbled Murrelet-Squamish Forest District	where Order apply	2007/06/28
GAR S.9(3)&S10(1) Grizzly Bear Wildlife Habitat Areas 2-322 to 2-343, 2-	where Order applies	2007/06/28 &

345 to 2-350, 2-352 to 2-355, 2-357 to 2-371(2007 order); Areas 2-272 to 2-297, 2-381 to 2-386, 2-388, 2-390 to 2-406, 2-436 to 2-443(2010 order)		2010/08/25
Land Act S93.4 Ministerial Order Land Use Objectives for the Sea-to-Sky Land and Resource Management Plan	where Order applies	2011/04/04, 2014/10/30, 2015/08/20, & 2015/09/10
Table 1: Designations (cont'd)	Table 1: Designations	Table 1: Designations
GAR S.9(2)&S10(1) Order – Wildlife Habitat Areas 2-517 to 2-525 for Spotted Owl for Sea to Sky District	where Order applies	2013/02/28

2 RESULTS or STRATEGIES

This section specifies the results or strategies in relation to established objectives that are applicable to the identified FDUs.

2.1 Soils

2.1.1 Relevant established objectives

Section 5 and 12.2 of the FPPR.

2.1.2 Result or Strategy

R/S#	FDU	Result or Strategy
CHS-1001	All	Sections 35^a and 36^b of the FPPR are adopted as a result or strategy in respect of cut blocks within which the TSM carries out or authorizes timber harvesting.

^a Soil disturbance limits

^b Permanent access structure limits

2.2 Wildlife

2.2.1 Relevant established objectives

Section 7, 8, 9, 9.1 of the FPPR.

2.2.2 Result or Strategy

(A) Species at Risk		
R/S#	FDU	Result or Strategy
CHS-1002a	East Howe, Lower Squamish, Whistler, Indian, Mamquam, Upper Squamish	<p>In respect of Marbled Murrelet (<i>Brachyramphus marmoratus</i>):</p> <p>(1) The TSM will ensure that suitable habitat for Marbled Murrelet within mature THLB in Soo TSA portion of the Squamish Forest District is not reduced to less than 120 hectares prior to carrying out or authorizing timber harvesting or road construction within mature THLB in Soo TSA.</p> <p>(2) The TSM will not carry out or authorize timber harvesting or road construction in suitable Marbled Murrelet habitat area in the non-contributing land base unless a survey completed by a qualified professional determines the area does not meet the habitat requirements of class 1, 2 or 3. Suitable nesting habitats with a habitat rating of 1, 2 or 3 are identified on FSP map(s) (Squamish Forest District Marbled Murrelet Inventory Project, 2005).</p>
R/S#	FDU	Result or Strategy
CHS-1004	All	<p>In respect of Spotted Owl (<i>Strix occidentalis</i>):</p> <p>BCTS will conform to the Government Actions Regulations (GAR) Order for Wildlife Habitat Areas (WHA) 2-517 to 2-525, containing habitat that is necessary to meet the habitat requirement for Spotted Owl. This order is given under the authority of sections 9(2) and 10(1) of the GAR for Spotted Owl in the Sea to Sky District.</p>
(B) Survival of Regionally Important Wildlife <p>The Ministry responsible for the <i>Wildlife Act</i> has not identified regionally important wildlife within the FDU's covered by this FSP.</p>		
(C) The Winter Survival of Specified Ungulate Species		
CHS-1006	All	<p>The result or strategy is to conform with the objectives established under sections 9(2) and 12(1) of the GAR set within Ungulate Winter Range plans:</p> <p>(a) #U2-002, dated October 6, 2003; Mountain goat (<i>Oreamnos americanus</i>); (refer to Appendix D for result and strategy for each objective), (UWR established under OSPR 69 and continued by GAR).</p> <p>(b) #U2-010 dated March 17, 2005, Moose (<i>Alces alces</i>), within TFL38</p>

In addition to the strategies or results provided in this section, some of the strategies or results in other sections also relate to wildlife:

CHS-1007 to CHS-1009 (see Section 2.3 – Water) and **CHS-1010 to CHS-1014** (see Section 2.5 - Biodiversity).

2.3 Water

2.3.1 Relevant established objectives

Section 8, 8.2, 12(3), and 12.3 of the FPPR.

2.3.2 Result or Strategy

R/S#	FDU	Result or Strategy
CHS-1007	All	Sections 47 to 51, 52(2) and 53 of the FPPR apply in respect of forest practices that are carried out or authorized by the TSM relating to riparian classes or restrictions within them.
CHS-1008	All	<p>(1) Prior to authorizing primary forest activities within a community watershed to which section 8.2 of the FPPR applies, the TSM will</p> <ul style="list-style-type: none"> (a) ensure that a hydrologic review including cumulative effects, is carried out by a qualified professional within the 5 year period immediately before the primary forest activity occurs, (b) ensure that this hydrological review considers potential impacts on water quality, water quantity, including risks to public health, and timing of water flows and (c) ensure that the primary forest activity is consistent with the recommendations of the hydrological review.
CHS-1009	All	<p>(1) In respect to sections 8 and 12 (3) of the FPPR, to address retention of trees in a riparian management zone, prior to harvesting the TSM will:</p> <ul style="list-style-type: none"> (a) ensure that retention levels within RMZs are determined by a qualified professional through a riparian assessment that considers all factors listed in Schedule 1(2) of the FPPR, and (b) design cutblocks and roads in a manner that is consistent with the retention levels as determined by the qualified professional as described in (a).

2.4 Fish

2.4.1 Relevant established objectives

Section 8 of the FPPR.

2.4.2 Result or Strategy

Consistency with the objective for **fish** within riparian areas is achieved through results and strategies that are provided in other sections within this FSP as per:

CHS-1007 to CHS-1009 (see Section 2.3 –Water).

2.5 Biodiversity

2.5.1 Relevant established objectives

Objectives that were established or continued under sections 3 – 5 of the *Forest Practices Code of BC Act* and Sections 8, 9, 9.1, 12.4, and 12.5 of the FPPR.

2.5.2 Objectives established Pursuant to Section 93.4 of the *Land Act*

Objectives that were established as land use objectives for the purposes of *Forest and Range Act (FRPA)* and Sections 8, 9, 9.1, 12.4, and 12.5 of the FPPR

2.5.2 Result or Strategy

R/S#	FDU	Result or Strategy
CHS-1010	All	Sections 64 and 65 of the FPPR apply in respect of cut blocks within which the TSM carries out or authorizes timber harvesting.
CHS-1011	Birkenhead, East Howe, Gates, Indian, Lower Squamish, Rogers, Billygoat, Meager, Railroad, Ryan, Soo, Upper Lillooet	In respect of the “ <i>Order to Establish A Landscape Unit and Objectives</i> ”, the TSM will manage landscape level biological diversity and stand level structural diversity by: <ul style="list-style-type: none"> (a) designing cutblocks and roads in a manner that is consistent with Objectives One and Two of the Order, (refer to Appendix C for Results or Strategies for each Objective by FDU), and (b) carrying out or authorize forest practices only if the forest practices are consistent with the design for the cutblock or road referred to in paragraph (a).
CHS-1012	Lizzie, Mamquam, Sloquet High, Sloquet North, Sloquet South, Tuwasus, & Whistler	In respect of the orders “ <i>Order to Establish A Landscape Unit and Objectives.</i> ”, the TSM will manage landscape level biological diversity by: <ul style="list-style-type: none"> (a) designing cutblocks and roads in a manner that is consistent with Objectives One and Two of the draft orders (refer to Appendix C for Results or Strategies for each Objective by FDU), and (b) carrying out or authorize forest practices only if the forest practices are consistent with the design for the cutblock or road referred to in paragraph (a).
CHS-1013	Elaho, Upper Squamish	In respect of the “ <i>Order Establishing Provincial Non-Spatial Old Growth Objectives</i> ”, within the Elaho and Upper Squamish FDU, the TSM will: <ul style="list-style-type: none"> (a) work with affected holders of major licences to ensure that the seral stage distribution targets outlined in Table A are met, prior to carrying out or authorizing forest practices, and (b) not enter into a TSL or RP that will cause any of the seral stage distribution targets to be exceeded until a suitable recruitment strategy has been developed in consultation with the Ministry of Forests and Range and all other appropriate agencies.

CHS-1014	Lizzie, Mamquam, High Sloquet, North Sloquet, South Sloquet, Tuwasus, Upper Squamish, Whistler	<p>In respect of the orders “<i>Order to Establish A Landscape Unit and Objectives.</i>”, the TSM will manage stand level structural diversity by:</p> <ul style="list-style-type: none"> (a) designing cutblocks and roads consistent with sections 66 and 67 of the FPPR, and (b) carrying out or authorize forest practices only if the forest practices are consistent with the design for the cutblock or road referred to in paragraph (a).
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Table A: Old Growth Retention Targets for Non-spatial Landscape Units.

FDU (Landscape Unit)	Biodiversity Emphasis Option	% old forest retention >250 yrs				
		CWH*		ESSFmw	IDFww	MH mm1, mm2
		NDT 1 (vm1/vm2)	NDT 2 (dm, ds1, ms1, ms2)	NDT 2	NDT 4	NDT 1
Elaho CWH ds1, ms1, MHmm2	Intermediate	N/A	>9	N/A	N/A	>19
Upper Squamish CWH ds1, ms1, MHmm2	Low	N/A	>9	N/A	N/A	>19

2.6 Cultural Heritage Resources

2.6.1 Relevant established objectives

Section 10 of the FPPR.

2.6.2 Result or Strategy

R/S#	FDU	Result or Strategy
CHS-1015	All	<p>In relation to the objective set by government for cultural heritage resources set out in section 10 of the FPPR, the results or strategies that apply to each FDU are</p> <p>(c) on an annual basis, the TSM will make reasonable efforts to communicate to affected First Nations the general areas of timber harvesting and road construction if any, that are proposed for the following year.</p> <p>(d) the TSM will evaluate the nature and extent of a possible applicable cultural heritage resource identified within areas of potential timber harvesting and road construction activities, including making reasonable efforts to share information or consult with the applicable First Nations</p> <p>(e) the TSM, when designing a cutblock or road, in respect of applicable cultural heritage resources, will identify</p> <ul style="list-style-type: none"> (i) the portion of the area occupied by the cultural heritage resources (ii) the nature of the cultural heritage resource (iii) whether the cultural heritage resource is to be protected or conserved, and (iv) if the cultural heritage resource is to be conserved, what constraints, if any, are to apply to the forest practices carried out on the area <p>(f) for each cultural heritage resource that has been identified under paragraph (c) for protection, the TSM will carry out or authorize a person to carry out a forest practice only to the extent that the forest practice does not damage or render ineffective the cultural heritage resource, and</p> <p>(g) for each cultural heritage resource that has been identified under paragraph (c) for being conserved, the TSM will carry out or authorize a person to carry out a forest practice only to the extent that the forest practice is consistent with the constraints, if any, specified in the design for the cutblock or road.</p>
CHS-1015a	All	In relation to Objectives for First Nations' cultural places specified in Ministerial Order - Land Use Objectives for the Sea-to-Sky Land and Resource Management Plan, the TSM will comply with the order.
CHS-1015b	All	<p>In relation to Objectives for First Nations' cultural management areas specified in Ministerial Order - Land Use Objectives for the Sea-to-Sky Land and Resource Management Plan, the TSM will comply with the order.</p> <p>For cultural management areas defined under the same Order where commercial timber harvesting is allowed, the TSM will engage with respective First Nations regarding proposed forest development to ensure that opportunities for First Nations to practice their traditional cultural activities are adequately maintained.</p>
CHS-1015c	Elaho, Meager, Railroad, Ryan, Soo, Upper Lillooet, Upper Squamish,	In relation to Objectives for Floodplain management and riparian areas specified in Ministerial Order - Land Use Objectives for the Sea-to-Sky Land and Resource Management Plan, the TSM will comply with the order.

In addition to the results or strategies provided in this section, some of the results or strategies in other sections also relate to cultural heritage:

CHS-1002, 1004 and 1006 (see Section 2.2 –Wildlife); **CHS-1007 and 1009** (see Section 2.3 –Water); **CHS-1010 to 1014** (see Section 2.5 –Biodiversity); and **CHS-1018** (see Section 3.3 –Invasive Plants).

2.7 Recreation Resource

2.7.1 Relevant established objectives

Section 180 of FRPA.

As of the submission date of this FSP, the established recreation sites, trails, and interpretive forest for which there is an applicable established objective applicable to the FSP are listed as follows:

Established Recreation Sites, Recreation Trails and Interpretive Forests

Recreation Trails /Sites/Interpretive Forests (Designated)	Project #	Date of Establishment	Established Objectives
Alexander Falls Site	REC0108	2000/12/14	Yes
Anderson Beach Site	REC6276	2009/01/29	No
Barkley Cr Trail	REC6047	2000/12/14	Yes
Bob McIntosh Recreation Trail	REC33008	2010/01/04	No
Brandywine Meadows Trail	REC3215	2000/12/14	Yes
Brohm Lake Site	REC0106	2000/12/14	Yes
Cal Cheak/Brandywine Trail	REC3218		
Callaghan Valley Ski Trails	REC32329	2009/01/29	No
Chek canyon [Conroy] Site	REC32295	2010/01/04	No
Dead End Loop Recreation Trail	REC33036	2010/01/04	No
Deeks Cr. Trail	REC6121	2000/12/14	Yes
Echo Lake Site	REC6243	2000/12/14	Yes
Flat Alley Recreation Trail	REC32397	2010/01/04	No
Half Nelson Recreation Trail	REC32953	2010/01/04	No
Levette Lake Site	REC6279	2009/01/29	No
Made in the Shade Recreation Trail	REC33040	2010/01/04	No
Magnesia/Harvey Creeks Trail	REC3182	2000/12/14	Yes
Mashiter Recreation Trail	REC32491	2010/01/04	No
Meager Cr. Hot-springs Site	REC0236	2000/12/14	Yes
Meager Cr. Hotsprings Trail	REC0236	2000/12/14	Yes
Meager/Fish Lake R.Reserve	REC0235	2001/03/29	
Norton Lake Site	REC6311	2000/12/14	Yes
Mid Altitude Trail	REC6408	2001/03/29	
Owl Creek Site	REC0219	1992/06/11	
Petgill Lake Trail	REC6130	2000/12/14	Yes
Powerhouse Plunge Recreation Trail	REC16116	2010/01/04	No
Rainbow-Madeley Trail	REC6025		
Ray Peters Recreation Trail	REC33012	2010/01/04	No
Ring Creek Rip Recreation Trail	REC16117	2010/01/04	No
Rutherford Snowmobile Trail	REC6048	2000/12/14	Yes
Showh Lake site Trail	REC3186	2000/12/14	Yes
Soo River Falls Site	REC3064	2000/12/14	Yes
Soo River site	REC3063	2000/12/14	Yes
Spetch Creek Site	REC0230	1991/08/01	
Tenquille /Owl Lake Trail System	REC5637	2003/05/29	
Tenquille Lake Site	REC3217		
Tenquille Lake. (Branch 12) Trail	REC6131		
The Corners Recreation Trail	REC32503	2010/01/04	No
Upper Power Smart Recreation Trail	REC32399	2010/01/04	No
Whistler Interpretive Forest	REC6264	2003/05/29	
Wonderland Recreation Trail	REC16124	2010/01/04	No

2.7.2 Result or Strategy

<i>R/S#</i>	<i>FDU</i>	<i>Result or Strategy</i>
CHS-1016	All	<p>(1) In respect of the each established recreation site or recreation trail for which there is an applicable established objective, the TSM will</p> <ul style="list-style-type: none"> (a) design cutblocks and roads in a manner that is consistent with the applicable established objective, and (b) carry out or authorize forest practices only if the forest practices are consistent with the design for the cutblock or road referred to in paragraph (a). <p>(2) In respect of the Whistler Interpretive Forest for which there is an applicable established objective, the TSM will</p> <ul style="list-style-type: none"> (a) design cutblocks and roads in a manner that is consistent with the applicable established objective, and (b) carry out or authorize forest practices only if the forest practices are consistent with the design for the cutblock or road referred to in paragraph (a).

2.8 Visual Quality

2.8.1 Relevant established objectives

Section 181 of FRPA; Section 17 of GAR.

Scenic areas that were made known for the Squamish Forest District and Visual Quality Objectives (VQOs) formally established under the FPC are continued under FRPA (Section 181 of FRPA). As well, within known scenic areas, recommended Visual Quality Classes (rVQC) were specified and are carried forward as VQOs under Section 17 of GAR. For the purposes of this FSP, the individual VQO categories (preservation, retention, partial retention, modification, and maximum modification) are legally defined as referenced in Section 1.1 of FPPR.

