**Campbell River Natural Resource District** 

# Campbell River Forest Stewardship Plan

## BC Timber Sales, Strait of Georgia Business Area

Consolidated to Amendment #2





FSP ID #: 936 Amendment 2 Approved: January 11, 2024 Original Submitted: July 13, 2023 Original Approved: July 20, 2023 Effective: July 20, 2023 to July 19, 2028



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## Forest Stewardship Plan Holder Authorized Signature:

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Date: \_\_\_\_\_

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Signature: \_\_\_\_\_

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Position: Planning Forester, BC Timber Sales, Strait of Georgia Business Area

Date: \_\_\_\_\_





## Summary of Amendments:

Amendment / Version	Approval / Effective Date	Signing Forester (s)	Description of changes
Original	July 20, 2023	Dan Doubinin, RPF	
Amendment 1	July 21, 2023	Dan Doubinin, RPF	Added Cape Mudge Forestry Ltd license
Amendment 2	January 11, 2024	Mike Pitre, RPF	Added Cribco Forest Products Ltd. and several minor corrections



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## Campbell River Forest Stewardship Plan

## 1 Application of the FSP

This Forest Stewardship Plan (FSP) has been prepared by BC Timber Sales Strait of Georgia Business Area as required under section 3(2) of the FRPA, on behalf of the licensees listed under Table 1.

Table 1:	FSP Holder(s).
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Licences	FSP Holder(s)	Applicable FDUs	
N/A	BC Timber Sales	all	
Operations within:			
North Island TSA, Sayward			
Block			
North Island TSA, Kyuquot			
Block			
• Pacific TSA block 9,18,19, 20			
Forest Licence A97152; FLTC A99095	Cape Mudge Forestry Ltd.	Sayward, Salmon	
	(Subsidiary of We Wai Kai Nation)		
Non-replaceable Forest License A98674	Cribco Forest Products Ltd.	Sayward	
	(Subsidiary of Wei Wai Kum First		
	Nation)		

#### 2 Definitions

The following terms and abbreviations used throughout the FSP are defined and provided for reference:

BCTS means BC Timber Sales

BEC or BCG means Biogeoclimatic

**CP** means Cutting Permit

**Cutblock** means an area within which a tenure holder is authorized to harvest timber, as identified in a cutting permit, timber sale licence, or other cutting authority

**DDM** means Delegated Decision Maker

**EFZ** means an 'enhanced forestry zone' under the Vancouver Island Land Use Plan and related Higher Level Plan Order

FDU means Forest Development Unit

FDP means Forest Development Plan

FPPR means the Forest Planning and Practices Regulation of the Forest and Range Practices Act

FRPA means the Forest and Range Practices Act

FSP means Forest Stewardship Plan



FSW means Fisheries Sensitive Watershed

GAR means the Government Actions Regulation of the Forest and Range Practices Act

HLP means Higher Level Plan

**IRM** means Integrated Resource Management

LU means Landscape Unit

LUP means Landscape Unit Plan

NAR means Net Area to be Reforested

**OGMA(s)** means Old Growth Management Area(s)

**PAS** means Permanent Access Structures

#### Primary Forest Activities – means one or more of the following

- a) Timber Harvesting
- b) Silviculture Treatments
- c) Wildlife Habitat Enhancement
- d) Road Construction, maintenance, and deactivation

**Qualified Professional** means an applied scientist or technologist, acting alone or together with another professional, if:

- a) the individual is a registrant and in good standing with an appropriate regulatory body that is listed in Schedule 1 of the Professional Governance Act; and,
- b) is acting under that regulatory body's code of ethics and is subject to disciplinary action by that regulatory body; and
- c) the individual is acting within their area of expertise

**RMZ** in reference to riparian matters means a 'riparian management zone'; in the context of the Vancouver Island Land Use Plan and related Higher Level Plan Order means a 'resource management zone'

R/S means Result/Strategy

**SMZ** means a 'special management zone' under the Vancouver Island Land Use Plan and related Higher Level Plan Order

TAUP means the Total Area Under Permit, this includes all reserves (WTRA, TLA), harvest area and roads

THLB means Timber Harvesting Landbase

TSL means Timber Sale Licence

UWR means an Ungulate Winter Range

VILUP means Vancouver Island Land Use Plan and related Higher Level Plan Order

WHA means a Wildlife Habitat Area

**Wildlife tree** means a tree that provides wildlife habitat and assists in the conservation of stand level biodiversity



**Wildlife tree retention area(s) (WTRA)** means an area occupied by wildlife trees located in a cutblock, in an area that is contiguous to a cutblock, or in an area that is sufficiently close to the cutblock that the wildlife trees could directly impact on, or be directly impacted by, a forest practice carried out in the cutblock

WTP, WTR and Wildlife Tree Patch are the same as Wildlife Retention Areas.

## 3 General Information and Term of FSP

#### 3.1 Relevant Date for Legislation and Objective Reference

In this FSP, unless the FSP specifies otherwise, a reference to legislation, an established objective, a notice under s. 7(2) of the FPPR, a designation or a species to which such a notice or established objective applies, an establishment of an area referred to in s. 14(3)(a) to (i) of the FPPR or an order made by Government means that legislation, established objective, notice, designation, area, or order as it was on the date the FSP commences.

#### 3.2 Changes to Legislation

If legislation referred to in this FSP is renamed or a provision of legislation referred to in this FSP is renumbered, the reference in this FSP is to be construed as a reference to the provision as renamed or renumbered.

#### 3.3 Objectives Cancelled

If an objective for which a result or strategy (R/S) is included within this FSP is cancelled by Government, then the R/S within this FSP concerning the cancelled objective is no longer applicable effective the date of the cancellation of the objective.

#### 3.4 Term of the FSP

The term of this FSP is five years and begins on July 20, 2023. This FSP may be extended after the effective date according <u>FRPA s. 6(3)</u>.

#### 3.5 FSP Map

The FSP maps show the boundaries of the Forest Development Units (FDUs) under this FSP as per FRPA s. 5(1)(a) and FPPR s. 14. This FSP includes operations of FSP signatories in the Sayward, Salmon, Adam/Eve, Naka, Tsitika, Gold, Burman, Tahsish, Artlish, Kashutl, Kaouk, Simms, Upper Campbell and Eliza Landscape Units (LUs). Refer to Appendix 2 for the FSP Maps.

Any roads or road corridors identified on the British Columbia, Canada and Maa-nulth consensus maps dated March 11, 2005 (or as subsequently amended) that are to be excluded from Maa-nulth treaty land are included in the FDUs.



### 3.6 Designations in Effect at Date of Submission of this FSP

The FSP maps show the designations and requirements described in <u>FPPR s.14(3)</u> that were in effect on the date of submission of this FSP, including, for ease of reference, the designations listed in Table 2, below.

#### Table 2:Designations in Effect

FPPR s. 14 (3)(a)	FDU	Date Designated
Ungulate Winter Ranges		
UWR U1-004	Johnstone	December 17, 2003
UWR U1-014	Burman	December 14, 2004
UWR U1-005	Kyuquot, Eliza, Gold, Sayward,	July 20, 2006
	Salmon	
FPPR s. 14 (3)(b)	FDU	Date Designated
Wildlife Habitat Areas		
WHA 1-005 (Data Sensitive)	Sayward, Salmon	June 11, 2002
WHA 1-093 (Data Sensitive)	Johnstone	December 1, 2004
WHA 1-092 (Data Sensitive)	Johnstone	December 1, 2004
WHA 1-094 (Data Sensitive)	Gold	December 1, 2004
WHA 1-096 (Data Sensitive)	Sayward	December 1, 2004
WHA 1-135 (Marbled Murrelet)	Kyuquot	December 2, 2004
WHA 1-136 (Marbled Murrelet)	Kyuquot	December 2, 2004
WHA 1-137 (Marbled Murrelet)	Kyuquot	December 2, 2004
WHA 1-138 (Marbled Murrelet)	Kyuquot	December 2, 2004
WHA 1-139 (Marbled Murrelet)	Kyuquot	December 2, 2004
WHA 1-140 (Marbled Murrelet)	Kyuquot	December 2, 2004
WHA 1-141 (Marbled Murrelet)	Kyuquot	December 2, 2004
WHA 1-142 (Marbled Murrelet)	Куиquot	December 2, 2004
WHA 1-143 (Marbled Murrelet)	Kyuquot	December 2, 2004
WHA 1-144 (Marbled Murrelet)	Kyuquot	December 2, 2004
WHA 1-145 (Marbled Murrelet)	Kyuquot	December 2, 2004
WHA 1-146 (Marbled Murrelet)	Kyuquot	December 2, 2004
WHA 1-147 (Marbled Murrelet)	Kyuquot	December 2, 2004
WHA 1-148 (Marbled Murrelet)	Kyuquot	December 2, 2004
WHA 1-149 (Marbled Murrelet)	Kyuquot	December 2, 2004
WHA 1-150 (Marbled Murrelet)	Kyuquot	December 2, 2004
WHA 1-151 (Marbled Murrelet)	Kyuquot	December 2, 2004
WHA 1-152 (Marbled Murrelet)	Kyuquot	December 2, 2004
WHA 1-153 (Marbled Murrelet)	Kyuquot	December 2, 2004
WHA 1-154 (Marbled Murrelet)	Kyuquot	December 2, 2004
WHA 1-155 (Marbled Murrelet)	Kyuquot	December 2, 2004
WHA 1-156 (Marbled Murrelet)	Kyuquot	December 2, 2004
WHA 1-157 (Marbled Murrelet)	Kyuquot	December 2, 2004
WHA 1-158 (Marbled Murrelet)	Kyuquot	December 2, 2004
WHA 1-159 (Marbled Murrelet)	Kyuquot	December 2, 2004



WHA 1-160 (Marbled Murrelet)	Kyuquot	December 2, 2004
WHA 1-161 (Marbled Murrelet)	Kyuquot	December 2, 2004
WHA 1-162 (Marbled Murrelet)	Kyuquot	December 2, 2004
WHA 1-163 (Marbled Murrelet)	Kyuquot	December 2, 2004
WHA 1-164 (Marbled Murrelet)	Kyuquot	December 2, 2004
WHA 1-116 (Marbled Murrelet)	Kyuquot	December 13, 2004
WHA 1-119 (Marbled Murrelet)	Kyuquot	December 13, 2004
WHA 1-211 (Marbled Murrelet)	Johnstone	November 9, 2011
WHA 1-212 (Marbled Murrelet)	Johnstone	January 21, 2008
WHA 1-481 (Red-legged Frog)	Sayward	April 1, 2014
WHA 1-482 (Red-legged Frog)	Sayward	April 1, 2014
WHA 1-483 (Red-legged Frog)	Sayward	April 1, 2014
WHA 1-514 (Marbled Murrelet)	Kyuquot	March 23, 2019
WHA 1-515 (Marbled Murrelet)	Kyuquot	March 23, 2019
WHA 1-698 (Data sensitive)	Sayward	October 3, 2019
WHA 1-699 (Data sensitive)	Sayward	October 3, 2019
WHA 1-703 (Data sensitive)	Sayward	October 3, 2019
FPPR s. 14 (3)(c)	FDU	Date Designated
Fisheries Sensitive Watersheds	100	Date Designated
Artlish River	Kyuquot, Salmon	December 28, 2005 and
Memekay River	, , ,	As per Schedule 2 FPPR Sec. 8.1
FPPR s. 14 (3)(d)	FDU	Date Designated
Lakeshore Management Zones	FDO	Date Designated
Riparian Reserve Zones established for Lakes	Sayward	February 26, 2003
within the Sayward LU by the District Manager		, ,
FPPR s. 14 (3)(e)	FDU	Date Designated
Scenic Areas		
Scenic areas as established by the District	All	December 14, 2005
Manager		
<u>FPPR s. 14 (3) (g)</u>	FDU	Date Designated
Community Watersheds	Countrand	May 20, 2001
John Hart Lake FPPR s. 14 (3)(h) and Land Act s. 93.4	Sayward FDU	May 29, 2001 Date Designated
Old Growth Management Areas	FDO	Date Designated
	Connerd	huly 1, 2002 (actablished)
Established OGMAs as per the Order to Establish a Landscape Unit and Objectives -Sayward	Sayward	July 1, 2003 (established)
Landscape Unit		
Established OGMAs as per the Ministerial Order	Johnstone,	luly 26, 2010
for Land Use Objectives for Old Growth	Salmon	July 26, 2010
Management Areas		
FPPR s. 7 (2) and <i>Land Act</i> s. 93.4		
Old Growth Management Areas and Wildlife	FDU	Date Designated
Habitat Areas		



Established OGMAs and WHAs as per the	All	December 2, 2021
Ministerial Order for The Recovery of Marbled		
Murrelet and Notice – Indicators of the Amount,		
Distribution and Attributes of Wildlife Habitat		
Required for the Survival of Marbled Murrelet		

#### 3.7 Declared Areas

All previously identified and declared areas under the BCTS Strait of Georgia Campbell River FSP (ID# 688) are carried forward under this replacement FSP.

