



Forest Stewardship Plan Port McNeill and Quatsino Sound 2023-2028

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Timberlands
Management System

Port McNeill and Quatsino Sound Forest Operations 2023-2028

Table of Contents

Tal	ole of Cor	tents	1
Pre	amble		4
1.	Date of	Submission	3
2.	Interpre	tation and Definitions	3
	2.1	Interpretation	3
	2.2	Definitions: Error! Bookmark not defin	ned.
	2.3	Definitions:	3
3.	Applicat	tion of this FSP	4
	3.1	Licences and Licensees (FRPA s.3(4))	4
	3.2 ss.14(Application of this FSP to FPC Obligations (FRPA Act ss.197(4-5, 7) and FPPR 1)(d-e))	4
4.	Term of	this FSP (FRPA ss.6(1)(a) and (b))	. 5
5.	FSP Ma	o and Forest Development Units (FDUs) (FRPA Act s.5(1)(a), FPPR s.14)	. 5
	5.1	Boundaries of the FDU	5
	5.2	New Forest Development Units (FRPA s.5(1)(a) and FPPR s.14(1)(a))	5
	5.3 ss.7(1	Forest Development Units in Effect on Date of Submission of this FSP (FRPA .1) and (2) and 5(1)(a) and FPPR s.14(1)(b))	5
	5.4	Areas to Which s.196(1) of the Act Apply (FRPA s.196(1); FPPR s.14(1)(c)	5
	5.5	Designations in Effect Four Months Before Submission of This FSP (FPPR s.14(2	')).5
	5.6 s.14(1	Areas Within FDUs Considered to be Approved (FRPA ss.196(1) and (2) and FPPI(c) and s.110)	
	5.7 Anoth	Areas within FDUs in Which Commercial Timber Harvesting is Prohibited by er Enactment (FPPR s.14(3)(i))	€
	5.8	Areas within FDUs Subject to Cutting Permit or Road Permit (FPPR s.14(3)(j))	6
	5.9	Declared Areas (FPPR s.14(4))	6
6.	FRPA V	alues and Results or Strategies	. 6
	6.1	Soils	6
	6.2	Timber	6
	6.3	Wildlife	
		6.3.1 Species at Risk	8 14
	6.4	Water, Fish, Wildlife and Biodiversity within Riparian Areas	



Timberlands

Management System

Por	t McNeill	and Quatsino Sound Forest Operations 2023-2028	wianagement			
		6.4.1 Water, Fish, Wildlife and Biodiversity within Riparian Areas	17			
	0.5	6.4.2 Retention of Trees in a Riparian Management Zone				
	6.5	Fish Habitat in Fisheries Sensitive Watersheds				
	6.6	Water in Community Watersheds				
	6.7	Wildlife and Biodiversity – Landscape Level				
		6.7.2 Mature and Old Seral Stages – Special Management Zones				
		6.7.3 Late Successional Habitat Elements and Attributes of Biodiversity				
		Management Zones	26 28			
		6.7.5 Old Growth Designated Areas – McKelvie Creek Error! Bookm				
	6.8	Wildlife and Biodiversity – Stand Level				
		6.8.1 Wildlife Tree Retention				
	6.9	Visual Quality	36			
	6.10	Cultural Heritage Resources	36			
	6.11	FRPA Value: Recreation	37			
	6.12	FRPA Value: Resource Features	38			
7.	FRPA M	easures	39			
	7.1	Invasive Plants	39			
	7.2	Natural Range Barriers	41			
8.	Stocking	Standards	41			
	8.1	Application	42			
	8.2 s.197(8.2 Application to Cutblocks Where Harvesting Began Before Term Commences (Act s.197(5)) and declaration was not received by MFLNRO within RESULTS4				
	8.3 Block	Situation or Circumstances that Determine Whether Free Growing is Basis				
	8.4	Stocking and Related Standards for Stands to which Free Growing O	bligations			
	Apply	43 8.4.1 Species	43			
		8.4.2 Stocking (Even-Aged Stocking Standards)				
	8.5	Hardwood Management	44			
	8.6	Intermediate Cutting	44			
	8.7	High Retention Harvesting – SEDRSS	45			
9.	Signatur	e(s) (FRPA Act s.5(3))	47			
App	oendix 1 -	- Stocking Standards	48			
	Appen	dix 1.1 – Species Selection and Stocking Targets	48			
	Appen	dix 1.2 – Minimum Horizontal Inter-Tree Distance	52			

Revision Date: October 31, 2022



Timberlands

Management System

Port McNeill and	Quatsino	Sound	Forest O	perations	2023-2028
------------------	----------	-------	----------	-----------	-----------

Appendix 1.3 – SEDRSS Stocking Standard	53
Appendix 1.3.1 – SEDRSS Tabular Method for HwCw over HwCw	
Appendix 1.3.2 - SEDRSS Tabular Method for Fdc – Fd(CwHw) over HwCwFd	

Appendix 2 – Site Series Representation Analysis for SMZ 11 (R/S 6.7.3) ... Error! Bookmark not defined.

PRINTED COPY IS UNCONTROLLED

Revision Date: October 31, 2022

Page 3 of 58



Timberlands

Management System

Port McNeill and Quatsino Sound Forest Operations 2023-2028

Preamble

This FSP encompasses lands within the traditional territories of several First Nations, as documented by evidence of historical use and the memories of their Elders. The FSP Holders will share information and work collaboratively with Quatsino First Nation, Kwakiutl First Nation, 'Namgis First Nation, Tlatlasikwala First Nation and Tlowitsis First Nation.

This Forest Stewardship Plan replaces the North Island Forest Stewardship Plan (2018-2023), as maintained in the BC Government FSP Tracker system.

FSPs are the key operational plan under the *Forest and Range Practices Act* (FRPA). FSPs identify broad areas called Forest Development Units (FDUs) where timber harvesting and road construction may occur, are subject to public review and comment, and must be approved by government before taking effect. FSPs do not show cutblocks and roads for approval and are generally in effect for a five-year term.

For each of the FRPA values and their Objectives set by government, such as wildlife and biodiversity, the FSP identifies legally binding results and strategies, measures and standards which will be required to be implemented by each Holder of the FSP. Results and strategies are consistent, to the extent practicable, with government Objectives set out in land use plans, such as the Vancouver Island Land Use Plan, and sub-unit plans such as approved landscape unit plans.

This FSP includes one FDU, where each Holder of the FSP is involved with cutblock development through joint ventures, as well as cutblocks with outstanding silviculture obligations. The entire area is within the North Island Natural Resource District.

The WFP Port McNeill and Quatsino Sound Operations 2023-2028 FSP with maps and appendices can be found at http://www.westernforest.com/sustainability.

More information on FSPs is available at:

https://www2.gov.bc.ca/gov/content/industry/forestry/managing-our-forest-resources/forest-stewardship-plans. Comments should be directed to:

Western Forest Products Inc.
Port McNeill and Quatsino Sound Forest Operations
Attn. Bruce Vinnedge, RPF
Sr. Silviculture Forester
fsp@westernforest.com

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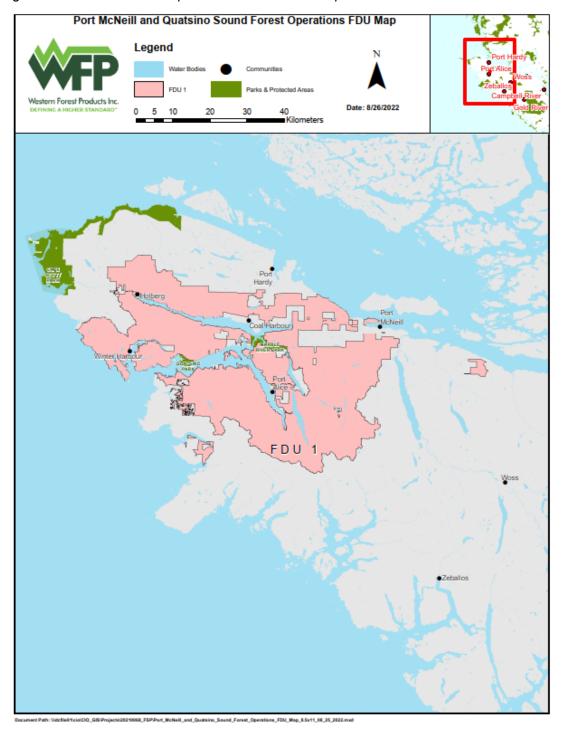
Revision Date: October 31, 2022 Page 4 of 58



Timberlands
Management System

Port McNeill and Quatsino Sound Forest Operations 2023-2028

Figure 1 – FSP Forest Development Unit – Overview Map



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Revision Date: October 31, 2022

Page 2 of 58



Timberlands
Management System

Port McNeill and Quatsino Sound Forest Operations 2023-2028

Date of Submission

March 17, 2022

Interpretation and Definitions

1.1 Interpretation

Results or **Strategies** in this Forest Stewardship Plan (**FSP**) refer to the *Forest and Range Practices Act*, Forest Planning and Practices Regulation (**FPPR**) and the Government Actions Regulation (**GAR**) as they were on the date this **FSP** was submitted for approval.

The word "section" or "subsection" or the abbreviations "s." or "ss." is used to indicate a numbered section or sections of the indicated Act, Regulation, or Order. An **FSP** section or subsection may also be referred to with "s." or "ss." Where no other reference is indicated, "s." or "ss." refers to a section or subsection under the current header.

Sections of Orders, Notices, and Objectives are embedded within Objective Source or Background Information tables in this **FSP** for convenience only. If there is a discrepancy between this **FSP** text and a quoted section, the text in the Act, Regulation, Order, or Notice prevails, and should be used in preference to this **FSP** text. Where contained in this **FSP**, the preamble, objective sources and background information is not part of this **FSP** or **Results** or **Strategies**.

Certain terms are intentionally in bold type within the text, to add emphasis and to indicate the specific definition listed below (i.e. "holder" may indicate a holder of a different forest stewardship plan, while "**Holder**" indicates a holder of this **FSP**).

1.2 Definitions:

General definitions that apply to the entire text of the **FSP** are listed here. Where definitions appear under a section or subsection header, those definitions apply in that section or subsection.

"FDU" means forest development unit;

"FPC" means the Forest Practices Code of British Columbia Act.

"FPPR" means the Forest Planning and Practices Regulation.

"FRPA" means the Forest and Range Practices Act.

"FSP" means this Forest Stewardship Plan.

"GAR" means the Government Actions Regulation.

"Holder" means a holder of an agreement under the Forest Act, and a signatory to this FSP.

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"Licensee" means an agreement holder under the Forest Act, that is a holder of this FSP.

"Measure" means obligations required by FPPR ss.17-18.

"Primary Forest Activity" has the same meaning as in FPPR s.1(1).

Revision Date: October 31, 2022

Page 3 of 58



Timberlands Management System

Port McNeill and Quatsino Sound Forest Operations 2023-2028

"Result" and "Strategy" have same meanings as in FPPR s.1(1).

"Stocking Standards" means obligations required by FPPR s.16.

Application of this FSP

1.3 **Licences and Licensees (FRPA s.3(4))**

- 1. This FSP applies to each cutting permit and road permit issued or granted to the Licensees holding this **FSP**:
 - a. after the FSP term commences;
 - b. within **FDUs**: and
 - c. under or in respect of the following licences:

Licence Holder	Licences
Western Forest Products Inc.	Tree Farm Licence 6 (includes TLs within the TFL), FL A94737, T0860
Quatsino First Nation	TSL A66259

1.4 Application of this FSP to FPC Obligations (FRPA Act ss.197(4-5, 7) and FPPR ss.14(1)(d-e))

- 1. In the **FDU**, this **FSP** applies:
 - a. to all cutblocks and roads subject to cutting permits issued to each Holder under the licences referred to in Paragraph 3.1 on or after the date approval of this FSP;
 - b. to a cutblock or road permit subject to a cutting permit issued to each Holder under a licence referred to in Paragraph 3.1 before this FSP term commences, whether the cutting permit is still in effect or not, for which each Holder gives written notice to the minister responsible for the Forest Act after this FSP term commences, effective the date, and to the extent, specified in the notice;
 - c. to a road, or portion thereof, subject to a road permit in effect before the FSP term commences for which each Holder gives written notice to government after this FSP term commences, effective the date, and to the extent, specified in the written notice:
 - d. where each Holder may elect to, for the purpose of changes to the total area under prescription of cutblock, including wildlife tree patches, under FRPA s.197(4) or (7) within the **FDU** as specified by **FPPR** s.14(1)(d), make changes to wildlife tree patches consistent with s.6.8 of this FSP; and
 - e. for a cutblock that has not been declared free growing that is within the FDU each **Holder** may elect to, for the purpose of otherwise specifying stocking standards, under FRPA ss.197(4), (5) or (7) within an FDU as specified by FPPR ss.14(1)(d) or (e) and where it is ecologically appropriate, to have stocking standards approved under this **FSP** apply to standards units within cutblocks from previous plans. For each standards unit, this election is to be made prior to a free growing declaration.

PRINTED COPY IS UNCONTROLLED

Revision Date: October 31, 2022

Page 4 of 58



Timberlands
Management System

Port McNeill and Quatsino Sound Forest Operations 2023-2028

Term of this FSP (FRPA ss.6(1)(a) and (b))

- 1. The term of this **FSP** is 5 years.
- 2. This **FSP** may be terminated earlier if the licensee elects to replace it with another approved FSP, approved Forest Landscape Plan, or may be extended pursuant to **FRPA** and the regulations thereunder.
- 3. The term of this **FSP** commences on the date specified by the minister or person delegated under **FRPA** s.120.1.

FSP Map and Forest Development Units (FDUs) (FRPA Act s.5(1)(a), FPPR s.14)

1.5 Boundaries of the FDU

1. The boundaries of the **FDU** under this **FSP** are shown on the **FSP** map (Figure 1). The **FDU** boundaries include, despite any inconsistency between the **FSP** map and the boundaries of a tree farm license or timber license referred to in s.3.1, the full area of such licence.

1.6 New Forest Development Units (FRPA s.5(1)(a) and FPPR s.14(1)(a))

1. The **FSP** map (Figure 1) shows the **FDU** boundaries.

1.7 Forest Development Units in Effect on Date of Submission of this FSP (FRPA ss.7(1.1) and (2) and 5(1)(a) and FPPR s.14(1)(b))

1. The **FSP** map shows the **FDU** that is in effect at the time of its submission for approval.

1.8 Areas to Which s.196(1) of the Act Apply (FRPA s.196(1); FPPR s.14(1)(c)

1. Not applicable.

1.9 Designations in Effect Four Months Before Submission of This FSP (FPPR s.14(2))

1. This **FSP** identifies designations and other areas listed in **FPPR** s.14(2) that were in effect 4 months before this **FSP** was submitted for approval.

