Powell River Community Forest Ltd. FOREST STEWARDSHIP PLAN

Community Forest License K3G

Approved December 19, 2008
Consolidated to Amendment # 1 and 5 year Extension effective_____, 2013



Sunshine Coast Forest District

Forest Operations Of Powell River Community Forests Ltd.

NOTE: Public Review and Comment Version-This document and content form a proposed FSP only and is subject to approval after submission to government.

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Forest Stewardship Plan

1 DATE OF SUBMISSION

The date of submission of this Forest Stewardship Plan (FSP) Amendment #1 and 5 year Extension is ______, 2013. (the "Date of Submission"). The original FSP was approved December 19th, 2008.

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

References to the Forest and Range Practices Act and the Forest Planning and Practices Regulation refer to the legislation as it was on the date of submission of this FSP.

2.1 Licensees and Licences

This FSP applies to all new cutblocks and roads associated with Community Forest License K3G Cutting Permit (CP) ZZ. The FSP will also apply to each cutting permit and road permit issued, or granted, to the Holder of Community Forest License K3G in the Sunshine Coast TSA that is issued or granted:

- (a) after the Commencement Date of this FSP; and
- (b) within the Forest Development Units (FDU) under this FSP.

3 TERM OF THE FSP (FRPA S. 6(1) (a))

The original term of this FSP was 5 years (Dec. 19th, 2008 to Dec. 19th, 2013). The term of the extension to this FSP will be 5 years, subject to approval.

4 COMMENCEMENT OF TERM (FRPA S. 6 (1) (b))

The term of this FSP commences on the date approved and specified by the Minister or his Delegated Decision Maker (DDM).

5 MAP (FRPA S. 5(1) (a) AND FPPR S. 14)

The attached FSP map shows the boundaries of the Forest Development Unit (FDU) under this FSP. Portions of the established Landscape Unit boundaries have been used as the FDU for this FSP. The FSP Maps show the areas that are within the boundaries of the FDU and areas subject to a cutting permit or road permit.

Landscape units have been designed to be logical areas for the management of resource values such as biodiversity and old growth retention. The only Landscape Unit (LU) included in this FSP is the Haslam Landscape Unit. The Haslam FDU included in this plan includes all portions of the PRCF license area within the Haslam LU, except those small portions within the Sechelt First Nation's (FN) traditional territory. The portions of the PRCF license area within the Sechelt FN territory have been excluded from the FDU for administrative reasons. No operations are planned within the Sechelt FN territory during the term of this FSP.



The Lois Landscape Unit is identified as a very small portion of the license area along the Eastern tenure edge adjacent to TFL 39 and has not been included in an FDU for administrative reasons. No operations are planned within the Lois Landscape Unit during the term of this FSP.

6 DESIGNATION IN EFFECT BEFORE SUBMISSION OF THIS FSP (FPPR s. 14(3))

The FSP map shows the requirements as listed in s. 14(3) of the FPPR that were in effect on the Date of Submission., including, for ease of reference, the designations listed in Table 1, below.

 Table 1:
 FPPR 14(3) Designations for Sunshine Coast Forest District (SCFD) FSP

FPPR 14 (3)(a)	FDU	Date Designated
Ungulate Winter Range		C
Not Applicable to this FSP	None within FDUs	
FPPR 14 (3)(b)	FDU	Date Designated
Wildlife Habitat Areas		G
Not Applicable to this FSP	None within FDUs	
FPPR 14 (3)(c)	FDU	Date Designated
Fisheries sensitive watershed		G
Not Applicable to this FSP	None within FDUs	
FPPR 14 (3)(d)	FDU	Date Designated
Lakeshore management zone		G
Not Applicable to this FSP	None within FDUs	
FPPR 14 (3)(e)	FDU	Date Designated
Scenic Areas		G
Visual Quality Objectives (VQO)	Haslam	April 22, 1997
Declared for SCFD.		(Amendments June 4, 1999)
FPPR 14 (3)(f)	FDU	Date Designated
Designated L1 Lake		G
Not Applicable to this FSP	None within FDUs	
FPPR 14 (3) (g)	FDU	Date Designated
Community Watersheds		C
Haslam Lang, 900.034	Haslam	May15, 1996
FPPR 14 (3) (h)	FDU	Date Designated
Old Growth Management Areas		
Not Applicable to this FSP	Haslam	No legal OGMAs have been
		established within the Haslam LU



7 RESULTS AND STRATEGIES

7.1 Land Use Objectives (FPPR S. 1 definition)

The following land use objectives have been established under Sections 3 to 5 of the FPC and meet the definition of objectives set by government as per the FRPA.

7.1.1 Order Establishing Landscape Units and Objectives

Landscape Unit (LU) Plans have been established under Section 4 of the FPC for the Lois Landscape Unit. The Lois Landscape Unit is identified as a very small portion of the license area along the Eastern tenure edge adjacent to TFL 39. For administrative reasons, these small portions of the Lois Landscape have not been included in the FDU under this plan. There are no operations planned within the portions of the license area within the Lois LU during the term of this plan. The Haslam Landscape Unit does not have an approved Landscape Unit Plan.