## **3.8** Areas Within FDUs Subject to a Road Permit, Cutting Permit, or Timber Sale Licence but Not Subject to this FSP

For the purposes of <u>FPPR s.14(3)(j) and (k)</u>, the FSP maps identify the areas that are within the outer boundaries of the FDUs, but subject to a road permit, cutting permit, or Timber Sale Licence in effect on the date of commencement of this FSP.

#### 4 Results and Strategies

#### 4.1 Land Use Objectives

This section is driven by the Land Use Objectives (<u>FRPA s.5(1)(b) and 5(1.1)</u>) from Higher Level Plans and Ministerial Orders such as Sayward Landscape Unit and Order Establishing Provincial Non-Spatial Old Growth Objectives.

#### 4.1.1 Higher Level Plan Objectives for the Sayward Landscape Unit

The "Order to Establish a Landscape Unit and Objectives – Sayward Landscape Unit" was established on July 1, 2003 for the Sayward Landscape Unit.

#### 4.1.1.1 Objective 1 (HLP Objective 1)

 Maintain or recruit old growth forest attributes in designated old growth management areas (OGMA, OGMA/UWR for Deer, and OGMA/UWR for Elk), as shown on the attached Sayward Landscape Unit map, titled Biodiversity and Wildlife<sup>1</sup>. 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 sections 2 and 3 below.

<sup>&</sup>lt;sup>1</sup> <u>https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/natural-resource-use/land-water-use/crown-land/land-use-plans-and-objectives/westcoast-region/campbellriver-lup/sayward\_landscape\_unit\_biodiversity\_wildlife\_map.pdf</u>



- 2. The Delegated Decision Maker (DDM) may allow operations to occur within an OGMA that are not to be established as UWR for Deer or Elk 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 if no other practicable option exists.
  - (3) Partial-cut timber harvesting within immature (<100 years old) portions of OGMAs, where it can be demonstrated that harvesting will accelerate development of old growth forest attributes and improve the stand for biodiversity purposes, without compromising other resource values.
- 3. The following do not require the approval of the Delegated Decision Maker before proceeding:
  - (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) (2) Felling of guyline clearance, tailhold anchor trees, or danger trees (except high value live wildlife trees<sup>2</sup>) along cutblock boundaries or within the right of way on new road/bridge alignments to meet safety requirements. These trees are to be retained on site for coarse woody debris.
  - (3) Intrusions<sup>3</sup>, less than 0.5 hectare in size for OGMA's that are not to [be] established as UWR for Deer or Elk.
  - (4) OGMAs that are not to be established as UWR for Deer or Elk that are > 10ha in size may be modified for operational reasons provided that replacement OGMA of like or better quality and quantity is identified in order or 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 >10ha to < 50ha in size where the proposed development affects the OGMA by <5ha,
    - *ii)* OGMAs ≥ 50ha to < 100ha in size where the proposed development affects the OGMA by < 10ha,
    - iii) OGMAs ≥ 100ha in size where the proposed development affects the OGMA by <10%,</li>
    - 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 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.</li>

<sup>&</sup>lt;sup>2</sup> High value live wildlife trees are characterized as having the presence of black bear dens or visible, large stick nests.

<sup>&</sup>lt;sup>3</sup> Intrusions will occur where field engineering more precisely locates OGMA boundaries.



#### Strategy

- 1) The holder(s) of the FSP will not carry out or authorize primary forest activities including salvage, singletree selection, topping for cone harvesting, or commercial gathering of botanical forest products within OGMAs delineated as part of the Sayward LU objectives established July 1, 2003, except:
  - a) as agreed upon in writing by the DDM for activities within an OGMA not established as UWR for Deer or Elk including but not limited to the following:
    - i) timber harvesting may occur to prevent the spread of insect infestations or disease that pose a significant threat to forested areas outside of OGMAs;
    - ii) road construction may occur if no other practicable option exists;
    - iii) partial-cut timber harvesting within immature portions of OGMAs, where it can be demonstrated that harvesting will accelerate development of old growth forest attributes and improve the stand for biodiversity purposes, without compromising other resource values.
  - b) under the following permissible activities within OGMAs established as part of the Sayward LU objectives do not require approval of the DDM:
    - i) maintenance, deactivation, removal of danger trees, or brushing and clearing on existing roads under active tenure within the right-of-way for safety purposes;
    - 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;
    - iii) intrusions less than 0.5 ha in size for OGMAs that are not established as UWR for Deer or Elk;
    - iv) OGMAs that are not established as UWR for Deer or Elk that are > 10ha in size may be modified for operational reasons provided that replacement OGMA of like or better quality and quantity, as determined by a qualified professional, 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 overall OGMA ecological attributes and spatial distribution are maintained or improved in one of the following categories:
      - OGMAs <a>10 ha to <50 ha in size where the proposed development affects the OGMA by < 5ha;</a>
      - (2) OGMAs  $\geq$ 50 ha to <100 ha in size where the proposed development affects the OGMA by <10 ha;
      - (3) OGMAs <a>100</a> ha in size where the proposed development affects the OGMA by <10 %;</li>
      - (4) construction of <500 m 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 deactivate or rehabilitate a temporary road or bridge site within four years after construction;
      - (5) 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.</p>



 Section 1 of this strategy applies to subsequent amendments to OGMAs delineated within the Sayward LU objectives.

FDUs to which these R/S apply: Sayward

#### 4.1.1.2 OBJECTIVE 2 (HLP Objective 2)

Maintain stand level structural diversity by retaining wildlife tree patches (WTP). Cutblocks for which harvesting has been completed by each licensee by tenure will maintain adequate amounts of wildlife tree patches to ensure that over any 5 year period, commencing on the date the objectives are established, the target percentage as noted in Table A is achieved. In addition:

- (1) WTPs must be well distributed across the BEC subzone or variant.
- (2) No timber harvesting, including salvage or single tree selection, is to occur within Wildlife Tree Patches.
- (3) WTPs must include, if present, live and dead veteran trees (excluding danger trees), or remnant old growth patches.
- (4) WTPs must include larger trees for the stand and existing moderate to high value wildlife trees (excluding danger trees).
- (5) BEC subzones and/or variants will be determined by site plan information.

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

BEC Subzone	% Wildlife Tree Retention
CWHmm1 (Coastal Western Hemlock, Submontane moist	13
maritime)	
CWHmm2 (Coastal Western Hemlock, Montane moist maritime)	10
CWHxm (Coastal Western Hemlock, Very Dry Maritime)	14
MHmm1(Mountain Hemlock, Windward moist maritime)	2

#### Strategy

1) The holder(s) of the FSP will identify WTRA(s), for cutblocks for which harvesting has been completed to ensure that over any 5 year period the target percentages noted in the table below are achieved.

BEC Subzone	Total WTR (%)
CWHmm1	13
CWHmm2	10
CWHxm1	14
CWHxm2	14
MHmm1	2

2) WTRAs will:

a) be distributed across the BEC subzone or variant as determined by Site Plan information;

b) not be subject to timber harvesting, including salvage or single tree selection;

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	c)	include, if present, live, and dead veteran trees, (excluding danger trees), or remnant old growth patches; and,
	d)	include, when possible, larger trees for the stand and existing moderate to high value wildlife trees (excluding danger trees).
3)		lder(s) of the FSP will undertake to comply with <u>FPPR s. 66 and 67</u> as those sections were on the f this submission of this FSP, except with respect to <u>FPPR s. 12.5(2) and (4)</u> , where:
	a)	a tree must be felled to safely establish one or more tailholds or guy-line tiebacks in a WTRA to facilitate adjacent cable logging operations; or
	b)	a tree, or trees, within a WTRA is modified via windfirming treatments to maintain the integrity of that WTRA;
	c)	timber may be harvested in a WTRA, where the holder(s) of the FSP specifies one or more replacement WTRA, consistent with section 2 and 4 d) and e) of this strategy.
4)		timber harvesting is planned or authorized within a WTRA, replacement forest of equivalent age, are and area must be identified that is:
	a)	within the cutblock to which the WTRA is related; or,
	b)	in an area contiguous to the cutblock to which the WTRA is related; or,
	c)	in an area that is sufficiently close to the cutblock to which the WTRA is related that the wildlife trees could directly impact on, or be directly impacted by, a forest practice carried out in the cutblock.
	And th	at the process to replace the WTRA:
	d)	includes a rationale prepared by a qualified professional outlining what was replaced and what was chosen as a replacement area prior to harvest of the applicable cutblock; In blocks prior to Free Growing Declaration a Site Plan or Site Plan Amendment will be prepared. Where Free Growing is declared a rationale will be prepared and filed on the opening file.
	e)	includes data required to be submitted to the most current Province of BC database by the end of each calendar year, consistent with <u>FPPR s. 86(3)</u> .
5)	The pe	rcentage of stand retention shall be determined as follows: WTRA Retention % = WTRA / TAUP.



#### 4.1.1.3 OBJECTIVE 3 (HLP Objective 4)

Provide for spring forage adjacent to Ungulate Winter Ranges/Deer, as indicated on the Sayward Landscape Unit map, titled Biodiversity and Wildlife⁴ by managing seral stages as follows:

• Identifying Ungulate Winter Ranges/Deer within the Strathcona Timber Supply Area and determining all areas within 2 km that are on slopes 40 to 100% and with an aspect of exposure from 90 through 270 degrees and, ensuring that no more than 25% of this area be younger than 20 years old at any point in time; or Identifying Ungulate Winter Ranges/Deer within Tree Farm Licence 39 and managing as per the Weyerhaeuser Standard Operating Procedure for the Management of Critical Spring Forage Adjacent to Black-tailed Deer Winter Ranges, dated and approved November 29, 2001.

	Re	sult
	1)	In this Result:
Sayward LUP – UWRs		"spring forage areas" (CSF) means an individual area larger than 2.0 ha within 2 kms to UWR for Deer as identified on the Sayward Landscape Unit map, titled Biodiversity and Wildlife <sup>5</sup> , with aspect between 90 degrees and 270 degrees and a slope range of 40 % to 100%.
IP – UWI		"within 2 kms of a Deer UWR" means the area within a 2 km buffer applied from the perimeter of the UWR, excluding areas isolated from the UWR by large lakes which deer are highly unlikely to cross.
ard LU		"forest under 20 years" means portions of cutblocks larger than 2.0 ha 19 years or less from establishment based on reforestation declarations on the date of the assessment.
Saywa		"no more than 25% of this area" means the area of spring forage area to be harvested divided by the total of critical spring forage areas within the 2km buffer around the UWR.
	2)	The holder(s) of the FSP will not carry out or authorize primary forest activities within areas identified as spring forage areas if such harvesting will result in >25% of total spring forage area to be younger than 20 years old at any point in time.
	FDU	Is to which these R/S apply: Sayward

<sup>4</sup> Forest structure important to the function of an ungulate winter range is defined by large tree canopies effective in intercepting and retaining snowfall, clumped groups of conifers, rock outcrops, and scattered openings with herb and shrub layers present. Also, refer to, Deer and Elk Habitats in Coastal Forests of Southern British Columbia, Ministry of Forests and Ministry of Environment, 1990.

<sup>5</sup> <u>https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/natural-resource-use/land-water-use/crown-land/land-use-plans-and-objectives/westcoast-region/campbellriver-lup/sayward\_landscape\_unit\_biodiversity\_wildlife\_map.pdf</u>



#### 4.1.1.4 OBJECTIVE 4 (HLP Objective 5)

Manage stand structure and provide hiding cover for elk in the Elk Visual Cover Areas as identified on the attached Sayward Landscape Unit map, titled Biodiversity and Wildlife, by:

- Maintaining at least 50% of the forested area of each Elk Visual Cover Area at greater than 5 metres in height; and,
- Prohibiting further harvesting adjacent to the major riparian feature (swamp, lake or stream) within the Elk Visual Cover Areas identified on the Sayward Landscape Unit map, titled Biodiversity and Wildlife, until the forest on the opposite side of the riparian feature exceeds the 5 metre height requirement for a lateral distance of 100m from the riparian feature.