1.10 Areas Within FDUs Considered to be Approved (FRPA ss.196(1) and (2) and FPPR s.14(1)(c) and s.110)

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1. Not applicable.

Davisian Data: Ostaban 24

Revision Date: October 31, 2022 Page 5 of 58



Timberlands
Management System

Port McNeill and Quatsino Sound Forest Operations 2023-2028

1.11 Areas within FDUs in Which Commercial Timber Harvesting is Prohibited by Another Enactment (FPPR s.14(3)(i))

1. Not applicable.

1.12 Areas within FDUs Subject to Cutting Permit or Road Permit (FPPR s.14(3)(j))

1. See the FSP map for active cutting permit and road permit areas.

1.13 Declared Areas (FPPR s.14(4))

1. See the FSP map for areas declared under FPPR s.14(4).

FRPA Values and Results or Strategies

1.14 Soils

OBJECTIVE SOURCE: SOILS				
Туре	Source	Effective Date of Objective		
BC Reg. 14/2004	FPPR s.5	January 31, 2004		

The objective set by government for soils is, without unduly reducing the supply of timber from British Columbia's forests, to conserve the productivity and the hydrologic function of soils.

1.14.1 Soil Disturbance Limits

Exemption from Result or Strategy - FPPR s.5

1. For the purposes of **FPPR** s.12.1(1), each **Holder** undertakes to comply with **FPPR** s.35, and is exempt from specifying an intended **Result** or **Strategy**.

1.14.2 Permanent Access Structures Limits

<u>Definitions for the Purposes of Results or Strategies in s.6.1.2</u>

"Cutblock" means the total area specified in a cutblock site plan.

Exemption from Result or Strategy - FPPR s.5

1. For the purposes of **FPPR** s.12.1(1), each **Holder** undertakes to comply with **FPPR** s.36, and is exempt from specifying an intended **Result** or **Strategy**.

1.15 Timber

OBJECTIVE SOURCE: TIMBER

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Revision Date: October 31, 2022 Page 6 of 58



Timberlands
Management System

Port McNeill and Quatsino Sound Forest Operations 2023-2028

Authority	Category/Source	Effective Date of Objective
BC Reg. 14/2004	FPPR s.6	January 31, 2004

The objectives set by government for timber are to

- a) maintain or enhance an economically valuable supply of commercial timber from British Columbia's forests.
- b) ensure that delivered wood costs, generally, after taking into account the effect on them of the relevant provisions of this regulation and of the Act, are competitive in relation to equivalent costs in relation to regulated primary forest activities in other jurisdictions, and
- c) ensure that the provisions of this regulation and of the Act that pertain to primary forest activities do not unduly constrain the ability of a holder of an agreement under the Forest Act to exercise the holder's rights under the agreement.

Exemption from Result or Strategy - FPPR s.6

1. In accordance with **FPPR** s.12(8), each **Holder** is exempt from the requirement to prepare a **Result** or **Strategy** for an objective set by government for timber in **FPPR** s.6.

1.16 Wildlife

OBJECTIVE SOURCE: WILDLIFE					
Authority	Category/Source	Effective Date of Objective			
BC Reg. 14/2004	FPPR s.7	January 31, 2004			

- 1. The objective set by government for wildlife is, without unduly reducing the supply of timber from British Columbia's forests, to conserve sufficient wildlife habitat in terms of amount of area, distribution of areas and attributes of those areas, for
 - a) the survival of species at risk,
 - b) the survival of regionally important wildlife, and
 - c) the winter survival of specified ungulate species.
- 2. A person required to prepare a forest stewardship plan must specify a result or 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
 - a) species referred to in subsection (1), and
 - 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 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.

PRINTED COPY IS UNCONTROLLED

Revision Date: October 31, 2022

vision Date: October 31, 2022 Page 7 of 58



Timberlands

Management System

Port McNeill and Quatsino Sound Forest Operations 2023-2028

1.16.1 Species at Risk

OBJECTIVE SOURCE: WILDLIFE: SPECIES AT RISK				
Authority	Category/Source	Effective Date of Objective		
BC Reg. 17/2004 s.11(1)	Order – Categories of Species at Risk (2004)	May 6, 2004		
BC Reg. 582/2004 s.13(1)	Order – Categories of Species at Risk (2011 Update)	July 18, 2011		
BC Reg. 14/2004 s.7(2)	Notice - Indicators of the Amount, Distribution and Attributes of Wildlife Habitat Required for the Survival of the Species at Risk in the North Island – Central Coast Forest District	March 2, 2006		

Definitions for the Purposes of Results or Strategies in s.6.3.1.

"**DNI s.7 Notice**" means the "Notice - Indicators of the Amount, Distribution and Attributes of Wildlife Habitat Required for the Survival of the Species at Risk in the North Island – Central Coast Forest District" (2006).

"Non-contributing landbase (NCLB)" means that portion of the forest management land-base assumed to be unavailable for harvesting, given objectives for all forest values.

1.16.1.1 Northern Goshawk (Accipiter gentilis laingi)

OBJECTIVE SOURCE: WILDLIFE: SPECIES AT RISK					
Authority	Category/Source	Effective Date of Objective			
BC Reg. 582/2004	Order – Wildlife Habitat Area #1-089	December 18, 2005			

The Deputy Minister of Environment orders that:

- 1. the wildlife habitat area shown in the map set out in the attached Schedule A (#1-089) and boundaries contained in the GIS file twha bc are established;
- 2. the wildlife habitat area in the attached Schedule A and boundaries contained in the GIS file twha_bc is established for Queen Charlotte Goshawk (Accipiter gentilis laingi),
- 3. the general wildlife measures outlined in Schedule 1 are established for the wildlife habitat area in the attached Schedules A and boundaries contained in the GIS file twha bc,
- 4. where there is discrepancy between the wildlife habitat area boundaries as shown in the attached Schedules A and the GIS file twha_bc, the boundary as detailed in the GIS file will take precedent. The centre point of the line on the map denoting the wildlife habitat area is what establishes the boundary; and
- 5. pursuant to section 7(3) of the Forest Planning and Practices Regulation the person(s) required to prepare a forest stewardship plan are hereby exempted from the obligation to prepare results or strategies in relation to the objective set out in section 7(1) of the Forest Planning and Practices Regulation to the extent that wildlife habitat area 1-089 addresses the amount included for Queen

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Revision Date: October 31, 2022 Page 8 of 58



Timberlands
Management System

Port McNeill and Quatsino Sound Forest Operations 2023-2028

OBJECTIVE SOURCE: WILDLIFE: SPECIES AT RISK					
Authority	Category/Source	Effective Date of Objective			

Charlotte Goshawk in the Notice for the North Island - Central Coast Forest District. Including consideration of this order, the amount remaining for Queen Charlotte Goshawk in the North Island Central Coast Forest District Notice is 277 ha not exceeding an impact to the mature timber harvesting land base of 128 ha.

Schedule 1 - General Wildlife Measures

Access

• Do not construct roads within the WHA unless an exemption is approved by the Minister of Environment or delegate.

Harvestina:

- Do not harvest timber or salvage (e.g., cedar) except for traditional aboriginal purposes when the Minister of Environment or delegate approves an exemption.
- Do not commercially thin, cedar-shake harvest or salal harvest within the WHA unless the statutory decision maker approves a variance or harvest of these items is for traditional aboriginal purposes.
- There are no restrictions on the use and maintenance of the existing mainline road within the WHA. Pesticides
- Do not use pesticides unless an exemption is approved by the Minister of Environment or delegate. Additional Management Considerations:
- Minimize disturbance when working adjacent to the WHA between 15 February and 1 September. In general, avoid blasting, road construction, helicopter activity and other prolonged disturbance
 Do not construct roads or upgrade existing roads unless there is no other practicable option.

Strategy – DNI s.7 Notice

- To comply with s.4 of Schedule 1 of the DNI s.7 Notice, as a Strategy, each Holder will
 maintain suitable habitat with attributes required in the DNI s.7 Notice which will update as
 new WHAs that are subsequently established are subtracted from the amount. The amount
 of suitable habitat required in the DNI s.7 Notice is 277 ha total, of which 128 ha is in the
 timber harvesting land base, on the effective date of this FSP.
- 1.16.1.2 Coastal Tailed Frog (Ascaphus truei)

Result or Strategy

- 1. The known range of this species does not overlap the FDU area. No result or strategy is required.
- 1.16.1.3 Marbled Murrelet (*Brachyramphus marmoratus*)

<u>Definitions for the purposes s.6.3.1.3 of this FSP</u>

- "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 December 2, 2021.
- "MAMU" means the species Marbled Murrelet (Brachyramphus marmoratus).

Revision Date: October 31, 2022

Page 9 of 58



Timberlands

Management System

Port McNeill and Quatsino Sound Forest Operations 2023-2028

"**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 a given forest district, within each landscape unit aggregate and landscape unit portion, which may be varied consistent with Objective 3(4) of the Order.

"Suitable Habitat" means Marbled Murrelet nesting habitat, that has the attributes of wildlife habitat listed 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.

OBJECTIVE SOURCE: WILDLIFE: MARBLED MURRELET				
Authority	Category/Source	Effective Date of Objective		
BC Reg. 14/2004 s.7(2)	Notice – Indicators of the Amount, Distribution and Attributes of Wildlife Habitat Required for the Survival of Marbled Murrelet (<i>Brachyramphus marmoratus</i>)	December 2, 2021		

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:

1. 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:

- 1. 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.
- 2. 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.

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Revision Date: October 31, 2022 Page 10 of 58



Timberlands

Management System

Port McNeill and Quatsino Sound Forest Operations 2023-2028

<u>Strategy</u> – "Notice – Indicators of the Amount, Distribution and Attributes of Wildlife Habitat Required for the Survival of Marbled Murrelet (*Brachyramphus marmoratus*)"

- 1. To meet the requirements of the **Notice**, each **Holder** will coordinate with other holders in a **Working Group**, as follows:
 - a. As a **Strategy**, to comply with the **Notice**, each **Holder** will:
 - i. Maintain at least:
 - I. For each landscape unit portion, the **MAMU WHA Suitable Habitat** Minimum listed in the Notice, Schedule 1, Table 3; and
 - II. For each landscape unit aggregate, the **MAMU WHA Suitable Habitat** Minimum listed in the **Notice**, Schedule 1, Table 2;
 - ii. Maintain at least:
 - For each landscape unit portion, the MAMU WHA and OGMA Suitable Habitat Minimum listed in the Notice, Schedule 1, Table 3; and
 - II. 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:
 - I. Of an amount greater than or equal to the **MAMU WHA Suitable Habitat** Minimum, to be established as **MAMU WHAs**; and
 - II. Of an amount greater than or equal to the MAMU WHA and OGMA Suitable Habitat Minimum, to be established as MAMU WHAs and OGMAs:
 - iv. Identify, for each landscape unit portion, or several landscape unit portions within a landscape unit aggregate:
 - 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
 - II. 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:
 - Each Holder will apply the Planning Tables and notify other Forest Stewardship Plan and Woodlot License Plan holders until agreement is reached in the Working Group assembly; or
 - II. The **Working Group** may request that the Minister establish proportional **Suitable Habitat** targets pursuant to **FPPR** s.19.

PRINTED COPY IS UNCONTROLLED

Revision Date: October 31, 2022

Page 11 of 58



Timberlands
Management System

Port McNeill and Quatsino Sound Forest Operations 2023-2028

OBJECTIVE SOURCE: WILDLIFE: MARBLED MURRELET		
Authority	Category/Source	Effective Date of Objective
Land Act s.93.4	Order for the Recovery of Marbled Murrelet (Brachyramphus marmoratus)	December 2, 2021

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 (1)(b), 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 (1)(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 3.(1) to 3.(3) 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 – "Order for the Recovery of Marbled Murrelet (Brachyramphus marmoratus)"

- 2. To meet the requirements of the **Order**, each **Holder** will coordinate with other holders in a **Working Group**, as follows:
 - a. As a **Strategy**, to comply with the **Order**, each **Holder** will:
 - i. Reach agreement on specific amounts of **Suitable Habitat** to maintain by retaining all timber, equal to or greater than:
 - I. The amount listed in **Order**, Schedule 7, Table 2, Column "A", for each landscape unit portion; or
 - II. 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;
 - ii. Use the **Planning Tables** as a basis to identify **Suitable Habitat** distribution to maintain by retaining all timber, equal to or greater than:

PRINTED COPY IS UNCONTROLLED

Revision Date: October 31, 2022 Page 12 of 58



Timberlands

Management System

Port McNeill and Quatsino Sound Forest Operations 2023-2028

- The amount listed in Order, Schedule 7, Table 2, Column "B", for each landscape unit portion; and
- II. The amount listed in the **Order**, Schedule 7, Table 1, Column "A", for each landscape unit aggregate;

and

- iii. If agreement cannot be reached:
 - I. Each **Holder** will apply the **Planning Tables** and notify other Forest Stewardship Plan and Woodlot License Plan holders until agreement is reached in the **Working Group** assembly; or
 - II. The **Working Group** may request that the Minister establish proportional **Suitable Habitat** targets pursuant to **FPPR** s.19.

1.16.1.4 Great Blue Heron (Ardea herodias fannini)

OBJECTIVE SOURCE: WILDLIFE: SPECIES AT RISK		
Authority	Category/Source	Effective Date of Objective
BC Reg. 14/2004 s.7(2)	Notice - Indicators of the Amount, Distribution and Attributes of Wildlife Habitat Required for the Survival of the Species at Risk in the North Island – Central Coast Forest District	March 2, 2006

2) Great Blue Heron (Ardea herodias fannini)

Amount:

1 . 240 ha not exceeding an impact to the mature timber harvesting landbase of 36 ha.

Distribution:

- 1. The amount of habitat referenced above must be distributed to provide:
- areas of suitable habitat of the size, spatial distribution and connectivity identified in the species account for Great Blue Heron in the Accounts and Measures for Managing Identified Wildlife (Identified Wildlife Management Strategy Version 2004).
- 2. The areas described above are located within the biogeoclimatic units and preferred elevations identified in the species account for Great Blue Heron in the Accounts and Measures for Managing Identified Wildlife in the Identified Wildlife Management Strategy Version 2004.