2.8.2 Result or Strategy

<i>R/S#</i>	<i>FDU</i>	<i>Result or Strategy</i>
CHS-1017	All	The TSM will carry out or authorize timber harvesting or road construction in an area only if the design of the cutblock or road is consistent with the visual quality objective applicable to the area.

3 ADDITIONAL FSP INFORMATION

In addition to the objectives, strategies, and results, there are several other items to be shown or addressed in the FSP, as outlined in Section 3.1 to 3.4.

3.1 Protection of Cutblocks and Roads from an FDP to an FSP

Areas which FRPA s 196 (1) or (2) applies are shown on the FSP maps.

3.2 Stocking Standards

The FSP must describe the Stocking Standards that will apply on the FDUs (FPPR s. 16). The following information is provided to describe the stocking standards that apply on the FDUs in this Forest Stewardship Plan.

3.2.1 Specification of Situations and Circumstances under Section 16 of FPPR

- 1) Section 44 (1) of the FPPR applies to all FDUs where the TSM is required to establish a free growing stand.
- 2) The applicable stocking standards, regeneration dates and free growing heights referred to in Section 44(1)(a)&(b) of the FPPR are described in :
 - (a) paragraph 3.2.1
 - (b) paragraph 3.2.2 and
 - (c) Appendix A
- 3) For the purpose of section 16(4) of the FPPR, section 44(4) does not apply to this FSP, as the TSM does not propose to carry out harvesting activities listed in section 44(3)(h)(i).

Stocking Standards Tables

Stocking standards tables are based on the Reference Guide for FDP Stocking Standards, dated Dec 11, 2002, for the former Vancouver Forest Region. Tables describing the stocking standards that apply on all FDUs in this FSP are provided in Appendix A.

The stocking standards in this FSP include the following: biogeoclimatic zone, subzone, variant, preferred and acceptable species combinations, regeneration dates, minimum free-growing heights, minimum inter-tree distances between well formed crop trees, and the minimum required and target stocking levels at free growing, and ecological footnotes for each site series that occur within the FSP area.

3.2.2 Root Disease Management Strategies and Stocking Standards

If the block planning indicates a root rot survey is warranted, BCTS will conduct the survey, and the results will be reviewed by a qualified professional who may apply some or all of the following general management strategies to amend the approved stocking standards:

- 1) indicate moderately susceptible or tolerant coniferous species as acceptable and/or:
- 2) reduce minimum inter-tree spacing to allow for inoculum avoidance planting and/or :
- 3) reduce stocking levels of preferred and acceptable species below minimum stocking standard, provided all prescribed operations intended to abate the risk of root disease have been fully implemented.

3.2.3 Amendments

In accordance with FRPA section 197(5), BCTS specifies that it may choose to amend the stocking standards for silviculture prescriptions or site plans that are already in existence to conform to this FSP.

3.3 Measures to Prevent the Introduction & Spread of Invasive Plants

R/S#	FDU	Measures to Prevent the Introduction & Spread of Invasive Plants
CHS-1018	All	<p>(1) If the TSM carries out or authorizes primary forest activities, the measures for the purposes of section 47 of the Act are</p> <ul style="list-style-type: none"> (a) on an annual basis using information gathered from forest district staff, regional experts, <p>or other agencies, the TSM will identify sites that are known to contain invasive plants,</p> <ul style="list-style-type: none"> (b) within one year of completion of the Timber Sale Licence document, the TSM will ensure seeding of areas of disturbed soil with grass seed that meets or exceeds Common Forage #1 mix. Specifications as defined by the <i>Canada Seeds Act</i>; if the area: <ul style="list-style-type: none"> (i) contains invasive plants or is within 200 m of a site identified under paragraph (a), or (ii) was disturbed through forest practices carried out or authorized by the TSM and has not been reforested, and (iii) grass will likely grow on the disturbed area and will materially reduce the likelihood of invasive plant germination, and (c) the TSM will ensure that disturbed areas that are seeded under paragraph (b) are re-vegetated within 4 years of completing timber harvesting or road construction on an area. <p>(2) The TSM will not take any measures on areas of disturbed soil that</p> <ul style="list-style-type: none"> (a) do not contain invasive plants and are located more than 200 m from sites identified under subsection (1) (a) as containing invasive plants, or (b) are located on the surface of an active road.

3.4 Natural Range Barriers

Under Section 48 of FRPA and Section 18 of FPPR, the FSP must specify measures to mitigate the effect of removing or rendering ineffective natural range barriers.

R/S#	FDU	Measures
CHS-1019	Ryan	<p>The measures in respect of section 48 of the Act are that the TSM will:</p> <ul style="list-style-type: none"> (a) each year under the term of this FSP, identify any areas within the Ryan FDU that are subject to or adjacent to agreements under the <i>Range Act</i> in respect of grazing of livestock, using information gathered from Ministry of Forests and Range district range staff, or regional experts; (b) inform each the affected holders of agreements under the <i>Range Act</i> of planned harvest and road construction within or adjacent to their agreement; (c) where the affected holder of an agreement under the <i>Range Act</i> indicates that the planned harvest and road construction will remove or render ineffective a natural range barrier, <ul style="list-style-type: none"> (i) design cutblocks and roads to mitigate the effect of the removal or ineffectiveness, and (ii) carry out or authorize forest practices only if the forest practices are consistent with the design for the cutblock or road referred to in subparagraph (i).

[illegible]

ID	BEC				Stocking (W/S)							Preferred Species												Acceptable Species												STANDARDS CODES
	BGCZ	SZ	VAR	SITE SERIES	TARGET (sph)	MIN. P + A (sph)	MIN. PREED (sph)	MIN. INTER TREE DIST.	REGEN DELAY (yrs)	FREE GROWING (yrs)	Crop HT/Competition (%)	1	HT (min)	2	HT (min)	3	HT (min)	4	HT (min)	5	HT (min)	6	HT (min)	1	HT (min)	2	HT (min)	3	HT (min)	4	HT (min)	5	HT (min)			
	CWH	ds	1	8	900	500	400	2	3	20	150	CW	2.00											SX	2.00	SS	3.00	BG	2.00	FDC	3.00			SS35;SS613;ALL612;ALL623		
	CWH	ds	1	9	900	500	400	2	3	20	150	CW	2.00											SX	2.00	SS	2.00	FDC	3.00	BG	2.00			CW1;BG1;SS613;ALL612;ALL623		
	CWH	ds	1	11	400	200	200	2	3	20	150	PLC	1.25											CW	1.00									PLC1;CW1;ALL520;ALL612;ALL623		
	CWH	ds	1	12	800	400	400	2	3	20	150	CW	1.00											PLC	1.25									CW1;PLC7;ALL612;ALL623		
	CWH	ms	1	1	900	500	400	2	3	20	150	CW	1.50	FDC	2.25	SX	1.00	HW	1.50	BA	0.75			YC	1.50									SX13;SX18;HW10;HW13;BA10;BA13;ALL612;ALL623		
	CWH	ms	1	1	900	500	400	2	3	20	150	CW	1.50	FDC	2.25	SX	1.00							HW	1.50	BA	0.75	YC	1.50					SX13;SX18;ALL612;ALL623		
	CWH	ms	1	2	400	200	200	2	3	20	150	PLC	1.25	FDC	1.50																			ALL520;ALL612;ALL623		
	CWH	ms	1	3	800	400	400	2	3	20	150	CW	1.50	FDC	2.25	SX	1.00							BA	0.75									SX13;SX18;BA10;ALL612;ALL623		
	CWH	ms	1	4	900	500	400	2	3	20	150	CW	2.00	FDC	3.00	SX	1.25	BA	1.00	HW	2.00	YC	2.00	PW	2.50									SX13;SX18;BA10;BA13;HW10;HW13;YC13;YC17;PW31;ALL612;ALL623		
	CWH	ms	1	4	900	500	400	2	3	20	150	CW	2.00	FDC	3.00									SX	1.25	HW	2.00	PW	2.50	BA	1.00	YC	2.00	SX18;PW31;ALL612;ALL623		
	CWH	ms	1	5	900	500	400	2	6	20	150	CW	1.50	HW	1.50	YC	1.50	BA	0.75															YC13;YC17;BA10;BA13;ALL612;ALL623		
	CWH	ms	1	5	900	500	400	2	6	20	150	CW	1.50	HW	1.50									YC	1.50	BA	0.75							ALL612;ALL623		
	CWH	ms	1	6	900	500	400	2	3	20	150	CW	2.00	FDC	3.00	YC	2.00	SX	1.25	BA	1.00			HW	2.00	BG	2.50							YC13;YC17;SX13;BA10;BA13;BG14;BG17;ALL612;ALL623		
	CWH	ms	1	6	900	500	400	2	3	20	150	CW	2.00	FDC	3.00	SX	1.25							HW	2.00	BA	1.00	BG	2.50	YC	2.00			SX13;BG14;BG17;ALL612;ALL623		
	CWH	ms	1	7	900	500	400	2	3	20	150	BA	1.00	CW	2.00	SS	4.00	SX	1.25					FDC	3.00									SS35;FDC1;SX18;SS613;ALL612;ALL623		
	CWH	ms	1	7	900	500	400	2	3	20	150	BA	1.00	CW	2.00	SS	4.00							SX	1.25	FDC	3.00							SS35;FDC1;SS613;ALL612;ALL623		
	CWH	ms	1	8	900	500	400	2	3	20	150	CW	2.00	BA	1.00	SS	2.00	SX	1.25															CW1;BA1;SS35;SS613;ALL612;ALL623		
	CWH	ms	1	10	400	200	200	2	3	20	150	PLC	1.25											CW	1.00									PLC1;CW1;ALL520;ALL612;ALL623		
	CWH	ms	1	11	800	400	400	2	3	20	150	CW	1.00	YC	1.00									PW	2.50	SX	0.75							CW1;YC13;YC17;PW31;SX1;ALL612;ALL623		
	CWH	vm	1	1	900	500	400	2	6	20	150	CW	1.50	HW	3.00	FDC	3.00	BA	1.75															FDC9;BA25;ALL612;ALL623		
	CWH	vm	1	1	900	500	400	2	6	20	150	CW	1.50	HW	3.00	FDC	3.00							BA	1.75									FDC9;BA26;ALL612;ALL623		
	CWH	vm	1	2	400	200	200	2	3	20	150	PLC	1.25	CW	1.00	FDC	2.00							HW	2.00									FDC9;ALL520;ALL612;ALL623		
	CWH	vm	1	3	800	400	400	2	6	20	150	CW	1.00	HW	2.00	FDC	2.00							PLC	1.25									FDC9;PLC53;ALL612;ALL623		
	CWH	vm	1	4	900	500	400	2	3	20	150	CW	1.50	HW	3.00	FDC	3.00							BA	1.75	SS	3.00							FDC9;SS35;SS613;ALL612;ALL623		
	CWH	vm	1	5	900	500	400	2	3	20	150	BA	1.75	CW	1.50	HW	3.00	FDC	3.00					SS	3.00									FDC1;FDC9;SS35;SS613;ALL612;ALL623		

ID	BEC				Stocking (W/S)							Preferred Species												Acceptable Species										STANDARDS CODES	
	BGCZ	SZ	VAR	SITE SERIES	TARGET (sph)	MIN. P + A (sph)	MIN. PREED (sph)	MIN. INTER TREE DIST.	REGEN DELAY (yrs)	FREE GROWING (yrs)	Crop HT/Competition (%)	1	HT (min)	2	HT (min)	3	HT (min)	4	HT (min)	5	HT (min)	6	HT (min)	1	HT (min)	2	HT (min)	3	HT (min)	4	HT (min)	5	HT (min)		
	CWH	vm	1	6	900	500	400	2	6	20	150	BA	1.75	CW	1.50	HW	3.00							SS	3.00										SS35;BA25;SS613; ALL612;ALL623
	CWH	vm	1	6	900	500	400	2	6	20	150	CW	1.50	HW	3.00									SS	3.00	BA	1.75								SS35;BA26;SS613; ALL612;ALL623
	CWH	vm	1	7	900	500	400	2	3	20	150	BA	2.25	CW	2.00	FDC	4.00	HW	4.00					SS	4.00										FDC1;FDC9;FD23;HW2 ;SS35;22613; ALL612;ALL623
	CWH	vm	1	7	900	500	400	2	3	20	150	BA	2.25	CW	2.00	FDC	4.00							HW	4.00	SS	4.00								FDC1;FDC9;FD23;SS5; 22613; ALL612;ALL623
	CWH	vm	1	8	900	500	400	2	3	20	150	BA	2.25	CW	2.00	HW	4.00							SS	4.00										HW2;SS35;SS613; ALL612;ALL623
	CWH	vm	1	8	900	500	400	2	3	20	150	BA	2.25	CW	2.00									HW	4.00	SS	4.00								SS35;SS613;ALL612; ALL623
	CWH	vm	1	9	900	500	400	2	3	20	150	BA	2.25	CW	2.00	HW	4.00																		ALL612;ALL623
	CWH	vm	1	10	900	500	400	2	3	20	150	CW	2.00											BA	2.25	SS	4.00								CW1;BA1;SS1;SS35; SS613;ALL612;ALL623
	CWH	vm	1	12	800	400	400	2	3	20	150	CW	1.00	HW	2.00	YC	1.00							PLC	1.25										CW1;HW1;YC1;PLC1; ALL612;ALL623
	CWH	vm	1	13	400	200	200	2	3	20	150	PLC	1.25											CW	1.00										PLC1;CW1;ALL520; ALL612;ALL623
	CWH	vm	1	14	800	400	400	2	3	20	150	CW	1.50											HW	3.00	SS	3.00								CW1;HW1;SS1;SS35; ALL612;ALL623
	CWH	vm	2	1	900	500	400	2	6	20	150	FDC	2.25	HW	2.50	CW	1.50	YC	1.50	BA	1.75			SS	3.00										FDC1;FDC9;FDC23; SS7;SS35;SS613; ALL612;ALL623
	CWH	vm	2	2	400	200	200	2	3	20	150	PLC	1.25	CW	1.00	FDC	1.50	YC	1.00					HW	1.75										FDC9;ALL520; ALL612;ALL623
	CWH	vm	2	3	800	400	400	2	6	20	150	CW	1.00	HW	1.75	FDC	1.50	YC	1.00					PW	2.50										FDC9;PW16;PW31; ALL612;ALL623
	CWH	vm	2	4	900	500	400	2	6	20	150	CW	1.00	HW	1.75	FDC	1.50	YC	1.00					BA	1.50	PW	2.50								FDC9;PW16;ALL612; ALL623
	CWH	vm	2	5	900	500	400	2	3	20	150	CW	1.50	HW	2.50	YC	1.50	BA	1.75					FDC	2.25	SS	3.00								FDC1;FDC8;FDC9; FDC23;SS35;SS613; ALL612;ALL623
	CWH	vm	2	6	900	500	400	2	6	20	150	CW	1.50	HW	2.50	YC	1.50	BA	1.75					HM	1.00										ALL612;ALL623
	CWH	vm	2	7	900	500	400	2	3	20	150	CW	2.00	HW	3.50	YC	2.00	BA	2.25					SS	4.00	HM	1.00								HW2;SS35;ALL612; ALL623
	CWH	vm	2	7	900	500	400	2	3	20	150	CW	2.00	YC	2.00	BA	2.25							SS	4.00	HM	1.00	HW	3.50						SS35;ALL612;ALL623
	CWH	vm	2	8	900	500	400	2	3	20	150	CW	2.00	HW	3.50	YC	2.00	BA	2.25					SS	4.00										CW14;HW2;SS35; SS613;ALL612;ALL623
	CWH	vm	2	8	900	500	400	2	3	20	150	CW	2.00	YC	2.00	BA	2.25							SS	4.00	HW	3.50								CW14;SS35;SS613; ALL612;ALL623
	CWH	vm	2	9	800	400	400	2	3	20	150	CW	1.00	HW	1.75	YC	1.00							BA	1.50	HM	0.75								CW1;HW1;YC1;HM13; ALL612;ALL623
	CWH	vm	2	10	400	200	200	2	3	20	150	PLC	1.25	YC	1.00									HM	0.75										PLC1;YC1;ALL520; ALL612;ALL623
	CWH	vm	2	11	800	400	400	2	3	20	150	CW	1.00	YC	1.00									HW	1.75	HM	0.75								CW1;YC1;HW1;ALL612 ; ALL623
	ESSF	mw		1	1200	700	600	2	4	20	125	SX	1.00	BA	0.60	BL	0.75																		BA17;ALL612;ALL623
	ESSF	mw		2	1000	500	400	2	7	20	125	PLC	1.25	FDC	1.00									SX	0.75										FDC9;FDC14;ALL612; ALL623