	Sti	rategy
	1)	In this strategy:
		"Elk Visual Cover Area" means spatially defined polygons located along main Elk travel corridors with the intent to protect Elk from human predation as indicated on the Sayward Landscape Unit map titled Biodiversity and Wildlife <sup>5</sup> .
al Cover		<b>"50% of the forested area of the Elk Visual Cover Area</b> " means the area with average stand height more than 5 m divided by the total area of the EVC using forest cover information from BC Geographic warehouse.
k Visua		"major riparian feature" means a W1 or W2 wetland, or S2, S3 stream, and lakes larger than 1.0 ha within an Elk Visual Cover Area.
Ē	2)	The holder(s) of the FSP will not carry out or authorize primary forest activities:
LUP -		<ul> <li>a) within areas identified as Elk Visual Cover areas if such harvesting will result in &gt;50% of the forested area in each Elk Visual Cover area to be &lt;5 meters in height;</li> </ul>
Sayward LUP – Elk Visual Cover		b) adjacent to the major riparian feature (swamp, lake stream) within an area identified as an Elk Visual Cover Area on the Sayward Landscape Unit map titled Biodiversity and Wildlife <sup>6</sup> until the forest on the opposite side of the riparian feature exceeds the 5 metre height requirement for a lateral distance of 100 meters from the riparian feature; or,
		c) within an area identified as an Elk Visual Cover Area until the forest parallel to the main travel direction exceeds the 5 metre height requirement for a lateral distance of 100 meters from the harvest of timber or construction of new roads.
	FDL	Js to which these R/S apply: Sayward

<sup>6</sup> <u>https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/natural-resource-use/land-water-use/crown-land/land-use-plans-and-objectives/westcoast-region/campbellriver-lup/sayward\_landscape\_unit\_biodiversity\_wildlife\_map.pdf%20</u>



#### 4.1.1.5 OBJECTIVE 5 (HLP Objective 12)

To manage stand structure and protect Critical Stream Reaches, as shown on the Sayward Landscape Unit map, titled Lakes Classification<sup>7</sup>, and Small Spawning and Rearing Streams (S4) by:

- Retaining all windfirm trees with roots embedded in the streambank; and
- For S4 streams, retaining 50% of the stems, representative of species, age and size, within 10m of the channel;

E	S	trategy
Sayward LUP – Critical Stream	2	embedded in the streambank of small spawning and rearing streams (S4) and critical stream reaches as identified on the Sayward Landscape Unit map, titled Lakes Classification <sup>8</sup> .
Sayı	FI	DUs to which these R/S apply: Sayward

#### 4.1.1.6 OBJECTIVE 6 (HLP Objective 16)

To establish a patch size objective and pursue enhanced timber harvesting opportunities, within areas not subject to integrated resource management (i.e., ungulate winter ranges, elk hiding cover areas, old growth management areas, recreation resource units, visually sensitive landscapes<sup>9</sup>, recreation constraint areas, lakeshore management zones, and designated community watersheds) and as shown as Non-constraint Areas on the Sayward Landscape Unit map titled, Non-constraint Areas<sup>10</sup>, by allowing cutblocks up to, but not exceeding 80 ha in size<sup>11</sup>.

<sup>&</sup>lt;sup>7</sup> <u>https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/natural-resource-use/land-water-use/crown-land/land-use-plans-and-objectives/westcoast-region/campbellriver-lup/sayward\_landscape\_unit\_lake\_stream\_classification\_map.pdf</u>

<sup>&</sup>lt;sup>8</sup> <u>https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/natural-resource-use/land-water-use/crown-land/land-use-plans-and-objectives/westcoast-region/campbellriver-lup/sayward\_landscape\_unit\_lake\_stream\_classification\_map.pdf</u>

<sup>&</sup>lt;sup>9</sup> Visually sensitive landscapes refers to areas with an established VQO of Preservation, Retention, or Partial Retention.

<sup>&</sup>lt;sup>10</sup> <u>https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/natural-resource-use/land-water-use/crown-land/land-use-plans-and-objectives/westcoast-region/campbellriver-lup/sayward\_landscape\_unit\_non\_constraint\_area\_map.pdf</u>

<sup>&</sup>lt;sup>11</sup> Size refers to the net area to be reforested.



	Strategy
LUP – ed Areas	1) Within the Sayward Landscape Unit area, the holder(s) of the FSP may carry out or authorize the harvest of cutblocks with a NAR up to 80 ha, subject to:
Sayward Ll Unconstraine	a) where the cutblock NAR overlaps the IRM <sup>12</sup> area, as shown on the Sayward Landscape Unit Non-constraint Areas map, the portion of the cutblock within the IRM area is limited to a maximum of 40ha NAR.
Ū	FDUs to which these R/S apply: Sayward

#### 4.1.2 Old Growth Management Areas – Approve Landscape Unit Orders

Pursuant to <u>Land Act s. 93.4</u>, a Ministerial Order establishing land use objectives for the purposes of FRPA for OGMAs within the Tsitika, Naka, Adam-Eve, White and Salmon LUs was designated on July 26, 2010.

- 1) Maintain or recruit old growth forests in established Old Growth Management Areas as shown on the map attached as Schedule 1<sup>13</sup> [or as subsequently amended], subject to subsections (2) to (6) below.
- 2) Despite subsection 1, timber harvesting and road or bridge construction are permitted within OGMAs, provided that:
  - a) the area of the OGMA that is subject to timber harvesting or road or bridge construction does not exceed the greater of one hectare or 10% of the area of the OGMA,
  - b) replacement forest is identified which is
    - i) biologically suitable
    - *ii)* of equivalent age, structure and area, and
    - *iii)* situated in order of priority either immediately adjacent to the OGMA, or adjacent to another OGMA in the same variant and landscape unit as the existing OGMA, and
  - c) road or bridge construction, if applicable, is required to access resource values beyond or adjacent to the OGMA and no other practicable option for road or bridge location exists.
- 3) For the purposes of subsection 2) a) and b), as an alternative to identifying replacement area, a temporary road or bridge site may be permanently deactivated and rehabilitated within four years after construction.
- 4) Within OGMAs, the following activities are permitted:
  - a) First Nations traditional use of trees or understorey plants.
  - b) Topping or pruning of trees along boundaries to improve wind firmness.

<sup>&</sup>lt;sup>12</sup> Areas subject to integrated resource management are within constrained areas shown on the Sayward Landscape Unit Map titled Non Constraint Areas (<u>https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/natural-resource-use/land-water-use/crown-land/land-use-plans-and-objectives/westcoast-region/campbellriverlup/sayward\_landscape\_unit\_non\_constraint\_area\_map.pdf</u>). These constrained areas include UWRs, elk cover areas, OGMAs, recreation resource units, visually sensitive landscape, recreation constraint areas, lakeshore management areas, and designated community watersheds.

<sup>&</sup>lt;sup>13</sup> <u>https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/natural-resource-use/land-water-use/crown-land/land-use-plans-and-objectives/legal-orders/campbellriver\_lu\_tsitika-naka-adam-eve-white-salmon\_luor\_29jul2010.pdf</u>



- c) Timber harvesting to prevent the spread of insect infestations or diseases that pose 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.
- d) Road maintenance, deactivation, removal of danger trees, or brushing and clearing on existing roads under active tenure within the right-of-way for safety purposes.
- e) Felling for guyline clearance, tailhold anchor trees, or danger trees along cutblock boundaries or within the right-of-way on new road/bridge alignments to meet safety requirements.
- f) Silvicultural habitat enhancement in recruitment OGMAs.
- g) Trail and site maintenance or development, and silvicultural treatments to address public safety associated with the management and operation of recreation sites and trails.
- 5) Replacement forest is required if the total area of an OGMA that is subject to the activities pursuant to subsection (4) exceeds the greater of one hectare or 10% of the area of the OGMA. Replacement forest must be biologically suitable, of equivalent age, structure and area, and situated, in order of priority, either immediately adjacent to the OGMA, or adjacent to another OGMA in the same variant and landscape unit as the OGMA.
- 6) OGMA adjustments and replacements made in accordance with subsections (2) to (5) must be documented and submitted as digital spatial data to the delegated decision maker at the end of each calendar year.

#### Strategy

**OGMAs** 

- When the FSP holder(s) conducts primary forest activities in areas where Landscape Unit (LU) Objectives are legally established, as shown on the LU Order maps, the objectives for Old Growth Management Areas (OGMAs), maintenance and recruitment of old growth forests, permissible (and non-permissible) activities within OGMAs and identification of replacement area and communication, are adopted as a Strategy.
- 2) Refer to the <u>FSP R/S Section 4.2.2.1.</u> for OGMAs legally established through the MAMU Ministerial Order December 2, 2021.

FDUs to which these R/S apply: Sayward, Johnstone, Salmon

#### 4.1.3 Order Establishing Provincial Non-Spatial Old Growth Objectives

The Order Establishing Non-Spatial Old Growth Objectives (effective June 30, 2004) (the Order) clarifies the amount of area available for timber harvesting. This Order supplements but does not replace <u>FPPR s. 9</u>.

	Strategy	
Old der	1) In this strategy:	
Non-Spatial Old Growth Order	"Order" means the Order Establishing Provincial Non-Spatial Old Growth Objectives (effective June 30, 2004);	
n-Sl row	"legal OGMA" are those OGMAs established through an LUP process or Ministerial order;	
oN	<b>"draft OGMA"</b> are those OGMAs identified by the holder(s) of this FSP consistent with provision A8 of the Order and provision 2(c) and 6 of the Implementation Policy.	16



"proposed OGMA" are those spatial polygons that have been designed to accomplish retention targets for representative ecosystems and have not become legal OGMA and are not considered draft OGMA.
2) Where draft OGMAs are identified, the holder(s) of the FSP in accordance with the written notice specifying that the draft OGMAs meet the intent of the Order:
a) will maintain or recruit old growth forest attributes within draft OGMAs; and
<ul> <li>b) will authorize or carry out road construction or timber harvesting or other such operations within draft OGMAs in accordance with direction in the written notice specifying that draft OGMAs meet the intent of the non-spatial Order for the landscape unit; and</li> </ul>
c) may authorize or carry out road construction or timber harvesting within draft OGMAs, provided that replacement areas are selected by the holder(s) of the FSP that:
<ul> <li>i) are within the same biogeoclimatic variant;</li> <li>ii) have similar or more suitable ecological attributes for conserving biological diversity than the area being removed from draft OGMA;</li> <li>iii) such replacement will not result in the insufficient suitable forest being available to meet the retention targets.</li> </ul>
3) Where amendments are made to draft OGMAs as provided for in subsection 2(c) (iii), the holder(s) of the FSP will provide copies of the replacement area to the applicable Provincial ministry responsible for establishing and amending OGMAs.
<ol> <li>The holder(s) of the FSP will map and submit draft OGMA boundary adjustments and draft OGMA replacement areas to the Delegated Decision Maker (DDM) at the end of each calendar year.</li> <li>Where there are no OGMAs, legal or draft, or where proposed OGMAs exist the holder(s) of the FSP, in concert with holders of major licences operating in the same FDU, will:</li> </ol>
a) not carry out or authorize timber harvesting or road construction in areas of old forest within that FDU, to the extent necessary to meet the specified retention targets; and
b) if the amount of old forest is insufficient to meet the specified retention target, determine if the identified shortfall can be achieved in the mature forest and not carry out or authorize timber harvesting or road construction in areas of mature forest assessed to have old forest structure to the extent necessary to meet the specified retention targets.
FDUs to which these R/S apply: Kyuquot, Eliza, Gold, Burman,

#### 4.1.4 Vancouver Island Land Use Plan Higher Level Plan Order

The applicable Higher Level Plan Order Objectives for the Special Management Zones (SMZs) and Enhanced Forestry Zones (EFZs) included in this FSP are listed in the following tables and described below and are shown on the FSP maps.