Strategy – DNI s.7 Notice

1. To comply with s.2 of Schedule 1 of the DNI s.7 Notice, as a Strategy, each Holder will maintain suitable habitat with attributes required in the DNI s.7 Notice which will update as new WHAs that are subsequently established are subtracted from the amount. The amount of suitable habitat required in the DNI s.7 Notice is 240 ha total, of which 36 ha is in the timber harvesting land base, on the effective date of this FSP.

Revision Date: October 31, 2022 Page 13 of 58

PRINTED COPY IS UNCONTROLLED



Timberlands Management System

Port McNeill and Quatsino Sound Forest Operations 2023-2028

1.16.2 Winter Survival of Specified Ungulate Species

1.16.2.1 Winter Survival of Specified Ungulate Species - Black-Tailed Deer (Odocoileus hemionus columbianus) and Elk (Cervus elaphus roosevelti)

OBJECTIVE SOURCE: WILDLIFE: WINTER SURVIVAL OF SPECIFIED UNGULATE SPECIES		
Authority Category/Source Effective Date of Objective		Effective Date of Objective
BC Reg. 17/2004 ss.7(2) and 10(1)	Order – Ungulate Winter Range #U1-006	October 18, 2004

Schedule 1 – General Wildlife Measures

- 1. Road construction is not to occur within the designated ungulate winter ranges unless there is no other practicable option and an exemption is approved by the MWLAP designated authority.
- 2. An exemption is not required for road maintenance, road deactivation, felling of danger trees or brushing and clearing on existing roads within the UWR. These activities will be conducted in a manner that does not result in a material adverse impact on the ungulate winter range habitat within the designated ungulate winter range
- 3. Harvesting is not to occur within the designated ungulate winter ranges unless an exemption is approved by the MWLAP designated authority. An exemption would be considered for the purposes of enhancing the quality of the winter range.
- 4. An exemption is not required for harvesting within the designated ungulate winter ranges when it is required to address worker safety: felling of danger trees, felling for guy line anchors, felling of tail hold anchor trees within an UWR along adjacent cutblock boundaries. Harvesting will be conducted in a manner that does not result in a material adverse impact on the ungulate winter range habitat within the designated ungulate winter ranges.
- 5. Trees that must be felled within an UWR will be left onsite to provide coarse woody debris, unless the felled tree lies outside the UWR.
- 6. Salvage harvesting is not to occur within the designated ungulate winter ranges unless an exemption is approved by the MWLAP designated authority.

Strategy – "Order – Ungulate Winter Range #U1-006"

1. For TFL 39-4¹:

a. As a Strategy, each Holder will conduct its Primary Forest Activities in the area subject to the "Order – Ungulate Winter Range #U1-006", in a manner consistent with the General Wildlife Measures in Schedule 1 of the "Order - Ungulate Winter Range #U1-006".

¹ Note that as of January 1st, 2015, TFL 39 Block 4 was amalgamated with TFL 6.

Revision Date: October 31, 2022

Page 14 of 58



Timberlands
Management System

Port McNeill and Quatsino Sound Forest Operations 2023-2028

OBJECTIVE SOURCE: WILDLIFE: WINTER SURVIVAL OF SPECIFIED UNGULATE SPECIES			
Authority	Authority Category/Source Effective Date Objective		
BC Reg. 582/2004 ss.9(2) and 12(1)	Amended Order – Ungulate Winter Range #U1-010	October 18, 2004	

Schedule 1 – General Wildlife Measures

- 1. Road construction is not to occur within the designated ungulate winter ranges unless there is no other practicable option and an exemption is approved by the MOE delegated decision maker.
- 2. An exemption is not required for road maintenance, road deactivation, felling of danger trees or brushing and clearing on existing roads within the UWR. These activities will be conducted in a manner that does not result in a material adverse impact on the ungulate winter range habitat within the designated ungulate winter range.
- 3. Harvesting is not to occur within the designated ungulate winter ranges unless an exemption is approved by the MOE delegated decision maker. An exemption would be considered for the purposes of enhancing the quality of the winter range.
- 4. An exemption is not required for harvesting within the designated ungulate winter ranges when it is required to address worker safety: felling of danger trees, felling for guy line anchors, felling of tail hold anchor trees within an UWR along adjacent cutblock boundaries. Harvesting will be conducted in a manner that does not result in a material adverse impact on the ungulate winter range habitat within the designated ungulate winter ranges.
- 5. Trees that must be felled within an UWR will be left onsite to provide coarse woody debris, unless the felled tree lies outside the UWR.6. Salvage harvesting is not to occur within the designated ungulate winter ranges unless an exemption is approved by the MWLAP designated authority.
- 6. Salvage harvesting is not to occur within the designated ungulate winter ranges unless an exemption is approved by the MOE delegated decision maker.

Strategy – "Amended Order – Ungulate Winter Range #U1-010 – TFL 6"

2. For TFL 6:

a. As a Strategy, each Holder will conduct its Primary Forest Activities in the area subject to the "Amended Order – Ungulate Winter Range #U1-010 – TFL 6", in a manner consistent with the General Wildlife Measures in Schedule 1 of the "Amended Order – Ungulate Winter Range #U1-010 – TFL 6".

OBJECTIVE SOURCE: WILDLIFE: WINTER SURVIVAL OF SPECIFIED UNGULATE SPECIES		
Authority Category/Source Effective Date of Objective		
BC Reg. 582/2004 ss.9(2) and 12(1)	Amended Order – Ungulate Winter Range #U1-011 – Kingcome TSA	May 16, 2007
Schedule 1: General Wildlife Measures:		

PRINTED COPY IS UNCONTROLLED

Revision Date: October 31, 2022 Page 15 of 58



Timberlands
Management System

Port McNeill and Quatsino Sound Forest Operations 2023-2028

OBJECTIVE SOURCE: WILDLIFE: WINTER SURVIVAL OF SPECIFIED UNGULATE SPECIES		
Authority	Category/Source	Effective Date of Objective

1. Road construction is not to occur within the designated ungulate winder ranges unless there is no other practicable option and an exemption is approved by the MOE designated authority.

An exemption is not required for the construction of future extension of road PIO in UWR Unit No. NAH- 07, the Nahwitti East Mainline road in the upland portion of UWR Unit No, NAH- 03 north of Nahwitti River and Basin Mainline road in Unit No. KLA-03. The extension of these roads will be conducted in a manner that does not result in a material adverse impact on the ungulate winter range habitat.

MOE recognizes that the lower boundary of the UWR Unit No. WAK-08 is proposed along the 620 metre above sea level elevation line in the northwest portion of this UWR. It is expected that road construction would occur below this elevation. Amendments to the UWR boundary will be considered if it is not practicable to construct the road below this elevation.

- 2. An exemption is not required for road maintenance, road deactivation, felling of danger trees or brushing and clearing on existing roads within the Ungulate Winter Range. These activities will be conducted in a manner that does not result in a material adverse impact on the ungulate winter range habitat within the designated ungulate winter range.
- 3. Harvesting is not to occur within the designated ungulate winter ranges unless an exemption is approved by the MOE designated authority. An exemption would normally only be considered for the purposes of enhancing the quality of the winter range. An exemption is not required for harvesting of Western Red Cedar trees within UWR Unit No. UK1-09 by selective helicopter removal ("single-stem harvest"). Maximum opening size for this operation will be less than 0.1 hectare. Licensees will notify the regional office of Ministry of Environment prior to initiating operations such that monitoring to evaluate vegetation response and animal use may be considered.

MOE recognizes that a 1 hectare helicopter drop zone is required for long term use in UWR Unit No. LKL-1. An exemption to general wildlife measure 3 will be considered subject to the extent of clearing and timing of use.

- 4. An exemption is not required for harvesting within the designated ungulate winter ranges when it is required to address worker safety: felling of danger trees, felling for guy line anchors, felling of tail hold anchor trees within an UWR along adjacent cutblock boundaries. Harvesting will be conducted in a manner that does not result in a material adverse impact on the ungulate winter range habitat within the designated ungulate winter ranges.
- 5. Trees that must be felled within an UWR will be left onsite to provide coarse woody debris, unless the felled tree lies outside the UWR.
- 6. Salvage harvesting is not to occur within the designated ungulate winter ranges unless an exemption is approved by the MOE designated authority.
- 7. An authorized person who carries out a primary forest activity within 100m of a designated ungulate winter range, as per Schedule A, must ensure that the adjacent designated ungulate winter range is not materially adversely affected by foreseeable impacts of their activities.

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Devision Data October 24 00

Revision Date: October 31, 2022 Page 16 of 58



Timberlands Management System

Port McNeill and Quatsino Sound Forest Operations 2023-2028

Strategy – "Amended Order – Ungulate Winter Range #U1-011 – Kingcome TSA"

- 3. For the North Island TSA (FL A94737 and TLs):2
 - a. As a Strategy, each Holder will conduct its Primary Forest Activities in the area subject to the "Amended Order – Ungulate Winter Range #U1-011 – Kingcome TSA", in a manner consistent with the General Wildlife Measures in Schedule 1 of the "Amended Order – Ungulate Winter Range #U1-011 – Kingcome TSA".

1.17 Water, Fish, Wildlife and Biodiversity within Riparian Areas

1.17.1 Water, Fish, Wildlife and Biodiversity within Riparian Areas

OBJECTIVE SOURCE: WATER, FISH, WILDLIFE AND BIODIVERSITY WITHIN RIPARIAN AREAS		
Authority	Category/Source	Effective Date of Objective
BC Reg. 14/2004	FPPR s.8	January 31, 2004

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

Exemption from Result or Strategy - Objective set by government for water, fish, wildlife and biodiversity within riparian areas (FPPR ss.8)

1. For the purposes of FPPR s.12.1(2), each Holder undertakes to comply with FPPR ss.47 to 51, 52(2) and 53, and is exempt from specifying an intended **Result** or **Strategy**.

1.17.2 Retention of Trees in a Riparian Management Zone

OBJECTIVE SOURCE: WATER, FISH, WILDLIFE AND BIODIVERSITY WITHIN RIPARIAN AREAS		
Authority	Category/Source	Effective Date of Objective
BC Reg. 14/2004	FPPR s.12(3)	January 31, 2004

⁽³⁾ Despite section 12.1 (2) and (6), a person who prepares a forest stewardship plan must specify in it, for the objective set out in section 8, a result or strategy that addresses retention of trees in a riparian management zone.

Strategy – FPPR s.12(3)

- 1. For the purposes of FPPR s.12(3), as a Strategy, to address the retention of trees in a riparian management zone, each Holder will:
 - a. Ensure that prior to harvesting, retention levels within RMZs are determined by a qualified professional through a riparian assessment that considers:

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Page 17 of 58

Revision Date: October 31, 2022

² Note that the Part 2 of the Great Bear Rainforest Regulation abolished the Kingcome TSA and Part 5 of the GBRR created the North Island TSA from part of the former Kingcome TSA on January 1st, 2017.



Timberlands

Management System

Port McNeill and Quatsino Sound Forest Operations 2023-2028

- i. All the factors listed in Schedule 1, s.2 of the FPPR; and
- ii. Potential site-specific safety and operational issues;
- b. Design cutblocks and roads in a manner that is consistent with the retention levels as determined by the qualified professional as described in s.1.a; and
- c. Plan and conduct **Primary Forest Activities** consistent with the assessment and design in this **Strategy.**

1.18 Fish Habitat in Fisheries Sensitive Watersheds

OBJECTIVE SOURCE: FISH HABITAT IN FISHERIES SENSITIVE WATERSHEDS		
Authority	Category/Source	Effective Date of Objective
BC Reg. 582/2004 ss.14(1) and 14(2)	Order – Fisheries Sensitive Watersheds – Vancouver Island, Schedule B	December 28, 2005

For each of the Fisheries Sensitive Watersheds identified by this Order, 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.

Result or Strategy – FPPR s.8.1

1. There are no Fisheries Sensitive Watersheds in the **FDU**. No **Result** or **Strategy** is required.

1.19 Water in Community Watersheds

OBJECTIVE SOURCE: WATER IN COMMUNITY WATERSHEDS		
Authority	Category/Source	Effective Date of Objective
BC Reg. 240/2009	FPPR s.8.2	October 22, 2009

- 1. 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
 - established under the Government Actions Regulation.
- 2. The objective set by government for water being diverted for human consumption through a licensed waterworks in a community watershed is to prevent to the extent described in subsection

Revision Date: October 31, 2022 Page 18 of 58



Timberlands
Management System

Port McNeill and Quatsino Sound Forest Operations 2023-2028

OBJECTIVE SOURCE: WATER IN COMMUNITY WATERSHEDS			
Authority	Category/Source	Effective Date of Objective	
(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 to 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. 3. The objective set by government under subsection (2) applies only to the extent that it does not			

Definitions for the purposes s.6.6 of this FSP

"Equivalent Clear-Cut Area (ECA)" means, for the purposes of tracking ECA, the R1b hydrologic recovery curve from TR-032³ will be applied to harvested stands and cumulated over the total watershed area.

"Hydrologic Evaluation" is an evaluation form prepared by a qualified professional, that addresses site-specific hydrologic considerations and practices including terrain stability, riparian condition, roads, and streams flows for cutblocks or groups of cutblocks in a Community Watershed. The Hydrologic Evaluation will be consistent with the applicable Watershed Assessment.

"Watershed Assessment" means an assessment prepared by a qualified professional to investigate watershed hydrologic and geomorphic processes and provide guidance for forest management activities, and is consistent with the EGBC/ABCFP Joint Professional Practice Guidelines, Watershed Assessment and Management of Hydrologic and Geomorphic Risk in the Forest Industry, v.1.0 (2020). A Watershed Assessment will be consistent with applicable Community Watershed objectives.

Strategy – FPPR s.8.2

- 1. To comply with **FPPR** s.8.2, as a **Strategy**, in the Calbick Creek Community Watershed, each **Holder** will:
 - a. Complete a **Watershed Assessment** if **Primary Forest Activities** are planned in the Community Watershed during the term of this **FSP**;
 - b. Complete a **Hydrologic Evaluation** for a proposed cutblock or group of cutblocks; and
 - c. Conduct **Primary Forest Activities** in a manner that is consistent with the recommendations in the applicable **Watershed Assessment** and **Hydrologic Evaluation**.

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Revision Date: October 31, 2022 Page 19 of 58

³ Hudson, R. and G. Horel, 2007.