7.1.2 Order Establishing Provincial Non-Spatial Old Growth Objectives

The Order Establishing Provincial Non-spatial Old Growth Objectives (the Order), effective June 30, 2004, identifies the amount of old forest to be maintained to address biodiversity values. This order supplements, but does not replace, FPPR S. 9.

Objective 2 as specified in the Order is "to contribute to the conservation of biodiversity, licensees must maintain old forest by biogeoclimatic variant within each landscape unit according to the age of old forest and percentage of old forest retention...".

The following provisions of the Order may be applied:

(A6) Use of younger forests to meet old forest objectives.

In intermediate and high emphasis landscape units where it can be demonstrated that equal or better conservation benefits would result, stands less than the age of old, and preferably mature forest, may contribute to the percentage of old forest retention defined in Tables 1-4 of the Order.

(A7) Recruitment and catastrophic natural disturbance.

In landscape units where there is:

- a. An immediate recruitment situation due to insufficient old forest in a variant; or
- b. An epidemic or catastrophic natural event such as wildfire or insects

A recruitment strategy approved by the Minister of Sustainable Resource Management or his delegate can be used to meet the requirements of Objective 2, 3, and 4.

(A8) Draft old growth management areas

Where the Minister of Sustainable Resource Management (now Agriculture and Lands), his delegate, or a licensee or group of licensees has identified draft old growth management area, the Minister or delegate may specify in writing that these draft old growth management areas meet the intent of this Order.



Strategy for Order Establishing Provincial Non-Spatial Old Growth Objectives.

Forest Development Unit	Result or Strategy
<u>Haslam</u>	 The Landscape Unit is within Natural Disturbance types 1 & 2. Old forest for these Natural Disturbance types 1 & 2 is defined as >250yrs of age (Age Class 9). 1. If the amount of old forest within a landscape unit is less than the specified retention targets, as listed in Table 2 (Column 6) of this FSP, the Holder of this FSP:
	a) will not carry out timber harvesting including salvage and single tree harvesting in areas of:
	 i) old forest within the non-contributing land base in that landscape unit, and ii) old forest in the contributing land base to the extent necessary to meet the specified retention targets, and iii) mature forest in the non-contributing land base to the extent necessary to meet the specified retention targets.
	b) will not construct roads within the areas referred to in 1. a) (i-iii), unless no other practicable options exist, in which case, replacement area may be required.
	2. <u>Subsection 1 of this strategy applies until one of the following:</u>
	 a) the Order is rescinded; b) The license holder spatially delineates proposed OGMAs for the biogeoclimatic variants where shortfall exists to the extent necessary to meet the specified retention targets and will not harvest within them.
	c) the Minister responsible for Part 7.1 of the Land Act, that Minister's delegate or other authorized representative of government specifies in writing that draft OGMAs meet the intent of the Order for the affected landscape units, as under Provision A8 of the Order; or
	d) OGMAs are legally established as part of an approved landscape unit plan.
	After which, Subsections 3 applies.
	 3. The Holder of this FSP will not harvest cut blocks or construct roads unless no other practicable option exists: a) Within proposed OGMAs delineated by the licensee that meet the specified retention targets. b) Within draft OGMA polygons that meet the intent of the Non-Spatial Old Growth Order under Provision A8 of the Order. c) Within legally established OGMAs as part of an approved landscape unit plan.



Table 2: Old Growth Retention Targets

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8	Column 9	Column 10	Column 11	Column 12	Column 13
Landscape Unit	FDU	Bio- diversity Emphasis	BEC Variant	Forested Area (ha)	Old Growth Target (%)	Old Growth Target (ha)	Non- Contributing Old Forest (ha)	Old Growth Target Achieved? (column 8)	Short- fall (ha)	Contributing Old Forest to be retained (ha)	Recruitment Mature Forest Non- Contributing (ha)	Recruitment Mature Forest Unconstrained Contributing (ha)
Haslam		Low	CDF mm	213.3	>9%	6.4	0.0	No	6.4	0.0	6.4	
			CWH dm	11,407.1	>9%	342.2	149.3	No	192.9	61.1	131.8	
			CWH vm2	2865.7	>13%	124.2	69.1	No	55.1	53.9	1.2	
			CWH xm1	4066.4	>9%	122.0	90.7	No	31.3	0.0	31.3	
			MH mm1	360.6	>19%	22.8	25.3	Yes	-	0.0		

Table 2 summarizes the old growth retention targets for the BEC variants occurring within the Haslam Landscape Unit based on the Regional Land Use Plan database, RLUPS v3.2 August 15, 2005.

7.2 Objectives Prescribed Under FRPA S. 149

7.2.1 Soils (FPPR S. 5)

The objective set by Government for soils is, with out unduly reducing the supply of timber from British Columbia's forest, to conserve the productivity and the hydrologic function of the soils.