Special Management Zone	Applicable HLP Objective	FDU	
SMZ 7 Johnstone Strait	1 (a,b,c), 2	Johnstone	
SMZ 8 Tsitika River	1 (a,b,c), 2, 4, 5	Johnstone	[7
			Page 1

#### Table 3: VILUP Special Management Zones



SMZ 10 Pinder-Atluck	1 (a,b,c), 2,	Kyuquot
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#### Table 4: VILUP Resource Management Zones (Enhanced and General)

Resource Management Zone	Applicable HLP Objective	FDU
RMZ 14 Kashutl	15, 16	Kyuquot
EFZ 15 Tahsish	7, 9, 9.1 *	Kyuquot
RMZ 17 Artlish-Kaouk	15,16	Kyuquot
EFZ 24 Burman	7, 9, 9.1 *	Burman
EFZ 27 Naka	7, 9, 9.1*	Johnstone
EFZ 28 Adam/Eve	7, 9, 9.1*, 15, 16	Johnstone
EFZ 30 Salmon	7, 9, 9.1*	Salmon
EFZ 18 Eliza	7, 9, 9.1*,	Eliza

\* Objectives 7, 8, 9, 9.1 apply save and except for the parts of those zones which are designated as community watersheds as defined in FPC s. 41(8).

#### 4.1.4.1 HLP Order Objective 1(a) – Mature and Old Seral

- 1) Sustain forest ecosystem structure and function in SMZs, by:
  - (a) Creating or maintaining stand structures and forest attributes associated with mature<sup>14</sup> and old<sup>15</sup> forests subject to the following:
    - *i.* the target for mature seral forest should range between one quarter to one third of the forested area of each SMZ<sup>16</sup>; and
    - *ii. in the SMZs where the area of mature forest is currently less than the mature target range referred to in (i) above, the target amount of mature forest must be in place within 50 years.*

<sup>&</sup>lt;sup>14</sup> The mature seral forest is defined as generally 80 to 120 years old or older, depending on species and site conditions. The structure of mature seral forests generally includes canopies that vary vertically or horizontally, or both. The age and structure of the mature seral stage will vary significantly by forest type and from one biogeoclimatic zone to another.

<sup>&</sup>lt;sup>15</sup> The old seral forest is defined as generally greater than 250 years old, containing live and dead (downed and standing) trees of various sixes, including large diameter trees, and of various tree species, including broad-leaved trees. The structure of old seral forest varies significantly by forest type and from one biogeoclimatic zone to another.

<sup>&</sup>lt;sup>16</sup> Mature seral targets will be established through landscape unit planning. See transition provisions under III.



le	Strategy
Mature Seral	1. The holder(s) of the FSP will not carry out or authorize primary forest activities in mature and old seral forest:
VILUP – 1a and Old	a) within the designated Johnstone Strait SMZ 7, Tsitika River SMZ 8, Pinder Atluck SMZ 10 that would result in the amount of mature and old seral stage forest to fall below 25%.
, AIL	FDUs to which these R/S apply: Portions of the Johnstone, Kyuquot FDUs within the SMZs

#### 4.1.4.2 HLP Order Objective 1(b) – Structural Forest Attributes

- 1. Sustain forest ecosystem structure and function in SMZs, by:
  - (b) retaining, within cutblocks<sup>17</sup>, structural forest attributes and elements with important biodiversity functions<sup>18</sup>.

al	Strategy
LUP – 1b Structural Forest Attributes	<ol> <li>In designated, Johnstone Strait SMZ 7, Tsitika River SMZ 8, Pinder Atluck SMZ 10, the holder(s) of the FSP will retain, within cutblocks, structural forest attributes and elements with important biodiversity functions. Structural forest attributes include, but are not limited to, snags, wildlife trees and downed logs.</li> </ol>
VILUP Fore	FDUs to which these R/S apply: Portions of the Johnstone, Kyuquot FDUs within the SMZs

#### 4.1.4.3 HLP Order Objective 1(c) and 2 – Silviculture Systems and Salvage

- 1) Sustain forest ecosystem structure and function in SMZs by:
  - (c) Applying a variety of silvicultural systems, patch sizes and patch shapes across the zone, subject to a maximum cutblock size of 5 ha if clearcut, clearcut with reserves or seed tree silvicultural systems are applied, and 40 ha if shelterwood, selection or retention silvicultural systems are applied<sup>19</sup>.
- 2) Despite subsection 1(c) above, cutblocks larger than 5 or 40 ha as the case may be, may be approved if harvesting is being carried out to recover timber that was damaged by fire, insects, wind or other similar events and wherever possible, the cutblock incorporates structural characteristics of natural disturbances.

<sup>&</sup>lt;sup>17</sup> Within cutblocks: generally, means non-contiguous with cutblock boundaries.

<sup>&</sup>lt;sup>18</sup> This includes, but is not limited to snags, wildlife trees, downed logs.

<sup>&</sup>lt;sup>19</sup> Maximum cutblock sizes refer to net are to be reforested.



	rategy
1)	<ul> <li>In this strategy retention silviculture system will utilize the parameters set out in FPPR s.64(4), the cutblock meets the definition if no point within the net area to be reforested is:</li> <li>a) More than two tree lengths from either: <ul> <li>i) the cutblock boundary, or</li> <li>ii) a group of trees reserved from harvesting that is greater than or equal to 0.25 ha in size, or</li> </ul> </li> <li>b) more than one tree length from a group of trees reserved from timber harvesting that is less than 0.25 ha in size.</li> </ul>
	"shelterwood silviculture system" is defined as a system where the old stand is removed in a series of cuttings to promote the establishment of a new even-aged stand under the shelter of the old one. The intent is to protect and shelter the developing regeneration;
	<b>"selection silviculture system"</b> includes single tree and group selection and is defined as a system that removes mature timber either as single scattered individuals or in small groups at relatively short intervals, repeated indefinitely, where an uneven-aged stand is maintained. Regeneration should occur throughout the life of the stand with pulses following harvest entries. This system depends on recruitment of trees into successive age classes over time and the predictable yield from merchantable age classes;
2)	Regarding Objective #1(c), the holder(s) of the FSP will apply a variety of silviculture systems <sup>20</sup> , patch sizes and patch shapes across the SMZ zone, subject to a maximum cutblock size of:
	a) 5 ha if the silvicultural system is clearcut, clearcut with reserves or seed tree; and,
	b) 40 ha if the silvicultural system is shelterwood, selection or retention.
3)	Regarding Objective #2, subject to approval, the FSP holder(s) may carry out or authorize primary forest activities within a cutblock that exceeds the size limits in subsection 2), if:
	a) harvesting is being carried out to recover timber that was damaged by fire, insects, wind, or othe similar events; and,
	b) wherever possible, the cutblock incorporates structural characteristics of natural disturbances and,
	c) a rationale prepared by a qualified professional for District Manager approval.

<sup>&</sup>lt;sup>20</sup> Silvicultural Systems Handbook For British Columbia https://www.for.gov.bc.ca/hfp/publications/00085/silvsystemshdbk-web.pdf



#### 4.1.4.4 HLP Order Objectives 4 and 5 – Rare Ecosystems

- 4. Maintain late-successional habitat elements and attributes of biodiversity<sup>21</sup> in forested ecosystems with emphasis on regionally rare and underrepresented ecosystems, by retaining old seral forest at the site series/surrogate level of representation<sup>22</sup>.
- 5. Retain late-successional habitat elements and attributes of biodiversity in patches of variable size.

	St	rategy
	1)	In this strategy:
S		<b>"old seral forest"</b> is defined in VILUP as generally greater than 250 years old, containing live and dead (downed and standing) trees of various sizes, including large diameter trees, and of various tree species, including broad-leaved trees. The structure of old seral forest varies significantly by forest type and from BEC zone to another.
– Rare Ecosystems	2)	Regarding VILUP Objective 4, the FSP holder(s) will adhere to the approved Johnstone Strait Landscape Unit Plan.
soo	3)	Regarding VILUP Objective 5, the holder(s) of the FSP will:
kare E		a) design cutblocks that retain, within or adjacent to the cutblocks, late successional habitat elements and attributes of biodiversity <sup>23</sup> in old seral forest in:
		i) WTRAs;
d 5		ii) riparian management areas; or,
4 ar		iii) other areas reserved from harvesting
VILUP 4 and		that are of various sizes, and which will include site series representative of the site series associated with the areas to be harvested and are internal or immediately adjacent to the perimeter of the cutblock.
		<ul> <li>b) carry out primary forest activities only if they are consistent with the design for the cutblock referred to in subsection 3(a) of this R/S;</li> </ul>
		c) enter into a TSL or CP only if the licence or permit is consistent with the design for the cutblock referred to in subsection 3(a) of this R/S.
	FD	Js to which these R/S apply: Johnstone

<sup>&</sup>lt;sup>21</sup> This includes but is not limited to: large diameter (>60 cm) live, decaying and dead standing trees (providing nest and cavity sites); downed wood, including large diameter pieces (50 to 150 cm); deciduous broad-leaved trees, both in riparian and upland areas.

<sup>&</sup>lt;sup>22</sup> The level of representation of old seral forest will be applied through landscape unit planning.

<sup>&</sup>lt;sup>23</sup> This includes but is not limited to: large diameter (>60 cm) live, decaying and dead standing trees (providing nest and cavity sites); downed wood, including large diameter pieces (50 to 150 cm); deciduous broad-leaved trees, both in riparian and upland areas.



#### 4.1.4.5 HLP Order Objective 7 – Short-term Timber Availability

- 7. To increase the short-term availability of timber,
  - (a) a cutblock may be larger than 40 ha pursuant to section 11(2)(a) of the OPR; and
  - (b) pursuant to section 68(4) of the OPR, a cutblock is greened-up if it is adequately stocked and the average height of those trees that are
    - (i) the tallest tree in each 0.01 ha plot included in a representative sample, and
    - (ii) a commercially valuable species or other species acceptable to the district manager

is at least 1.3 meters;

unless the district manager determines that a cutblock referred to under (a) or (b) would significantly impact specific hydrological, wildlife, biodiversity, scenic or recreation values.

	St	rategy
	1)	In this strategy "Retention Silvicultural System" means a silvicultural system that is designed to:
bility		<ul> <li>a) retain individual trees or groups of trees to maintain structural diversity over the area of the cutblock for at least one rotation; and,</li> <li>b) leave more than half the total area of the cutblock within one tree height from the base of a tree or group of trees, whether or not the tree or group of trees is inside the cutblock.</li> </ul>
Availa	2)	In this strategy, except for in a designated as community watershed, the FSP holder(s) will not utilize the strategy under HLP Order Objective 7a. <sup>24</sup>
nber /	3)	The FSP holder(s) may assess a cutblock as greened-up if it is adequately stocked and the average height of those trees that are:
٦Ti		i) the tallest tree in each 0.01 ha plot included in a representative sample; and,
ern		ii) a commercially valuable species or other species acceptable is at least 1.3 meters.
Short T	4)	For the purposes of this strategy, in determining the size of a proposed cutblock the non-greened up portion of an existing cutblock adjacent to a cutblock proposed for harvest will be considered part of the proposed cutblock's NAR.
VILUP 7 – Short Term Timber Availability	5)	To avoid significant impacts to specific hydrological, wildlife, biodiversity, scenic or recreation values; cutblocks applying section 3 of this strategy to adjacent cutblocks, the FSP holder(s) will be consistent with:
>		a) hydrological values:
		i) <u>R/S in FSP Section 4.5 Watershed Assessment and Hydrology</u> ;
		b) wildlife values:
		i) <u>R/S in FSP Section 4.2.2</u> , for wildlife;



		i) <u>R/S in FSP Section 4.4</u> for ungulate winter ranges (UWRs);	
	c)	vildlife and biodiversity values:	
		) By applying a Retention Silviculture System to the cutblock;	
		i) <u>R/S in FSP Section 4.2.3</u> for water, fish, wildlife and biodiversit	y within riparian areas;
		i) <u>R/S in FSP Section 4.2.5</u> for wildlife and biodiversity;	
	d)	cenic values:	
		R/S in FSP Section 4.3.2 for visual quality; and,	
	e)	ecreation values:	
		<u>Government Actions Regulation</u> "Order to Identify Recreation Campbell River Forest District" dated April 12, 2006;	Resource Features for the
		i) Any recreation features as defined in Forest Recreation Regula	ation s. 3 and s. 4;
6)		alified professional will be required to complete a rationale ensurin on 5 a) to e) will not be significantly impacted.	ng that the values listed in
	OUs to Zs	hich these R/S apply: Those portions of the Kyuquot, Burman, Jol	hnstone, Salmon, Eliza, within the

#### 4.1.4.6 HLP Order Objective 8 – Hydrological Impacts

8. Avoid or mitigate adverse hydrological impacts, which may result from the practices referred to in objective 7, in watersheds with significant watershed sensitivity and significant fisheries values, as determined by the district manager and designated environment official.

cal	St	rategy
Hydrological pacts	1)	The FSP holder(s) will avoid or mitigate adverse hydrological impacts which may result from the practices specified in FSP section 4.1.4.5 for HLP Order Objective 7 (Short Term Timber Availability),
Hydrc pacts		within the Artlish and Memekay Fisheries Sensitive Watershed (designated by Government Actions
8 – Im		Regulation on December 28, 2005) will be consistent with the <u>R/S in section 4.3.1</u> , Objectives for
VILUP		Fisheries Sensitive Watersheds.
N	FD	Js to which these R/S apply: Kyuquot, Salmon

#### 4.1.4.7 HLP Order Objectives 9 and 9.1 – Species Composition

- 9. When proposing the species composition for the purposes of OPR section 39(3)(o), a person may, pursuant to OPR section 41, select a single species that is ecologically suited to the area, if a mix of species was present on the area before the timber was harvested.
- 9.1. The area that may be subject to selection of a single species pursuant to objective 9 is limited to no more than 20 percent of the forested area of any variant within a given EFZ.