ID	BEC				Stocking (W/S)							Preferred Species												Acceptable Species										STANDARDS CODES
	BGCZ	SZ	VAR	SITE SERIES	TARGET (sph)	MIN. P + A (sph)	MIN. PREED (sph)	MIN. INTER TREE DIST.	REGEN DELAY (yrs)	FREE GROWING (yrs)	Crop HT/Competition (%)	1	HT (min)	2	HT (min)	3	HT (min)	4	HT (min)	5	HT (min)	6	HT (min)	1	HT (min)	2	HT (min)	3	HT (min)	4	HT (min)	5	HT (min)	
	ESSF	mw		3	1000	500	400	2	7	20	125	PLC	1.25	FDC	1.00	SX	0.75																	FDC9;FDC14;ALL612; ALL623
	ESSF	mw		4	1200	700	600	2	7	20	125	PLC	1.25	SX	0.75	FDC	1.00							BL	0.60									FDC9;FDC14;ALL612; ALL623
	ESSF	mw		5	1200	700	600	2	4	20	125	SX	1.00	BL	0.75									BA	0.60									BA17;ALL612;ALL623
	ESSF	mw		6	1200	700	600	2	4	20	125	BL	0.75	SX	1.00									BA	0.60									BA17;ALL612;ALL623
	ESSF	mw		7	1000	500	400	2	4	20	125	BL	0.60	SX	0.75									BA	0.60	CW	0.75							BA17;CW14;CW32; ALL612;ALL623
	ESSF	mw		8	1000	500	400	2	4	20	125	BL	0.60	SX	0.75									CW	0.75									BL1;SX1;CW14;CW32; ALL612;ALL623
	IDF	ww		1	600	400	400	2	4	20	150	FDC	1.50											PLC	2.00	PY	1.50	CW	1.50					PY7;PY614;ALL612; ALL623
	IDF	ww		1	580	260	260	2	7	20	150	FDC	1.50	PY	1.50									PLC	1.50	CW	1.50	LW	1.50					ALL612;ALL623
	IDF	ww		1	600	400	400	2	4	20	150	Cw	1.50	PY	1.50									Lw	1.50									
	IDF	ww		2	400	200	200	2	3	20	150	PLC	1.25											FDC	1.00									ALL520;ALL612;ALL623
	IDF	ww		3	600	400	400	2	3	20	150	FDC	1.50											PLC	2.00	PY	1.50							PY7;ALL520;PY614; ALL612;ALL623
	IDF	ww		4	600	400	400	2	4	20	150	FDC	1.50	PY	1.50									CW	1.50									PY614;ALL612;ALL623
	IDF	ww		5	1000	500	400	2	4	20	150	CW	2.00	FDC	2.00									HW	1.50									ALL612;ALL623
	IDF	ww		6	1000	500	400	2	4	20	150	FDC	2.00	CW	2.00									BG	2.00	HW	1.50							BG16;ALL612;ALL623
	IDF	ww		7	1000	500	400	2	4	20	150	CW	1.50											PLC	2.00	SX	1.00							CW1;PL7;ALL612;ALL623
	MH	mm	1	1	900	500	400	2	7	20	125	BA	0.60	HM	1.00	YC	1.00							SX	1.00	HW	1.00							SX23;HW14;ALL612; ALL623
	MH	mm	1	2	800	400	400	2	4	20	125	HM	0.75	YC	0.75									BA	0.60	SX	0.75							SX23;ALL612;ALL623
	MH	mm	1	3	900	500	400	2	4	20	125	BA	0.60	HM	1.00	YC	1.00							HW	1.00									HW14;ALL612;ALL623
	MH	mm	1	4	900	500	400	2	7	20	125	BA	0.60	HM	1.00	YC	1.00							HW	1.00									HW14;ALL612;ALL623
	MH	mm	1	5	900	500	400	2	4	20	125	BA	0.60	YC	1.00									HM	1.00									ALL612;ALL623
	MH	mm	1	6	800	400	400	2	7	20	125	HM	0.75	YC	0.75									BA	0.60									HM1;YC1;BA1;ALL612; ALL623
	MH	mm	1	7	900	500	400	2	4	20	125	BA	0.60	YC	0.75									HM	0.75									BA1;YC1;HM1;ALL612; ALL623
	MH	mm	1	8	400	200	200	2	4	20	125	HM	0.75	YC	0.75																			HM1;YC1;ALL520; ALL612; ALL623
	MH	mm	1	9	800	400	400	2	4	20	125	YC	0.75											HM	0.75									YC1;HM1;ALL612; ALL623
	MH	mm	2	1	900	500	400	2	7	20	125	BA	0.60	HM	1.00	YC	1.00	SX	1.00					HW	1.00									YC17;HW14;ALL612; ALL623
	MH	mm	2	2	400	400	400	2	4	20	125	HM	0.75	SX	0.75	YC	0.75							BA	0.60	BL	0.75							YC17;BL45;BL53;ALL612; ALL623
	MH	mm	2	3	900	500	400	2	4	20	125	BA	0.60	HM	1.00	SX	1.00	YC	1.00															YC17;ALL612;ALL623
	MH	mm	2	4	900	500	400	2	7	20	125	BA	0.60	HM	1.00	YC	1.00																	YC17;ALL612;ALL623
	MH	mm	2	5	900	500	400	2	4	20	125	BA	0.60	SX	1.00	YC	1.00							HM	1.00									YC17;ALL612;ALL623
	MH	mm	2	6	800	400	400	2	7	20	125	HM	0.75	YC	0.75									BA	0.60									HM1;YC17;BA1;ALL612; ALL623

ID	BEC				Stocking (W/S)							Preferred Species												Acceptable Species										STANDARDS CODES
	BGCZ	SZ	VAR	SITE SERIES	TARGET (sph)	MIN. P + A (sph)	MIN. PREED (sph)	MIN. INTER TREE DIST.	REGEN DELAY (yrs)	FREE GROWING (yrs)	Crop HT/Competition (%)	1	HT (min)	2	HT (min)	3	HT (min)	4	HT (min)	5	HT (min)	6	HT (min)	1	HT (min)	2	HT (min)	3	HT (min)	4	HT (min)	5	HT (min)	
	MH	mm	2	7	900	500	400	2	4	20	125	BA	0.60	SX	0.75	YC	0.75							HM	0.75									BA1;SX1;YC17;HM1; ALL612;ALL623
	MH	mm	2	8	400	200	200	2	4	20	125	HM	0.75	YC	0.75																			HM1;YC1;YC17; ALL520;ALL612;ALL623
	MH	mm	2	9	800	400	400	2	4	20	125	HM	0.75	YC	0.75									SX	0.75									HM1;YC1;YC17;SX1; ALL612;ALL623
	MH	mm	2	1	900	500	400	2	3	20	125	BA	0.60	HM	1.00									SX	1.00	HW	1.5							441, All612, All623
	MH	mm	2	1	900	500	400	2	7	20	125	YC	0.75	BA	0.75									HM	0.75	HW	0.75							442, All612, All623
	CWH	ms	1	1	900	500	400	2	3	20	150	CW	1.50	BA	1.00									YC	1.50	FDC	2.25	HM	0.75	HW	1.5			136, All612, All623
	CWH	ms	1	1	900	500	400	2	3	20	150	FDC	2.25	CW	1.50	BA	1.00							YC	1.50	HM	0.75	HW	1.50					137, All612, All623
	CWH	ms																																138, All612, All623
	CWH	ms	1	1	900	500	400	2	3	20	150	YC	1.50	BA	1.00									CW	1.50	HM	0.75	HW	1.50					139, All612, All623
	CWH	ds	1	1	900	500	400	2	3	20	150	FDC	2.25	CW	1.50									BA	0.75	HW	1.00							076, All612, All623

Note: Id numbers will be issued by Ministry of Forests and Range after approval of this FSP.

Alder Stocking Standard Introduced through FSP Amendment #3

BGC/SZ/Var	Site Series	Target (sph)	Min. (sph)	Min. Pref. (sph)	Min. Inter Tree Distance	RG (yrs)	FG (yrs)	Crop HT./ Comp. (%)	Pref Spp./ Min. HT(m)	Acc Spp./ Min. Ht (m)
CWH dm	01/05/06/07/08/09/13/14	1200	700	500	2m	3	20	150	DR/4m	ACT/4m; MB/4m
CWH ds1	01/05/06/07/08/09	1200	700	500	2m	3	20	150	DR/4m	ACT/4m; MB/4m
CWH vm1	01/05/06/07/08/09/10	1200	700	500	2m	3	20	150	DR/4m	ACT/4m; MB/4m

Table A-2 Stocking Standards –Ecological Codes and Definitions

Code	Comment	Code	Comment	Code	Comment
1	elevated microsites are preferred	27	partial canopy cover required for successful establishment	50	restricted to sites where the species occurs as a major species in a pre-harvest, natural stand
2	suitable on thick forest floors	28	limited by moisture deficit	51	restricted to areas with proven PI performance
3	restricted to coarse-textured soils	29	risk of heavy browsing by moose	52	restricted to sheltered microsites with deep soil
4	restricted to medium-textured soils	30	risk of porcupine damage	53	minor component
6	restricted to nutrient-very-poor sites	31	risk of white pine blister rust	54	risk of unsuccessful release of advance regeneration
7	restricted to nutrient-medium sites	32	limited by growing-season frosts	55	acceptable in sx-sm portion of site series
8	restricted to steep slopes	33	footnote retired and replaced with footnote 'a'		
9	restricted to southerly aspects	34	risk of snow damage		
10	restricted to northerly aspects	35	risk of weevil damage	61	Acceptable on cold air drainage sites only.
11	restricted to crest slope positions	36	suitable major species on salal-dominated sites	69	Species is restricted to upper elevations when used in the southern portion
12	suitable on cold air drainage sites	37	risk of heart rots	ALL	These include colluvial sites, hygric or subhygric sites, and sites where stump avoidance strategies are employed to manage root rot.
13	restricted to upper elevations of biogeoclimatic unit				
14	restricted to lower elevations of biogeoclimatic unit	39	avoid exposed and windy sites	All 623	The crop tree height to brush ratio in a fireweed complex can be lowered to 100% for Fd and PI and 80% for other species.
15	restricted to northern portion of biogeoclimatic unit in region	40	risk of red heart		
16	restricted to southern portion of biogeoclimatic unit in region	41	limited by poorly drained soils	#	<u>Broadleaf Management Constraints</u>
17	restricted to western portion of biogeoclimatic unit in region	42	restricted to fresh soil moisture regimes	a	productive, reliable, and feasible regeneration option
18	restricted to eastern portion of biogeoclimatic unit in region	43	suitable on mainland coast only (QCI only)	b	limited in productivity, reliability and/or feasibility
19	restricted, not in Queen Charlotte Islands	44	suitable in areas with stronger maritime influence		
20	restricted, not near outer coast	45	suitable in areas with stronger continental influence		
21	restricted to mainland	47	risk of balsam wooly adelgid		
23	restricted to trial use	48	risk of heavy browsing by deer		
24	suitable (as a major species) in wetter portion of biogeoclimatic unit	49	applies only to rust resistant, planted stock.		
25	suitable on sites lacking salal				
26	suitable minor species on salal-dominated sites				
076	TFL 38 - CWHms1 influence on subzone. Ba is considered as an acceptable species due to the minor influence of the CWHms1. Hw is considered as only a minor acceptable species due to the planned retention of Hw dwarf mistletoe infected trees. Min. Inter Tree Distance reduced to 1.5m in areas of rockier terrain and shallow soils.				
136	TFL 38 - influenced by MHmm2 subzone. Hw is considered as only a minor acceptable species due to the planned retention of Hw infected with a low level of dwarf mistletoe. Hm is considered an acceptable species due to its presence within the mature stand and the minor MHmm2 influence on the block. The min. free growing height for Ba is based on that suggested for Bp as the guide does not include a height for Ba. Min. height for Hm comes from that suggested for MHmm2 due to its influence.				
137	TFL 38- Hw is considered as only a minor acceptable species due to the planned retention of Hw infected with a low level of dwarf mistletoe. Hm is considered an acceptable species due to its presence within the mature stand and the minor MHmm2 influence on the block. The min. free growing height for Ba is based on that suggested for Bp as the guide does not include a height for Ba. Min. height for Hm comes from that suggested for MHmm2 due to its influence.				
138	TFL 38 -Influenced by MHmm2 subzone. Hw is considered as only a minor acceptable species due to the planned retention of Hw infected with a low level of dwarf mistletoe. Hm is considered an acceptable species due to its presence within the mature stand and the minor MHmm2 influence on the block. Yc is considered a preferred species due to its presence within the mature stand, the strong montane influence, the upper elevation of the block and the MHmm2 influence. The min. free growing height for Ba is based on that suggested for Bp as the guide does not include a height for Ba. Min. height for Hm comes from that suggested for MHmm2 due to its influence.				
139	TFL 38 Hw is considered as only a minor acceptable species due to the planned retention of Hw dwarf mistletoe infected trees. The max. acceptable component of Hw is 10%. Yc is considered an acceptable species due to its presence within the mature stand and montane influences. Ba height based on that suggested for Se/Bp as guide does not include a height for Ba.				

441	TFL 38- Hw has been included as an acceptable species due to its presence in the lower reaches of this unit. The minimum height for Hw has been adopted from the adjacent CWHms1 subzone.
442	TFL 38 - CWHms1 influence on subzone. Yc is a suitable species for western portion this site series as stated in Field Guide. Hm is considered as only as an acceptable species as the plantation is to be managed primarily as a BaYc stand. Hw is considered an acceptable species due to its minor presence in the mature stand and the minor influence of the CWHms1. Min. heights for YC and HM taken from MHmm2 02 site series as there are none listed for 01 site series. Ba min height based on Bl min height. Min height for Hw is same as Hm as the influence of CWHms1 is minor.
Definitions	
Conifer Tree Species	Broadleaf Tree Species
"Ba" means amabilis fir;	"Acb" means balsam poplar;
"Bg" means grand fir;	"Act" means black cottonwood;
"Bl" means subalpine fir;	"At" means trembling aspen;
"Bp" means noble fir;	"Dr" means red alder;
"Cw" means western red cedar;	"Ep" means common paper birch;
"Fd" means Douglas-fir;	"Mb" means bigleaf maple;
"Hm" means mountain hemlock;	"Qg" means garry oak;
"Hw" means western hemlock;	"Ra" means arbutus;
"Lt" means tamarack;	
"Lw" means western larch;	
"Pa" means whitebark pine;	
"Pl" means lodgepole pine;	
"Pw" means white pine;	
"Py" means ponderosa pine;	
"Sb" means black spruce;	
"Se" means Engelmann spruce;	
"Ss" means Sitka spruce;	
"Sw" means white spruce;	
"Sx" means hybrid spruce or interior spruce;	
"Sxs" means hybrid Sitka spruce;	
"Sxw" means hybrid white spruce;	
"Yc" means yellow cedar.	

"Biogeoclimatic unit" or "BGC classification" means

the zone, subzone, variant and site series described

in the most recent field guide published by the Ministry

of Forests for the identification and interpretation of

ecosystems, as applicable to a harvested area.

"MIN or "Min" means minimum.

The Minimum Inter Tree Distance (MITD) can be reduced to 1.5 metres for any site series where productive and plantable sites are limited by site characteristics and/or where site conditions, such as clumpy stem distribution, is a desired stand characteristic.

Table A-3: Conifer Stocking Standards – Multi Layer

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

* Maximum regeneration delay is seven years.

****Stand Layer Definition**

Layer 1	Mature	trees >= 12.5 cm dbh
Layer 2	Pole	trees 7.5 cm to 12.4 cm dbh
Layer 3	Sapling	trees >= 1.3 m height to 7.4 cm dbh
Layer 4	Regeneration	trees < 1.3 m height

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

Preferred and acceptable species and “Target from Table A standards” are as specified in Table A-1 by biogeoclimatic ecosystem classification (BEC) site series.

Appendix B FSP Maps, FDU, Declared Areas

Table B1: FSP Maps

	Map Number
	Detailed Maps 1:50,000 (Series 92G or 92J)
1	G113
2	G118
3	G119
4	G120
5	J102
6	J103
7	J104
8	J107
9	J108
10	J109
11	J111
12	J112
13	J113
14	J114
15	J116
16	J117
17	J118
18	Overview Map 1:250,000 scale

Table B2: Forest Development Units

Forest Development Unit's (FDU)	Covers the:	
	TSA	TFL 38
East Howe	Y	
Indian	Y	
Mamquam	Y	
Lower Squamish	Y	
Upper Squamish		Y
Elaho		Y
Whistler	Y	
Soo	Y	
Ryan	Y	
Meager	Y	
Upper Lillooet	Y	
Railroad	Y	
Birkenhead	Y	
Gates	Y	
Billygoat	Y	
Lizzie	Y	
Rogers	Y	
Tuwasus	Y	
Sloquet	Y	

Table B3: Declared Areas

At time of advertisement there are no declared areas to report.