FDU	Result or Strategy
<u>Haslam</u>	1. The holder of this FSP adopts, as a result or strategy, the practice requirements as specified in s.35 and s.36 of the FPPR as those sections were on the date this FSP was submitted for approval.

7.2.2 Wildlife (FPPR S. 7)

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

- a) The survival of species at risk,
- b) The survival of regionally important wildlife, and
- c) The winter survival of specified ungulate species
- 1. A person required to prepare a forest Stewardship Plan must specify a result or a strategy in respect of the objective stated under subsection (1) only if the Minster responsible for the Wildlife Act gives notice to the person of the applicable
 - a) Species referred to in subsection (1), and
 - b) Indicators of amount, distribution and attributes of wildlife habitat described in subsection (1)
- 2. If satisfied that the objective set out in subsection (1) is addressed, in whole or in part, by an objective in relation to a wildlife habitat area or an ungulate winter range, general wildlife measure, or a wildlife habitat feature, the minister responsible for the Wildlife Act must exempt a person from obligation to specify a result or strategy in relation to the objective set out in subsection (1) to the extent that the objective is already addressed.
- 3. A notice described in subsection (2) must be given at least 4 months before the Forest Stewardship is submitted for approval.

For the purpose of the results or strategies in respect of this objective, "notice" means the NOTICE INDICATORS OF THE AMOUNT DISTRIBUTION AND ATTRIBUTES OF WILDLIFE HABITAT REQUIRED FOR THE SURVIVAL OF SPECIES AT RISK IN THE SUNSHINE COAST FOREST DISTRICT given under FPPR s.7(2)

Strategy for Wildlife Objectives

FDU	Species	Result or Strategy
Haslam	Mountain Goat (Oreamnos americanus)	 The Holder of this FSP will not construct road or harvest timber within the approved Ungulate Winter Range (UWR) polygons identified on the FSP maps, except as allowed by the General Wildlife Measures accompanying the approved UWR's for the Sunshine Coast Forest TSA. These approved UWR polygons meet the intent of the Notice for the Sunshine Coast Forest District (dated March 2, 2006) established under s. 7(2) of the FPPR. As per FPPR s. 7(3) and the Order for UWR #U-2-003, the license holder is exempt from the obligation to prepare results and strategies in relation to the objective set out in section 7(1) of the FPPR for Mountain Goat winter range in the Sunshine Coast TSA. Note: At time of writing, there are no approved UWR polygons in any of the FDU's included in this plan.
Haslam	Tailed Frog (Asaphus truei)	 The Holder of this FSP will not construct a road or harvest timber, except as allowed by the General Wildlife Measures, within an area that: a) meets the amount, distribution, attributes and characteristics described in the Notice for the Sunshine Coast Forest District (dated March 2, 2006) for Coastal Tailed Frog, or b) is identified on the FSP maps as management areas for Coastal Tailed Frog. Section 1 of this result/strategy no longer applies once WHA's are legally established that meet the intent of the Notice for Coastal Tailed Frog in the SCFD and an exemption is given under FPPR s. 7(3) from the obligation to write a result/strategy for Coastal Tailed Frog in the SCFD. Note: At time of writing, there are no habitat areas for Coastal Tailed Frog in any of the FDU's shown in this FSP plan.



FDU	Species	Result or Strategy
Haslam	Marbled Murrelet (Brachramphus marmoratus)	 The Holder of this FSP will not construct a road or harvest timber, except as allowed by the General Wildlife Measures, within an area that: a) meets the amount, distribution, attributes and characteristics described in the Notice for the Sunshine Coast Forest District (dated March 2, 2006) for Marbled Murrelet where suitable nesting habitat is defined as
		Surveying standards as described in Standard Methods for Identifying Marbled Murrelet Habitat in British Columbia Air Photo Interpretation and Low-level Aerial Survey.
Halsam	Queen Charlotte (Northern) Goshawk (Accipiter gentilis laingi)	 The Holder of this FSP will not construct a road or harvest timber, except as allowed by the General Wildlife Measures, within an area that: a) has an active nest and meets the amount, distribution, attributes and characteristics described in the Notice for the Sunshine Coast Forest District (dated March 2, 2006) for Queen Charlotte Goshawk, and b) until such time as the strategy in (a) above has met the requirements of the Notice, the Holder of this FSP will not harvest or build roads within areas identified on the FSP maps as management areas for Queen Charlotte Goshawk.
		2. If an exemption is provided after the Date of Submission under FPPR s. 7(3) that relates to this strategy, the strategy no longer applies effective on the date of the exemption.
		3. If the amount of habitat for Queen Charlotte Goshawk specified in the Notice is addressed, the result/strategy will not apply to areas beyond that amount.
		Note: At time of writing, there are no management areas for Queen Charlotte Goshawk in any of the FDU's shown in this FSP plan.