St	rategy
1)	In this strategy:
	<b>"variant"</b> is defined as a subset of Biogeoclimatic zone and subzone as determined using the <i>Field</i> <i>Guide for Site Identification and Interpretation for the Vancouver Forest Region</i> <sup>25</sup> .
2)	<ul> <li>Within VILUP Enhanced Forestry Zones (EFZs), the FSP holder(s) may:</li> <li>a) select a single, ecologically suitable species for artificial regeneration of a cutblock, if a mix of species was present on the area before the timber was harvested; and</li> <li>b) for those areas that are harvested within an Enhanced Forestry Zone (EFZ) during the term of this plan, the holder(s) of the FSP will ensure that no more than 20% of the total Net Area to Reforest (NAR) for all of the cutblocks in a variant will be reforested using a single species that is ecologically suited to the area, using a preferred species as set out in the applicable stocking standards.</li> </ul>

#### 4.1.4.8 HLP Order Objective 15 and 16 – Non-contributing Land Base

- 15. Retain old growth forests to meet old seral targets and marbled murrelet habitat requirements in the non-contributing landbase to the fullest extent possible.
- 16. Beyond retention in the non-contributing land base, retain old forests in the timber harvesting land base, up to the full target amount, if the district manager and the designated environmental official determine that such retention is required to maintain critical marbled murrelet habitat.

- Ind	Strategy	
VILUE LE ANG LE - Non-contributing Land Race	<ul> <li>Old forest retention objectives for Adam/Eve EFZ 28 and Kashutl RMZ 14 will be managed as p R/S for the Order Establishing Provincial Non-Spatial Old Growth Objectives in <u>s. 4.1.3 of this</u></li> <li>Marbled Murrelet habitat requirements as per Objective 15 will be managed through <u>s. 4.2.2 FSP (Wildlife)</u>.</li> </ul>	FSP.
Non-c	DUs to which these R/S apply: Portions of EFZ 28 within the Johnstone; Portions of RMZ 14 withi yuquot	in the

<sup>&</sup>lt;sup>25</sup> Available at: <u>https://www.for.gov.bc.ca/hfd/pubs/docs/lmh/lmh28/lmh28-01.pdf</u>



### 4.2 Objectives prescribed under FRPA s. 149

#### 4.2.1 Soils (FPPR s. 5)

The objective set by government for soils is to conserve the productivity and the hydrological function of soils.

	Strategy
S	1) The holder(s) of the FSP will undertake to comply with <u>FPPR s. 35 and 36</u> .
Soils	<ol> <li>Under <u>FPPR s. 12.1(1) and s. 12.1(5)</u>, the holder(s) of the FSP are exempt from the requirement to specify intended results and strategies set out in <u>FPPR s. 5</u>.</li> </ol>
	FDUs to which these R/S apply: All

#### 4.2.2 Wildlife (FPPR s. 7)

- (1) The objective set by government for wildlife is to conserve sufficient wildlife habitat in terms of amount of area, distribution of areas and attributes of those areas, for
  - the survival of species at risk, a)
  - b) the survival of regionally important wildlife, and
  - the winter survival of specified ungulate species. *c*)
- (2) 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 minister responsible for the Wildlife Act gives notice to the person of the applicable
  - species referred to in subsection (1), and a)
  - b) indicators of the amount, distribution and attributes of wildlife habitat described in subsection (1).
- (3) 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 a habitat area or an ungulate winter range, a general wildlife measure, or a wildlife habitat feature, the minister responsible for the Wildlife Act must exempt a person from the 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.
- (4) On or after December 31, 2004, a notice described in subsection (2) must be given at least 4 months before the forest stewardship plan is submitted for approval.

#### 4.2.2.1 Marbled Murrelet

Definitions for the purposes section 4.2.2.1 of this FSP

"OGMA" means Old Growth Management Area, as defined in FPPR s.1.

"Order" means the "Order for the Recovery of Marbled Murrelet (Brachyramphus marmoratus)", effective ഥ December 2, 2021. Page 2

"MAMU" means the species Marbled Murrelet (Brachyramphus marmoratus).



- "Notice" means the "Notice Indicators of the Amount, Distribution and Attributes of Wildlife Habitat Required for the Survival of Marbled Murrelet (*Brachyramphus marmoratus*)", effective December 2, 2021.
- "Planning Tables" means areas of Suitable Habitat distributed across forest tenures in the Campbell River Forest District, within each landscape unit aggregate and landscape unit portion, which will be consistent with Order and Notice. The planning table will be supplied by the district.
- **"Suitable Habitat"** means Marbled Murrelet nesting habitat, that has the attributes of wildlife habitat listed in in Schedule 1 of the **Notice**.

"WHA" means Wildlife Habitat Area, as defined in FPPR s.1.

"Working Group" means Forest Stewardship Plan and Woodlot License Plan holders that:

- operate in areas with shared **Planning Tables**;
- wish to enable flexibility provisions in the Order and Notice; and
- have agreed to terms of assembly, regarding coordination and cooperation.

4.2.2.1.1 **FPPR S. 7 Notice** – Indicators of the Amount, Distribution and Attributes of Wildlife Habitat Required for the Survival of Marbled Murrelet (*Brachyramphus marmoratus*)

The notice includes indicators of the amount, distribution and attributes of wildlife habitat required for the survival of the species at risk outlined in Schedule 1.

Suitable habitat within approved Wildlife Habitat Areas is included in the indicators of the amount, distribution and attributes for each of the species outlined in Schedule 1. As per section 7(3) of the Forest Planning and Practices Regulation, forest tenure holders are exempt from the obligation to specify a result or strategy in relation to the objective set out in section 7(1) of the Forest Planning and Practices Regulation, for approved Wildlife Habitat Areas.

#### **SCHEDULE 1**

1) Marbled Murrelet (Brachyramphus marmoratus)

#### Amount:

 Table 1 provides the minimum amount of Marbled Murrelet nesting habitat (Suitable Habitat) to be maintained within both Marbled Murrelet Wildlife Habitat Areas (WHAs) and Old Growth Management Areas (OGMAs) combined and the minimum amount of Suitable Habitat to be maintained within Marbled Murrelet WHAs within Forest Districts.

#### Distribution:

- a) Table 2 provides the minimum amount of Suitable Habitat to be maintained within both Marbled Murrelet WHAs and OGMAs combined and the minimum amount of Suitable Habitat to be maintained within Marbled Murrelet WHAs within landscape unit aggregates.
- b) Table 3 provides the target and minimum amount of Suitable Habitat to be maintained within both Marbled Murrelet WHAs and OGMAs combined and the minimum amount of Suitable Habitat to be maintained within Marbled Murrelet WHAs within landscape unit portions.



#### Strategy

Marbled Murrelet - Notice (WHAs and OGMAs)

- 1) To meet the requirements of the Notice, each holder of this FSP will coordinate with other holders in a Working Group, as follows:
  - a) As a Strategy, to comply with the Notice, each holder of this FSP will:
    - i) Maintain at least:
      - (1) For each landscape unit portion, the MAMU WHA Suitable Habitat Minimum listed in the Notice, Schedule 1, Table 3; and
      - (2) For each landscape unit aggregate, the MAMU WHA Suitable Habitat Minimum listed in the Notice, Schedule 1, Table 2;
    - ii) Maintain at least:
      - (1) For each landscape unit portion, the MAMU WHA and OGMA Suitable Habitat Minimum listed in the Notice, Schedule 1, Table 3; and
      - (2) For each landscape unit aggregate, the MAMU WHA and OGMA Suitable Habitat Minimum listed in the Notice, Schedule 1, Table 2;
    - iii) Reach agreement on specific amounts, for each landscape unit portion:
      - (1) Of an amount greater than or equal to the MAMU WHA Suitable Habitat Minimum, to be established as MAMU WHAs; and
      - (2) Of an amount greater than or equal to the MAMU WHA and OGMA Suitable Habitat Minimum, to be established as MAMU WHAs or OGMAs;
    - iv) Identify, for each landscape unit portion, or several landscape unit portions within a landscape unit aggregate:
      - (1) The equivalent amount of Suitable Habitat to be maintained above the MAMU WHA Suitable Habitat Target listed in the Notice, Schedule 1, Table 3; and
      - (2) The equivalent amount of Suitable Habitat to be maintained above the MAMU WHA and OGMA Suitable Habitat Target listed in the Notice, Schedule 1, Table 3; and
    - v) If agreement cannot be reached, prior to harvesting disputed Suitable Habitat:
      - (1) each holder of this FSP will apply the MAMU WHA and OGMA Suitable Habitat Minimum listed in the Planning Tables and notify other Forest Stewardship Plan and Woodlot License Plan holders until agreement is reached in the Working Group assembly; or

The Working Group may request that the Minister establish proportional Suitable Habitat targets pursuant to FPPR s.19

FDUs to which these R/S apply: All



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#### 4.2.2.1.2 Land Act S. 93.4 - Order for the Recovery of Marbled Murrelet (*Brachyramphus marmoratus*)

- 3. Objectives for Marbled Murrelet nesting habitat
  - (1) Maintain Suitable Habitat as follows:
    - (a) For each landscape unit aggregate in the order area:
       Retain all timber in an amount equal to or greater than the minimum habitat threshold listed in Column "A" in Table 1 in Schedule "7".
    - (b) For each landscape unit portion in the order area:
       Retain all timber in an amount equal to or greater than the suitable habitat target listed in column "A" in Table 2 in Schedule "7";
  - (2) Despite subsection (ii)(a), the amount of timber that must be retained within a landscape unit portion in the West and North Vancouver Island and Southern Mainland Coast Conservation Regions may be less than the suitable habitat target listed in Column "A" in Table 2 in Schedule "7", provided that:

The amount of timber retained is equal to or greater than the minimum habitat threshold listed in Column "B" in Table 2 in Schedule "7".

- (3) Despite subsection (i)(a), Suitable Habitat polygons shown in Schedule "1 to 6" in the East Vancouver Island Conservation Region may be harvested, provided that harvesting is required for road access, other infrastructure, or to address safety concerns, where there is no practicable alternative.
- (4) Variance from the Objectives in Sections 1) a) to 1) c) for the Suitable Habitat polygons shown in Schedule "1 to 6" may be allowed, provided that:
  - (a) A Qualified Professional:
    - (i) Completes a field assessment that identifies the characteristics of Suitable Habitat using established standards; and
    - (ii) Confirms the alteration will result in no net loss or functional loss of Suitable Habitat.
  - (b) A Regional Ministry of Forests, Lands, Natural Resource Operations and Rural Development biologist approves the alteration of the Suitable Habitat polygons.