Timberlands

Management System

Port McNeill and Quatsino Sound Forest Operations 2023-2028

1.20 Wildlife and Biodiversity - Landscape Level

OBJECTIVE SOURCE: WILDLIFE AND BIODIVERSITY - LANDSCAPE LEVEL		
Authority	Category/Source	Effective Date of Objective
BC Reg. 14/2004	FPPR s.9	January 31, 2004

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

Definitions for the purposes of s.6.7 of this FSP

"Adjacent" has the same meaning as in FPPR s.65(1).

"Enhanced Forestry Zone (EFZ)" means a Resource Management Zone (RMZ) established in Section I.B. of the Vancouver Island Land Use Plan – Higher Level Plan Order (VILUP Order).

"Existing Cutblock" has the same meaning as in FPPR s.65(1).

"General Management Zone (GMZ)" means an RMZ established in Section I.C. of the VILUP Order.

"New Cutblock" has the same meaning as in FPPR s.65(1).

"Non-Conforming Portion" means an area within an existing cutblock on which the applicable stocking and height requirements in s.6.7.1.1 paragraph 3, s.6.7.1.2 paragraph 3, or s.6.7.1.3 paragraph 3, of this **FSP**, have not been met.

"Special Management Zone (SMZ)" means an RMZ established in Section I.A. of the VILUP Order.

"VILUP Order" means the "Vancouver Island Land Use Plan – Higher Level Plan Order" (2000).

1.20.1 Cutblock Size and Adjacency Limits

OBJECTIVE SOURCE: WILDLIFE AND BIODIVERSITY – LANDSCAPE LEVEL		
Authority	Category/Source	Effective Date of Objective
BC Reg. 14/2004	FPPR s.9	January 31, 2004

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

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Revision Date: October 31, 2022 Page 20 of 58



Timberlands

Management System

Port McNeill and Quatsino Sound Forest Operations 2023-2028

1.20.1.1 Special Management Zones

OBJECTIVE SOURCE: WILDLIFE AND BIODIVERSITY – LANDSCAPE LEVEL: CUTBLOCK SIZE AND ADJACENCY LIMITS

Authority	Category/Source	Effective Date of Objective
FPC s.3(1), 3(2) and 9.1	VILUP Order Objectives 1(b) and (c), 2	December 1, 2000

- 1. Sustain forest ecosystem structure and function in SMZs, by:
 - b. retaining, within cutblocks⁴, structural forest attributes and elements with important biodiversity functions⁵, and
 - 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.
- 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. [N.B. Objective 2 is provided for completeness for the Reader but is superseded by FPPR s.64(2) and cannot be included in a Result or Strategy].

Footnote 4: Within cutblocks: generally, means non-contiguous with cutblock boundaries.

Footnote 5: This includes, but is not limited to snags, wildlife trees, downed logs.

<u>Strategy – Special Management Zones</u>

- 1. In **Special Management Zones**, for the purposes of **FPPR** s.12.4(1), as a **Strategy**, each **Holder**:
 - Adopts VILUP Order Objectives 1(c) and 2 for the net area to be reforested within a cutblock; and
 - b. Where cutblocks are larger than 5 ha, each **Holder** will implement **VILUP Order** Objective 1(b) by applying a cutblock configuration consistent with **FPPR** s.64(4);
- 2. In **Special Management Zones**, for the purposes of **FPPR** s.12.4(2), as a **Strategy**, each **Holder** must not harvest timber on a **New Cutblock**, unless:
 - a. All **Existing Cutblocks** that are adjacent to the **New Cutblock** meet the requirements set out in s.3 of this **Strategy**, or
 - b. The combined area of the New Cutblock and any Non-Conforming Portions that are immediately Adjacent to the New Cutblock does not exceed the requirements relating to cutblock size set out in s.1 of this Strategy;

and

- 3. For the purposes of s.2.a, an **Existing Cutblock** must meet the criteria set out in one of the following paragraphs:
 - a. At least 75% of the net area to be reforested of the **Existing Cutblock** is stocked such that the average height of the tallest 100 trees per ha on the area is a minimum of 3 m and

PRINTED COPY IS UNCONTROLLED

Revision Date: October 31, 2022 Page 21 of 58



Timberlands

Management System

Port McNeill and Quatsino Sound Forest Operations 2023-2028

- i. Is stocked in accordance with the applicable stocking standards for that cutblock; or
- ii. Is stocked with at least 500 trees per ha of a commercially valuable species that are at least 1.3 m in height;

or

- b. The part of the net area to be reforest of the **Existing Cutblock** that is closest to the **New Cutblock**
 - i. Must be at least half of the net area to be reforested;
 - ii. Is stocked such that the average height of the tallest 100 trees per ha on the area is a minimum of 3 m; and
 - iii. Is stocked
 - In accordance with the applicable stocking standards for that cutblock; or
 - II. With at least 500 trees per ha of a commercially valuable species that are at least 1.3 m in height.

1.20.1.2 General Management Zones

OBJECTIVE SOURCE: WILDLIFE AND BIODIVERSITY – LANDSCAPE LEVEL: CUTBLOCK SIZE AND ADJACENCY LIMITS		
Authority	Category/Source	Effective Date of Objective
FPC s.4	Order to Establish a Landscape Unit and Objectives – Sayward Landscape Unit, Objective 6	July 1, 2003

<u>Strategy – General Management Zones</u>

- 1. In **General Management Zones**, for the purposes of **FPPR** s.12.4(1), as a **Strategy**, each **Holder** adopts **FPPR** s.64(1);
- 2. In **General Management Zones**, for the purposes of **FPPR** s.12.4(2), as a **Strategy**, each **Holder** must not harvest timber on a **New Cutblock**, unless:
 - a. All **Existing Cutblocks** that are adjacent to the **New Cutblock** meet the requirements set out in s.3 of this **Strategy**, or
 - b. The combined area of the **New Cutblock** and any **Non-Conforming Portions** that are immediately **Adjacent** to the **New Cutblock** does not exceed the requirements relating to cutblock size set out in s.1 of this **Strategy**;

and

- 3. For the purposes of s.2.a, an **Existing Cutblock** must meet the criteria set out in one of the following paragraphs:
 - a. At least 75% of the net area to be reforested of the Existing Cutblock is stocked such that the average height of the tallest 100 trees per ha on the area is a minimum of 3 m and
 - Is stocked in accordance with the applicable stocking standards for that cutblock; or

PRINTED COPY IS UNCONTROLLED

Revision Date: October 31, 2022 Page 22 of 58



Timberlands

Management System

Port McNeill and Quatsino Sound Forest Operations 2023-2028

ii. Is stocked with at least 500 trees per ha of a commercially valuable species that are at least 1.3 m in height;

or

- b. The part of the net area to be reforest of the **Existing Cutblock** that is closest to the **New Cutblock**
 - i. Must be at least half of the net area to be reforested:
 - ii. Is stocked such that the average height of the tallest 100 trees per ha on the area is a minimum of 3 m; and
 - iii. Is stocked
 - In accordance with the applicable stocking standards for that cutblock; or
 - II. With at least 500 trees per ha of a commercially valuable species that are at least 1.3 m in height.

1.20.1.3 Enhanced Forest Management Zones

OBJECTIVE SOURCE: WILDLIFE AND BIODIVERSITY – LANDSCAPE LEVEL: CUTBLOCK SIZE AND ADJACENCY LIMITS

Authority	Category/Source	Effective Date of Objective
FPC s.3(1), 3(2) and 9.1	VILUP Order Objectives 7, 8	December 1, 2000

- 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.
- 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. [N.B. Objective 8 is provided for completeness for the Reader but is addressed by ss.6.5 and 6.6 of this FSP.

Definitions for the purposes of s.6.7.1.3 of this FSP

"Hydrologic Evaluation" is an evaluation form prepared by a qualified professional, that addresses site-specific hydrologic considerations and practices including terrain stability, riparian condition, roads, and streams flows for cutblocks or groups of cutblocks that do not conform to FPPR s.64(1)(a) or FPPR s.65(2), in an Enhanced Forestry Zone. The Hydrologic Evaluation will be consistent with the applicable Watershed Assessment.

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"Retention Silvicultural System" means a silvicultural system that is designed to:

Revision Date: October 31, 2022

Revision Date: October 31, 2022 Page 23 of 58



Timberlands

Management System

Port McNeill and Quatsino Sound Forest Operations 2023-2028

- a. retain individual trees or groups of trees to maintain structural diversity over the area of the cutblock for at least one rotation, and
- 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.

"Watershed Assessment" means an assessment prepared by a qualified professional to investigate watershed hydrologic and geomorphic processes and provide guidance for forest management activities, and is consistent with the EGBC/ABCFP Joint Professional Practice Guidelines, Watershed Assessment and Management of Hydrologic and Geomorphic Risk in the Forest Industry, v.1.0 (2020).

Strategy - Enhanced Forestry Zones

- 1. In **Enhanced Forestry Zones**, for the purposes of **FPPR** s.12.4(1), as a **Strategy**, to increase the short-term availability of timber, a cutblock may be larger than 40 ha, provided that the **Holder** conducts **Primary Forest Activities** in a manner consistent with:
 - a. A Retention Silvicultural System; and
 - b. Practice recommendations prescribed in the applicable Hydrologic Evaluation.
- 2. In **Enhanced Forest Management Zones**, for the purposes of **FPPR** s.12.4(2), as a **Strategy**, each **Holder** must not harvest timber on a **New Cutblock**, unless:
 - a. All **Existing Cutblocks** that are adjacent to the **New Cutblock** meet the requirements set out in s.3 of this **Strategy**; or
 - b. The combined area of the **New Cutblock** and any **Non-Conforming Portions** that are immediately **Adjacent** to the **New Cutblock** does not exceed the requirements relating to cutblock size set out in s.1 of this **Strategy**.
- 3. For the purposes of s.2.a, an **Existing Cutblock** must meet the criteria set out in one of the following paragraphs:
 - a. At least 75% of the net area to be reforested of the **Existing Cutblock** is stocked such that the average height of the tallest 100 trees per ha on the area is a minimum of 1.3 m and
 - i. Is stocked in accordance with the applicable stocking standards for that cutblock; or
 - ii. Is stocked with at least 500 trees per ha of a commercially valuable species;

or

- b. The part of the net area to be reforest of the existing cutblock that is closest to the new cutblock
 - i. Must be at least half of the net area to be reforested;
 - ii. Is stocked such that the average height of the tallest 100 trees per ha on the area is a minimum of 1.3 m; and
 - iii. Is stocked
 - In accordance with the applicable stocking standards for that cutblock; or
 - II. With at least 500 trees per ha of a commercially valuable species.

PRINTED COPY IS UNCONTROLLED

Revision Date: October 31, 2022 Page 24 of 58

Timberlands
Management System

Port McNeill and Quatsino Sound Forest Operations 2023-2028

1.20.2 Mature and Old Seral Stages - Special Management Zones

OBJECTIVE SOURCE: WILDLIFE AND BIODIVERSITY - LANDSCAPE LEVEL: MATURE AND OLD SERAL STAGES - SPECIAL MANAGEMENT ZONES

Authority	Category/Source	Effective Date of Objective
FPC s.3(1), 3(2) and 9.1	VILUP Order, Objective 1(a)	October 24, 2000

- 1. Sustain forest ecosystem structure and function in SMZs, by:
 - a) creating or maintaining stand structures and forest attributes associated with mature and old 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; and
 - ii. in 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.

Mature and Old Forest in FDU 1, West Coast Nahwitti Lowlands, SMZ 2 (based on VRI data, 2020 reference year)

	<u> </u>	-	
		Total Forest	
BEC	Mature and	Management Land	
Zone	Old Forest	Base	Proportion of Mature and Old Forest
CWH	6,206		
Total	6,206	10,074	62%

Mature and Old Forest in FDU 1, Brooks Bay, SMZ 3 (based on VRI data, 2020 reference year)

		Total Forest	
BEC	Mature and	Management Land	
Zone	Old Forest	Base	Proportion of Mature and Old Forest
CWH	376		
Total	376	596	63%

Mature and Old Forest in FDU 1, Koprino, SMZ 4 (based on VRI data, 2020 reference year)

		Total Forest	
BEC	Mature and	Management Land	
Zone	Old Forest	Base	Proportion of Mature and Old Forest
CWH	2,738		
Total	2,738	5,816	47%

Mature and Old Forest in FDU 1, Johnstone Strait, SMZ 7 (based on VRI data, 2020 reference year)

PRINTED COPY IS UNCONTROLLED

Revision Date: October 31, 2022 Page 25 of 58



Timberlands
Management System

Port McNeill and Quatsino Sound Forest Operations 2023-2028

OBJECTIVE SOURCE: WILDLIFE AND BIODIVERSITY – LANDSCAPE LEVEL: MATURE AND OLD SERAL STAGES – SPECIAL MANAGEMENT ZONES

Auth	ority	Category/Source		Effective D Objecti	
BEC	Mature and	Total Forest			
BEC	iviature ana	Management Land			
Zone	Old Forest	Base	Proportion of Mature and Old Forest		
CWH	247				
МН	7				
Total	254	341	74%		

<u>Definitions for the Purposes of this Strategy</u>

"**Mature**" means forest stands 80-250 years old in the CWH zone, and 120-250 years old in the MH zone.

"Old" means forest stands greater than 250 years old.

Strategy – VILUP Order Objective 1(a)

1. As a **Strategy**:

- a. Each **Holder** adopts VILUP Order Objective 1(a) in those portions of SMZs 2, 3, 4 and 7 within the FDU area, and
- b. Where SMZs are not entirely in the **FDU**, the **Strategy** only applies to that portion of the SMZ within the **FDU**, or as apportioned by government.

1.20.3 <u>Late Successional Habitat Elements and Attributes of Biodiversity – Special</u> Management Zones

OBJECTIVE SOURCE: WILDLIFE AND BIODIVERSITY – LANDSCAPE LEVEL: LATE SUCCESSIONAL HABITAT ELEMENTS AND ATTRIBUTES OF BIODIVERSITY – SPECIAL MANAGEMENT ZONES

Authority	Category/Source	Effective Date of Objective
FPC s.3(1), 3(2) and 9.1	VILUP Order, Objectives 4 and 5	October 24, 2000

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

Definitions for the purposes of s.6.7.3 of this FSP

"Late Successional Habitat Elements" includes, but is not limited to: large diameter (> 60 cm) live, decaying and dead standing trees (providing nest and cavity sites); downed wood,

Revision Date: October 31, 2022 Page 26 of 58



Timberlands

Management System

Port McNeill and Quatsino Sound Forest Operations 2023-2028

including large diameter pieces (50 to 150 cm); deciduous broad-leaved trees, both in riparian and upland areas.⁴

"**Mappable**" means a minimum polygon size with a leading site series of 0.25 ha, or 1 cm² on a 1:5,000 scale map.