Cutblocks:

FDU	Declaration Date	Cut Block # or TSL #	Area (ha)	Volume (m³)	Silv System Harv Method	Map #	Comments

Roads:

FDU	Declaration I	Road Identifier	Length (km)	Status	Map #	Comments

Table B4: Road permits in effect

Road permits in effect at time of submission.

Roads:

Road Permit #	TSL #	Mapsheet #	Comments
R14562	A53019	92J058	
R14612	A66132	92J037	
R14615	A69709	92G075	
R15058	A48554	92G089	
R15220	A64396	92G075	
R15318	A77027	92G075	

Table B5:FSP Amendment Log

Amendment Number	Amendment Date	Date approved by the DDM (if req'd)	FDU (if applicable)	Amendment Details
1	2008/02/29	Not required		declaration under Section 14(4)
2	2008/04/22	Not required		declaration under Section 14(4)
3	2009/07/13	Not required		To add Blackmount as an agreement holder to BCTS Squamish FSP
4	2009/07/09	Not required		declaration under Section 14(4)
5	2010/02/02	Not required		correcting an error on FSP mapsheet-92G118
6	2010/07/21	2010/10/20		adding Alder stocking standards
7	2011/10/17	2012/05/04		Mandatory Amendment
8	2012/04/16	Not required		declaration under Section 14(4)
9	2013/02/28	Not required		Mandatory Amendment
10	2015/11/26	Not required		declaration under Section 14(4)
11	2016/10/12	Pending Approval		Mandatory Amendment

Appendix C Biodiversity

Reference for Biodiversity Results and Strategies by FDU:

Legal Objectives - Birkenhead FDU

Results or strategies for Objective 1

1. Maintain or recruit old growth forests in established old growth management areas (OGMAs), as shown on the attached Birkenhead Landscape Unit map dated March 21, 2004 subject to timber harvesting and road construction in accordance with section 2, 3 and 4 below.
2. (1) Where sufficient suitable replacement forest is available in the variants listed below, timber harvesting or road construction (unrelated to ecosystem restoration activities) may be undertaken in OGMAs that are >10 ha in size for operational reasons up to a cumulative maximum of:
 - i) 15 ha in variant CWHds1,
 - ii) 30 ha in variant CWHms1,
 - iii) 5 ha in variant IDFww,
 - iv) 40 ha in subzone ESSFmw, and
 - v) 5 ha in variant MHmm2

provided that replacement OGMA of equivalent or better quality and quantity is identified in order of priority, 1) immediately adjacent to the existing OGMA, or 2) in the same variant and landscape unit as the existing OGMA.

- (2) The criteria in 2 (1) is to apply to individual OGMAs within the categories below and must ensure that OGMA ecological attributes and spatial distribution are maintained or improved:
 - i) OGMAs >10 ha to <50 ha in size where the proposed activity affects the OGMA by <5 ha,
 - ii) OGMAs ≥50 ha to <100 ha in size where the proposed activity affects the OGMA by <10ha,
 - iii) OGMAs ≥100 ha in size where the proposed activity affects the OGMA by <10%.
 - iv) Construction of ≤500m of road or a bridge within an OGMA where there is no other practicable option. As an alternative to finding replacement area, the licensee may permanently deactivate and rehabilitate a temporary road or bridge site within four years after construction.

- (3) Where OGMA boundary adjustments and replacement areas are required under section 2 (1) and (2) they must be documented, mapped and submitted to the satisfaction of the Delegated Decision Maker (DDM) at the end of each calendar year for his/her approval.

- (4) The provisions in section 2 (1) and (2) do not apply to the following OGMAs #8, 14, 24, 52, 70, 74, 95, 101.

3. Permissible Activities:

- (1) Timber harvest may occur to prevent the spread of insect infestations or diseases that pose a significant threat to forested areas outside of OGMAs. Salvage within OGMAs will be done in a manner that retains as many old growth forest attributes as possible.
- (2) Timber harvesting for ecosystem restoration purposes within fire dominated areas in up to 25% of OGMAs in the IDFww subzone and 25% of OGMAs in the CWHds1 variant. Proposed treatments must adhere to the Strategies and Table B below, and must be incorporated into an approved operational plan (FDP or equivalent) that specifically addresses ecosystem restoration goals. Ecosystem restoration activities must be documented, mapped and submitted to the satisfaction of the DDM at the end of each calendar year for his/her approval.
- (3) Construction of rock quarries and gravel pits under authority of forest tenure where the development will be located immediately adjacent to existing roads under tenure and will affect the OGMA by <0.5 ha.
- (4) Intrusions, other than those specified, that affect an OGMA by less than 0.5 hectare in total.
- (5) Where OGMA replacement forest is required as a result of activities under 3 (1) or (3), it must be of equivalent or better quality and quantity and be identified in order of priority, 1) immediately adjacent to the existing OGMA, or 2) in the same variant and landscape unit as the existing OGMA; such that OGMA ecological attributes and spatial distribution are maintained or improved. OGMA replacement areas must be documented, mapped and submitted to the satisfaction of the DDM at the end of each calendar year for his/her approval.

Legal Objectives – Birkenhead FDU Continued**4. Permissible Activities for Safety Purposes:**

- (1) Maintenance, deactivation, removal of danger trees, or brushing and clearing on existing roads under active tenure within the right-of-way for safety purposes.
- (2) Felling of guyline clearance, tailhold anchor trees, or danger trees (except high value wildlife trees) along cutblock boundaries or within the right of way on new road/bridge alignments to meet safety requirements.

Results or strategies for Objective 2

Maintain stand level structural diversity by retaining **wildlife tree retention area (WTR)**. Cutblocks for which harvesting has been completed by each licensee by tenure will retain adequate amounts of wildlife tree retention area to ensure that over each 3 year period, commencing on the date the objectives are established, the target percentage as noted in Table A is achieved. In addition:

- (1) WTR must be well distributed across the BEC subzone and located within or immediately adjacent to a cutblock.
- (2) Each cutblock >10 ha in size must have a minimum of 2% wildlife tree retention, except in the ESSFmw subzone.
- (3) No timber harvesting, including single tree selection, is to occur within WTR for at least one rotation, except as noted in (4) below.
- (4) Salvage of windthrown timber and harvesting of remaining standing stems is only permitted within WTR where catastrophic windthrow exceeds 50% of the dominant or co-dominant stems; or where forest health issues pose a significant threat to areas outside the WTR. Where salvage/harvesting is planned and authorized, replacement WTR of equivalent or better quality and quantity must be identified immediately to achieve the retention target.
- (5) WTR must include, if present, remnant old growth patches and live or dead veteran trees (excluding danger trees).
- (6) WTR must include representative larger trees for the stand and any moderate to high value wildlife trees (excluding danger trees).
- (7) Where differences exist between mapped and actual BEC subzones, subzones will be confirmed by site plan information.

Table A. Wildlife Tree Retention by BEC subzone in the Birkenhead Landscape Unit.

BEC Subzone	% Wildlife Tree Retention
CWH ds (Coastal Western Hemlock, dry maritime)	4
CWH ms (Coastal Western Hemlock, moist maritime)	3
ESSF mw (Engelmann Spruce Subalpine Fir moist warm)	0
IDF ww (Interior Douglas Fir, wet warm)	5
MH mm (Mountain Hemlock, moist maritime)	2

Ecosystem Restoration Strategies:

The purpose of restoration activities in OGMA, within the limits provided, is to improve or maximize biodiversity values and/or ecosystem health values in areas where there is a high to extreme risk of natural disturbance. Where ecosystem restoration is proposed and carried out, it must address the following strategies:

1. Where ecosystem restoration provisions within OGMA are proposed in an FSP, the FSP must outline the highest risk/highest priority transition forests requiring treatment. Ecosystem restoration treatment will be permitted in up to 25% of the OGMA target area, within specified site series in the IDFww and CWHds1 variants (see Table B).
2. Restoration activities within OGMA must address how old growth structure will be developed and/or maintained through management intervention over time. Accepted treatments include: partial cut timber harvesting, spacing, thinning and prescribed burning. Note: Open forest (<76 stems/ha in IDF, and <170 stems/ha in CWH) or grassland communities will not meet OGMA suitability criteria. Treatments to below these thresholds can occur outside OGMA; they can and do contribute to natural ecosystem diversity but aren't considered a forested ecosystem for OGMA purposes.
3. Where other resource objectives have been set (e.g. Ungulate Winter Range, Spotted Owl SRMZ, Identified Wildlife – Wildlife Habitat Areas), ecosystem restoration will only be permitted where compatible with those objectives. In addition, restoration plans and treatments must be compatible with and incorporate the habitat requirements of other red and blue-listed species or regionally important species.

Legal Objectives – Birkenhead FDU Continued

4. Restoration prescriptions will vary from site to site, but will maintain the oldest and/or largest trees for the site and high value wildlife trees (any high value wildlife trees that are determined to be danger trees should be left in no work zone areas). Partial harvest will be limited to removal of excess immature and understory trees or any larger trees in excess of the target stocking standard specified in Table B.
5. Partial-cut harvesting will be subject to current timber harvesting and silviculture practices, except normal stocking standards and green-up height obligations will not apply (see Table B for modified stocking standards).
6. BEC subzones, variants and site series for purposes of Table B will be confirmed by site plan or on the ground information.
7. Achieving restoration targets will be a direct function of budget and staffing resources available to undertake treatment activities.
8. Once forest stands within OGMAs have received initial restoration treatment, they should become components of a long term cycle of spacing and/or prescribed burning and future partial-cut harvesting that will maximize biodiversity value and ecosystem health. All treatments subsequent to meeting modified stocking standards would be considered incremental, and would not be considered a licensee responsibility unless by mutual agreement. Special and non-governmental funds can potentially be accessed to finance these incremental treatments.
9. All roads and trails required for restoration treatment must be temporary, and rehabilitated promptly (i.e. made non-drivable) after completion of harvest operations (except roads required for permanent access beyond the OGMA).
10. In most cases a partial-cut harvest can meet target stocking initially, but unless further treatments are undertaken, stocking targets will be exceeded again after a short time. Subsequent (incremental) prescribed burns will normally be required to reduce numbers of new tree seedlings or rejuvenate the understory and recycle nutrients. If burning is prescribed it should normally follow a partial-cut treatment so that initial fuel loading is reduced. Partial-cut harvest slash volumes and distribution should be managed to facilitate subsequent low soil temperature, surface burns. Measures must be taken to ensure post burn survival of appropriate numbers of tree recruits.
11. Restoration targets set in Table B may be modified over time based on experience, long term monitoring and better scientific knowledge (Adaptive Management).

Table B. Ecosystem Restoration Targets for the Birkenhead Landscape Unit.

BEC Unit	Site series Still need To confirm site series	Target Stocking Standard (stems/ha)	Minimum/ Maximum Stocking Standard (stems/ha)	Desired Structures Post Treatment*	Primary Leave Spp. (Secondary/Minor Leave Species)**	General Mgmt System Proposed
IDF ww	02, 03	- 200 of the oldest and largest stems. - up to 1/3 clustered - 2/3 well spaced.	76 – 250	WT, LT, CL, UV	02-Pl (/Fd) 03-Fd (Pl Py/)	Periodic partial-harvesting, prescribed burning, spacing and/or thinning to maintain open forest
IDFww	01, 04, 05	- 250 of the oldest and largest stems. - up to 1/3 clustered - 2/3 well spaced.	170 – 400	WT, LT, CL, UV	01-Fd (Pl Py / Cw) 04-Fd (Py / Cw) 05-CwFd (/Ss)	Periodic partial-harvesting, prescribed burning, spacing and/or thinning to maintain forest condition
CWHds1	01, 02, 03, 04	- 250 of the oldest and largest stems. - up to 1/3 clustered - 2/3 well spaced.	170 – 400	WT, LT, CL, UV	01-Fd (/Cw Lw Pw) 02-Pl (Fd/) 03-Fd (Pl Py / Cw) 04-Fd (/Cw Lw Pw) 05-Fd (Se/Cw Pw)	Periodic partial-harvesting, prescribed burning, spacing and/or thinning to maintain forest condition

* WT = where present and safe, retain a minimum of 5 moderate or high value wildlife trees per hectare; and 5 dying trees >50 cm dbh per hectare (e.g. by no work zone).

LT = large trees for the site, including veteran trees.

CL = approximately 1/3 of leave trees should be in clusters, not just uniform spacing.

UV = the diversity of natural understory vegetation (e.g. shrubs) should be retained, herbicide treatment should not occur.

** leave tree species are taken from the Ministry of Forests Land Management Handbook Number 28.

Legal Objectives - East Howe FDU

Results or strategies for Objective 1

1. Maintain or recruit old growth forest attributes in designated old growth management areas (OGMAs), as shown on the attached East Howe Landscape Unit map dated June 5, 2003. Timber harvesting, including salvage, single tree selection, topping for cone harvesting, and commercial gathering of botanical forest products, will not be permitted within OGMAs except as specified in section 2 and 3 below.
2. The Delegated Decision Maker (DDM) may allow operations to occur within an OGMA for reasons such as but not limited to the following:
 - (1) To prevent the spread of insect infestations or diseases that pose a significant threat to forested areas outside of OGMAs. This will be done in a manner that retains as many old growth forest attributes as possible.
 - (2) Construction of roads and yarding corridors if no other practicable option exists.
3. Exemptions:
 - (1) Maintenance, deactivation, removal of danger trees, or brushing and clearing on existing roads under active tenure within the right-of-way for safety purposes.
 - (2) Felling of guyline clearance, tailhold anchor trees, or danger trees (except high value wildlife trees) along cutblock boundaries or within the right of way on new road/bridge alignments to meet safety requirements.
 - (3) OGMAs that are >10 ha in size may be modified for operational reasons up to a cumulative maximum of :
 - a) 10 ha in variant CWHdm,
 - b) 35 ha in variant CWHvm2,
 - c) 55 ha in variant MHmm1,

provided that replacement OGMA of equivalent or better quality and quantity is identified in order of priority, 1) immediately adjacent to the existing OGMA, or 2) in the same variant and landscape unit as the existing OGMA; such that OGMA ecological attributes and spatial distribution are maintained or improved, in one of the following categories:

 - i) OGMAs >10 ha to <50 ha in size where the proposed development affects the OGMA by <5 ha,
 - ii) OGMAs ≥50 ha to <100 ha in size where the proposed development affects the OGMA by <10ha,
 - iii) OGMAs ≥100 ha in size where the proposed development affects the OGMA by <10%.
 - iv) Construction of ≤500m of road or a bridge within an OGMA where there is no other practicable option. As an alternative to finding replacement area, the licensee may permanently deactivate or rehabilitate a temporary road or bridge site within four years after construction.
 - v) Construction of rock quarries and gravel pits under authority of forest tenure where the development will be located immediately adjacent to existing roads under tenure and will affect the OGMA by <0.5 ha.
 - (4) Intrusions, other than those specified in (3) above, that affect an OGMA by less than 0.5 hectare in total.
4. Exemption 3(3) above does not apply to the following OGMAs: #6, 7, and 35.

Results or strategies for Objective 2

Maintain stand level structural diversity by retaining wildlife tree retention area (WTR). Cutblocks for which harvesting has been completed by each licensee by tenure will maintain adequate amounts of wildlife tree retention area to ensure that over each 2 year period, commencing on the date the objectives are established, the target percentage as noted in Table A is achieved. In addition:

- (1) WTR must be well distributed across the BEC subzone and located within or immediately adjacent to a cutblock.
- (2) Each cutblock >10 ha in size must have a minimum of 2% wildlife tree retention.
- (3) No timber harvesting, including single tree selection, is to occur within WTR for at least one rotation, except as noted in (4) below.

Legal Objectives – East Howe FDU Continued

- (4) Salvage of windthrown timber and harvesting of remaining standing stems is only permitted within WTR where catastrophic windthrow exceeds 50% of the dominant or co-dominant stems; or where forest health issues pose a significant threat to areas outside the WTR. Where salvage/harvesting is planned and authorized, replacement WTR of equivalent or better quality and quantity must be identified immediately to achieve the retention target.
- (5) WTR must include, if present, remnant old growth patches and live or dead veteran trees (excluding danger trees).
- (6) WTR must include representative larger trees for the stand and any moderate to high value wildlife trees (excluding danger trees).
- (7) BEC subzones will be determined by site plan information.