#### Strategy

<u> Marbled</u> Murrelet - Order

- 1) To meet the requirements of the Order, each holder of this FSP will coordinate with other holders in a Working Group, as follows:
  - a) As a Strategy, to comply with the Order, each holder of this FSP will:
    - ) Reach agreement on specific amounts of Suitable Habitat to maintain by retaining all timber, equal to or greater than:
      - (1) The amount listed in Order, Schedule 7, Table 2, Column "A", for each landscape unit portion; or
      - (2) The amount listed in the Order, Schedule 7, Table 1, Column "A", for each landscape unit aggregate, and the amount listed in the Order, Schedule 7, Table 2, Column "B" for each landscape unit portion;

and

- ii) Use the Planning Tables as a basis to identify Suitable Habitat distribution to maintain by retaining all timber, equal to or greater than:
  - (1) The amount listed in Order, Schedule 7, Table 2, Column "B", for each landscape unit portion; and



	<ul><li>(2) The amount listed in the Order, Schedule 7, Table 1, Column "A", for each landscape unit aggregate;</li><li>and</li></ul>
	<ul> <li>iii) If agreement cannot be reached prior to harvesting disputed Suitable Habitat:</li> <li>(1) each holder of this FSP will apply the MAMU WHA and OGMA Suitable Habitat Minimum listed in the Planning Tables and notify other Forest Stewardship Plan and Woodlot License Plan holders until agreement is reached in the Working Group assembly; or</li> <li>(2) The Working Group may request that the Minister establish proportional Suitable Habitat targets pursuant to FPPR s.19; and</li> </ul>
b)	Each holder of the FSP may apply for a variance from the Order Objectives, individually or in coordination with other Working Group members, according to s.3(4) of the Order.

#### 4.2.2.2 Great Blue Heron

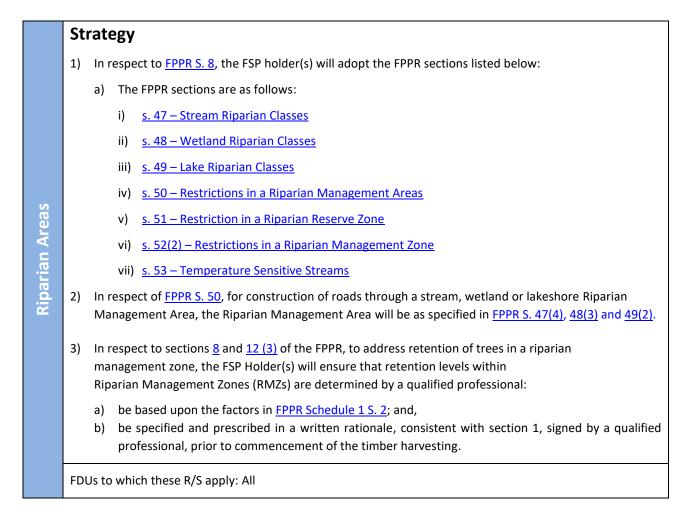
	Strategy
	Great Blue Heron (Ardea herodias fannini)
e Heron	<ol> <li>The FSP holder(s) will conduct or authorize primary forest activities within the Campbell River Resource District meeting the following notice (hereafter referred to as the Notice) given under authority of section 7(2) of the FPPR:</li> <li>a) FPPR S.7 Notice—Indicator of the Amount, Distribution and Attributes of Wildlife Habitat Required for the Survival of Species at Risk in the Campbell River Forest District. July 27, 2004</li> </ol>
Great Blue Heron	2) The strategy applies until the earlier of replacement of this Plan or the effective date of an exemption provided by the appropriate Minister or delegate with respect to the establishment of WHA's and/or other reserves. If an exemption is provided, the terms of the exemption and any associated general wildlife measures will prevail thereafter.
	3) The FSP holder(s) will manage the areas occupied by active nests on a site-by-site basis, using BCTS' Species at Risk Standard Operating Procedures for guidance.
	FDUs to which these R/S apply: All

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

Objectives set by government for water, fish, wildlife, and biodiversity within riparian areas (FPPR s. 8)

The objective set by government for water, fish, wildlife and biodiversity within riparian areas is to conserve, at the landscape level, the water quality, fish habitat, wildlife habitat and biodiversity associated with those riparian areas.





#### 4.2.4 Community Watersheds

Objectives set by government for water in community watersheds: (FPPR s. 8.2)

In this section, "community watershed" means a community watershed

- (a) That is continued under section 180(e) 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.

The objective set by government for water being diverted for human consumption though a licensed waterworks 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, or
- (b) the water from the waterworks having a material adverse impact on human health that cannot be addressed by water treatment required under
  - (i) an enactment, or
  - (ii) the licence pertaining to the waterworks.





	Str	ategy
Community Watersheds	1) 2)	Prior to authorizing or undertaking primary forest activities within the area designated as the John Hart Community Watershed area, the holder(s) of the FSP will follow the strategy in <u>FSP section 4.5</u> <u>Watershed Assessment and Hydrology</u> : In respect of community watersheds, the holder(s) of the FSP will adopt <u>FPPR s. 59, 60, and 61</u> as practice requirements
	FDL	Is to which these R/S apply: Sayward

#### 4.2.5 Wildlife and Biodiversity (FPPR s. 9 and 9.1)

#### 4.2.5.1 Cutblock Size and Adjacency

The objective set by government for wildlife and biodiversity at the landscape level is to design areas on which timber harvesting is to be carried out that resemble, both spatially and temporally, the patterns of natural disturbance that occur within the landscape.

	Strategy
ency	<ol> <li>The holder(s) of the FSP will undertake to comply with <u>FPPR s. 64 and 65</u> subject to section 2 or 3 of this R/S.</li> </ol>
Cutblock Size and Adjacency	<ol> <li>Cutblock size may exceed 40 ha within the Sayward FDU if timber harvesting operations are carried out in accordance with the R/S for Objective 6 of the Sayward LUP (<u>FSP s. 4.1.1.6</u>).</li> </ol>
and	3) Cutblock size may exceed 40 ha as per <u>FSP section 4.1.4.5</u> within the following EFZ's:
e :	a) Tahsish EFZ 15
Siz	b) Burman EFZ 24
с <mark>к</mark>	c) Naka EFZ 27
<u>o</u>	d) Adam/Eve EFZ 28
tb	e) Salmon EFZ 30
C	f) Eliza EFZ 18
	FDUs to which these R/S apply: All

#### 4.2.5.2 Stand Level (FPPR s. 9.1)

**Stand Level** 

The objective set by government for wildlife and biodiversity at the stand level is to retain wildlife trees.

<ol> <li>The holder(s) of the FSP will undertake to comply with <u>FPPR s. 66 and 67</u> as those sections were on t date of submission of this FSP, except with respect to <u>FPPR s. 12.5(2) and (4)</u>, where:</li> <li>a tree must be felled to safely establish one or more tailholds or guy-line tiebacks in a WTRA to a tree must be felled to safely establish one or more tailholds or guy-line tiebacks in a WTRA to be for the formation of the format</li></ol>	
	e
facilitate adjacent cable logging operations; or,	



	b)	a tree, or trees, within a WTRA is modified via windfirming treatments to maintain the integrity of that WTRA;	
	c)	timber may be harvested in a WTRA, where a qualified professional specifies one or more replacement WTRA, consistent with section 3 d) and e) of this strategy.	
2)		here wildlife tree retention targets are specified in approved landscape unit plans harvesting will dertake to comply with targets specified.	
3) Where timber harvesting is planned or authorized within a WTRA, a replacement WTRA must be identified where:			
	a)	the replacement WTRA will be of equivalent age, forest structure, and area;	
	b)	<ul> <li>the replacement WTRA will be located:</li> <li>i) within the cutblock to which the original WTRA was related; or,</li> <li>ii) in an area contiguous to the cutblock to which the original WTRA was related; or,</li> <li>iii) in an area that is within one tree length to the cutblock to which the original WTRA was related that the wildlife trees could directly impact on, or be directly impacted by, a forest practice carried out in the cutblock;</li> </ul>	
	c)	<ul> <li>the process to replace the WTRA will:</li> <li>include a rationale as part of a Site Plan prepared by a Qualified Professional outlining what was replaced and what was chosen as a replacement area prior to harvest commencement of the applicable cutblock;</li> <li>include data required to be submitted to the most current Province of BC database by the end of each calendar year, consistent with <u>FPPR s. 86(3)</u>.</li> </ul>	
4)	Th	e percentage of stand retention shall be determined as the following:	
	a)	WTRA Retention % = WTRA / TAUP	

### 4.2.6 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  $Act^{26}$ .

<sup>26</sup> Culturally Modified Trees (CMTs) and any archaeological features that have been altered prior to 1846 are under protection from <u>Heritage Conservation Act s. 12.1</u> and are not considered Cultural Heritage Resources in this FSP.



	Strategy				
	1)	In respect of the objective set by government for cultural heritage resources, over the term of the the FSP holder(s) will:			
		a) identify Cultural Heritage Resources as it applies to proposed primary forest activities by:			
		i) First Nations engagement with applicable First Nations on at least an annual basis, or at an interval which is mutually agreed upon by the FSP holder(s) and the applicable First Nation; and,			
rces		ii) consultation with qualified persons; or,			
soul		iii) the District Manager; or,			
ge Re		iv) for First Nations with a final treaty agreement, utilize the final treaty and side agreements to define Cultural Heritage Resources; and,			
Herita		b) assess identified cultural heritage resources in relation to the risk from primary forest activities by using <u>FPPR Schedule 1 Factors (s. 4)</u>			
Cultural Heritage Resources	2)	Where a Cultural Heritage Resource requires specific management, in order to be conserved or protected, the FSP holder(s) will seek information and advice from the affected First Nation(s), qualified persons, or the District Manager on proposed management options before implementing them.			
	3) Where the assessment in section 1) b) shows a Cultural Heritage Resource does not require management, the FSP holder(s) will communicate this to the First Nation, if the First Nations to be notified of this in section 1).				
	4)	The FSP holder(s) will ensure that the strategies set out in strategies sections 1) b) and 2) are applied in respect to cultural cedar resources.			
	FDI	Js to which these R/S apply: All			

## 4.3 Orders Established under Government Actions Regulation (GAR)

### 4.3.1 Fisheries Sensitive Watersheds (FPPR s. 8.1)

The Artlish River and the Memekay River were established as Fisheries Sensitive Watersheds (FSW) on December 28, 2005 under <u>GAR s. 14(1)</u>. Objectives for the Artlish FSW and the Memekay FSW were established on December 28, 2005 under <u>GAR s. 14(2)</u>.

Objectives established for the Artlish FSW and the Memekay FSW are:

The objective is to provide, within the normal forest rotation, special management of the amount, timing and distribution of primary forest activities, in order to:

- i) conserve the natural hydrological conditions, natural stream bed dynamics and integrity of stream channels in the Fisheries Sensitive Watershed,
- ii) conserve the quality, quantity and timing of water flows required by fish in the Fisheries Sensitive Watershed, and





iii) prevent the cumulative hydrological effects of primary forest activities in the Fisheries Sensitive Watershed from resulting in a material adverse impact on the fish habitat of the watershed.

S	Strategy
Fisheries Sensitive Vatershed	<ol> <li>Prior to authorizing primary forest activities within a designated Fisheries Sensitive Watershed (FSW) area, the holder(s) of the FSP will follow the strategy in <u>FSP section 4.5 Watershed</u> <u>Assessment and Hydrology</u>:</li> </ol>
>	FDUs to which these R/S apply: Kyuquot, Salmon

## 4.3.2 Visual Quality

	Strategy			
Visual Quality	<ol> <li>The FSP holder(s) will only carry out or authorize primary forest activities where the extent of alteration resulting from size, shape, and location of those cutblocks and roads when assessed from significant public viewpoints are in accordance with:         <ul> <li>a) Scenic Areas for the Campbell River Natural Resource District were established by the District Manager on December 14, 2005 under GAR s. 7(1). Visual Quality Objectives for the Campbell River [Natural Resource] District were established by the District Manager on December 14, 2005 under GAR s. 7(2).</li> <li>b) categories of visually altered forest landscape are as defined in FPPR s. 1.1.</li> </ul> </li> <li>If the FSP holder(s) intends to carry out or authorize primary forest activities that will not be consistent with the requirements of subsection 2, an exemption from the DDM under FPPR 12(7) is required, provided that:         <ul> <li>a) the timber has been damaged, destroyed or threatened by fire, insects, disease, wind, flooding, or other similar factors;</li> <li>b) the cutblock or road design will:                 <ul> <li>i) attempt to mimic naturally occurring landscape characteristics; and,</li> <li>ii) retain timber that is not damaged, destroyed or threatened where safe and operationally practicable to do so.</li> </ul> </li> </ul></li></ol>			

### 4.3.3 Resource Feature Set by Order - Karst

Identified resource features are subject to practice requirements; no result or strategy is required as objectives have not been established for the management of the resource feature. Where applicable within the Plan area, the holder(s) of the FSP will adhere to the requirements of <u>FPPR s. 70(1)</u> with respect to resource features:

An authorized person who carries out a primary forest activity must ensure that the primary forest activity does not damage or render ineffective a resource feature.