"Regionally Rare Ecosystem" means red and blue listed plant communities as defined by the BC Conservation Data Centre.

"Underrepresented Ecosystem" means any site series that is less than 2% of the special management zone forest management landbase.

Strategy - VILUP Order, Objective 4 and 5

- 1. As a **Strategy**, each **Holder** adopts VILUP Order Objective 4 in that portion of SMZ 3 in the **FDU**, subject to the following:
 - a. Approved and proposed Old Growth Management Areas (OGMAs), stand level retention and the non-contributing land-base (NCLB), address the objectives, subject to the following conditions:
 - i. An analysis that will be carried out prior to new road and/or cutblock development based on current provincial **TEM** and **VRI** data;
 - ii. Where the analysis shows a deficit under the target amount, including proposed OGMAs, harvesting will not take place in a **Mappable Regionally Rare** or **Underrepresented Ecosystem**, if doing so will result in an area below the target amount, when deducted from the total, including proposed OGMAs, for that site series;
 - iii. Site plan field data must be collected by or under the direction of a qualified registered professional that has received training in the identification of **Regionally Rare** or **Underrepresented Ecosystem**;
 - iv. Field data collection may be used to revise and recruit areas to the analysis table amounts; and
 - v. Despite s.1.a.ii, right-of-way clearing and road construction may occur for access through a **Regionally Rare** or **Underrepresented Ecosystem** that is below the target amount in the analysis, if no other practicable option exists.
- 2. For the purposes of VILUP Order, Objective 5, each **Holder** will, as a **Strategy** in that portion of SMZ 3 in the **FDU**, incorporate **Late Successional Habitat Elements** in wildlife

⁴ Footnote 8, "Vancouver Island Land Use Plan, Higher Level Plan Order".

PRINTED COPY IS UNCONTROLLED

Revision Date: October 31, 2022 Page 27 of 58



Timberlands Management System

Port McNeill and Quatsino Sound Forest Operations 2023-2028

tree retention areas where Late Successional Habitat Elements are within or immediately adjacent to a proposed cutblock.

1.20.4 Old Growth Management Areas (OGMAs)

1.20.4.1 **Old Growth Management Areas with Non-Spatial Legal Objectives**

OBJECTIVE SOURCE: WILDLIFE AND BIODIVERSITY - LANDSCAPE LEVEL: OLD GROWTH MANAGEMENT **A**REAS

Authority	Category/Source	Effective Date of Objective
FPC ss.4(1-2)	Order Establishing Provincial Non-Spatial Old Growth Objectives	June 30, 2004

- A.1. Biodiversity emphasis for landscape units For the purpose of implementing objective 2 below, biodiversity emphasis is assigned as listed in Appendix 1, Table 1.
- A.2. Old growth objectives To contribute to the conservation of biodiversity, licensees must maintain old forest by biogeoclimatic variant within each landscape unit according to the age of old forest and the percentage of old forest retention that is specified in Tables 1 through 4 and the assignment of Natural Disturbance Types outlined in Appendix 3, and subject to provisions 5 through 9 below.
- A.5. Potential reduction in old forest retention in low biodiversity emphasis areas For landscape units with a low biodiversity emphasis, the old forest retention percent listed in Tables 1-4 may be reduced by up to 2/3, to the extent necessary to address impacts on timber supply.
- A.6. Use of vounger forests to meet old forest objectives In intermediate and high emphasis landscape units where it can be demonstrated that equal or better conservation benefits would result, stands less than the age of old, and preferably mature forest, may contribute to the percentage of old forest retention defined in Tables 1-4.
- A.8. Draft old growth management areas. Where the Minister of Sustainable Resource Management, his delegate, or a licensee or group of licensees has identified draft old growth management areas, the Minister or delegate may specify in writing that these draft old growth management areas meet the intent of this Order.
- B. When a new order of the Minister of Sustainable Resource Management or delegate establishes old forest objectives, this Order will, on the effective date of the new order, cease to have effect for the area or areas affected by old forest established in the new order.

Where a new order of the Minister of Sustainable Resource Management or delegate establishes old forest objectives for a portion of a landscape unit that is established under this Order, this Order remains in effect for the portion of the landscape unit for which the new order does not establish old forest objectives.

Definitions for the purposes of s.6.7.4.1 of this FSP

"Order" means the "Order Establishing Provincial Non-Spatial Old Growth Objectives", effective June 30, 2004.

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Strategy – "Order Establishing Provincial Non-Spatial Old Growth Objectives"

Revision Date: October 31, 2022



Timberlands

Management System

Port McNeill and Quatsino Sound Forest Operations 2023-2028

- 1. In the Keogh, Bonanza, Neuroutsos, Mahatta, Holberg and Klaskish Landscape Units:
 - a. As a **Strategy**, to comply with the "Order Establishing Provincial Non-Spatial Old Growth Objectives", effective June 30, 2004, each **Holder** adopts the **Order** and in so doing, will not cause the target retention of old forest or younger forest by landscape unit, natural disturbance type and biogeoclimatic zone to fall below the amounts specified in the **Order**, except as permitted by the **Order**.

1.20.4.2 Old Growth Management Areas with Legal Objectives

1.20.4.2.1 San Josef Landscape Unit

Authority	Category/Source	Effective Date of Objective
Land Act s.93.4	Ministerial Order – Land Use Objectives for the San Josef Landscape Unit situated on Northern Vancouver Island within the North Island Central Coast Forest District	October 6, 2016

Part 2 - Objectives

The objectives for OGMAs are as follows:

4. Maintain or recruit old growth forests in established OGMAs, as shown on the attached OGMA map dated September 13, 2016, subject to part 3 below.

Part 3 - Permissible and Non-Permissible Activities within OGMAs

- 5. Within all OGMAs, the following activities are permitted:
 - a. Sanitation harvesting to prevent insect infestations or diseases posing a significant threat to forest health:
 - b. Felling of trees to remove a safety hazard along cutblock boundaries or within road right-of-ways, recreation sites or trails; and
 - c. Timber harvesting for First Nations' cultural purposes.
- 6. Within all OGMAs, the following activities are permissible as minor intrusions and/or adjustments:
 - a. Felling of trees to enable a safe and logical falling boundary where the area does not exceed two hectares;
 - b. Wind firming treatments along a boundary;
 - c. Road or bridge construction for access to resource values beyond or adjacent to the OGMA, and no other practicable option for road or bridge location exists;
 - d. 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 less than 0.5 hectares in total; and
 - e. Road maintenance, deactivation, or brushing and clearing on existing roads underactive tenure within the road permit area.
 - f. Felling to provide guyline clearance, tailhold anchor trees, or to mitigate a safety hazard along cutblock boundaries.
- 7. Within all OGMAs, the following activity is non-permissible:

PRINTED COPY IS UNCONTROLLED

Revision Date: October 31, 2022 Page 29 of 58



Timberlands Management System

Port McNeill and Quatsino Sound Forest Operations 2023-2028

Authority	Category/Source	Effective Date of Objective
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- a. Salvage opportunities, including firewood; OR
- b. Any activity not listed in Section 5 or 6.

Part 4 - Identification of Replacement Area and Communication

- 8. OGMA replacement forest area is required as a result of the activities in Sections 5 and 6 when the total net change to the OGMA exceeds 0.5 hectares in size. Replacement forest will be of an equivalent area and:
 - a. of similar or better stand attributes (i.e. age, site productivity, species distribution),
 - b. of equivalent or better habitat quality and functionality for species on the Category of Species of Risk list: and.
 - c. situated in order of priority, either directly adjacent to, or in the same variant and landscape unit as the adjusted OGMA.
- 9. Exceptions to Section 8 include:
 - a. As an alternative to finding replacement area for a road or bridge, the licensee may permanently deactivate and rehabilitate a temporary road or bridge site within four years of the date of construction.
 - b. In recognition of surplus suitable old serai forest within the San Josef LU, the requirement to identify OGMA replacement forest may be waived by the delegated decision maker in the CWHvhl, vml, vm2 and MHmml variants, provided that the total area of mature and old serai forest maintained in OGMAs plus the contributing old serai forest area in protected areas meets or exceeds the targets in Table A.

Strategy – "Land Use Objectives for the San Josef Landscape Unit situated on Northern Vancouver Island within the North Island Central Coast Forest District"

1. As a Strategy, each Holder will conduct Primary Forest Activities in the area subject to the document titled "Land Use Objectives for the San Josef Landscape Unit situated on Northern Vancouver Island within the North Island Central Coast Forest District" in a manner consistent with Parts 2, 3 and 4 of the document titled "Land Use Objectives for the San Josef Landscape Unit situated on Northern Vancouver Island within the North Island Central Coast Forest District".

1.20.4.2.2 Marble Landscape Unit

Authority	Category/Source	Effective Date of Objective
Land Act s.93.4	Ministerial Order – Land Use Objectives for Old Growth Management Areas (OGMAs) within the Nahwitti, Tsulquate and Marble Landscape Units situated on northern Vancouver Island within the North Island - Central Coast Forest District	July 26, 2010
Part 2 - Objectives		

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5. Objectives for Old Growth Management Areas

Revision Date: October 31, 2022

Page 30 of 58



Timberlands
Management System

Port McNeill and Quatsino Sound Forest Operations 2023-2028

Authority	Category/Source	Effective Date of Objective	
(1) Maintain or recruit old growth forests in established Old Growth Management Areas, as shown on the map attached as Schedules 1 and 2, subject to subsections (2) to (6) below.			
(2) Despite subsection 1, timber harvesting and road or bridge construction are permitted within OGMAs, provided that:			
	i) 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,		
	ii) replacement forest is identified which is		
	i. biologically suitable		
	ii. of equivalent age, structure and area, and,		
	iii. situated in order of priority, either immediatel OGMA, or adjacent to another OGMA in the sar landscape unit as the existing OGMA, and		
	iii) road or bridge construction, if applicable, is required values beyond or adjacent to the OGMA and no other proad or bridge location exists.		
replace	the purposes of subsection (2)(b) and (c), as an alternati ement area, a temporary road or bridge site may be perm habilitated within four years after construction.		
(4) Wit	hin OGMAs, the following activities are permitted:		
	a) First Nations traditional use of trees or understory pla	nnts.	
	b) Topping or pruning of trees along boundaries to impre	ove wind firmness.	
	c) Timber harvesting to prevent the spread of insect infe that pose significant threat to forested areas outside of OGMAs will be done in a manner that retains as many of attributes as possible.	OGMAs. Salvage within	
	d) Road maintenance, deactivation, removal of danger to clearing on existing roads under active tenure within the purposes.		
	e) Felling for guyline clearance, tailhold anchor trees, or cutblock boundaries or within the right-of-way on new ro to meet safety requirements.		
	f) Silvicultural habitat enhancement in recruitment OGM	As.	
	g) Trail and site maintenance or development, and silvid address public safety associated with the management recreation sites and trails.		
activitie	placement forest is required if the total area of an OGMA es pursuant to subsection (4) exceeds the greater of one f the OGMA. Replacement forest must be biologically suit	hectare or 10% of the	

PRINTED COPY IS UNCONTROLLED

Revision Date: October 31, 2022

Page 31 of 58



Timberlands
Management System

Port McNeill and Quatsino Sound Forest Operations 2023-2028

Authority	Category/Source	Effective Date of Objective
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.		

<u>Strategy – "Land Use Objectives for Old Growth Management Areas (OGMAs) within the Nahwitti, Tsulquate and Marble Landscape Units situated on northern Vancouver Island within the North Island - Central Coast Forest District"</u>

1. As a Strategy, each Holder will conduct Primary Forest Activities in the area subject to the document titled "Land Use Objectives for Old Growth Management Areas (OGMAs) within the Nahwitti, Tsulquate and Marble Landscape Units situated on northern Vancouver Island within the North Island - Central Coast Forest District" in a manner consistent with Part 2 of the document titled "Land Use Objectives for Old Growth Management Areas (OGMAs) within the Nahwitti, Tsulquate and Marble Landscape Units situated on northern Vancouver Island within the North Island - Central Coast Forest District."

1.20.4.2.3 Lower Nimpkish Landscape Unit

Authority	Category/Source	Effective Date of Objective
FPC Act s.4	Order to Establish a Landscape Unit and Objectives – Lower Nimpkish Landscape Unit, Objective 1	October 24, 2005

Objective 1 - Old Growth Management Areas

1. Maintenance or recruitment of old growth forests

Maintain or recruit old growth forests in established Old Growth Management Areas (OGMAs), as shown on the attached Lower Nimpkish Landscape Unit map dated August 5, 2005, subject to section 2 below.

- 2. Permissible activities within OGMAs
- (a) Minor OGMA boundary adjustments for operational reasons:

To accommodate operational requirements for timber harvesting and road or bridge construction, OGMAs that are 10 ha or greater in size may have boundaries adjusted, provided that

- i) the boundary adjustment does not affect more than 10 per cent of the area of the OGMA, or
- ii) road or bridge construction is required to access resource values beyond or adjacent to the OGMA and no other practicable option for road or bridge location exists, and iii) suitable OGMA replacement forest of equivalent age, structure and area is identified either (in order of priority) directly adjacent to or in the same variant and landscape unit as the adjusted OGMA.

PRINTED COPY IS UNCONTROLLED

Revision Date: October 31, 2022 Page 32 of 58



Timberlands
Management System

Port McNeill and Quatsino Sound Forest Operations 2023-2028

Authority	Category/Source	Effective Date of Objective

In the case of ii) above, as an alternative to finding replacement area the licensee may permanently deactivate and rehabilitate a temporary road or bridge site within four years after construction.

In the case of iii) above, in recognition of surplus suitable old seral forest located in protected areas, riparian reserve zones, or areas required for species at risk management within the Lower Nimpkish Landscape Unit, the requirement to identify OGMA replacement forest may be waived in the CWHxm2, vm1, vm2 and MHmm1 variants, provided that the total area of mature and old seral forest maintained in OGMAs plus the contributing old seral forest area in protected areas meets or exceeds the targets in Table A.