7.2.3 Water, Fish, Wildlife & Biodiversity within Riparian Areas (FPPR S. 8)

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

Stream, Lake and Wetland Riparian Classes (FPPR S. 47, 48, and 49)							
FDU	Result or Strategy						
<u>Haslam</u>	1. For areas of primary forest activity authorized or carried out by the holder of this license, the widths of the riparian management area, riparian reserve zone and riparian management zone will be:						
	 a) As specified in FPPR Sections 47(4) to (6), 48(3) to (5) and 49(2) to (3), or b) As specified in a written rationale, prepared prior to commencement of the primary forest activity by a qualified professional, that i) is based on one or more of the following circumstances: (1) wind throw hazard and consequence, (2) water quality protection, (3) sensitive stream protection, (4) environmental sensitivity such as terrain stability class 4 or 5, (5) topography, or (6) worker safety, and ii) reflect the Factors in Schedule 1 Sec. 2 of the FPPR. 						

Restrictions in Riparian Management Areas, Riparian Reserve Zones and Riparian Management Zones (FPPR s. 50, 51 and 52(2) and 53)					
FDU	Result or Strategy				
Haslam	1. The license holder will adopt FPPR s. 50, 51 and 52(2) and 53 as those sections were on the date of submission of this FSP as a result or strategy, subject to conditional exemption under FPPR s.12.3.				



Result or Strategy for Conditional Exemption Under 12.3(5) for Enhanced and Protection Activities in
Riparian Reserve Zones (RRZs)

FDU	Result or Strategy					
Haslam	 Subject to paragraph 2, the Holder, in addition to the purposes granted under FPPR s. 51(1)(a,b,c,d,e,f,g,h,i), is exempt from FPPR s. 51(1), if the activities proposed in a RRZ are designed to: a) enhance wildlife values, b) enhance fisheries values, c) enhance biodiversity values, or d) protect water quality values. Prior to enhancement or protection activities for wildlife, fisheries, biodiversity, and water quality values in a RRZ, the Holder will: i. develop a plan for the proposed enhancement/ protection works; ii. have the plan signed by a qualified professional; and iii. implement the prescribed measures in accordance with the plan or as amended. 					

Result or Strategy for Conditional Exemption Under FPPR 12.3(5) for Harvest Activities in Riparian
Reserve Zones (RRZs)

FDU	Result or Strategy
All FDUs	 Approach to Harvesting 1.1 Subject to paragraphs 1.2, the Holder, in addition to the purposes granted under s.51(1)(a, b, c, d, e, f, g, h, i), is exempt from 51(1), if the activities proposed in the RRZ are for the purposes of: (a) harvesting timber on the upslope side of a road that has been constructed in the RRZ and is located between the road and cutblock. 1.2 Prior to removing tree(s) on the upslope side of a road within the RRZ, the Holder, will: (i) only remove tree(s) from the area included in the RRZ if the removal of tree(s), as determined by a qualified professional, will not have a material adverse effect on the water, fish, wildlife and biodiversity values as compared to other options; and (ii) establish the RRZ at the edge of the road right of way located closest to the stream.



Retentio	Retention in a Riparian Management Zone (FPPR S. 12(3))		
FDU	Result or Strategy		
<u>Haslam</u>	 If the Holder of this license authorizes or carries out a primary forest activity in a riparian management zone, in a cut block, the level of retention within the riparian management zone will: a) reflect the factors in FPPR Schedule 1 Sec.2; and b) be specified in a site plan prepared prior to commencement of harvesting. 		

7.2.4 Community Watersheds (FPPR S. 8.2)

Objectives set by Government for community watersheds (FPPR s. 8.2)

- (1) In this section, "community watershed" means a community watershed
 - (a) That is continued under section 180 of the Act, and
 - (b) For which a water quality objective has not been
 - (i) Continued under section 181 of the Act, or
 - (ii) Established under the Government actions Regulation.
- (2) The objective set by government for water being diverted for human consumption through a licensed water works in a community watershed is to prevent to the extent described in subsection (3) the cumulative hydrological effects of primary forest activities within the community watershed from resulting in
 - (a) A material adverse impact on the quantity of water or the timing of the flow of the water from the waterworks
 - (b) The water from the waterworks having a material adverse impact on human health that cannot be addressed by water treatment required under
 - (i) An enactment, or
 - (ii) The license pertaining to the waterworks.
 - (3) The objective set by government under subsection (2) applies only to the extent that it does not unduly reduce the supply of timber from British Columbia's forests.