## **Practice Requirement**

Karst	1)	In this practice requirement, the holder(s) of the FSP will ensure that any primary forest activities authorized or carried out by the holder(s) of the FSP will be carried out in accordance with the established Resource Feature Order under sections 5(1) (a) of the Government Actions Regulation (B.C. Reg. 17/04), "Order to Identify Karst Resource Features" dated May 30, 2007, or as subsequently amended.				
	2)	Pursuant to Section 5(1) (a) of the Government Actions Regulation under the <i>Forest and Range</i> <i>Practices Act</i> , the following are defined as surface or subsurface elements of a karst system as resource				
		features wherever they are found within the Campbell River Forest District:				
		a) Karst caves;				
		b) significant surface karst features; and				
		c) important features and elements within high and very high vulnerability karst terrain.				
	3)	The location of a surface or subsurface element of a karst system as described in subsection 2 must not be publicly disclosed by the agreement holder(s).				
	FDU	Js to which these R/S apply: All				

### 4.3.4 Resource Feature Set by Order – Recreation Resource Feature

Identified resource features are subject to practice requirements; no result or strategy is required as objectives have not been established for the management of the resource feature. Where applicable within the Plan area, the holder(s) of the FSP will adhere to the requirements of <u>FPPR s. 70(1)</u> with respect to resource features:

An authorized person who carries out a primary forest activity must ensure that the primary forest activity does not damage or render ineffective a resource feature.

## Practice Requirement

1)

Secreation Jurce Featu In this practice requirement, the holder(s) of the FSP will ensure that any primary forest activities authorized or carried out within identified recreation resource features polygons will be carried out in accordance with the established Resource Feature Order under sections 5(1) of the Government Actions Regulation "<u>Order to Identify Recreation Resource Features for the Campbell River Forest</u> <u>District</u>" dated April 12, 2006, or as subsequently amended.

FDUs to which these R/S apply: All

# 4.4 Objectives continued under FRPA S. 180 and 181 (Grandparenting Designations, Objectives, and Measures)

The objectives in respect of specified designations established or continued under the FPC under FSP s. 8.4 are grand parented.

Licensees operating within the Campbell River Natural Resource District are exempt from the obligation of preparing a result or strategy in relation to the objective set out in <u>FPPR s. 7(1)</u> for the Queen Charlotte



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Goshawk as noted in the Order establishing WHA 1-085 to 1-088 and 1-090 to 1-096 dated December 1, 2004.

Ungulate Winter Range #U1-014 and associated general wildlife measures were established on December 14, 2004 under GAR s. 9(2) and 12(1). The Order was amended on January 30, 2006. The Order establishing UWR #U1-014 provides an exemption from the obligation to prepare result or strategies in relation to the objective for the winter survival of ungulates in TFL 19 as per FPPR s. 7(3).

Ungulate Winter Range #U1-005 and associated general wildlife measures were established on July 20, 2006 under GAR s. 9(2) and 12(1). The Order establishing UWR #U1-005 provides an exemption from the obligation to prepare result or strategies in relation to the objective for the winter survival of ungulates in the portions of the North Island TSA that were previously part of the Strathcona TSA at the time of the order, as per FPPR s. 7(3).

Wildlife Habitat Areas # WHA 1-481, 1-483, 1-485, 1-486 and associated general wildlife measures for Red Legged Frogs (Rana aurora) were established April 1, 2014 under GAR s. 9(2) and 12(1). The Order establishing WHA # 1-481, 1-483, 1-485, 1-486 provides an exemption from the obligation to prepare result or strategies in relation to the objective to meet the habitat requirements of red legged frogs in portions of the North Island TSA that were previously part of the Strathcona TSA at the time of the order as per FPPR s. 7(3).

FSP s. 8.4 is consistent with Orders establishing objectives for Lakeshore Management within the Sayward LU, Recreation Trails within the Sayward LU, and Ungulate Winter Range #U1-004; this FSP section 7.4 is not subject to approval by the DDM of this FSP.

# 4.4.1 Objectives Set for Lakeshore Management within the Sayward Landscape Unit (LUP Objective 10)

Riparian reserve zones and riparian management zones, within the Sayward LU and associated objectives were established on February 26, 2003 as per FPC s. 64. These objectives are continued under FRPA s. 181.

**Riparian Reserve Zones** 

To manage for fisheries values within those areas noted as riparian reserve zones as shown on the Sayward Landscape Unit map, titled Lakeshore Management<sup>33</sup>, by:

- Prohibiting timber harvesting, including salvage, unless such activities occur within established recreation sites and/or trails and are complementary to the recreation setting and experience as determined by the Statutory Decision Maker; and
- Prohibiting road construction unless no other practicable option exists as determined by the Statutory Decision Maker.

Riparian Management Zones:

To ensure that for a distance of 50 metres from the timbered edge surrounding the following lakes within the Sayward Landscape Unit: McIvor, Beaver, Comeback, Hemp, Lily, Little Mud, Lawnchair, Pocket, Reed, Sedge, Shadow, Smolt, Star, and Whistlepunk, that no more than 25% of the forested area be less than 5 metres in height.



	Strategy				
Sayward Lakeshore Riparian	1)	<ul> <li>The holder(s) of the FSP will not carry out or authorize:</li> <li>a) timber harvesting within the riparian reserve zones as shown on the Sayward Landscape Unit map titled, Lakeshore Management<sup>27</sup>, unless such activity occurs within established recreation sites and/or trails and are complementary to the recreation setting and experience as determined by the Statutory Decision Maker</li> </ul>			
		<ul> <li>Statutory Decision Maker.</li> <li>roads construction within the riparian reserve zones as shown on the Sayward Landscape Unit map titled, Lakeshore Management<sup>33</sup>, unless no other practicable option exists as determined by the Statutory Decision Maker.</li> </ul>			
		c) timber harvesting within 50 metres from the timbered edge surrounding the McIvor, Beaver, Comeback, Hemp, Lawnchair, Lily, Little Mud, Pocket, Reed, Sedge, Shadow, Smolt, Star, and Whistlepunk Lakes unless at least 75% of the forested area is greater than 5 metres in height.			
	FDU	Js to which these R/S apply: Sayward			

## 4.4.2 Recreation Trail Objective – Sayward Landscape Unit (LUP Objective 8)

A recreation trail objective for the Sayward Landscape Unit was established on July 1, 2003 as per FPC s. 6. These objectives are continued under FRPA s. 181.

#### Objective 1:

Harvesting and/or road building within 10 metres of the running surface of existing trails within the Snowden Forest, as shown on the Sayward Landscape Unit Map titled, Recreation Constraints<sup>31</sup>, requires the prior approval of the Designated Statutory Decision Maker.

I		Strategy		
	Snowden Recreation	<ol> <li>The holder(s) of the FSP will not carry out or authorize road construction or timber harvesting within 10 metres of the running surface of trails established under <i>FRPA s. 56</i> within the Snowden Forest as shown on the Sayward Landscape Unit Map titled, Recreation Constraints<sup>28</sup>, without prior approval from the Designated Statutory Decision Maker.</li> </ol>		
		FDUs to which these R/S apply: Sayward		

<sup>27</sup> Available at: <u>https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/natural-resource-use/land-water-use/crown-land/land-use-plans-and-objectives/westcoast-region/campbellriver-lup/sayward landscape unit lakeshore management map.pdf</u>

<sup>28</sup> Available at: <u>https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/natural-resource-use/land-water-use/crown-land/land-use-plans-and-objectives/westcoast-region/campbellriver-lup/sayward\_landscape\_unit\_recreation\_resource\_units\_map.pdf</u>



# 4.5 Watershed Assessment and Hydrology

	Strategy					
	1)	Prior to authorizing or undertaking primary forest activities, with the exception of tree planting and brushing, within a designated Fisheries Sensitive Watershed (FSW) area, within a Community Watershed or when utilizing the VILUP Objective 7 strategy to increase the short term Timber Supply the holder(s) of the FSP will:				
Watershed Assessment and Hydrology		n G	ave a qualified professional complete or update a watershed assessment, that follows nethodology outlined in the Watershed Assessment and Management of Hydrologic and reomorphic Risk in the Forest Industry <sup>29</sup> , as amended from time to time in Forest Research echnical Reports; or,			
		S	update the watershed assessment in 1a) following any previously unaccounted for landslide or ignificant sedimentation events with the potential to result in material adverse effects <sup>30</sup> to fish abitat.			
	2)	The assessment of hydrologic impacts in the watershed assessment described in 1a) will assess the potential for:				
		a)	adverse changes to peak stream flows, low stream flows, and timing of flows;			
me		b)	adverse changes in sedimentation;			
Assess		c)	adverse changes in terrain stability;			
		c)	adverse changes to riparian zones;			
Jed		d)	adverse changes to channel morphology;			
ersł		e)	adverse changes to the watershed as a follow up to previous assessments for the watershed;			
Vat		f)	adverse changes as identified by the qualified professional through site-specific fieldwork;			
>		g)	potential hydrological changes within watershed associated with climate change			
		h)	adverse changes identified to the qualified professional through consultation with local watershed managers and local stakeholders; and,			
		i)	where applicable, take into consideration results from consultation with other forest tenure holders whose tenures are situated within the watershed.			
	3) Where the assessment in subsection 1(a) or 1(b) of this strategy identifies potential adverse effects described in subsections 2(a) to 2(i), the qualified professional preparing the assessment is to provide recommendations to manage, mitigate or eliminate the impact(s), taking into consideration and corresponding to the severity of the consequence of the potential adverse impact.					

<sup>&</sup>lt;sup>30</sup> Where a "material adverse effect" is understood to be an injurious result or unfavourable influence that might have some real, appreciable consequence.



<sup>&</sup>lt;sup>29</sup> <u>https://abcfp.ca/web/ABCFP/Members/Practising\_in\_BC/Standards-and-Practice-Guidelines/ABCFP/Practising\_in\_BC/Standards\_and\_Practice\_Guidelines.aspx?%5B%5BStandards\_and\_Practice\_Guidelines%5D% 5D&hkey=4c8a303d-5de7-4a2d-8a50-78b4f0fa7a65</u>



4) The holder(s) of the FSP will carry out or authorize primary forest activities that follow the recommendations in section 3 of this strategy unless a variance to the recommendation(s) is supported by a rationale<sup>31</sup> written by a qualified professional.

FDUs to which these R/S apply: All

## 5 Stocking Standards

5.1 Situations or Circumstances that determine whether Free Growing is Assessed on a Block Basis or Across Blocks

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

5.2 Regeneration Date and Stocking Standards, Free Growing Height

The Appendix 1 Stocking Standards specify the regeneration date, free growing height and stocking standards for the situations or circumstances where <u>FPPR S. 44(1)</u> applies.

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

If the holder(s) of the FSP carries out or authorizes harvesting of special forest products, intermediate cuts, or commercial thinning from an area within the area under this plan, cutblock specific stocking standards will be proposed as an amendment of this FSP. Stocking standards which may be amended into this FSP will be maintained on the area for twelve months following the completion of the harvesting.

## 5.4 Stocking Standards and FRPA S. 197(5)

In accordance with <u>FRPA s. 197(5)</u>, the holder of this FSP may specify in a written notice to Government that stocking standards approved as part of the FSP apply to cutblocks harvested prior to the commencement of this FSP by the holder(s) of the FSP.

The potential effects of climate change have been considered in the development of this FSP and in particular, the development of the stocking standards. Increasing the diversity of regenerating tree species will lead to more resilient plantations.

<sup>&</sup>lt;sup>31</sup> Rationale must meet the intent of practice requirements in FPPR S. 8.1 or 8.2 that provide for the protection of fish habitat or drinking water.