Table A. Wildlife Tree Retention by BEC Subzone in the East Howe Landscape Unit

BEC Subzone	Total Wildlife Tree Retention (%)	Wildlife Tree Retention (%)
CWH dm (Coastal Western Hemlock, dry maritime)		5
CWH vm (Coastal Western Hemlock, very wet maritime)		10
MH mm (Mountain Hemlock, moist maritime)		7

Legal Objectives - Gates FDU

Results or strategies for Objective 1

1. Maintain or recruit old growth forests in established old growth management areas (OGMAs), as shown on the attached Gates Landscape Unit map dated March 21, 2004 subject to timber harvesting and road construction in accordance with section 2, 3 and 4 below.
2. (1) Where sufficient suitable replacement forest is available in the variants listed below, timber harvesting or road construction (unrelated to ecosystem restoration activities) may be undertaken in OGMAs that are >10 ha in size for operational reasons up to a cumulative maximum of:
 - i) 15 ha in variant CWHds1,
 - ii) 15 ha in variant CWHms1,
 - iii) 15 ha in subzone ESSFmw, and
 - iv) 30 ha in variant MHmm2

provided that replacement OGMA of equivalent or better quality and quantity is identified in order of priority, 1) immediately adjacent to the existing OGMA, or 2) in the same variant and landscape unit as the existing OGMA.
- (2) The criteria in 2 (1) is to apply to individual OGMAs within the categories below and must ensure that OGMA ecological attributes and spatial distribution are maintained or improved:
 - i) OGMAs >10 ha to <50 ha in size where the proposed activity affects the OGMA by <5 ha,
 - ii) OGMAs ≥50 ha to <100 ha in size where the proposed activity affects the OGMA by <10ha,
 - iii) OGMAs ≥100 ha in size where the proposed activity affects the OGMA by <10%.
 - iv) Construction of ≤500m of road or a bridge within an OGMA where there is no other practicable option. As an alternative to finding replacement area, the licensee may permanently deactivate and rehabilitate a temporary road or bridge site within four years after construction.
- (3) Where OGMA boundary adjustments and replacement areas are required under section 2 (1) and (2) they must be documented, mapped and submitted to the satisfaction of the Delegated Decision Maker (DDM) at the end of each calendar year for his/her approval.
- (4) The provisions in section 2 (1) and (2) do not apply to the following OGMAs #9, 33, 35, 45, 57, 61.
3. Permissible Activities:
 - (1) Timber harvest may occur to prevent the spread of insect infestations or diseases that pose a significant threat to forested areas outside of OGMAs. Salvage within OGMAs will be done in a manner that retains as many old growth forest attributes as possible.

Legal Objectives – Gates FDU Continued

- (2) Timber harvesting for ecosystem restoration purposes within fire dominated areas in up to 25% of OGMA's in the IDFww subzone and 25% of OGMA's in the CWHds1. Proposed treatments must adhere to the Strategies and Table B below, and must be incorporated into an approved operational plan (FDP or equivalent) that specifically addresses ecosystem restoration goals. Ecosystem restoration activities must be documented, mapped and submitted to the satisfaction of the DDM at the end of each calendar year for his/her approval.
- (3) Construction of rock quarries and gravel pits under authority of forest tenure where the development will be located immediately adjacent to existing roads under tenure and will affect the OGMA by <0.5 ha.
- (4) Intrusions, other than those specified, that affect an OGMA by less than 0.5 hectare in total.
- (5) Where OGMA replacement forest is required as a result of activities under 3 (1) or (3), it must be of equivalent or better quality and quantity and be identified in order of priority, 1) immediately adjacent to the existing OGMA, or 2) in the same variant and landscape unit as the existing OGMA; such that OGMA ecological attributes and spatial distribution are maintained or improved. OGMA replacement areas must be documented, mapped and submitted to the satisfaction of the DDM at the end of each calendar year for his/her approval.

4. Permissible Activities for Safety Purposes:

- (1) Maintenance, deactivation, removal of danger trees, or brushing and clearing on existing roads under active tenure within the right-of-way for safety purposes.
- (2) Felling of guyline clearance, tailhold anchor trees, or danger trees (except high value wildlife trees) along cutblock boundaries or within the right of way on new road/bridge alignments to meet safety requirements.

Results or strategies for Objective 2

Maintain stand level structural diversity by retaining wildlife tree retention area (WTR). Cutblocks for which harvesting has been completed by each licensee by tenure will retain adequate amounts of wildlife tree retention area to ensure that over each 3 year period, commencing on the date the objectives are established, the target percentage as noted in Table A is achieved. In addition:

- (1) WTR must be well distributed across the BEC subzone and located within or immediately adjacent to a cutblock.
- (2) Each cutblock >10 ha in size must have a minimum of 2% wildlife tree retention, except in the ESSFmw and MHmm subzone.
- (3) No timber harvesting, including single tree selection, is to occur within WTR for at least one rotation, except as noted in (4) below.
- (4) Salvage of windthrown timber and harvesting of remaining standing stems is only permitted within WTR where catastrophic windthrow exceeds 50% of the dominant or co-dominant stems; or where forest health issues pose a significant threat to areas outside the WTR. Where salvage/harvesting is planned and authorized, replacement WTR of equivalent or better quality and quantity must be identified immediately to achieve the retention target.
- (5) WTR must include, if present, remnant old growth patches and live or dead veteran trees (excluding danger trees).
- (6) WTR must include representative larger trees for the stand and any moderate to high value wildlife trees (excluding danger trees).
- (7) Where differences exist between mapped and actual BEC subzones, subzones will be confirmed by site plan information.

Table A. Wildlife Tree Retention by BEC subzone in the Gates Landscape Unit.

BEC Subzone	% Wildlife Tree Retention
CWH ds (Coastal Western Hemlock, dry maritime)	6
CWH ms (Coastal Western Hemlock, moist maritime)	6
ESSF mw (Engelmann Spruce Subalpine Fir moist warm)	1
IDF ww (Interior Douglas Fir, wet warm)	8
MH mm (mountain Hemlock, moist maritime)	0

Legal Objectives – Gates FDU Continued

Ecosystem Restoration Strategies:

The purpose of restoration activities in OGMAs, within the limits provided, is to improve or maximize biodiversity values and/or ecosystem health values in areas where there is a high to extreme risk of frequent natural disturbance. Where ecosystem restoration is proposed and carried out, it must address the following strategies:

1. Where ecosystem restoration provisions within OGMAs are proposed in an FSP, the FSP must outline the highest risk/highest priority transition forests requiring treatment. Ecosystem restoration treatment will be permitted in up to 25% of the OGMA target area, within specified site series in the IDFW and CWHds1 variants (see Table B).
2. Restoration activities within OGMAs must address how old growth structure will be developed and/or maintained through management intervention over time. Accepted treatments include: partial cut timber harvesting, spacing, thinning and prescribed burning. Note: Open forest (<76 stems/ha in IDF, and <170 stems/ha in CWH) or grassland communities will not meet OGMA suitability criteria. Treatments to below these thresholds can occur outside OGMAs; they can and do contribute to natural ecosystem diversity but aren't considered a forested ecosystem for OGMA purposes.
3. Where other resource objectives have been set (e.g. Ungulate Winter Range, Spotted Owl SRMZ, Identified Wildlife – Wildlife Habitat Areas), ecosystem restoration will only be permitted where compatible with those objectives. In addition, restoration plans and treatments must be compatible with and incorporate the habitat requirements of other red and blue-listed species or regionally important species.
4. Restoration prescriptions will vary from site to site, but will maintain the oldest and/or largest trees for the site and high value wildlife trees (any high value wildlife trees that are determined to be danger trees should be left in no work zone areas). Partial harvest will be limited to removal of excess immature and understory trees or any larger trees in excess of the target stocking standard specified in Table B.
5. Partial-cut harvesting will be subject to current timber harvesting and Silviculture practices, except normal stocking standards and green-up height obligations will not apply (see Table B for modified stocking standards).
6. BEC subzones, variants and site series for purposes of Table B will be confirmed by site plan or on the ground information.
7. Achieving restoration targets will be a direct function of budget and staffing resources available to undertake treatment activities.
8. Once forest stands within OGMAs have received initial restoration treatment, they should become components of a long term cycle of spacing and/or prescribed burning and future partial-cut harvesting that will maximize biodiversity value and ecosystem health. All treatments subsequent to meeting modified stocking standards would be considered incremental, and would not be considered a licensee responsibility unless by mutual agreement. Special and non-governmental funds can potentially be accessed to finance these incremental treatments.
9. All roads and trails required for restoration treatment must be temporary, and rehabilitated promptly (i.e. made non-drivable) after completion of harvest operations (except roads required for permanent access beyond the OGMA).
10. In most cases a partial-cut harvest can meet target stocking initially, but unless further treatments are undertaken, stocking targets will be exceeded again after a short time. Subsequent (incremental) prescribed burns will normally be required to reduce numbers of new tree seedlings or rejuvenate the understory and recycle nutrients. If burning is prescribed it should normally follow a partial-cut treatment so that initial fuel loading is reduced. Partial-cut harvest slash volumes and distribution should be managed to facilitate subsequent low soil temperature, surface burns. Measures must be taken to ensure post burn survival of appropriate numbers of tree recruits.
11. Restoration targets set in Table B may be modified over time based on experience, long term monitoring and better scientific knowledge (Adaptive Management).

Legal Objectives – Gates FDU Continued**Table B. Ecosystem Restoration Targets for the Gates Landscape Unit.**

BEC Unit	Site Series	Target Stocking Standard (stems/ha)	Minimum – Maximum Stocking Standard (stems/ha)	Desired Structures Post Treatment*	Primary Leave Spp. (Secondary/Minor Leave Species)**	General Mgmt System Proposed
IDF ww	02, 03	- 200 of the oldest and largest stems. - up to 1/3 clustered - 2/3 well spaced.	76 – 250	WT, LT, CL, UV	02-Pl (/Fd) 03-Fd (Pl Py/)	Periodic partial- harvesting, prescribed burning, spacing and/or thinning to maintain open forest
IDFww	01, 04, 05	- 250 of the oldest and largest stems. - up to 1/3 clustered - 2/3 well spaced.	170 – 400	WT, LT, CL, UV	01-Fd (Pl Py / Cw) 04-Fd (Py / Cw) 05-CwFd (/Ss)	Periodic partial- harvesting, prescribed burning, spacing and/or thinning to maintain forest condition
CWHds1	01, 02, 03, 04, 05	- 250 of the oldest and largest stems. - up to 1/3 clustered - 2/3 well spaced.	170 – 400	WT, LT, CL, UV	01-Fd (/Cw Lw Pw) 02-Pl (Fd/) 03-Fd (Pl Py / Cw) 04-Fd (/Cw Lw Pw) 05-Fd (Se/Cw Pw)	Periodic partial- harvesting, prescribed burning, spacing and/or thinning to maintain forest condition

* WT = where present and safe, retain a minimum of 5 moderate or high value wildlife trees per hectare; and 5 dying trees >50 cm dbh per hectare (e.g. by no work zone).

LT = large trees for the site, including veteran trees.

CL = approximately 1/3 of leave trees should be in clusters, not just uniform spacing.

UV = the diversity of natural understory vegetation (e.g. shrubs) should be retained, herbicide treatment should not occur.

** leave tree species are taken from the Ministry of Forests Land Management Handbook Number 28.

Legal Objectives - Indian FDU

Results or strategies for Objective 1

1. Maintain or recruit old growth forest attributes in designated old growth management areas (OGMAs), as shown on the attached Indian Landscape Unit map dated August 6, 2002. Timber harvesting, including salvage, single tree selection, topping for cone harvesting, and commercial gathering of botanical forest products, will not be permitted within OGMAs except as specified in section 2 and 3 below.
2. The Delegated Decision Maker (DDM) may allow operations to occur within an OGMA for reasons such as but not limited to the following:
 - (1) To prevent the spread of insect infestations or diseases that pose a significant threat to forested areas outside of OGMAs. This will be done in a manner that retains as many old growth forest attributes as possible.
 - (2) Construction of roads and yarding corridors if no other practicable option exists.
3. Exemptions:
 - (1) Maintenance, deactivation, removal of danger trees, or brushing and clearing on existing roads under active tenure within the right-of-way for safety purposes.
 - (2) Felling of guyline clearance, tailhold anchor trees, or danger trees (except high value wildlife trees) along cutblock boundaries or within the right of way on new road/bridge alignments to meet safety requirements.
 - (3) OGMAs that are >10 ha in size may be modified for operational reasons up to a cumulative maximum of :
 - a) 15 ha in variant CWHvm1,
 - b) 45 ha in variant CWHvm2, and
 - c) 30 ha in MHmm1
 provided that replacement OGMA of equivalent or better quality and quantity is identified in order of priority, 1) immediately adjacent to the existing OGMA, or
 - 2) in the same variant and landscape unit as the existing OGMA; such that OGMA ecological attributes and spatial distribution are maintained or improved, in one of the following categories:
 - i) OGMAs >10 ha to <50 ha in size where the proposed development affects the OGMA by <5 ha,
 - ii) OGMAs ≥50 ha to <100 ha in size where the proposed development affects the OGMA by <10ha,
 - iii) OGMAs ≥100 ha in size where the proposed development affects the OGMA by <10%.
 - iv) Construction of ≤500m of road or a bridge within an OGMA where there is no other practicable option. As an alternative to finding replacement area, the licensee may permanently deactivate or rehabilitate a temporary road or bridge site within four years after construction.
 - v) Construction of rock quarries and gravel pits under authority of forest tenure where the development will be located immediately adjacent to existing roads under tenure and will affect the OGMA by <0.5 ha.
 - (4) Intrusions, other than those specified in (3) above, that affect an OGMA by less than 0.5 hectare in total.
4. Exemption 3 (3) above does not apply to the following OGMAs: #34, 49

Results or strategies for Objective 2

Maintain stand level structural diversity by retaining wildlife tree retention area (WTR). Cutblocks for which harvesting has been completed by each licensee by tenure will maintain adequate amounts of wildlife tree retention area to ensure that over each 2 year period, commencing on the date the objectives are established, the target percentage as noted in Table A is achieved. In addition:

- (1) WTR must be well distributed across the BEC subzone and located within or immediately adjacent to a cutblock.
- (2) Each cutblock >10 ha in size must have a minimum of 2% wildlife tree retention.
- (3) No timber harvesting, including single tree selection, is to occur within WTR for at least one rotation, except as noted in (4) below.

Legal Objectives - Indian FDU Continued

- (4) Salvage of windthrown timber and harvesting of remaining standing stems is only permitted within WTR where catastrophic windthrow exceeds 50% of the dominant or co-dominant stems; or where forest health issues pose a significant threat to areas outside the WTR. Where salvage/harvesting is planned and authorized, replacement WTR of equivalent or better quality and quantity must be identified immediately to achieve the retention target.
- (5) WTR must include, if present, remnant old growth patches and live or dead veteran trees (excluding danger trees).
- (6) WTR must include representative larger trees for the stand and any moderate to high value wildlife trees (excluding danger trees).
- (7) BEC subzones will be determined by site plan information.

Table A. Wildlife Tree Retention by BEC Subzone in the Indian Landscape Unit.

BEC Subzone	Wildlife Tree Retention %
CWH vm (Coastal Western Hemlock, very wet maritime)	11
MH mm (Mountain Hemlock, moist maritime)	5

Legal Objectives - Lower Squamish FDU

Results or strategies for Objective 1

1. Maintain or recruit old growth forest attributes in designated old growth management areas (OGMAs), as shown on the attached Lower Squamish Landscape Unit map dated August 6, 2002. Timber harvesting, including salvage, single tree selection, topping for cone harvesting, and commercial gathering of botanical forest products, will not be permitted within OGMAs except as specified in section 2 and 3 below.
2. The Delegated Decision Maker (DDM) may allow operations to occur within an OGMA for reasons such as but not limited to the following:
 - (1) To prevent the spread of insect infestations or diseases that pose a significant threat to forested areas outside of OGMAs. This will be done in a manner that retains as many old growth forest attributes as possible.
 - (2) Construction of roads and yarding corridors if no other practicable option exists.
3. Exemptions:
 - (1) Maintenance, deactivation, removal of danger trees, or brushing and clearing on existing roads under active tenure within the right-of-way for safety purposes.
 - (2) Felling of guyline clearance, tailhold anchor trees, or danger trees (except high value wildlife trees) along cutblock boundaries or within the right of way on new road/bridge alignments to meet safety requirements.
 - (3) OGMAs that are >10 ha in size may be modified for operational reasons up to a cumulative maximum of :
 - a) 10 ha in variant CWHdm,
 - b) 5 ha in variant CWHms1,
 - c) 10 ha in variant CWHvm1,
 - d) 20 ha in variant CWHvm2, and
 - e) 15 ha in MHmm1
 provided that replacement OGMA of equivalent or better quality and quantity is identified in order of priority, 1) immediately adjacent to the existing OGMA, or 2) in the same variant and landscape unit as the existing OGMA; such that OGMA ecological attributes and spatial distribution are maintained or improved, in one of the following categories:
 - i) OGMAs >10 ha to <50 ha in size where the proposed development affects the OGMA by <5 ha,
 - ii) OGMAs ≥50 ha to <100 ha in size where the proposed development affects the OGMA by <10ha,
 - iii) OGMAs ≥100 ha in size where the proposed development affects the OGMA by <10%.
 - iv) Construction of ≤500m of road or a bridge within an OGMA where there is no other practicable option. As an alternative to finding replacement area, the licensee may permanently deactivate or rehabilitate a temporary road or bridge site within four years after construction.
 - v) Construction of rock quarries and gravel pits under authority of forest tenure where the development will be located immediately adjacent to existing roads under tenure and will affect the OGMA by <0.5 ha.