Strategy for Community Watershed Objectives

FDU	Result or Strategy
<u>Haslam</u>	Approach to Harvesting and Roads
	1.1 Subject to paragraphs 1.2 to 1.4: a) Before carrying out or authorizing a primary forest activity within the areas designated as a Community Watershed, the holder will ensure that the primary forest activities authorized or undertaken under this FSP will not result in the Equivalent Clearcut Area (ECA) to:
	 i) exceed 30% for community watersheds that do not have an ECA threshold specified as part of a CWAP; or ii) exceed the ECA threshold of the most recent previously established Coastal Watershed Assessment for the community watershed.
	b) The holder when designing harvest areas and harvesting timber within the areas designated as a Community Watershed will comply with the following;
	 i) The maximum Cut block size is ≤40ha, with ii) The average cut block size ≤20ha (over the term of the plan).
	c) The holder when constructing, maintaining or deactivating a road within the areas designated as a Community Watershed will comply with the following;
	 i) Permanent access structures required to harvest cut blocks will comply with FPPR sec. 36. ii) Minimize the amount of road constructed and reduced road widths where practicable. iii) Maintain water in natural drainage courses to the extent practicable.
	1.2 In addition to Subsection 1.1, where the qualified professional who has completed or updated the CWAP or other similar assessment, provides additional recommendations that are applicable to the license holder's forest practices, the holder will incorporate these recommendations into forest practices unless supported by a rationale written by a qualified professional.
	1.3 In respect of community watersheds, the license holder will work with other tenure holders to not exceed the ECA threshold.
	1.4 FPPR section(s) 47 to 51, 52(2), 53, 59, 60 & 61 apply as they were on the date of submission, subject to conditional exemption under FPPR s.12.3.



7.2.5 Wildlife and Biodiversity - landscape level (FPPR S. 9)

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

FDU	Undertaking Under FPPR Section 12.1(3) (Exemption-undertaken with specified regulation)	
<u>Haslam</u>	When constructing a road or harvesting timber under this FSP, the Holder undertakes to comply with FPPR s. 64 and 65. In accordance with FPPR s. 12.1(3)(b), when the holder receives approval of this plan, the holder will be exempt from the requirement to specify intended results and strategies set out in FPPR s. 9.	

7.2.6 Wildlife and Biodiversity - stand level (FPPR S. 9.1)

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

FDU	Result / Strategy for Conditional Exemption Under FPPR Section 12.5(1)-Wildlife Tree Retention Area (WTRA)		
<u>Haslam</u>	Basis of Wildlife Tree Retention Area		
	1. When harvesting timber under this FSP, the amount of Wildlife Tree Retention Area specified below is applied on the total of:		
	a) the Net Area to be Reforested (NAR); and		
	b) the area of all roads,		
	Within the cutblock.		
	Amount of Wildlife Tree Retention Area 1. The Holder will, when harvesting timber under this FSP, do so in a manner consistent with the following:		
	(a) the minimum WTRA amount by cut block is:		
	Total Cut block Area(ha) Minimum WTP % Retention		
	Cut blocks < 10 ha in size 0%		
	Cut blocks ≥ 10 ha in size 3.5%		
	(b) if the FDU has an established Landscape Plan, then the legally established Wildlife Tree Retention targets for the Landscape unit will apply.		
	(c) at the completion of harvest, the total area of wildlife tree retention is a minimum of 7% of the total area of the cut blocks harvested, <i>over the term of the plan</i> .		



FDU	WTRAs-Restrictions on Harvesting (FPPR Section 67)	
<u>Haslam</u>	When constructing a road or harvesting timber under this FSP, the Holder undertakes to comply with s.67 of the FPPR, subject to conditional exemption.	

FDU	Result / Strategy for Conditional Exemption Under FPPR Section 12.5(2)- Management of Wildlife Tree Retention Areas (WTRAs)	
<u>Haslam</u>	The holder of this FSP may:	
	 a) Relocate a WTRA, or portion thereof, by specifying in a site plan/ amendment a suitable replacement WTRA. 	
	b) Salvage windthrown and remaining standing timber in a WTRA where windthrow exceeds 50% of the dominant or co-dominant stems. Suitable replacement WTRA is required.	
	c) Salvage timber in a WTRA, where forest health issues pose a significant threat to areas/ timber outside the WTRA. Suitable replacement WTRA is required.	
	For the purposes of this result/ strategy <i>suitable replacement WTRA</i> is defined as an area that is equal to, or better than, the quality and quantity of the WTRA being replaced.	

7.2.7 Cultural Heritage Resources (FPPR s. 10)

Objectives set by government for cultural heritage resources (FPPR s.10)

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

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



Strategy for Cultural Heritage Resource Objectives

FDU	Result or Strategy		
<u>Haslam</u>	The holder of this FSP will, when constructing a road or harvesting timber under this FSP, do so in a manner consistent with:		
	a) conserving or if necessary, protecting cultural heritage resources that are;		
	 i) the focus of a traditional use by an aboriginal people that is of continuing importance to that people, and are determined to be important valuable and scarce through; 		
	(1) documented information sharing between the Holder of this FSP and the affected First Nation.		
	(2) information received from the effected First Nation in accordance with FPPR s.20.		
	(3) information received from the effected First Nation in accordance with Section 2 below.		
	ii) not regulated under the Heritage Conservation Act or are not conserved and protected by other arrangements and;		
	iii) likely to be adversely impacted by the activities of the Holder of this FSP and;		
	iv) capable of being addressed in the context of this FSP.		
	b) the timber harvesting rights to which this FSP pertains.		
	2. The following process will be used to provide the FN with the opportunity to provide cultural heritage information for resources which proposed road building or timber harvesting activities may impact. This pertains to "new" proposed development areas, where "new" refers to areas not previously forwarded to the FN:		
	a) The holder of this FSP will consult with the affected FN regarding new proposed development areas to obtain new cultural heritage resource information. First Nations representatives will conduct a walkthrough of the new proposed development areas in conjunction with the block layout and design.		
	b) New information received from the FN or MFLNRO within 30 days will be reviewed in the context to which the proposed harvesting activities will impact upon the identified cultural heritage resource.		
	c) The holder of this FSP will determine what options, if any, exist to mitigate the impacts from proposed road construction and /or harvesting activities.		