(b) Other permissible activities

- i) Topping or pruning of trees along the boundary to improve wind firmness.
- ii) Timber harvesting to prevent the spread of insect infestations or diseases that pose a significant threat to forested areas outside of OGMAs. Salvage within OGMAs will be done in a manner that retains as many old growth forest attributes as possible.
- iii) 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.
- iv) Felling of 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.
- 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 less than 0.5 ha in total.
- vi) Small boundary adjustments for operational reasons, or intrusions, other than those specified above, that result in a net loss to the OGMA of less than or equal to 0.5 ha.

OGMA replacement forest is required as a result of the activities in 2 (b) above if the total net change to the OGMA exceeds 0.5 ha in size and the total area of mature and old seral forest maintained in OGMAs plus the contributing old seral forest area in protected areas is reduced below the minimum target area outlined in Table A. Replacement forest must be biologically suitable, of equivalent age, structure and area, and situated (in order of priority), either immediately adjacent to the existing OGMA, or in the same variant and landscape unit as the existing OGMA.

<u>Strategy – "Order to Establish a Landscape Unit and Objectives – Lower Nimpkish Landscape Unit" – Objective 1</u>

 As a Strategy, each Holder will conduct Primary Forest Activities in the area subject to the "Order to Establish a Landscape Unit and Objectives – Lower Nimpkish Landscape Unit" in a manner consistent with Objective 1 of the "Order to Establish a Landscape Unit and Objectives – Lower Nimpkish Landscape Unit".

Revision Date: October 31, 2022

Page 33 of 58



Timberlands

Management System

Port McNeill and Quatsino Sound Forest Operations 2023-2028

1.21 Wildlife and Biodiversity - Stand Level

1.21.1 Wildlife Tree Retention

OBJECTIVE SOURCE: WILDLIFE AND BIODIVERSITY – STAND LEVEL: WILDLIFE TREE RETENTION		
Authority	Category/Source	Effective Date of Objective
BC Reg. 580/2004	FPPR s.9.1	June 25, 2012
The objective set by government for wildlife and biodiversity at the stand level is, without unduly reducing the supply of timber from British Columbia's forests, to retain wildlife trees.		
FPC Act s.4	Order to Establish a Landscape Unit and Objectives – October 24, 2005 Lower Nimpkish Landscape Unit, Objective 2	

Objective 2 - Wildlife Tree Retention

Maintain stand-level structural diversity, by retaining wildlife tree patches (WTPs). The holder of an agreement under the Forest Act, except a woodlot licence agreement, who completes harvesting in one or more cutblocks, except minor salvage cutblocks, located within the LU during any 60 month period beginning on January 1 of any calendar year following the establishment of this objective, must ensure that, at the end of that 60 month period, the total area covered by wildlife tree retention areas that relate to the cutblocks, meets or exceeds the percent of the total harvest area (Net Area to be Reforested + permanent road area) of the cutblocks by subzone presented in Table B.

Table B. Wildlife Tree Retention (WTR)by BEC unit in the Lower Nimpkish Landscape Unit.

BEC Subzone/Variant	Wildlife Tree Retention %.
CWHxm (Coastal Western Hemlock, very dry maritime)	11%
CWHvm (Coastal Western Hemlock, very wet maritime)	9%
MHmm (Mountain Hemlock, moist maritime)	1%

In addition:

- (1) WTPs must be well distributed across the BEC subzone.
- (2) When designated at the site plan level, WTPs must be located within or immediately adjacent to a cutblock.

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- (3) No timber harvesting, including single tree selection is to occur within WTPs, except as noted below:
 - (a) Falling of danger trees;
 - (b) Salvage of windthrown timber is permitted within WTPs where windthrow impacts 25% to 50% of the dominant or co-dominant stems. Salvage of windthrown timber and harvesting of remaining standing stems is permitted within WTPs where windthrow exceeds 50% of the dominant or co-dominant stems; or where forest health issues pose a significant threat to areas outside the WTP. Where such salvage/harvesting is planned and authorized, suitable replacement WTP of at least equivalent area must be identified to achieve the retention target.

Revision Date: October 31, 2022

Page 34 of 58



Timberlands

Management System

Port McNeill and Quatsino Sound Forest Operations 2023-2028

- (4) WTPs should include, if present, remnant old-growth patches and live or dead veteran trees (excluding danger trees).
- (5) WTPs should include representative larger trees (dbh > average operational cruise) for the stand and suitable wildlife trees, if available, as well as identified wildlife habitat features, if present (excluding danger trees).
- (6) BEC subzones and variants will be determined by site plan information.

Definitions for the Purposes s.6.8.1 of this FSP

"Equivalent Forested Area" means replacement forest of equivalent age, structure and area that is within or immediately adjacent to the cutblock to which the WTRA relates.

"Mature Seral Condition" means at least 80 years old in the CWH biogeoclimatic zone, or at least 120 years old in the MH biogeoclimatic zone.⁵

"WTP" means a wildlife tree patch established under the *Forest Practices Code of BC Act*. Synonymous with WTRA except in s.4.c, below.

"WTRA" means wildlife tree retention area, has the same meaning as in FPPR s.1(1).

Result or Strategy – FPPR ss.9.1 and 12.5(1-2)

- 1. For the purposes of **FPPR** s.12.5(1), as a **Result** or **Strategy**, each **Holder** will ensure that for each cutblock, the area⁶ set aside for a **WTRA**:
 - a) Is a minimum of:
 - i. 7% of the sum total area of a cutblock; or
 - ii. In the Lower Nimpkish Landscape Unit Plan area, the amount specified in Objective 2, Table B of the "Order to Establish a Landscape Unit and Objectives – Lower Nimpkish Landscape Unit", subject to ecosystem classification information collected during site plan field work;
 - a. Is within or immediately adjacent to the Cutblock to which the WTRA relates;

and

Result or Strategy – FPPR ss.9.1 and 12.5(2)

- 2. For the purposes of **FPPR** s.12.5(2), as a **Result** or **Strategy**, each **Holder** must not harvest timber from a **WTRA** unless the trees on the net area to be reforested of the cutblock to which the wildlife tree retention area relates have reached a **Mature Seral Condition**, except:
 - a. Timber may be harvested for establishment of tail holds or guy line tiebacks;
 - b. Danger trees may be felled; and
 - c. Where a Holder modifies a previously established WTP or WTRA, the Holder will specify a replacement WTRA that is an Equivalent Forested Area if the modified WTRA or WTP is not reduced below the minimum area requirements listed in s.1 of this Result or Strategy.

Revision Date: October 31, 2022

Page 35 of 58

⁵ Biodiversity Guidebook, 1995. p.16. https://www.for.gov.bc.ca/hfd/library/documents/bib19715.pdf.

⁶ For the purposes of calculating WTRA requirements, a cutblock is considered to be the total of the net area to be reforested and the road area within a cutblock boundary.



Timberlands

Management System

Port McNeill and Quatsino Sound Forest Operations 2023-2028

1.22 Visual Quality

OBJECTIVE SOURCE: VISUAL QUALITY		
Authority	Category/Source	Effective Date of Objective
BC Reg. 582/2004 s.7(2)	Order to Establish Visual Quality Objectives for Tree Farm Licence 6 and Block 7 of the Pacific TSA within the North Island Central Coast Forest District	September 24, 2010

Strategy - FPPR s.9.2

- 1. For the purposes of FPPR s.9.2, as a Strategy, each Holder will comply with the Categories of Visually Altered Forest Landscape⁷ established by the "Order to Establish Visual Quality Objectives for Tree Farm Licence 6 and Block 7 of the Pacific TSA within the North Island Central Coast Forest District" or subsequently established under s.7 of the Government Actions Regulation;
- 2. Where required, a Visual Impact Assessment (VIA) will be conducted according to the ABCFP's 'Guidance for Forest Professionals Practicing in Visual Resource Management', as amended from time to time;
- 3. Each **Holder** will ensure that the recommendations in an applicable VIA are followed to the extent practicable, including mitigation measures such as tree crown modification of timbered edges:
- 4. The scenic areas and VQOs apply to a road permit, cutting permit or area declared under **FPPR** s.14(4), as the scenic areas and VQOs were on the date of submission. This **Strategy** applies to new objectives established under **GAR** s.7 on the effective date of the Order: and
- 5. If the road or harvesting relates to the harvesting of timber that is damaged or destroyed by fire insects, disease, wind, flooding or other factor, and it is not practicable to meet the established VQO, a **Holder** may make an application for an exemption to the objective under **FPPR** s.12(7).

1.23 Cultural Heritage Resources

OBJECTIVE SOURCE: CULTURAL HERITAGE RESOURCES		
Authority	Category/Source	Effective Date of Objective
BC Reg. 14/2004	FPPR s.10	January 31, 2004

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.

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PRINTED COPY IS UNCONTROLLED

Revision Date: October 31, 2022 Page 36 of 58

⁷ As defined in FPPR s.1.1.



Timberlands

Management System

Port McNeill and Quatsino Sound Forest Operations 2023-2028

Definitions for the purposes of s.6.10 of this FSP

"Cultural Heritage Resource" is as defined in Forest Act s.1 and in respect of FPPR s.10.

"First Nation" in this FSP means First Nations as recognized by government where asserted territories and FDUs overlap, or Tribal Council for a group of First Nations where territories and FDUs overlap.

"Primary Forest Activity" has the same meaning as in FPPR s.1.

"Objective" means the text of FPPR s.10.

"Western Red Cedar or Cypress for Monumental Art" refers to cedar or cypress used for making paddles, poles, masks, totems, canoes, and similar traditional use items.

Strategy - FPPR s.10

- 1. For the purposes of **FPPR** s.10, as a **Strategy**, each **Holder** will:
 - a. Gather data over the term of this **FSP** to identify the **Cultural Heritage Resources** to which the **Objective** relates by:
 - i. Initiating ongoing, regular, reasonable efforts in writing and in person to gather data from **First Nations**, qualified persons, and the government; and
 - ii. Seeking confirmation from the DDM and First Nations of whether any potential cultural heritage resource that has been identified, is in fact a Cultural Heritage Resources to which the objective relates, and/or whether the data gathered in s.1.a.i indicates the resource requires further assessment under s.1.b;
 - b. Assess the identified Cultural Heritage Resources in relation to the risk from Primary Forest Activities, using FPPR Schedule 1 s.4 Factors and information gathered from available, knowledgeable sources including traditional use and archaeological studies, First Nations, qualified persons, and government; and
 - c. As part of the assessment, make reasonable efforts to:
 - Establish options for mitigating the impact that a forest practice or forest development carried out by the **Holder** of the **FSP** may have on an identified **Cultural Heritage Resource**;
 - ii. Seek information and advice on the options from **First Nations**, qualified persons or government; and
 - iii. Select the most appropriate option for carrying out Primary Forest Activities.
- 2. The **Holder** of the **FSP** will ensure that the **Strategies** set out in ss.1.b and c are applied with respect to **Western Red Cedar or Cypress for Monumental Art**.

1.24 FRPA Value: Recreation

OBJECTIVE SOURCE: RECREATION		
Authority	Category/Source	Effective Date of Objective
FRPA s.56	FRPA Value	November 21, 2002

PRINTED COPY IS UNCONTROLLED

Revision Date: October 31, 2022 Page 37 of 58



Timberlands Management System

Port McNeill and Quatsino Sound Forest Operations 2023-2028

OBJECTIVE SOURCE: RECREATION		
Authority	Category/Source	Effective Date of Objective

- 1. The minister may order
 - a) the establishment of Crown land as an interpretive forest site, a recreation site or a recreation trail, except Crown land that is subject to another enactment and is being administered by another minister, branch or agency of government.
 - b) the variance of the boundaries of an interpretive forest site, a recreation site or a recreation trail, and
 - c) the disestablishment of an interpretive forest site, a recreation site or a recreation trail.
- 2. [Repealed 2003-55-31.]
- 3. The minister may establish an objective for an interpretive forest site, recreation site or recreation trail established under subsection (1).
- 4. An objective established under subsection (1) must be consistent with objectives set by government that pertain to the area.

FRPA Value - Recreation

 Each Holder manages FRPA s.56 and FPC s.102 established sites in accordance with the FRPA s.56 or grandfathered FPC s.102 agreement for the site, as amended from time to time. Note that recreation resource features have not been established in the North Island-Central Coast Natural Resource District. See s.6.12 of this FSP.

1.25 FRPA Value: Resource Features

OBJECTIVE SOURCE: RESOURCE FEATURES		
Authority	Category/Source	Effective Date of Objective
BC Reg. 582/2004	Order to Identify Karst Resource Features for the North Island – Central Coast Forest District	March 29, 2007

Pursuant to Section 5 of the Government Actions Regulation of the Forest and Range Practices Act (FRP A), I hereby identify the following surface or subsurface elements of a karst system as resource features wherever they are found within the North Island – Central Coast Forest District, effective March 29, 2007.

- Karst caves
- The important features and elements within very high or high vulnerability karst terrain
- Significant surface karst 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.

PRINTED COPY IS UNCONTROLLED

Revision Date: October 31, 2022 Page 38 of 58



Timberlands

Management System

Port McNeill and Quatsino Sound Forest Operations 2023-2028

FRPA Value - Resource Features

Resource features include practice requirements that are not within the scope of an FSP and are mentioned here only as background information supporting this FSP. No objectives are specified in resource feature orders; therefore, Results or Strategies are not required. Current Orders are listed in the objective source table above. Each Holder will ensure that Primary Forest Activities do not damage or render ineffective a resource feature subject to an Order.

FRPA Measures

1.26 Invasive Plants

BACKGROUND INFORMATION: INVASIVE PLANTS		
Authority	Category/Source	Effective Date of Objective
BC Reg. 580/2004	FPPR s.17	January 31, 2004

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.

Table 7.1 – Priority Species⁸

- 3 -1		
Priority	Species	
Prevent	Yellow Starthistle	
Provincial EDRR	Perennial Pepperweed	
Provincial Containment	Giant Hogweed, Rush Skeletonweed	
Regional Containment/Control	Blueweed, Common Tansy, Field Scabious, Hoary Alyssum, Hoary Cress, Knotweeds (Japanese, Giant, Bohemian, Himalayan), Leafy Spurge, Marsh Plume Thistle, Orange Hawkweed, Puncture Vine, Scotch Broom, Spotted Knapweed, Teasel, Yellow Flag Iris	
Management	Gorse, Purple Loosestrife, Scentless Chamomile, Scotch Thistle, Sulphur Cinquefoil, Tansy Ragwort	

Table 7.2 – Priority Categories and Provincial Objectives for Invasive Plants⁹

⁸ Correlated list between the Invasive Plants Regulation and the document titled 'Provincial Priority Invasive Species – BC Inter-Ministry Invasive Species Working Group' (March 2021), on the effective date of this FSP.