Legal Objectives – Lower Squamish FDU Continued

(4) Intrusions, other than those specified in (3) above, that affect an OGMA by less than 0.5 hectare in total.

4. Exemption 3(3) above does not apply to the following OGMAs: #52, 60.

Results or strategies for Objective 2

Maintain stand level structural diversity by retaining wildlife tree retention area (WTR). Cutblocks for which harvesting has been completed by each licensee by tenure will maintain adequate amounts of wildlife tree retention area to ensure that over each 2 year period, commencing on the date the objectives are established, the target percentage as noted in Table A is achieved. In addition:

- (1) WTR must be well distributed across the BEC subzone and located within or immediately adjacent to a cutblock.
- (2) Each cutblock >10 ha in size must have a minimum of 2% wildlife tree retention, except in the MHmm subzone.
- (3) No timber harvesting, including single tree selection, is to occur within WTR for at least one rotation, except as noted in (4) below.
- (4) Salvage of windthrown timber and harvesting of remaining standing stems is only permitted within WTR where catastrophic windthrow exceeds 50% of the dominant or co-dominant stems; or where forest health issues pose a significant threat to areas outside the WTR. Where salvage/harvesting is planned and authorized, replacement WTR of equivalent or better quality and quantity must be identified immediately to achieve the retention target.
- (5) WTR must include, if present, remnant old growth patches and live or dead veteran trees (excluding danger trees).
- (6) WTR must include representative larger trees for the stand and any moderate to high value wildlife trees (excluding danger trees).
- (7) BEC subzones will be determined by site plan information.

Table A. Wildlife Tree Retention by BEC Subzone in the Lower Squamish Landscape Unit

BEC Subzone	Wildlife Tree Retention %
CWH dm (Coastal Western Hemlock, dry maritime)	8
CWH ds (Coastal Western Hemlock, dry subarctic)	6
CWH ms (Coastal Western Hemlock, moist subarctic)	8
CWH vm (Coastal Western Hemlock, very wet maritime)	6
MH mm (Mountain Hemlock, moist maritime)	0

Legal Objectives - Rogers FDU**Results or strategies for Objective 1**

1. Maintain or recruit old growth forests in established old growth management areas (OGMAs), as shown on the attached Rogers Landscape Unit map dated March 10, 2004 subject to timber harvesting and road construction in accordance with section 2, 3 and 4 below.
2. (1) Where sufficient suitable replacement forest is available in the variants listed below, timber harvesting or road construction may be undertaken in OGMAs that are >10 ha in size for operational reasons up to a cumulative maximum of:
 - i) 30 ha in variant CWHds1,
 - ii) 60 ha in variant CWHms1,
 - iii) 10 ha in variant IDFww, and
 - iv) 60 ha in variant MHmm2,
 provided that replacement OGMA of equivalent or better quality and quantity is identified in order of priority, 1) immediately adjacent to the existing OGMA, or 2) in the same variant and landscape unit as the existing OGMA.
- (2) The criteria in 2 (1) is to apply to individual OGMAs within the categories below and must ensure that OGMA ecological attributes and spatial distribution are maintained or improved:
 - i) OGMAs >10 ha to <50 ha in size where the proposed activity affects the OGMA by <5ha,
 - ii) OGMAs ≥50 ha to <100 ha in size where the proposed activity affects the OGMA by <10ha,
 - iii) OGMAs ≥100 ha in size where the proposed activity affects the OGMA by <10%.
 - iv) Construction of ≤500m of road or a bridge within an OGMA where there is no other practicable option. As an alternative to finding replacement area, the licensee may permanently deactivate and rehabilitate a temporary road or bridge site within four years after construction.

Legal Objectives – Rogers FDU Continued

- (3) Where OGMA boundary adjustments and replacement areas are required under section 2 (1) and (2) they must be documented, mapped and submitted to the satisfaction of the Delegated Decision Maker (DDM) at the end of each calendar year for his/her approval.
- (4) The provisions in section 2 (1) and (2) do not apply to the following OGMAs #2, 3, 4, 7, 48, 54, 55, 78, 87, 89, 92, 94, 118, 143, 172, 186, 196.

3. Permissible Activities:

- (1) Timber harvest may occur to prevent the spread of insect infestations or diseases that pose a significant threat to forested areas outside of OGMAs. Salvage within OGMAs will be done in a manner that retains as many old growth forest attributes as possible.
- (2) Construction of rock quarries and gravel pits under authority of forest tenure where the development will be located immediately adjacent to existing roads under tenure and will affect the OGMA by <0.5 ha.
- (3) Intrusions, other than those specified, that affect an OGMA by less than 0.5 hectare in total.
- (4) Where OGMA replacement forest is required as a result of activities under 3 (1) or (2), it must be of equivalent or better quality and quantity and be identified in order of priority, 1) immediately adjacent to the existing OGMA, or 2) in the same variant and landscape unit as the existing OGMA; such that OGMA ecological attributes and spatial distribution are maintained or improved. OGMA replacement areas must be documented, mapped and submitted to the satisfaction of the DDM at the end of each calendar year for his/her approval.

4. Permissible Activities for Safety Purposes:

- (1) Maintenance, deactivation, removal of danger trees, or brushing and clearing on existing roads under active tenure within the right-of-way for safety purposes.
- (2) Felling of guyline clearance, tailhold anchor trees, or danger trees (except high value wildlife trees) along cutblock boundaries or within the right of way on new road/bridge alignments to meet safety requirements.

Results or strategies for Objective 2

Maintain stand level structural diversity by retaining wildlife tree retention area (WTR). Cutblocks for which harvesting has been completed by each licensee by tenure will retain adequate amounts of wildlife tree retention area to ensure that over each 3 year period, commencing on the date the objectives are established, the target percentage as noted in Table A is achieved. In addition:

- (1) WTR must be well distributed across the BEC subzone and located within or immediately adjacent to a cutblock.
- (2) Each cutblock >10 ha in size must have a minimum of 2% wildlife tree retention.
- (3) No timber harvesting, including single tree selection, is to occur within WTR for at least one rotation, except as noted in (4) below.
- (4) Salvage of windthrown timber and harvesting of remaining standing stems is only permitted within WTR where catastrophic windthrow exceeds 50% of the dominant or co-dominant stems; or where forest health issues pose a significant threat to areas outside the WTR. Where salvage/harvesting is planned and authorized, replacement WTR of equivalent or better quality and quantity must be identified immediately to achieve the retention target.
- (5) WTR must include, if present, remnant old growth patches and live or dead veteran trees (excluding danger trees).
- (6) WTR must include representative larger trees for the stand and any moderate to high value wildlife trees (excluding danger trees).
- (7) Where differences exist between mapped and actual BEC subzones, subzones will be confirmed by site plan information.

Table A. Wildlife Tree Retention by BEC subzone in the Rogers Landscape Unit.

BEC Subzone	Wildlife Tree Retention %
CWH ds (Coastal Western Hemlock, dry maritime)	9
CWH ms (Coastal Western Hemlock, moist maritime)	6
IDF ww (Interior Douglas Fir, wet warm subzone)	5
MH mm (Mountain Hemlock, moist maritime)	2

Legal Objectives - Billygoat FDU

Results or strategies for Objective 1

1. Maintain or recruit old growth forests in established old growth management areas (OGMAs), as shown on the attached Billygoat Landscape Unit map dated July 30, 2004 subject to timber harvesting and road construction in accordance with section 2, 3 and 4 below.
2. (1) Where sufficient suitable replacement forest is available in the variants listed below, timber harvesting or road construction may be undertaken in OGMAs that are >10 ha in size for operational reasons up to a cumulative maximum of:
 - i) 10 ha in variant CWHds1,
 - ii) 20 ha in variant CWHms1,
 - iii) 10 ha in variant IDFww, and
 - iv) 15 ha in variant MHmm2,
 provided that replacement OGMA of equivalent or better quality and quantity is identified in order of priority, 1) immediately adjacent to the existing OGMA, or 2) in the same variant and landscape unit as the existing OGMA.
- (2) The criteria in 2 (1) is to apply to individual OGMAs within the categories below and must ensure that OGMA ecological attributes and spatial distribution are maintained or improved:
 - i) OGMAs >10 ha to <50 ha in size where the proposed activity affects the OGMA by <5ha,
 - ii) OGMAs ≥50 ha to <100 ha in size where the proposed activity affects the OGMA by <10ha,
 - iii) OGMAs ≥100 ha in size where the proposed activity affects the OGMA by <10%.
 - iv) Construction of ≤500m of road or a bridge within an OGMA where there is no other practicable option. As an alternative to finding replacement area, the licensee may permanently deactivate and rehabilitate a temporary road or bridge site within four years after construction.
- (3) Where OGMA boundary adjustments and replacement areas are required under section 2 (1) and (2) they must be documented, mapped and submitted to the satisfaction of the Delegated Decision Maker (DDM) at the end of each calendar year for his/her approval.
- (4) The provisions in section 2 (1) and (2) do not apply to the following OGMAs #2, 7, 19, 28, 29, 58, 99, 100.
3. Permissible Activities:
 - (1) Timber harvest may occur to prevent the spread of insect infestations or diseases that pose a significant threat to forested areas outside of OGMAs. Salvage within OGMAs will be done in a manner that retains as many old growth forest attributes as possible.
 - (2) Construction of rock quarries and gravel pits under authority of forest tenure where the development will be located immediately adjacent to existing roads under tenure and will affect the OGMA by <0.5 ha.
 - (3) Intrusions, other than those specified, that affect an OGMA by less than 0.5 hectare in total.
 - (4) Where OGMA replacement forest is required as a result of activities under 3 (1) or (2), it must be of equivalent or better quality and quantity and be identified in order of priority, 1) immediately adjacent to the existing OGMA, or 2) in the same variant and landscape unit as the existing OGMA; such that OGMA ecological attributes and spatial distribution are maintained or improved. OGMA replacement areas must be documented, mapped and submitted to the satisfaction of the DDM at the end of each calendar year for his/her approval.
4. Permissible Activities for Safety Purposes:
 - (1) Maintenance, deactivation, removal of danger trees, or brushing and clearing on existing roads under active tenure within the right-of-way for safety purposes.
 - (2) Felling of guyline clearance, tailhold anchor trees, or danger trees (except high value wildlife trees) along cutblock boundaries or within the right of way on new road/bridge alignments to meet safety requirements.

Legal Objectives – Billygoat FDU Continued

Results or strategies for Objective 2

Maintain stand level structural diversity by retaining wildlife tree retention area (WTR). Cutblocks for which harvesting has been completed by each licensee by tenure will retain adequate amounts of wildlife tree retention area to ensure that over each 3 year period, commencing on the date the objectives are established, the target percentage as noted in Table A is achieved. In addition:

- (1) WTR must be well distributed across the BEC subzone and located within or immediately adjacent to a cutblock.
- (2) Each cutblock >10 ha in size must have a minimum of 2% wildlife tree retention, except in the MHmm subzone.
- (3) No timber harvesting, including single tree selection, is to occur within WTR for at least one rotation, except as noted in (4) below.
- (4) Salvage of windthrown timber and harvesting of remaining standing stems is only permitted within WTR where catastrophic windthrow exceeds 50% of the dominant or co-dominant stems; or where forest health issues pose a significant threat to areas outside the WTR. Where salvage/harvesting is planned and authorized, replacement WTR of equivalent or better quality and quantity must be identified immediately to achieve the retention target.
- (5) WTR must include, if present, remnant old growth patches and live or dead veteran trees (excluding danger trees).
- (6) WTR must include representative larger trees for the stand and any moderate to high value wildlife trees (excluding danger trees).
- (7) Where differences exist between mapped and actual BEC subzones, subzones will be confirmed by site plan information.

Table A. Wildlife Tree Retention by BEC subzone in the Billygoat Landscape Unit.

BEC Subzone	Wildlife Tree Retention %
CWH ds (Coastal Western Hemlock, dry subarctic)	7
CWH ms (Coastal Western Hemlock, moist subarctic)	2
IDF ww (Interior Douglas Fir, wet warm subzone)	12
MH mm (Mountain Hemlock, moist maritime)	0

Legal Objectives - Meager FDU

Results or strategies for Objective 1

1. Maintain or recruit old growth forests in established old growth management areas (OGMAs), as shown on the attached Meager Landscape Unit map dated July 30, 2004 subject to timber harvesting and road construction in accordance with section 2, 3 and 4 below.

2. (1) Where sufficient suitable replacement forest is available in the variants listed below, timber harvesting or road construction may be undertaken in OGMAs that are >10 ha in size for operational reasons up to a cumulative maximum of:

- i) 5 ha in variant CWHds1,
- ii) 30 ha in variant CWHms1, and
- iii) 40 ha in variant MHmm2, provided that replacement OGMA of equivalent or better quality and quantity is identified in order of priority, 1) immediately adjacent to the existing OGMA, or 2) in the same variant and landscape unit as the existing OGMA.

(2) The criteria in 2 (1) is to apply to individual OGMAs within the categories below and must ensure that OGMA ecological attributes and spatial distribution are maintained or improved:

- i) OGMAs >10 ha to <50 ha in size where the proposed activity affects the OGMA by <5ha,
- ii) OGMAs ≥50 ha to <100 ha in size where the proposed activity affects the OGMA by <10ha,
- iii) OGMAs ≥100 ha in size where the proposed activity affects the OGMA by <10%.
- iv) Construction of ≤500m of road or a bridge within an OGMA where there is no other practicable option. As an alternative to finding replacement area, the licensee may permanently deactivate and rehabilitate a temporary road or bridge site within four years after construction.

Legal Objectives – Meager FDU Continued

(3) Where OGMA boundary adjustments and replacement areas are required under section 2 (1) and (2) they must be documented, mapped and submitted to the satisfaction of the Delegated Decision Maker (DDM) at the end of each calendar year for his/her approval.

(4) The provisions in section 2 (1) and (2) do not apply to the following OGMAs #2, 51, 103,105, 106, 107.

3. Permissible Activities:

- (1) Timber harvest may occur to prevent the spread of insect infestations or diseases that pose a significant threat to forested areas outside of OGMAs. Salvage within OGMAs will be done in a manner that retains as many old growth forest attributes as possible.
- (2) Construction of rock quarries and gravel pits under authority of forest tenure where the development will be located immediately adjacent to existing roads under tenure and will affect the OGMA by <0.5 ha.
- (3) Intrusions, other than those specified, that affect an OGMA by less than 0.5 hectare in total.
- (4) Where OGMA replacement forest is required as a result of activities under 3 (1) or (2), it must be of equivalent or better quality and quantity and be identified in order of priority, 1) immediately adjacent to the existing OGMA, or 2) in the same variant and landscape unit as the existing OGMA; such that OGMA ecological attributes and spatial distribution are maintained or improved. OGMA replacement areas must be documented, mapped and submitted to the satisfaction of the DDM at the end of each calendar year for his/her approval.

4. Permissible Activities for Safety Purposes:

- (1) Maintenance, deactivation, removal of danger trees, or brushing and clearing on existing roads under active tenure within the right-of-way for safety purposes.
- (2) Felling of guyline clearance, tailhold anchor trees, or danger trees (except high value wildlife trees) along cutblock boundaries or within the right of way on new road/bridge alignments to meet safety requirements.

Results or strategies for Objective 2

Maintain stand level structural diversity by retaining wildlife tree retention area (WTR). Cutblocks for which harvesting has been completed by each licensee by tenure will retain adequate amounts of wildlife tree retention area to ensure that over each 3 year period, commencing on the date the objectives are established, the target percentage as noted in Table A is achieved. In addition:

- (1) WTR must be well distributed across the BEC subzone and located within or immediately adjacent to a cutblock.
- (2) Each cutblock >10 ha in size must have a minimum of 2% wildlife tree retention, except in the MHmm subzone.
- (3) No timber harvesting, including single tree selection, is to occur within WTR for at least one rotation, except as noted in (4) below.
- (4) Salvage of windthrown timber and harvesting of remaining standing stems is only permitted within WTR where catastrophic windthrow exceeds 50% of the dominant or co-dominant stems; or where forest health issues pose a significant threat to areas outside the WTR. Where salvage/harvesting is planned and authorized, replacement WTR of equivalent or better quality and quantity must be identified immediately to achieve the retention target.
- (5) WTR must include, if present, remnant old growth patches and live or dead veteran trees (excluding danger trees).
- (6) WTR must include representative larger trees for the stand and any moderate to high value wildlife trees (excluding danger trees).
- (7) Where differences exist between mapped and actual BEC subzones, subzones will be confirmed by site plan information.