- d) The FN and MFLNRO will be notified in writing, as to what actions, if any, will be taken to conserve and/or protect identified cultural heritage resource values that are defined under 1 (a) of this section.
- 3. To the extent that the criteria in paragraph 1 above have been met, for identified cultural heritage resource values, the following strategies apply:
- (a) <u>Cultural Cedar-</u> To ensure a long and midterm supply of cedar as a cultural heritage resource, the holder of this FSP will conduct the following:
 - (i) A component of cedar and cypress will be planted in areas referred to in section 29 (1) of the FRPA in accordance with the stocking standards specified in this FSP. Cedar/ cypress will only be planted on ecologically suitable sites and where significant elk damage is not anticipated.
 - (ii) Upon request, provide reasonable assistance in locating cedar and cypress which may be suitable for cultural requirements.
 - (iv) Upon request, provide reasonable assistance in identifying sites suitable for cedar bark stripping.
- (b) <u>Medicinal Plant Species-</u>To provide reasonable opportunities for FN members to obtain or access rare or scarce medicinal plants if they request the opportunity.
 - If a site has been identified by the FN, as containing rare/ scarce medicinal
 plant species, notification will be provided prior to timber harvesting
 activities on sites identified to contain the plants. The time frame for
 notification will be determined when specific plants are identified by the
 FN.

7.3 Objectives Continued Under FRPA S. 181

7.3.1 Visual Quality

Visual Quality Objectives (VQO's) established for the Sunshine Coast under Section 1 of the Operational Planning Regulations, defines the amount of allowable alteration for areas designated as scenic on the Sunshine Coast.

Categories of visually altered forest landscape as per FPPR s. 1.1 are:

- 1.1 For the purposes of paragraph (c) of the definition of "altered forest landscape" in section 1, the following categories are prescribed, each according to the extent of alteration resulting from the size, shape and location of cut blocks and roads:
 - a) preservation: consisting of an altered forest landscape in which the alteration, when assessed from a significant public viewpoint,
 - i) very small in scale, and
 - ii) not easily distinguishable from the pre-harvest landscape;



- b) retention: consisting of an altered forest landscape in which the alteration, when assessed from a significant public viewpoint,
 - i) difficult to see,
 - ii) small in scale, and
 - iii) natural in appearance;
- c) partial retention: consisting of an altered forest landscape in which the alteration, when assessed from a significant public viewpoint,
 - i) easy to see,
 - ii) small to medium in scale, and
 - iii) natural and not rectilinear or geometric in shape;
- d) modification: consisting of an altered forest landscape in which the alteration, when assessed from a significant public viewpoint, is
 - i) is very easy to see, and
 - ii) is
 - (A) large in scale and natural in its appearance, or
 - (B) small to medium in scale but with some angular characteristics;
- e) maximum modification: consisting of an altered forest landscape in which the alteration, when assessed from a significant public viewpoint,
 - i) is very easy to see, and
 - ii) is
 - (A) very large in scale,
 - (B) rectilinear and geometric in shape, or
 - (*C*) *both*.

Strategy for Visual Quality Objectives

FDU	Result or Strategy		
<u>Haslam</u>	1. Subject to subsection 2, if the Holder of this FSP constructs a road or harvests a cut block within the scenic areas made known and established by the Sunshine Coast Forest District, such activities will be consistent with:		
	 a) the Visual Quality Objectives (VQO): i) as established on April 22, 1997; ii) as amended June 4, 1999; and iii) as per subsequent amendments by the Sunshine Coast Forest District. 		
	b) and the categories of visually altered forest landscape as defined in FPPR s. 1.1.		
	2. The Holder of this FSP may construct a road or harvest a cut block in a manner that produces a landscape alteration in excess of that specified in the VQO's,		



where road construction or cut block harvesting is:
a) related to the harvesting of timber that is damaged or destroyed by fire, insects, disease, wind or flooding; or
b) evaluated using a group of polygons in a visible landscape where those polygons have the same VQO, instead of against one polygon,
c) adjacent to land to which VQO's are not applied, including but not limited to private land and gravel pits,
d) otherwise authorized or required by government.

7.3.2 Recreation Objective set for the Sweetwater Trail Project

The objective is to manage the Sweetwater Recreation Trail for a semi primitive, non-motorised, recreation experience. The trail will be maintained. Opportunities for hiking are available, no mechanised uses permitted.