Revision Date: October 31, 2022

Page 39 of 58

⁹ Adopted from the definitions contained in the document titled 'Provincial Priority Invasive Species – BC Inter-Ministry Invasive Species Working Group' (March 2021).



Timberlands
Management System

Port McNeill and Quatsino Sound Forest Operations 2023-2028

Priority Category	Category Description	Management Objective
Prevent	Species determined to be high risk and not yet established.	Prevent introduction and establishment.
Provincial EDRR	Species is high risk and is new to the Province	Eradication.
Provincial Containment	Species is high risk with limited extent but significant potential to spread.	Prevent further expansion into new areas with the ultimate goal of reducing the overall extent.
Regional Containment/Control	Species is high risk and well established, or medium risk with high potential to spread.	Prevent further expansion into new areas within the region through establishment of occurrences outside the line to control
Management	Species is more widespread but may be of concern in specific situations with certain high values – e.g. conservation lands or specific agriculture crops.	Reduce the invasive species impacts locally or regionally, where resources are available.

Definitions for the purposes Measures in s.7.1 of this FSP

Measure - FPPR s.17

- 1. For the purposes of **FPPR** s.17, each **Holder** will, as a **Measure**:
 - a. Incorporate known invasive **Priority Species** into development plans and report new sites as they are discovered, by
 - i. In the planning process, consulting the map display module of the Invasive Alien Plant Program (IAPP) online database for known invasive **Priority** Species (www.for.gov.bc.ca/hra/plants/application.htm);
 - ii. Distribute information to staff and contractors on **Priority Species** that exist or threaten to establish within the plan area, on an annual basis; and
 - iii. Monitoring areas for the presence of invasive species while conducting road and cutblock layout, road reactivation surveys, site plan fieldwork, contractor inspections, and silviculture surveys; and
 - iv. Reporting new incidences of invasive plants in the company's spatial database and through Report-a-Weed or similar technology to the Invasive Alien Plant Program (IAPP) within 30 days of discovery;
 - b. Work in uninfested sites before moving to infested sites;
 - c. Clean equipment within existing infestations of **Priority Species**, to the extent practicable, before moving to a new work site or region, by

PRINTED COPY IS UNCONTROLLED

Revision Date: October 31, 2022 Page 40 of 58

[&]quot;Applicable Area" means an area of exposed mineral soil that is at least a contiguous 0.1 ha.

[&]quot;Priority Categories" means the priority categories listed in Table 7.2 of s.7.1 of this FSP.

[&]quot;Priority Species" means those invasive species listed in Table 7.1 of s.7.1 of this FSP.



Timberlands

Management System

Port McNeill and Quatsino Sound Forest Operations 2023-2028

- i. Pressure-washing mud from vehicles and equipment, while preventing run-off from contaminating waterways and riparian areas; or
- ii. Visually inspecting vehicles and equipment and removing lodged plant parts found:
- d. Inspect and ensure fill and erosion-control materials are not taken from sites infested with **Priority Species**;
- e. Direct all contractors and staff to not brush or mow **Priority Species**:
- f. Minimize unnecessary soil disturbance and maintain native vegetation, especially in areas infested with **Priority Species**;
- g. Revegetate a disturbed site that is an **Applicable Area** as soon as possible with weed-free Common No.1 Forage Mixture or better; and
- h. Promptly control infestations of **Priority Species** resulting from **Primary Forest Activities**, if in the infestation is a knotweed species, or in the **Prevent**, **Provincial EDRR** or **Provincial Containment Priority Categories**, or after consultation with a Provincial Invasive Species Specialist if in the Regional Containment/Control priority category.

1.27 Natural Range Barriers

OBJECTIVE SOURCE: NATURAL RANGE BARRIERS				
Authority	Category/Source Effective Date Objective			
BC Reg. 14/2004	FPPR s.18	January 31, 2004		

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

Measure - FPPR s.18

- 1. For the purposes of **FPPR** s.18, as a **Measure**, each **Holder** will:
 - Each year under the term of this FSP, identify any areas within the FDU that are subject to or adjacent to agreements under the Range Act in respect of grazing livestock;
 - 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; and
 - 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:
 - Design cutblocks and roads to mitigate the effect of the removal or ineffectiveness; and

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ii. Carry out **Primary Forest Practices** only if the **Primary Forest Practices** are consistent with the design in s.1.c.i of this **Measure**.

Stocking Standards

<u>Definitions for the purposes of these Stocking Standards</u>

Revision Date: October 31, 2022

Page 41 of 58



Timberlands

Management System

Port McNeill and Quatsino Sound Forest Operations 2023-2028

"Assessment Area" or "AA" means an unmappable area within a standards unit with a uniform site series or phase.

"Heavy Elk Use Area" means a mappable stratum where at least two tree plantations have failed due to elk activity.

"Standards Unit" or "SU" has the same meaning as in FPPR s.1(1)

1.28 Application

- 1. These stocking standards apply to:
 - a. areas harvested under this FSP within the FDU; and
 - b. areas identified in a cutblock site plan as the "net area to be reforested", as that term is defined in **FPPR** s.1(1).

1.29 Application to Cutblocks Where Harvesting Began Before Term Commences (Act s.197(5)) and declaration was not received by MFLNRO within RESULTS

1. See s.3.2.1.e of this **FSP**.

1.30 Situation or Circumstances that Determine Whether Free Growing is Assessed on a Block Basis

BACKGROUND INFORMATION: SITUATION OR CIRCUMSTANCES THAT DETERMINE WHETHER FREE GROWING IS ASSESSED ON A BLOCK BASIS

Authority	Category/Source Effective l				
BC Reg. 14/2004	FPPR s.16(1)	January 31, 2004			
A person required to prepare a forest stewardship plan must ensure that the plan specifies the situations or circumstances that determine when section 44 (1) or section 45 will apply to an area.					
		June 25, 2012			

A person who has an obligation to establish a free growing stand must establish, for areas that have been identified under section 16 (1) [stocking standards] as areas to which this section will apply, a stand that:

- (a) meets the applicable stocking standards set out in the forest stewardship plan for the area, by the applicable regeneration date specified for the area, and
- (b) meets the applicable stocking standards and free growing height set out in the forest stewardship plan for the area by a free growing date that is no more than 20 years from the commencement date, unless the minister permits a later free growing date.
- 1. **FPPR** s.44(1) applies in all situations or circumstances under this **FSP** where a free growing stand is required to be established under **FRPA** s.29.

PRINTED COPY IS UNCONTROLLED

Revision Date: October 31, 2022

Page 42 of 58



Timberlands

Management System

Port McNeill and Quatsino Sound Forest Operations 2023-2028

1.31 Stocking and Related Standards for Stands to which Free Growing Obligations Apply

- 1. There may be relatively uniform conditions or mosaics (ecosystem complexes), transitional ecosystem sites, and varying site conditions within the net area to be reforested, for each cutblock. The net area to be reforested will be stratified into areas of similar characteristics for the purposes of stocking standards, or **Standards Units** (SUs). A **Standards Unit** will be assigned the applicable stocking standard from Appendix 1.1, based on the dominant ecosystem site series and, if applicable, phase. Management intent will also govern the choice of a stocking standard. The stocking standard includes species, target and minimum stocking levels (TSS and MSS), minimum intertree distance (MITD), and free growing heights.
- 2. Optionally, to accommodate unmappable site series components in a **Standards Unit**, elements of a stocking standard may be assigned at an **Assessment Area** level.

1.31.1 **Species**

 Species selection to determine compliance with FPPR s.44(1) of the FPPR will be based on the ecosystem classification and be evaluated at the SU or AA level. Species which are ecologically suitable and commercially valuable for each site series are listed in Appendix 1.1. All listed species are preferred.

1.31.2 Stocking (Even-Aged Stocking Standards)

1.31.2.1 Target Stocking Standards

- 1. Target Stocking Standards (TSS) are listed in Appendix 1.1, except:
 - a. Where hardwood management is applied under s.8.5; or
 - b. In areas where **Heavy Elk Use Area** stocking standards are applied, the TSS are 1200 stems per hectare, to allow for clumpy stocking;

and

2. TSS is assigned at the SU level.

1.31.2.2 Minimum Stocking Standard

- 1. Minimum Stocking Standards (MSS) are listed in Appendix 1.1, except
 - a) Where hardwood management is applied under s.8.5; or
 - b) In areas where **Heavy Elk Use Area** stocking standards are applied, the MSS will be 50% of the MSS in Appendix 1.1;

anc

2. MSS is assigned at the **SU** level.

1.31.2.3 Minimum Horizontal Intertree Distance

1. Minimum intertree distances (MITDs) are listed in Appendix 1.2, along with application conditions; and

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2. MITD may be assigned at the **SU** or **AA** level.

Revision Date: October 31, 2022

evision Date: October 31, 2022 Page 43 of 58



Timberlands
Management System

Port McNeill and Quatsino Sound Forest Operations 2023-2028

1.31.2.4 Minimum Height Over Competitive Brush

- 1. For the CWH biogeoclimatic zone, the minimum free growing height over competitive brush species is 150%;
- 2. For the MH biogeoclimatic zone, the minimum free-growing height over competitive brush species is 125%, and
- 3. Hardwoods with a point of germination within 10 m of riparian features listed in **FPPR** Division 3, or in a road prism, are considered non-competitive at the time of free-growing.

1.31.2.5 Regeneration Date

1. The regeneration date is 6 years.

1.31.2.6 Minimum Free Growing Height

- 1. The minimum free growing heights listed in Appendix 1.1 will be used to demonstrate that the trees are adapted to the site, are growing well and can reasonably be expected to continue to do so, and
- 2. Minimum free growing height may be assigned at the **SU** or **AA** level.

1.32 Hardwood Management

- 1. Red alder will be the leading species for hardwood management;
- 2. For site series and identified for hardwood management in Appendix 1.1, listed coniferous species and big-leaf maple may contribute to target stocking;
- 3. The minimum free growing height of red alder and maple will be 4 m;
- 4. Not more than 0.5% of the area managed under s.8.5 of this **FSP** will have hardwood stocking standards applied, over a five-year period;
- 5. At least 80% of the total stocking will be red alder;
- 6. The target stocking standard (TSS) is 1500 stems per hectare and the minimum stocking standard is 1000 stems per hectare; and
- 7. Heavy elk use stocking standards will not be used in hardwood management areas.

1.33 Intermediate Cutting

BACKGROUND INFORMATION: INTERMEDIATE CUTTING				
Authority	Category/Source	Effective Date of Objective		
BC Reg. 14/2004	FPPR s.16(4)	January 31, 2004		

A person required to prepare a forest stewardship plan must ensure that the plan specifies stocking standards for areas referred to in section 44 (4), and the situations or circumstances that determine when the stocking standards will be applied.

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Stocking Standard for Intermediate Cutting (FPPR ss.44(4))

Revision Date: October 31, 2022

vision Date: October 31, 2022 Page 44 of 58



Timberlands
Management System

Port McNeill and Quatsino Sound Forest Operations 2023-2028

- 1. Where a **Holder** of this FSP applies intermediate cutting as a silviculture system in an area within the **FDU**, that Holder will not cause stocking within that area to fall below 40 m²/ha for a period of at least 12 months after harvest completion;
- 2. Intermediate cutting rules apply to conifer management only:
- 3. Openings greater than 0.1 ha will be managed using even-aged stocking standards;
- 4. Intermediate cutting as a single entry may only be applied in:
 - a. Areas where harvest is constrained by visual quality objectives under s.6.9 of this **FSP**: or
 - b. In riparian management zones, where prescribed in a site plan, consistent with s.6.4.2 of this **FSP**;
- 5. Where intermediate cutting is applied, the residual stand will consist of ecologically suitable species that will be viable for future harvest opportunities, and
- 6. A stocking standard ID will be assigned for CWHvm1-01 and additional site series may be added to the standard, as required, using the approved variation mechanism. Suitable species will match the species listed in Appendix 1.1.

1.34 High Retention Harvesting – SEDRSS

OBJECTIVE SOURCE: HIGH RETENTION HARVESTING - SEDRSS				
Authority	Category/Source Effective Date of Objective			
BC Reg. 14/2004	FPPR s.16(4)	January 31, 2004		

A person required to prepare a forest stewardship plan must ensure that the plan specifies stocking standards for areas referred to in section 44 (4), and the situations or circumstances that determine when the stocking standards will be applied.

- 1. SEDRSS (Single Entry Dispersed Retention Stocking Standard) standards may be applied where basal area retention following harvest is between 5 and 40 m²/ha;
- 2. Justification for high retention harvesting will be documented in the Cutblock Site Plan, consistent with High Retention Management Decision table below;
- 3. The Single Entry Dispersed Retention Stocking Standard Framework Implementation Guide (Coastal), 2014, provides guidance for high retention harvesting (as revised by CRIT from time to time), and
- 4. See Appendix 1.2 for the stocking standard to be approved with this FSP.

High Retention Management Decision (SEDRSS)

Situations or Circumstances	Standard
1. Type of Silviculture System	Partial Cutting with Regeneration Obligation – Use SEDRSS (Single Entry Dispersed Retention Stocking Standard). The silviculture system is Retention.
2. Stocking standards applicable	SEDRSS outlines stocking standard criteria based on basal area retained and site index. Additional biogeoclimatic subzones and site series may be added through approved variations.

PRINTED COPY IS UNCONTROLLED

Revision Date: October 31, 2022 Page 45 of 58



Timberlands

Management System

Port McNeill and Quatsino Sound Forest Operations 2023-2028

Situations or Circumstances	Standard
	Survey methodology will be consistent with the SEDRSS Implementation Guide (Feb. 14, 2014).
	SEDRSS includes stratification, overstory, understory, survey methodology, and stocking decision (Option 2 will be used in the FDU). RESULTS reporting will be as outlined in the Implementation Guide.
3. Species to be retained	Conifer species only.
4. Maximum Basal Area % Reduction (Quantity)	SEDRSS are to be applied where the residual basal area (RBA) within a selected harvest area is $5-40~\text{m}^2/\text{ha}$ for Fdc sites, and $8-40~\text{m}^2/\text{ha}$ for HwCw sites, per Appendix 1.2.
5. Maximum Opening size (Distribution)	Openings larger than 0.1 ha will be stratified and even-aged stocking standards will be applied.
6. Characteristics of Retained Trees or Remaining Stand	Leave tree form, health, and vigour will conform to the SEDRSS Damage Criteria in the Implementation Guide.
7. Scope	Non-timber values and objectives are the primary management focus (visuals, recreation, terrain stability, riparian and cultural). The specific value will be indicated in the Cutblock Site Plan.
8. Scale	0-1% of the harvest volume during the lifetime of this FSP.