Table A. Wildlife Tree Retention by BEC subzone in the Meager Landscape Unit.

BEC Subzone	Wildlife Tree Retention %
CWH ds (Coastal Western Hemlock, dry subaritime)	9
CWH ms (Coastal Western Hemlock, moist subaritime)	7
MH mm (Mountain Hemlock, moist maritime)	0

Legal Objectives - Railroad FDU

Results or strategies for Objective 1

1. Maintain or recruit old growth forests in established old growth management areas (OGMAs), as shown on the attached Railroad Landscape Unit map dated July 30, 2004 subject to timber harvesting and road construction in accordance with section 2, 3 and 4 below.
2. (1) Where sufficient suitable replacement forest is available in the variants listed below, timber harvesting or road construction may be undertaken in OGMAs that are >10 ha in size for operational reasons up to a cumulative maximum of:
 - i) 20 ha in variant CWHds1,
 - ii) 25 ha in variant CWHms1,
 - iii) 15 ha in variant ESSFmw,
 - iv) 15 ha in variant IDFww, and
 - v) 10 ha in variant MHmm2,
 provided that replacement OGMA of equivalent or better quality and quantity is identified in order of priority, 1) immediately adjacent to the existing OGMA, or 2) in the same variant and landscape unit as the existing OGMA.
- (2) The criteria in 2 (1) is to apply to individual OGMAs within the categories below and must ensure that OGMA ecological attributes and spatial distribution are maintained or improved:
 - i) OGMAs >10 ha to <50 ha in size where the proposed activity affects the OGMA by <5 ha,
 - ii) OGMAs ≥50 ha to <100 ha in size where the proposed activity affects the OGMA by <10ha,
 - iii) OGMAs ≥100 ha in size where the proposed activity affects the OGMA by <10%.
 - iv) Construction of ≤500m of road or a bridge within an OGMA where there is no other practicable option. As an alternative to finding replacement area, the licensee may permanently deactivate and rehabilitate a temporary road or bridge site within four years after construction.
- (3) Where OGMA boundary adjustments and replacement areas are required under section 2 (1) and (2) they must be documented, mapped and submitted to the satisfaction of the Delegated Decision Maker (DDM) at the end of each calendar year for his/her approval.
- (4) The provisions in section 2 (1) and (2) do not apply to the following OGMAs #2, 3, 4, 8, 14, 28, 37, 41, 45, 46, 48, 64, 76.
3. Permissible Activities:
 - (1) Timber harvest may occur to prevent the spread of insect infestations or diseases that pose a significant threat to forested areas outside of OGMAs. Salvage within OGMAs will be done in a manner that retains as many old growth forest attributes as possible.
 - (2) Construction of rock quarries and gravel pits under authority of forest tenure where the development will be located immediately adjacent to existing roads under tenure and will affect the OGMA by <0.5 ha.
 - (3) Intrusions, other than those specified, that affect an OGMA by less than 0.5 hectare in total.
 - (4) Where OGMA replacement forest is required as a result of activities under 3 (1) or (2), it must be of equivalent or better quality and quantity and be identified in order of priority, 1) immediately adjacent to the existing OGMA, or 2) in the same variant and landscape unit as the existing OGMA; such that OGMA ecological attributes and spatial distribution are maintained or improved. OGMA replacement areas must be documented, mapped and submitted to the satisfaction of the DDM at the end of each calendar year for his/her approval.
4. Permissible Activities for Safety Purposes:
 - (1) Maintenance, deactivation, removal of danger trees, or brushing and clearing on existing roads under active tenure within the right-of-way for safety purposes.
 - (2) Felling of guyline clearance, tailhold anchor trees, or danger trees (except high value wildlife trees) along cutblock boundaries or within the right of way on new road/bridge alignments to meet safety requirements.

Legal Objectives – Railroad FDU Continued**Results or strategies for Objective 2**

Maintain stand level structural diversity by retaining wildlife tree retention area (WTR). Cutblocks for which harvesting has been completed by each licensee by tenure will retain adequate amounts of wildlife tree retention area to ensure that over each 3 year period, commencing on the date the objectives are established, the target percentage as noted in Table A is achieved. In addition:

- (1) WTR must be well distributed across the BEC subzone and located within or immediately adjacent to a cutblock.
- (2) Each cutblock >10 ha in size must have a minimum of 2% wildlife tree retention, except in the ESSF mw and MH mm subzone.
- (3) No timber harvesting, including single tree selection, is to occur within WTR for at least one rotation, except as noted in (4) below.
- (4) Salvage of windthrown timber and harvesting of remaining standing stems is only permitted within WTR where catastrophic windthrow exceeds 50% of the dominant or co-dominant stems; or where forest health issues pose a significant threat to areas outside the WTR. Where salvage/harvesting is planned and authorized, replacement WTR of equivalent or better quality and quantity must be identified immediately to achieve the retention target.
- (5) WTR must include, if present, remnant old growth patches and live or dead veteran trees (excluding danger trees).
- (6) WTR must include representative larger trees for the stand and any moderate to high value wildlife trees (excluding danger trees).
- (7) Where differences exist between mapped and actual BEC subzones, subzones will be confirmed by site plan information.

Table A. Wildlife Tree Retention by BEC subzone in the Railroad Landscape Unit.

BEC Subzone	Wildlife Tree Retention %
CWH ds (Coastal Western Hemlock, dry subarctic)	8
CWH ms (Coastal Western Hemlock, moist subarctic)	6
ESSF mw (Engelmann Spruce Subalpine Fir moist warm subzone)	0
IDF ww (Interior Douglas Fir, wet warm subzone)	8
MH mm (Mountain Hemlock, moist maritime)	0

Legal Objectives - Ryan FDU**Results or strategies for Objective 1**

1. Maintain or recruit old growth forests in established old growth management areas (OGMAs), as shown on the attached Ryan Landscape Unit map dated July 30, 2004 subject to timber harvesting and road construction in accordance with section 2, 3 and 4 below.
2. (1) Where sufficient suitable replacement forest is available in the variants listed below, timber harvesting or road construction may be undertaken in OGMAs that are >10 ha in size for operational reasons up to a cumulative maximum of:
 - i) 5 ha in variant CWHds1,
 - ii) 25 ha in variant CWHms1, and
 - iii) 40 ha in variant MHmm2,
 provided that replacement OGMA of equivalent or better quality and quantity is identified in order of priority, 1) immediately adjacent to the existing OGMA, or 2) in the same variant and landscape unit as the existing OGMA.
- (2) The criteria in 2 (1) is to apply to individual OGMAs within the categories below and must ensure that OGMA ecological attributes and spatial distribution are maintained or improved:
 - i) OGMAs >10 ha to <50 ha in size where the proposed activity affects the OGMA by <5 ha,
 - ii) OGMAs ≥50 ha to <100 ha in size where the proposed activity affects the OGMA by <10ha,
 - iii) OGMAs ≥100 ha in size where the proposed activity affects the OGMA by <10%.
 - iv) Construction of ≤500m of road or a bridge within an OGMA where there is no other practicable option. As an alternative to finding replacement area, the licensee may permanently deactivate and rehabilitate a temporary road or bridge site within four years after construction.

Legal Objectives – Ryan FDU Continued

(3) Where OGMA boundary adjustments and replacement areas are required under section 2 (1) and (2) they must be documented, mapped and submitted to the satisfaction of the Delegated Decision Maker (DDM) at the end of each calendar year for his/her approval.

(4) The provisions in section 2 (1) and (2) do not apply to the following OGMA's #12, 14, 53, 87,144, 154.

3. Permissible Activities:

- (1) Timber harvest may occur to prevent the spread of insect infestations or diseases that pose a significant threat to forested areas outside of OGMA's. Salvage within OGMA's will be done in a manner that retains as many old growth forest attributes as possible.
- (2) Construction of rock quarries and gravel pits under authority of forest tenure where the development will be located immediately adjacent to existing roads under tenure and will affect the OGMA by <0.5 ha.
- (3) Intrusions, other than those specified, that affect an OGMA by less than 0.5 hectare in total.
- (4) Where OGMA replacement forest is required as a result of activities under 3 (1) or (2), it must be of equivalent or better quality and quantity and be identified in order of priority, 1) immediately adjacent to the existing OGMA, or 2) in the same variant and landscape unit as the existing OGMA; such that OGMA ecological attributes and spatial distribution are maintained or improved. OGMA replacement areas must be documented, mapped and submitted to the satisfaction of the DDM at the end of each calendar year for his/her approval.

4. Permissible Activities for Safety Purposes:

- (1) Maintenance, deactivation, removal of danger trees, or brushing and clearing on existing roads under active tenure within the right-of-way for safety purposes.
- (2) Felling of guyline clearance, tailhold anchor trees, or danger trees (except high value wildlife trees) along cutblock boundaries or within the right of way on new road/bridge alignments to meet safety requirements.

Results or strategies for Objective 2

Maintain stand level structural diversity by retaining wildlife tree retention area (WTR). Cutblocks for which harvesting has been completed by each licensee by tenure will retain adequate amounts of wildlife tree retention area to ensure that over each 3 year period, commencing on the date the objectives are established, the target percentage as noted in Table A is achieved. In addition:

- (1) WTR must be well distributed across the BEC subzone and located within or immediately adjacent to a cutblock.
- (2) Each cutblock >10 ha in size must have a minimum of 2% wildlife tree retention, except in the MHmm subzone.
- (3) No timber harvesting, including single tree selection, is to occur within WTR for at least one rotation, except as noted in (4) below.
- (4) Salvage of windthrown timber and harvesting of remaining standing stems is only permitted within WTR where catastrophic windthrow exceeds 50% of the dominant or co-dominant stems; or where forest health issues pose a significant threat to areas outside the WTR. Where salvage/harvesting is planned and authorized, replacement WTR of equivalent or better quality and quantity must be identified immediately to achieve the retention target.
- (5) WTR must include, if present, remnant old growth patches and live or dead veteran trees (excluding danger trees).
- (6) WTR must include representative larger trees for the stand and any moderate to high value wildlife trees (excluding danger trees).
- (7) Where differences exist between mapped and actual BEC subzones, subzones will be confirmed by site plan information.

Table A. Wildlife Tree Retention by BEC subzone in the Ryan Landscape Unit.

BEC Subzone	Wildlife Tree retention %
CWH ds (Coastal Western Hemlock dry subarctic)	10
CWH ms (Coastal Western Hemlock, moist subarctic)	8
MH mm (Mountain Hemlock, moist maritime)	0

Legal Objectives - Soo FDU

Results or strategies for Objective 1

1. Maintain or recruit old growth forests in established old growth management areas (OGMAs), as shown on the attached Soo Landscape Unit map dated July 30, 2004 subject to timber harvesting and road construction in accordance with section 2, 3 and 4 below.
2. (1) Where sufficient suitable replacement forest is available in the variants listed below, timber harvesting or road construction may be undertaken in OGMAs that are >10 ha in size for operational reasons up to a cumulative maximum of:
 - i) 35 ha in variant CWHms1, and
 - ii) 35 ha in variant MHmm2,
 provided that replacement OGMA of equivalent or better quality and quantity is identified in order of priority, 1) immediately adjacent to the existing OGMA, or 2) in the same variant and landscape unit as the existing OGMA.
- (2) The criteria in 2 (1) is to apply to individual OGMAs within the categories below and must ensure that OGMA ecological attributes and spatial distribution are maintained or improved:
 - i) OGMAs >10 ha to <50 ha in size where the proposed activity affects the OGMA by <5 ha,
 - ii) OGMAs ≥50 ha to <100 ha in size where the proposed activity affects the OGMA by <10ha,
 - iii) OGMAs ≥100 ha in size where the proposed activity affects the OGMA by <10%.
 - iv) Construction of ≤500m of road or a bridge within an OGMA where there is no other practicable option. As an alternative to finding replacement area, the licensee may permanently deactivate and rehabilitate a temporary road or bridge site within four years after construction.
- (3) Where OGMA boundary adjustments and replacement areas are required under section 2 (1) and (2) they must be documented, mapped and submitted to the satisfaction of the Delegated Decision Maker (DDM) at the end of each calendar year for his/her approval.
- (4) The provisions in section 2 (1) and (2) do not apply to the following OGMAs #1, 7, 8, 11, 16, 18, 46, 104.

3. Permissible Activities:

- (1) Timber harvest may occur to prevent the spread of insect infestations or diseases that pose a significant threat to forested areas outside of OGMAs. Salvage within OGMAs will be done in a manner that retains as many old growth forest attributes as possible.
- (2) Construction of rock quarries and gravel pits under authority of forest tenure where the development will be located immediately adjacent to existing roads under tenure and will affect the OGMA by <0.5 ha.
- (3) Intrusions, other than those specified, that affect an OGMA by less than 0.5 hectare in total.
- (4) Where OGMA replacement forest is required as a result of activities under 3 (1) or (2), it must be of equivalent or better quality and quantity and be identified in order of priority, 1) immediately adjacent to the existing OGMA, or 2) in the same variant and landscape unit as the existing OGMA; such that OGMA ecological attributes and spatial distribution are maintained or improved. OGMA replacement areas must be documented, mapped and submitted to the satisfaction of the DDM at the end of each calendar year for his/her approval.

4. Permissible Activities for Safety Purposes:

- (1) Maintenance, deactivation, removal of danger trees, or brushing and clearing on existing roads under active tenure within the right-of-way for safety purposes.
- (2) Felling of guyline clearance, tailhold anchor trees, or danger trees (except high value wildlife trees) along cutblock boundaries or within the right of way on new road/bridge alignments to meet safety requirements.

Results or strategies for Objective 2

Maintain stand level structural diversity by retaining wildlife tree retention area (WTR). Cutblocks for which harvesting has been completed by each licensee by tenure will retain adequate amounts of wildlife tree retention area to ensure that over each 3 year period, commencing on the date the objectives are established, the target percentage as noted in Table A is achieved. In addition:

Legal Objectives – Soo FDU Continued

- (1) WTR must be well distributed across the BEC subzone and located within or immediately adjacent to a cutblock.
- (2) Each cutblock >10 ha in size must have a minimum of 2% wildlife tree retention.
- (3) No timber harvesting, including single tree selection, is to occur within WTR for at least one rotation, except as noted in (4) below.
- (4) Salvage of windthrown timber and harvesting of remaining standing stems is only permitted within WTR where catastrophic windthrow exceeds 50% of the dominant or co-dominant stems; or where forest health issues pose a significant threat to areas outside the WTR. Where salvage/harvesting is planned and authorized, replacement WTR of equivalent or better quality and quantity must be identified immediately to achieve the retention target.
- (5) WTR must include, if present, remnant old growth patches and live or dead veteran trees (excluding danger trees).
- (6) WTR must include representative larger trees for the stand and any moderate to high value wildlife trees (excluding danger trees).
- (7) Where differences exist between mapped and actual BEC subzones, subzones will be confirmed by site plan information.

Table A. Wildlife Tree Retention by BEC subzone in the Soo Landscape Unit.

BEC Subzone	Wildlife Tree Retention %
CWH ds (Coastal Western Hemlock, dry subarctic)	8
CWH ms (Coastal Western Hemlock, moist subarctic)	7
MH mm (Mountain Hemlock, moist maritime)	3

Legal Objectives - Upper Lillooet FDU**Results or strategies for Objective 1**

1. Maintain or recruit old growth forests in established old growth management areas (OGMAs), as shown on the attached Upper Lillooet Landscape Unit map dated July 30, 2004 subject to timber harvesting and road construction in accordance with section 2, 3 and 4 below.
2. (1) Where sufficient suitable replacement forest is available in the variants listed below, timber harvesting or road construction may be undertaken in OGMAs that are >10 ha in size for operational reasons up to a cumulative maximum of:
 - i) 15 ha in variant CWHms1, and
 - ii) 15 ha in variant MHmm2,
 provided that replacement OGMA of equivalent or better quality and quantity is identified in order of priority, 1) immediately adjacent to the existing OGMA, or 2) in the same variant and landscape unit as the existing OGMA.
- (2) The criteria in 2 (1) is to apply to individual OGMAs within the categories below and must ensure that OGMA ecological attributes and spatial distribution are maintained or improved:
 - i) OGMAs >10 ha to <50 ha in size where the proposed activity affects the OGMA by <5 ha,
 - ii) OGMAs ≥50 ha to <100 ha in size where the proposed activity affects the OGMA by <10ha,
 - iii) OGMAs ≥100 ha in size where the proposed activity affects the OGMA by <10%.
 - iv) Construction of ≤500m of road or a bridge within an OGMA where there is no other practicable option. As an alternative to finding replacement area, the licensee may permanently deactivate and rehabilitate a temporary road or bridge site within four years after construction.
- (3) Where OGMA boundary adjustments and replacement areas are required under section 2 (1) and (2) they must be documented, mapped and submitted to the satisfaction of the Delegated Decision Maker (DDM) at the end of each calendar year for his/her approval.
- (4) The provisions in section 2 (1) and (2) do not apply to the following OGMAs #13, 28, 63, 65.
3. Permissible Activities:
 - (1) Timber harvest may occur to prevent the spread of insect infestations or diseases that pose a significant threat to forested areas outside of OGMAs. Salvage within OGMAs will be done in a manner that retains as many old growth forest attributes as possible.