FDU	Result or Strategy	
<u>Haslam</u>	1. Subject to paragraph 2, the Holder of this FSP will not construct roads or harvest cut blocks within the area established as the Sweetwater Trail (Exhibit A dated October 20, 1995), and	
	2. When the Holder is constructing road or harvesting timber near or adjacent to a recreation site or recreational trail established by Order, to which there is an Established Objective;	
	 a) the Holder will construct and harvest timber consistent with the Established Objective and; 	
	b) use harvesting and road construction practices design that maintains the recreation value that the site or trail was intended.	
	3. The Holder may construct a road or harvest timber across a recreation trail established through Order, if following the practice, the trail is returned to a condition that supports the intended use.	



8.0 STOCKING STANDARDS (FRPA s. 16)

8.1 Situations or Circumstances that determine whether Free Growing is assessed on a Block Basis or Across Block

FPPR s.44 (1) applies in all situations or circumstances under the FSP where a free growing stand is required to be established under FRPA s.29, except where exempt.

8.2 Regeneration Date and Stocking Standards, Free Growing Height

The FSP Stocking Standards specify the regeneration date, free growing height and stocking standards for the situations or circumstances where FPPR s. 44(1) applies (Stocking standards are in Appendix 1).

The following strategies describe variances to the stocking standards applicable in all FDU's of this FSP:

1. Reduced stocking levels

a) In locations where elk have been introduced or have spread into stands are being damaged, a reduction in the stocking level will be acceptable. In locations such as, but not exclusively Haslam Lake and Lang Creek, although initial targets will aim for full stocking of 900 sph, a minimum stocking of 250 stems per hectare will be acceptable for Free Growing. Within these cut blocks the use of deciduous species mixed with the conifer will be an acceptable strategy to reduce damage caused by elk and provide an opportunity to create a viable timber resource for the future. Conifer crop trees may be declared free growing so long as there is at least 0.5m distance between crop trees and deciduous trees at breast height and the conifer crop trees are not exhibiting reduced leader growth rates over the last two growing seasons.

For the purpose of measuring and verifying for stratification, the following will be used as a guide for heavy damage or the likelihood that damage will continue to reduce the value of the stand post free growing:

If while conducting silviculture surveys the number of locations where groups of more than 4 neighboring or near neighboring trees are damaged such that they will not meet the free growing standards is;

- i. at least once per hectare averaged across the Standard Unit or
- ii. at least once per standard unit where the number of trees damaged is 10 or more

With evidence the damage is chronic and ongoing then the new stocking standard will apply either to the whole standard unit or a new standard unit will be created.

b) Where Riparian Harvesting is being carried out in alder leading stands with the objective of harvesting being to speed up the conversion to a conifer leading stand with old growth characteristics a reduced level of stocking is prescribed. Stocking of 50-75% of the Net Area to be reforested is targeted with forage for wildlife covering the remaining area. Stocking standards are detailed in Appendix 1.



2. <u>Definition of Competition for Free Growing</u>

For the purposes of this FSP and the applicable stocking standards referred to in sections 16(3)(b) and 44(1)(b) of the FPPR, as they were on the date this FSP was submitted for approval, the growth of a stand is not impeded by competing vegetation if:

- a) conifers that have birch, bitter cherry or willow within the 1m radius that are taller than them at time of free growing assessment but are still exhibiting at least 75% of the leader growth of a typical conifer in the stand which is growing free of competition will be considered not impeded. In addition these conifer trees must not be exhibiting a reduction in leader growth over the previous two growing seasons as further evidence they are truly unimpeded.
- b) the crop tree to competing brush ratio within the 1m cylinder meets or exceeds the height in the following table:

Competing Brush	Crop tree % of competing height
Alder or maple, (subject to section 1 above or section 4, 5, and 6 below)	150
Bracken fern, lady fern	125
Birch, bitter cherry, willow sp.	100
Salmonberry, Thimbleberry, elderberry, fireweed, sword fern	100

3. Maple Coppice

- (a) Where maple is coppicing within the pesticide free zone of a watercourse or in blocks where herbicide has not been used in deference to social pressure, such as but not limited to community watersheds, the maple will be managed as a crop tree. The coppice will be cut once to retain 5 or less of the straightest stems and then left to become crop trees.
- (b) Where there are 10 or less maple coppice stools per hectare averaged across a standard unit they will be accepted as a valuable component of biodiversity within the standard unit.

4. Forest Health

In stands where root rot (undetected at the pre-harvest stage) caused by fungal pathogens is causing the death or poor performance of conifers that have been established to meet the requirements of s.16 (3) (b) and 44(1) (b) of the FPPR, as they were on the date this FSP was submitted for approval, deciduous species that are present can be substituted as preferred crop trees. To be acceptable the BEC site series must be one suitable for deciduous trees to achieve timber production as detailed for the alder stocking standards in appendix 1 of this FSP. Stocking standards for root rot areas are included in appendix 1.