## 6 Measures to Prevent the Introduction and Spread of Invasive Plants (FRPA <u>s.47</u>, FPPR s.17)

#### FRPA s. 47 requires that:

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

- (a) specified in the applicable operational plan, or
- (b) authorized by the minister

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

#### FPPR s. 17:

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

	Μ	Measures				
	1)		ne FSP egulat	holder(s) will prevent the introduction or spread of invasive plants listed in the Invasive Plants ion		
				entify and report infestations of invasive plants associated with FSP holders' primary forest ities, the FSP holder(s) will:		
		i	-	ensure staff, and personal conducting authorized primary forest activities are trained in the dentification of invasive plants that may occur within the Plan Area; and,		
nvasive Plants			r	eport infestations of invasive plants listed in the Invasive Plants Regulation to to InvasivesBC Report Invasives" mobile app or "Report Online" website <sup>32</sup> , or the most current provincial ecognized database within 1 year from when the plant occurrence is observed or reported to BCTS staff.		
	4)	The FSP Holder(s) will mitigate the conditions suitable for invasive plant establishment of invasive plant listed in the Invasive Plants Regulation, by:		Holder(s) will mitigate the conditions suitable for invasive plant establishment or spread of an plant listed in the Invasive Plants Regulation, by:		
ln		a) minimizing ground disturbance;				
		b)	distu	s seeding exposed soil (>0.1 contiguous hectares, excluding the road prism) that has been Irbed by primary forest activities authorized by the FSP holder(s), within 12 months after soil Irbance, recognizing that spring and fall are optimum times to revegetate; and		
				<ul> <li>seed used will be either a native seed or an agronomic grass seed that is a grade of Common No. 1 Forage Mixture or better;</li> </ul>		
				<ul> <li>seed will be free of invasive species listed under the Weed Control Regulation or the FRPA Invasive Plants Regulation. This will be ensured by obtaining a "Certificate of Seed Analysis" and any seed lot with invasive seed will be rejected.</li> </ul>		

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- 5) To reduce the spread of existing infestations of priority invasive plants listed in the Invasive Plants Regulation, the FSP holder(s) will:
  - a) where practicable, not brush or mow invasive plants during road maintenance activities, unless required for safety purposes;
  - b) require all ground-based equipment be cleaned of soil and plant material before moving or transporting from an infested site to a new site; and,
- 6) If invasive plants listed in the Invasive Plants Regulation are detected during post-harvest monitoring that have likely established as the result of the FSP holders' forest practices, the FSP Holder(s) will develop and implement a plan with the assistance from a MOF Invasive Plant Specialist.

FDUs to which these R/S apply: All

# 7 Measures to Mitigate the Effect of Removing or Rendering Ineffective Natural Range Barriers

#### Measures

<u>Natural Range Barrier</u>

1) The holder(s) of the FSP will:

a)	each year under the term of this FSP, identify any areas within the FDUs that are subject to or
	adjacent to agreements under the <i>Range Act</i> in respect of grazing of livestock, using
	information gathered from regional experts;

- b) inform each of the affected holders of agreements under the *Range Act* of planned harvest and road construction within or adjacent to their agreement;
- c) where the affected holder of an agreement under the *Range Act* indicates that the planned harvest and road construction will remove or render ineffective a natural range barrier,
  - i) design cutblocks and roads to mitigate the effect of the removal or ineffectiveness,
  - ii) carry out primary forest activities that are consistent with the design for the cutblock or road referred to in subparagraph (i), and
  - enter into a timber sale license, cutting permit or grant a road permit only if the license or permit is consistent with the design for the cutblock or road referred to in subparagraph (i).
- 2) The holder of a timber sale licence will not remove or render ineffective a natural range barrier other than in a manner set out in the timber sale licence.
- 3) The holder of a cutting permit document will not remove or render ineffective a natural range barrier other than in a manner set out in the cutting permit document.
- 4) If the holder of a timber sale licence or cutting permit removes or renders ineffective a natural range barrier other than in a manner set out in the licence or permit, the holder will carry out reasonable measures to mitigate the effect of the removal or ineffectiveness.

FDUs to which these R/S apply: Salmon

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# **APPENDIX 1 FSP Stocking Standards**

A1.1 Stocking Standards BC Timber Sales' Campbell River FSP (Strait of Georgia Business Area)

For complete list of stocking standards, see attached Stocking Standards PDF

## A1.2 Reference Notes for Stocking Standards

Tree Species	'PW' is white pine
'BA' is amabilis fir	'SS' is Sitka spruce
'BG' is grand fir	'SE' is Engelmann spruce
'BP' is noble fir	'YC' is yellow cedar
'CW' is western red cedar	'EP' is paper birch
'FDC is coastal Douglas fir	'ACT' is black cottonwood
'HM' is mountain hemlock	'MB' is bigleaf maple
'HW' is western hemlock	'DR" is red alder
'PLC' is shore pine	

MIN or 'Min' means minimum
MITD means minimum inter tree distance in metres.
MSS means minimum stocking standard stems per hectare of planted and natural preferred and, if present, acceptable species.
SU means standards unit.
FG means free growing at 20 years.

<u>Height of trees above brush</u>: in addition to being at least minimum required height, trees must be greater than the approved minimum percentage height above brush to be free growing. All BEC = 150%, except MH is 125% as prescribed in the "Additional Standards" of the "Reference Guide for Forest Development Plan Stocking Standards, September 7, 2021".

- "<u>Biogeoclimatic unit</u>" or "<u>BGC classification</u>" 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 within the mosaic.
- <u>Where standards units (SUs) are comprised of an unmappable mosaic of site series</u>, the practice will be to be managed for the stocking standards of the dominant site series provided that the tree species are suitable in all site series contained within the SU.

True Firs (BA, BG, BP). The plan area is within the quarantine zone. There is a risk of balsam woolly adelgid within quarantine area, see:

http://www2.gov.bc.ca/gov/content/industry/agriculture-seafood/animals-and-crops/plant-health/insects-and-plantdiseases/nursery-and-ornamentals/balsam-woolly-adelgid

A.1.2 Management Strategies Describing the situations or circumstances that determine when *FPPR s.* 44(1) (free growing stands generally) or s. 45 (free growing stands collectively across cutblocks) will apply to an area.

#### Situations or Circumstances Where Less Than 2.0 metre Minimum Horizontal Intertree Distance Applies:

The Provincial stocking standard guidelines were developed on the assumption of a 2.0 metre minimum inter-tree spacing. In some cases, the BCTS stocking standards can reduce the 2.0 metre minimum inter-tree spacing for site specific circumstances identified in the Site Plan as follows:

- i. 1.6 metres immediately adjacent to any stream or riparian area, natural non-productive area, or unplantable slash (including debris piles and helicopter logged sites).
- 1.6 metres on sites dominated by colluvium, those occurring as mosaics with non productive rock (site series 02 / bedrock), and morainal sites with a high coarse fragment content (site series 03).
- iii. 1.6 metres on very moist to wet sites (site series 06 / 07) where irregularly spaced natural mounds are the most productive microsites, often occurring in mosaic with natural non productive.
- iv. 1.6 metres on wet sites (site series 12) where irregularly spaced mounds are the <u>only</u> productive microsites.
- **v.** Include sites where elk or deer are trampling, bedding, browsing, and/or rubbing. Microsite selection reduced to 1.6 metre spacing is used to reduce browse opportunity and maximize utilization of optimum microsites.
- vi. 1.6 metres where the trees are less than 10 metres from a permanent access structure.

#### Management of Standards Units Impacted by Heavy Elk Use: Stocking Standards

An area of heavy elk use is defined as an area that will not achieve free growing standards described in the site plan (SP) due to impacts by elk activity, including continuous and ongoing trampling, bedding, browse, and/or rubbing. The damage must be significant enough that it is either reducing tree vigour or causing mortality such that crop trees cannot achieve minimum heights and/or the standards unit (SU) cannot achieve minimum densities as stated in the initial SP. Elk browse has three major influences on crop trees in the area affected.

**The first influence** occurs early in the establishment of the new stand where browse is severe and continued, resulting in mortality of the seedling. Severe browsing at this stage of seedling development sometimes results in the elk pulling the seedling from the ground. The lower stocking that results within the area affected, despite fill planting, could potentially make stocking standards described in the SP unachievable.

**The second influence** occurs where seedlings and young trees are continuously browsed but not killed. The seedling is generally short, stunted and very bushy in appearance. It is difficult for an affected crop tree to achieve minimum free growing height or meet requirements for damage / tree form.

**The third** type of damage is primarily due to rubbing of the stems on crop trees in localized areas and/or along elk trails. This damage also reduces vigour, causes poor form, and can also result in mortality of the crop trees.

The intent of these stocking standards is that they will be applied through a site plan amendment, after attempts to meet the initial standards for that area have failed. These elk standards will not be chosen at the site planning stage, even though it may be evident that high elk presence in the area will hinder reforestation. The elk standards in this FSP are for application in the xm, vm1, vm2 and mm1 sub zone. The species chosen for a particular block will be based on the 'regular' stocking standards which will have been in place at the time of initial stocking. For the purposes of measuring and verifying for stratification, the following description will be used as a guide to assess for heavy damage or the likelihood that damage will continue to reduce the value of the stand post-free growing.

An area will be considered as having heavy elk use if reasonable efforts to manage the risk have failed. How 'reasonable efforts' will be defined will vary; however, the intention is that planting efforts will be made to reach the target in the initial stocking standard. Initial stocking efforts will reflect the elk browse potential in the area and strategies to mitigate elk damage including species and stock type selection, application of deer/elk repellant products, installation of tree protection cones, microsite selection, and increased planting density will be implemented. Fill planting will be conducted where needed.

When the efforts as described above fail to generate stocking which meets originally applied standards, and there is evidence the damage is chronic and-ongoing, the elk stocking standards will be applied. The preferred option is to stratify the worst damaged areas and apply the new standard to as small an area as possible, but in extreme cases the standard may be applied to the entire SU. Efforts will still be made to exceed the reduced standards where possible. Stocking standards must be flexible for these areas, and it may only be economically feasible to achieve an average of 200 to 300 trees per hectare.

#### Elk Stocking Standard:<sup>33</sup>

1) In areas where elk have substantially affected regeneration efforts as described above, the target stocking will aim for 900, or 800 in (03) well-spaced stems/ha preferred and acceptable. However, the minimum preferred and acceptable will be reduced to 50% well-spaced stems/ha and the minimum preferred will be reduced to 50% well-spaced per/ha. Minimum inter tree distance will be reduced to 1.5 m. If the minimum inter tree distance in the SP is less than 1.5 m it will remain unchanged. Species selection will be subject to a particular species' productivity, reliability, and feasibility for any given site series generally consistent with LMH 28. The species chosen will be consistent with the original stocking standards chosen for the block.

2) The use of deciduous species mixed with the conifer will be an acceptable strategy to reduce damage caused by elk (Henigman et al. 2005<sup>32</sup>). DR will comprise not more than 5% of the crop trees for a SU. Where there are 10 or less maple coppices/ha in a heavy elk use area, they will be accepted as a component of biodiversity.

3) Conifer crop trees will be considered free growing with 1.0 m inter-tree distance between the stems of crop trees and deciduous trees at breast height. Conifer crop trees must not exhibit any signs of reduced leader growth over the previous two growing seasons.

#### **Broadleaf Management Strategy**

BCTS may manage for the regeneration of broadleaf timber crops on a limited portion of the land base, where the combination of economic and site factors makes it a viable option.

Sites will be selected for their contribution to the achievement of the following objective(s):

- root disease amelioration
- addressing localized age class imbalances
- tree species diversity
- wildlife habitat
- visual resource management, as a component of total chance planning and /or visual rehabilitation.
- A minor component of stands managed using the Elk stocking standards.

Regeneration date has been shortened in the case of deciduous management to reflect the critical nature of early plantation establishment. At least 80% of the total stocking will be red alder.

<sup>&</sup>lt;sup>33</sup> Developed with reference to:

Henigman, J., J, Turner, and K. Swift. 2005. Coast Forest Region: Roosevelt Elk Wildlife Habitat Decision Aid. BC Journal of Ecosystems and Management 6(1):51-53.

#### **Intermediate Cutting Standard**

Intermediate cutting is proposed under this FSP for old growth stands. Standards for acceptable leave trees will be as defined in the most recent version of Single Entry Dispersed Retention System Discussion Paper Appendix 1 and 2 (Coast Region FRPA Implementation Team).

Intermediate cutting is in stands that are constrained by resource values such as terrain stability and visuals. Helicopter harvesting will typically be employed. The use of Intermediate Cutting will be limited in application, comprising no more that 2% of the BCTS apportionment measured over a five-year cut control period. Basal area of the remaining stand post harvest will be >40m2/ha. Openings <0.25 ha will not be planted.

Addressing Section 44(4) of the Forest Planning and Practices Regulation, the stocking standards will be maintained for twelve months following the completion of intermediate cutting on the area that was harvested. This stocking standard is to apply to all BEC subzones/site series combinations where intermediate cutting is used. There is no regeneration delay, minimum height or minimum preferred. The only criteria is that the post-harvest stand does not have any openings >0.25 ha NAR within a cutblock and that the basal area >40m2/ha.