Legal Objectives – Upper Lillooet FDU Continued

- (2) Construction of rock quarries and gravel pits under authority of forest tenure where the development will be located immediately adjacent to existing roads under tenure and will affect the OGMA by <0.5 ha.
 - (3) Intrusions, other than those specified, that affect an OGMA by less than 0.5 hectare in total.
 - (4) Where OGMA replacement forest is required as a result of activities under 3 (1) or (2), it must be of equivalent or better quality and quantity and be identified in order of priority, 1) immediately adjacent to the existing OGMA, or 2) in the same variant and landscape unit as the existing OGMA; such that OGMA ecological attributes and spatial distribution are maintained or improved. OGMA replacement areas must be documented, mapped and submitted to the satisfaction of the DDM at the end of each calendar year for his/her approval.
4. Permissible Activities for Safety Purposes:
- (1) Maintenance, deactivation, removal of danger trees, or brushing and clearing on existing roads under active tenure within the right-of-way for safety purposes.
 - (2) Felling of guyline clearance, tailhold anchor trees, or danger trees (except high value wildlife trees) along cutblock boundaries or within the right of way on new road/bridge alignments to meet safety requirements.

Results or strategies for Objective 2

1. Maintain stand level structural diversity by retaining wildlife tree retention area (WTR). Cutblocks for which harvesting has been completed by each licensee by tenure will retain adequate amounts of wildlife tree retention area to ensure that over each 3 year period, commencing on the date the objectives are established, the target percentage as noted in Table A is achieved. In addition:
 - (1) WTR must be well distributed across the BEC subzone and located within or immediately adjacent to a cutblock.
 - (2) Each cutblock >10 ha in size must have a minimum of 2% wildlife tree retention, except in the MHmm subzone.
 - (3) No timber harvesting, including single tree selection, is to occur within WTR for at least one rotation, except as noted in (4) below.
 - (4) Salvage of windthrown timber and harvesting of remaining standing stems is only permitted within WTR where catastrophic windthrow exceeds 50% of the dominant or co-dominant stems; or where forest health issues pose a significant threat to areas outside the WTR. Where salvage/harvesting is planned and authorized, replacement WTR of equivalent or better quality and quantity must be identified immediately to achieve the retention target.
 - (5) WTR must include, if present, remnant old growth patches and live or dead veteran trees (excluding danger trees).
 - (6) WTR must include representative larger trees for the stand and any moderate to high value wildlife trees (excluding danger trees).
 - (7) Where differences exist between mapped and actual BEC subzones, subzones will be confirmed by site plan information.

Table A. Wildlife Tree Retention by BEC subzone in the Upper Lillooet Landscape Unit.

BEC Subzone	Wildlife Tree Retention %
CWH ds (Coastal Western Hemlock, dry subarctic)	12
CWH ms (Coastal Western Hemlock, moist subarctic)	6
MH mm (Mountain Hemlock, moist maritime)	0

Legal Objectives – Mamquam FDU**Results or Strategies for Objective**

- 1) Retain trees in the OGMA identified on the attached Mamquam map dated October 30, 2014, except to fell trees where necessary for any of the following:
 - (a) To prevent insect infestations or diseases posing a significant threat to forest health;
 - (b) To remove an identified safety hazard within road right-of-ways, recreation sites, or trails;
- 2) Retain trees in the OGMA identified on the attached Mamquam map, except to fell an area of trees where necessary for any of the following:
 - (a) To enable a safe falling boundary on a block immediately adjacent to the OGMA;
 - (b) To enable road or bridge construction for access to resource values beyond or adjacent to the OGMA, and no other practicable option for road or bridge location exists;
 - (c) To improve guyline clearance, tailholds, or tiebacks for guylines;

(d) To improve wind firmness along block boundaries.

3) The area of trees felled in an OGMA as provided in Part 2 (2) will not exceed the lesser of:

(a) Two hectares, or

(b) Five percent of the OGMA area.

4) The provisions in Part 2 (1) and (2) do not apply to the following OGMAs:

Lizzie LU: SRY_321_002, SRY_321_007, SRY_321_011, SRY_321_018, SRY_321_025, SRY_321_039; and
Mamquam LU: SRY_309_55, SRY_309_006, SRY_309_077, SRY_309_035, SRY_309_102, SRY_309_110,
SRY_309_112.

Identification of Replacement Area and Communication

1) The trees felled under Part 2 (1) are to be left on-site to function as coarse woody debris, except where they pose a significant risk to forest health.

2) The licensee will identify an equivalent area of trees to replace the area of trees felled under Part 2 (2), and ensure each of the following conditions are met:

(a) The replacement area of trees is equal or greater to the area of trees felled,

(b) The replacement area of trees has equivalent or better stand attributes (i.e. age, site index, species distribution) than the area of trees felled, and

(c) The replacement area of trees is located according to the following order of priority:

(i) Connected to the OGMA subject to activities pursuant to Part 2 (2), in the same BEC variant;

(ii) Connected to a nearby OGMA in the same BEC variant;

(iii) A new area of trees located as close as is practicable to the OGMA subject to activities pursuant to Part 2 (2), in the same BEC variant.

3) The licensee will provide notice and documentation of the proposed area of trees felled under Part 2 (2), in addition to the proposed equivalent area of trees to replace the area of trees felled, to the district office with cutting permit, road permit, or other tenure application. Notice and documentation should include:

(a) A description of the proposed area and characteristics of trees to be removed from the OGMA;

(b) A description of the proposed replacement area and characteristics of trees required in accordance with Part 3 (1); and

(c) Spatial data (i.e. GIS shape files) to identify the proposed area of trees felled from the OGMA and the proposed replacement area of trees.

Legal Objectives - Sloquet High, Sloquet North, and Sloquet South FDUs

Results or Strategies for Objective

1) Retain trees in the OGMAs identified on the attached Sloquet High, Sloquet North, and Sloquet South maps dated October 30, 2014, except to fell trees where necessary for any of the following:

(a) To prevent insect infestations or diseases posing a significant threat to forest health;

(b) To remove an identified safety hazard within road right-of-ways, recreation sites, or trails;

2) Retain trees in the OGMAs identified on the attached Sloquet map, except to fell an area of trees where necessary for any of the following:

(a) To enable a safe falling boundary on a block immediately adjacent to the OGMA;

(b) To enable road or bridge construction for access to resource values beyond or adjacent to the OGMA, and no other practicable option for road or bridge location exists;

(c) To improve guyline clearance, tailholds, or tiebacks for guylines;

(d) To improve wind firmness along block boundaries.

3) The area of trees felled in an OGMA as provided in Part 2 (2) will not exceed the lesser of:

(a) Two hectares, or

(b) Five percent of the OGMA area.

4) The provisions in Part 2 (1) and (2) do not apply to the following OGMAs:

Lizzie LU: SRY_321_002, SRY_321_007, SRY_321_011, SRY_321_018, SRY_321_025, SRY_321_039; and
Mamquam LU: SRY_309_55, SRY_309_006, SRY_309_077, SRY_309_035, SRY_309_102, SRY_309_110,
SRY_309_112.

Identification of Replacement Area and Communication

1) The trees felled under Part 2 (1) are to be left on-site to function as coarse woody debris, except where they pose a significant risk to forest health.

- 2) The licensee will identify an equivalent area of trees to replace the area of trees felled under Part 2 (2), and ensure each of the following conditions are met:
 - (a) The replacement area of trees is equal or greater to the area of trees felled,
 - (b) The replacement area of trees has equivalent or better stand attributes (i.e. age, site index, species distribution) than the area of trees felled, and
 - (c) The replacement area of trees is located according to the following order of priority:
 - (i) Connected to the OGMA subject to activities pursuant to Part 2 (2), in the same BEC variant;
 - (ii) Connected to a nearby OGMA in the same BEC variant;
 - (iii) A new area of trees located as close as is practicable to the OGMA subject to activities pursuant to Part 2 (2), in the same BEC variant.
- 3) The licensee will provide notice and documentation of the proposed area of trees felled under Part 2 (2), in addition to the proposed equivalent area of trees to replace the area of trees felled, to the district office with cutting permit, road permit, or other tenure application. Notice and documentation should include:
 - (a) A description of the proposed area and characteristics of trees to be removed from the OGMA;
 - (b) A description of the proposed replacement area and characteristics of trees required in accordance with Part 3 (1); and
 - (c) Spatial data (i.e. GIS shape files) to identify the proposed area of trees felled from the OGMA and the proposed replacement area of trees.

Legal Objectives - Tuwasus FDU

Results or Strategies for Objective

- 1) Retain trees in the OGMA identified on the attached Tuwasus map dated October 30, 2014, except to fell trees where necessary for any of the following:
 - (a) To prevent insect infestations or diseases posing a significant threat to forest health;
 - (b) To remove an identified safety hazard within road right-of-ways, recreation sites, or trails;
- 2) Retain trees in the OGMA identified on the attached Tuwasus map, except to fell an area of trees where necessary for any of the following:
 - (a) To enable a safe falling boundary on a block immediately adjacent to the OGMA;
 - (b) To enable road or bridge construction for access to resource values beyond or adjacent to the OGMA, and no other practicable option for road or bridge location exists;
 - (c) To improve guyline clearance, tailholds, or tiebacks for guylines;
 - (d) To improve wind firmness along block boundaries.
- 3) The area of trees felled in an OGMA as provided in Part 2 (2) will not exceed the lesser of:
 - (a) Two hectares, or
 - (b) Five percent of the OGMA area.
- 4) The provisions in Part 2 (1) and (2) do not apply to the following OGMA:

Lizzie LU: SRY_321_002, SRY_321_007, SRY_321_011, SRY_321_018, SRY_321_025, SRY_321_039; and Mamquam LU: SRY_309_55, SRY_309_006, SRY_309_077, SRY_309_035, SRY_309_102, SRY_309_110, SRY_309_112.

Identification of Replacement Area and Communication

- 1) The trees felled under Part 2 (1) are to be left on-site to function as coarse woody debris, except where they pose a significant risk to forest health.
- 2) The licensee will identify an equivalent area of trees to replace the area of trees felled under Part 2 (2), and ensure each of the following conditions are met:
 - (a) The replacement area of trees is equal or greater to the area of trees felled,
 - (b) The replacement area of trees has equivalent or better stand attributes (i.e. age, site index, species distribution) than the area of trees felled, and
 - (c) The replacement area of trees is located according to the following order of priority:
 - (i) Connected to the OGMA subject to activities pursuant to Part 2 (2), in the same BEC variant;
 - (ii) Connected to a nearby OGMA in the same BEC variant;
 - (iii) A new area of trees located as close as is practicable to the OGMA subject to activities pursuant to Part 2 (2), in the same BEC variant.
- 3) The licensee will provide notice and documentation of the proposed area of trees felled under Part 2 (2), in addition to the proposed equivalent area of trees to replace the area of trees felled, to the district office with cutting permit, road permit, or other tenure application. Notice and documentation should include:

- (a) A description of the proposed area and characteristics of trees to be removed from the OGMA;
- (b) A description of the proposed replacement area and characteristics of trees required in accordance with Part 3 (1); and
- (c) Spatial data (i.e. GIS shape files) to identify the proposed area of trees felled from the OGMA and the proposed replacement area of trees.

Legal Objectives - Whistler FDU

Results or Strategies for Objective

- 1) Retain trees in the OGMA identified in Schedule A, except to fell trees where necessary for any of the following:
 - (b) To prevent insect infestations or diseases posing a significant threat to forest health;
 - (c) To remove an identified safety hazard within road right-of-ways, recreation sites, or trails;
- 2) Retain trees in the OGMA identified in Schedule A, except to fell an area of trees where necessary for any of the following:
 - (a) To enable a safe falling boundary on a block immediately adjacent to the OGMA;
 - (b) To enable road or bridge construction for access to resource values beyond or adjacent to the OGMA, and no other practicable option for road or bridge location exists;
 - (c) To improve guyline clearance, tailholds, or tiebacks for guylines;
 - (d) To improve wind firmness along block boundaries.
- 3) The area of trees felled in an OGMA as provided in Section 4 (2) will not exceed the lesser of:
 - (a) Two hectares, or
 - (b) Five percent of the OGMA area.

Identification of Replacement Area and Communication

- 5) The trees felled under Section 4(1) are to be left on-site to function as coarse woody debris, except where they pose a significant risk to forest health.
- 6) The licensee will identify an equivalent area of trees to replace the area of trees felled under Section 4 (2), and ensure each of the following conditions are met:
 - 1) The replacement area of trees is equal or greater to the area of trees felled,
 - 2) The replacement area of trees has equivalent or better stand attributes (i.e. age, site index, species distribution) than the area of trees felled, and
 - 3) The replacement area of trees is located according to the following order of priority:
 - (a) Connected to the OGMA subject to activities pursuant to Section 4 (2), in the same Biogeoclimatic Ecosystem Classification (BEC) variant;
 - (b) Connected to a nearby OGMA in the same BEC variant;
 - (c) A new area of trees located as close as is practicable to the OGMA subject to activities pursuant to Section 4 (2), in the same BEC variant.
7. The licensee will provide notice and documentation of the proposed area of trees felled under Section 4 (2), in addition to the proposed equivalent area of trees to replace the area of trees felled, to the district office with cutting permit, road permit, or other tenure application. Notice and documentation should include:
 - 1) A description of the proposed area and characteristics of trees to be removed from the OGMA;
 - 2) A description of the proposed replacement area and characteristics of trees required in accordance with Section 5; and
 - 3) Spatial data (i.e. GIS shape files) to identify the proposed area of trees felled from the OGMA and the proposed replacement area of trees.

Appendix D UWR U2-002

Reference for Mountain Goat Results or Strategies: U2-002

ORDER – UNGULATE WINTER RANGE #U2-002

Maintain mountain goat winter ranges to provide high suitability habitat. Habitat attributes include snow interception, foraging opportunities, escape terrain, steep south and west-facing windswept ridges/slopes, conifer bluffs, shrub/grass communities, and security cover. This will be accomplished by applying the following specific management objectives to the proposed UWRs:

Results or strategies for Objective 1

Road and trail construction and timber harvesting, including but not limited to, single tree selection and salvage topping for cone harvesting, will not be permitted within the GWRs, except as specified in section 1 and 2 below:

1. The MWLAP Statutory Decision Maker or designate, through the approval of a variance, may allow operations to occur within a GWR for reasons such as but not limited to the following:
 - a. Construction of roads and/or yarding corridors if no other practicable option exists.
 - b. Treatments to restore or enhance degraded habitats.
2. The following activities will be allowed to occur within a GWR subject to objective 2:
 - a. Maintenance and deactivation of existing roads.
 - b. Brushing or clearing along existing roads under active tenure within right of way for safety purposes.
 - c. Falling of guyline clearance, tailhold anchor trees or danger trees along right of way and cutblock boundaries, where the tree has been determined as a danger tree by a qualified Wildlife/Danger Tree Assessor, and the establishment of a No-work Safety Zone as per Worker's Compensation Board requirements is not practicable. Any trees that must be felled within a GWR will be left onsite to provide coarse woody debris.
 - d. Existing access agreements that were previously negotiated between industry and MWLAP will continue to be honoured.

Results or strategies for Objective 2

Where activities within a GWR have been approved by the MWLAP Statutory Decision Maker or designate or where exempted activities must occur, consistent with Objective 1, they shall be undertaken during a period extending from May 1 to October 31 of a calendar year, except as specified below:

1. The MWLAP Statutory Decision Maker or designate may permit industrial operations to occur within a GWR boundary for a period extending up to 4 weeks prior to May 1 and 4 weeks past October 31, where relevant site inspection data indicates that no impacts to Mountain Goats using the GWR will result from the extended operations; or
2. The MWLAP Statutory Decision Maker or designate may permit industrial operations to occur within a GWR boundary during some other specified period, where relevant site inspection data indicates that negative impacts to Mountain Goats using the GWR may result from operations occurring between May 1 and October 31 of a calendar year.