5. Mixedwood Management

As per the approved Hardwood Management Strategy in the Coast Forest Region, the holder of this FSP will initiate some areas of mixed alder and conifer. The focus is on managing alder in voids where inadequate conifer has established or the site is difficult or uneconomic for establishing conifer; increasing productivity in areas poorly stocked with preferred conifers by leaving alder in small voids; leaving low levels of alder of up to 100sph evenly spaced in stands generally well stocked with conifer. Standard Units where alder is accepted as a mixed wood component will be identified through the Site Plan process.

6. Deciduous Management

Where mixed deciduous stands are being harvested and alder is being planned for replanting, natural regeneration of bigleaf maple (Mb) will be allowed to count towards Free Growing numbers so long as they are healthy, well-spaced and of good form for timber production. Stocking standard details are in Appendix 1.

<u>8.3</u> Situations or Circumstances that Determine when FPPR s. 44(4) and the Standards Applicable Under FPPR s. 16(4) Applies

Where harvesting of special forest products, intermediate cuts or commercial thinning occurs as per FPPR s. 44(3) (h) and s. 44(3) (i), the Stocking Standards (FSP Stocking Standards) will be maintained for twelve months following the completion of intermediate timber harvesting on the area that the harvesting took place. These standards will apply to Community Forest License K3G as defined by the descriptions in the FSP Stocking Standards.

9.0 MEASURES TO PREVENT THE INTRODUCTION AND SPREAD OF INVASIVE PLANTS

Measures to prevent the Introduction and the spread of invasive plants (FPPR s. 17, FRPA s. 47)

FRPA s. 47 requires that:

Person carrying out a forest practice or range practice must carry out measures that are:

- a) Specified in the applicable operational plan, or
- *b)* Authorized by the minister

To prevent the introduction or spread of prescribed species of invasive plants.

FPPR s.17

For the purpose of FRPA s.47 (invasive plants) of the act, a person who prepares a Forest Stewardship Plan must specify measures in the plan to prevent the introduction or spread of species of plants that are invasive plants under the Invasive Plants Regulation, if the introduction or spread is likely to be the result of the person's forest practices.



FDU	Measures
<u>Haslam</u>	Preventative Actions: 1. Subject to Subsection (2), if the risk of establishment and spread of invasive plants is determined to be moderate to high and they are likely to germinate on soil exposed as a result of the FSP Holder's road construction, road deactivation or cut block harvesting or site preparation under this FSP, and it is reasonably foreseeable that revegetation with grass seed would materially reduce the likelihood of germination, a Holder of this FSP will:
	 a) within one year of the Holder completing such activity, seed such soil that exceeds 0.5 ha in contiguous area giving preference to seed: i) that meet the standards for reclamation set out in Canada's Seeds Regulation. ii) with high sod forming content (except in areas that are planted with
	tree seedlings); and iii) that has been certified by the Canadian Seed Growers Association that the seed meets the standards for varietal purity established by the Association for seed of that kind of species (Seeds Act, Seeds Regulation s. 2(1)); and
	 iv) that is of native origin, provided: (1) the seed is readily available; and (2) the seed is comparable in cost to agronomic mixtures; and (3) the seed is comparable in effectiveness to agronomic mixtures.
	 2. These measures apply to those activities listed in subsection (1) where: a) In the case of road construction or deactivation until the road is deleted from a Road Permit; or b) In the case of cut block harvesting; i) until the Cutting Permit has expired; or ii) until the harvested cut block has met the regeneration date.
	3. Where known invasive plants are present on the site, best management practices will be applied to reduce or eliminate risk of spreading seed/ plant material.
	4. If moderate to high risk invasive plants are likely to establish in cut blocks harvested during the forest regeneration phase, the Holder of this FSP will through normal reforestation practices:
	a) Establish a stand of coniferous and/or deciduous crop trees consistent with the applicable stocking for the area on or before the regeneration date; and



b) Meet Free Growing requirements consistent with the applicable stocking standards on or before the late Free Growing Date so that the stand will form a closed canopy to suppress seed and vegetative production of shade intolerant invasive plants.

Invasive Plant Species Eluding Prevention.

1. Invasive plants will be detected through the Holders planting surveys, regeneration survival surveys and free-to-grow surveys and general field observations. Action plans will be developed to combat the spread of invasive plants, if the introduction or spread is likely to be the result of the Holders forest practices.

10.0 MEASURES TO MITIGATE THE EFFECT OF REMOVING OR RENDERING INEFFECTIVE NATURAL RANGE BARRIERS.

There are no agreements under the Forest Range Act that apply to the FDU's in this FSP. Accordingly no measures have been specified for FPPR s.18 or s. 48.



11.0 SIGNATURES OF PERSONS REQUIRED TO PREPARE THE PLAN

Powell River Community Forest Ltd.

4760 Joyce Ave.

604-487-9540

Powell River, BC V8A 3B6

Name: _____ Authorized Licensee Signature: Dated: ______, 2013 Preparing Forester: "I certify that that this work was performed to the standards expected of a member of the Association of British Columbia Forest Professionals" Name: _____ Laurie James Hirtle, R.P.F. #4737 Dated: ______, 2013