PRINTED COPY IS UNCONTROLLED

Revision Date: October 31, 2022 Page 46 of 58



Timberlands Management System

Port McNeill and Quatsino Sound Forest Operations 2023-2028

Signature(s) (FRPA Act s.5(3))

CERTIFICATION OF SIGNING PROFESSIONAL

I certify that the work described herein fulfills the standards expected of a member of the Association of British Columbia Forest Professionals and that I did personally supervise the work.

FSP signed	
Bruce Vinnedge, RPF Senior Silviculture Forester	Date
LICENSEE SIGNATURE	
Jonathan Flintoft, RPF TFL Forester	Date

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Revision Date: October 31, 2022

Page 47 of 58



Port McNeill and Quatsino Sound Forest Operations 2023-2028

Timberlands

Management System

Appendix 1 – Stocking Standards

The stocking standards IDs (SSIDs) in RESULTS are:

Even-aged conifer management: xxxxxxxx

Even-aged hardwood: xxxxxxxx

Intermediate Cut: xxxxxxxx

SEDRSS for HwCw over HwCw: xxxxxxxxx SEDRSS for Second Growth Fd: xxxxxxxxx

Heavy Elk Use Areas: xxxxxxxx

Species selection will occur at the Standards Unit level based on the dominant site series in the SU or AA. Ecologically suitable species for each site series are listed in the table below.

Appendix 1.1 defines even-aged stocking standards for use in RESULTS.

Appendix 1.1 – Species Selection and Stocking Targets

ВЕС	Site Series	TSS	MSS	Species Selection	Minimum Free Growing Heights
CWHvh1	01	1000	500	Ba ⁴ , Cw, Hw, Pl, Ss, Yc	Ba-2.0, Cw-1.5, Hw-2.0, Pl-1.5, Ss-2.0, Yc-1.5
	02	400	200	Cw, Hw, Pl, Yc	Cw-1.0, Hw-1.25, PI-1.25, Yc-1.0
	03	800	400	Cw, Hw, Pl, Yc	Cw-1.0, Hw-1.25, PI-1.25, Yc-1.0
	04	1000	500	Ba ⁴ , Cw, Hw, Ss, Yc ⁶	Ba-2.25, Cw-2.0, Hw-1.75, Ss-4.0, Yc-2.0
	05	1000	500	Ba ⁴ , Cw, Hw, Ss, Yc	Ba-2.25, Cw-2.0, Hw-1.75, Ss-4.0, Yc-2.0
	06	1000	500	Ba, Cw, Hw, Ss, Yc	Ba-2.25, Cw-2.0, Hw-1.75, Ss-4.0, Yc-2.0
	07	1000	500	Ba, Cw, Hw, Ss, Yc ⁶	Ba-2.25, Cw-2.0, Hw-1.75, Ss-4.0, Yc-2.0





Timberlands

Management System

Port McNeill and Quatsino Sound Forest Operations 2023-2028

BEC	Site Series	TSS	MSS	Species Selection	Minimum Free Growing Heights
	08	1000	500	Ba, Cw, Hw, Ss	Ba-2.25, Cw-2.0, Hw-1.75, Ss-4.0
	09	1000	500	Ba, Cw, Hw ⁹ , Ss	Ba-2.25, Cw-2.0, Hw-1.75, Ss-4.0
	11	800	400	Cw, Hw, Pl, Yc	Cw-1.0, Hw-1.25, Pl-1.25, Yc-1.25
	12	400	200	Cw, Pl, Yc	Cw-1.0, Pl-1.25, Yc-1.0
	13	800	400	Cw, Hw, Pl, Ss, Yc	Cw-1.0, Hw-1.25, Pl-1.25, Ss-2.0, Yc-1.0
	15	1000	500	Cw, Hw, Ss	Cw-1.5, Hw-2.0, Ss-3.0
	17	1000	500	Cw, Hw, Ss	Cw-1.0, Hw-1.25, Ss-2.0
CWHvm1	01*	1000	500	Ba ¹ , Cw, Fd ⁵ , Hw, Ss ⁴ , Yc ⁶	Ba-1.75, Cw-1.5, Fd-3.0, Hw-3.0, Ss-3.0, Yc-1.5
	02	800	400	Cw, Fd, Hw, Pl, Yc	Cw-1.0, Fd-2.0, Hw-2.0, Pl-1.25, Yc-1.0
	03	800	400	Ba ^{1,2} , Cw, Fd ⁵ , Hw, Pl, Yc ⁶	Ba-1.25, Cw-1.0, Fd-2.0, Hw-2.0, Pl-1.25, Yc-1.0
	04	1000	500	Ba ^{1,2} , Cw, Fd ⁵ , Hw, Ss ⁴ , Yc ⁶	Ba-2.0, Cw-1.5, Fd-3.0, Hw-3.0, Ss-3.0, Yc-1.5
	05*	1000	500	Ba ¹ , Cw, Fd ⁵ , Hw, Ss ⁴ , Yc ⁶	Ba-1.75, Cw-1.5, Fd-3.0, Hw-3.0, Ss-3.0, Yc-1.5
	06	1000	500	Ba¹, Cw, Fd⁵, Hw, Ss⁴, Yc⁵	Ba-1.75, Cw-1.5, Fd-3.0, Hw-3.0, Ss-3.0, Yc-1.5
	07*	1000	500	Ba¹, Cw, Fd⁵, Hw, Ss⁴, Yc⁵	Ba-2.25, Cw-2.0, Fd-4.0, Hw-4.0, Ss-4.0, Yc-1.5
	08	1000	500	Ba ¹ , Cw, Hw, Ss ⁴ , Yc ⁶	Ba-2.25, Cw-2.0, Hw-4.0, Ss-4.0, Yc-1.5
	09	1000	500	Ba¹, Cw, Hw, Ss⁴, Yc⁶	Ba-2.25, Cw-2.0, Hw-4.0, Ss-4.0, Yc-1.5
	10	1000	500	Ba¹, Cw, Ss⁴, Yc⁶	Ba-2.25, Cw-2.0, Ss-4.0, Yc-1.5
	12	1000	500	Cw, Hw, Hm, Pl, Yc	Cw-1.0, Hw-2.0, Hm-2.0, Pl-1.25, Yc-1.0
	13	400	200	Cw, Pl, Yc ⁶	Cw-1.0, Pl-1.25, Yc-1.0





Timberlands Management System

Port McNeill and Quatsino Sound Forest Operations 2023-2028

BEC	Site Series	TSS	MSS	Species Selection	Minimum Free Growing Heights
	14	800	400	Cw, Hw, Pl, Ss, Yc ⁶	Cw-1.5, Hw-3.0, Pl-2.0, Ss-3.0, Yc-1.5
CWHvm2	01	1000	500	Ba, Bp³, Cw, Fd, Hm⁶, Hw, Yc	Ba-1.75, Bp-2.25, Cw-1.5, Fd-2.25, Hm-2.5, Hw-2.5, Yc-1.5
	02	800	400	Cw, Fd, Hm ⁶ , Hw, Pl, Yc	Cw-1.0, Fd-1.5, Hm-1.75, Hw-1.75, PI-1.25, Yc-1.0
	03	800	400	Ba ⁶ , Cw, Fd, Hm ⁶ , Hw, Pw, Pl, Yc	Ba-1.5, Cw-1.0, Fd-1.5, Hm-1.75, Hw-1.75, Pw-2.5, Pl-1.25, Yc-1.0
	04	1000	500	Ba, Cw, Fd, Hm ⁶ , Hw, Pw, Yc	Ba-1.5, Cw-1.0, Fd-1.5, Hm-1.75, Hw-1.75, Pw-2.5, Yc-1.0
	05	1000	500	Ba, Bp³, Cw, Fd⁵, Hm, Hw, Yc	Ba-1.75, Bp-2.25, Cw-1.5, Fd-2.25, Hm-2.0, Hw-2.5, Yc-1.5
	06	1000	500	Ba, Cw, Fd⁵, Hm⁶, Hw, Yc	Ba-1.75, Cw-1.5, Fd-2.25, Hm-2.0, Hw-2.5, Yc-1.5
	07	1000	500	Ba, Cw, Fd⁵, Hm⁶, Hw, Yc	Ba-2.25, Cw-2.0, Fd-3.5, Hm-2.5, Hw-3.5, Yc-2.0
	08	1000	500	Ba, Cw, Fd⁵, Hm⁶, Hw, Yc	Ba-2.25, Cw-2.0, Fd-3.5, Hm-2.5, Hw-3.5, Yc-2.0
	09	800	400	Ba, Cw, Hm, Hw, Pl, Yc	Ba-1.5, Cw-1.0, Hm-0.75, Hw-1.75, Pl-1.75, Yc-1.0
	10	400	200	Hm, PI, Yc	Hm-0.75, PI-1.25, Yc-1.0
	11	800	400	Cw, Hm, Hw, Yc	Cw-1.0, Hm-0.75, Hw-1.75, Yc-1.0
MHmm1	01	1000	500	Ba, Bp³, Cw⁵, Hm, Hw, Yc	Ba-0.6, Bp-1.25, Cw-1.0, Hm-1.0, Hw-1.0, Yc-1.0
	02	800	400	Ba, Hm, Hw⁵, Yc	Ba-0.6, Hm-0.75, Hw-1.0, Yc-0.75
	03	800	400	Ba, Bp³, Hm, Hw, Yc	Ba-0.6, Bp-1.25, Hm-1.0, Hw-1.0, Yc-1.0
	04	1000	500	Ba, Hm, Hw, Yc	Ba-0.6, Hm-1.0, Hw-1.0, Yc-1.0
	05	1000	500	Ba, Hm, Hw, Yc	Ba-0.6, Hm-1.0, Hw-1.0, Yc-1.0
	06	800	400	Ba, Hm, Hw⁵, Yc	Ba-0.6, Hm-0.75, Hw-1.0, Yc-0.75
	07	1000	500	Ba, Hm, Hw⁵, Yc	Ba-0.6, Hm-0.75, Hw-1.0, Yc-0.75



Timberlands

Management System

Port McNeill and Quatsino Sound Forest Operations 2023-2028

BEC	Site Series	TSS	MSS	Species Selection	Minimum Free Growing Heights
	08	400	200	Hm, Hw⁵, Yc	Hm-0.75, Hw-1.0, Yc-0.75
	09	800	400	Hm, Hw⁵,Yc	Hm-0.75, Hw-1.0, Yc-0.75

^{* -} Refers to SUs which are may be managed for hardwoods under FSP s.8.5. For site series 01, hardwood management may only be applied on nutrient medium sites.

Notes for Appendix 1.1:

Site-Specific Notes

- 1 Risk of balsam woolly adelgid. Ba or Bg will be counted last in a survey for the silviculture layer.
- 2 Suitable on cool aspects.
- 3 Suitable on warm aspects, nutrient medium to very rich soils.
- 4 Suitable on nutrient medium sites.
- 5 Suitable at lower elevations or warm aspects.
- 6 Suitable at upper elevations or cool aspects.
- 7 Suitable on fresh sites.
- 8 Elevated microsites only.
- 9 Viable option where ungulate browse is a factor.

General Notes

Ba – On west coast CWHvm1 sites transitional to CWHvh1, and CWHvh1, suitable in the proximal absence of salal at the plot level (applies to west coast sites that are a mosaic of 01/01s or 06/06s or transitional to CWHvh1). Does not include salal only growing on rotten wood.

Bg – restricted to nutrient medium or richer sites.

Bp – Initial regeneration of Bp (noble fir) is restricted to nutrient medium sites or better. Northerly aspects are to be avoided. Initial regeneration of Bp will not comprise more than a 20% component, to mitigate risk.

Hm – Where this species is encountered outside of the MHmm1, Hm is a viable crop tree in areas transitional to the montane zone or in cold air drainages.



Timberlands

Management System

Port McNeill and Quatsino Sound Forest Operations 2023-2028

Pw – Use seed which has been selected to be resistant to *Cronartium ribicola*. Use major gene resistant stock when available, especially below 1000 m elevation. Pw will be planted at not more than 200 trees per ha, evenly distributed. Use caution regarding the use of Pw for browse resistance, since ungulates may select other crop trees, increasing the reliance on Pw for stocking.

PI - Refers to Plc.

Ss – If Ss is from seed sources selected for high resistance to *Pissodes strobi*, the use of Ss to meet the MSS is unlimited in areas of moderate and high risk of spruce weevil damage; otherwise, the use of natural Ss to meet the MSS is limited to 20% in moderate-high spruce weevil risk areas.

Appendix 1.2 – Minimum Horizontal Inter-Tree Distance

Minimum Horizontal Inter-Tree Distance (MITD) will be assigned at the Assessment Area level as per the table below.

MITD (m)	Site Series						
1.6	(i) < 20 metres from road centreline;						
	(ii) immediately adjacent to any:						
	(A) stream – riparian area;						
	(B) natural non-productive area;						
	(C) unplantable slash; or						
	(iii) on any:						
	(A) talus site, landslide or avalanche track						
	(B) hygric or wetter site;						
	(C) very harsh site where protected microsites are critical;						
	(D) area where stump avoidance is necessary on a root rot site;						
	(E) area extensively utilized for elk, deer or other wildlife habitat or browse (heavy elk use areas) for survival and to utilize slash; or						
	(F) microsites that are preferable given the tree species or damaging agents, to those sites existing at regular 2.0 meters spacing.						
	(iv) in SUs that are being managed for a target stocking of 1500 stems per hectare.						
2.0	All other sites.						



Timberlands

Management System

Port McNeill and Quatsino Sound Forest Operations 2023-2028

Appendix 1.3 – SEDRSS Stocking Standard

Appendix 1.3.1 – SEDRSS Tabular Method for HwCw over HwCw

	Layer	Regeneration Guide											
BGCU		Species	Site Occupancy								Free Growing Guide		
			All BA combinations are applicable to survey plots					y plots	Regen Delay (max yrs.)	MITD	Species	Height(m)	
			Only used combinations are applicable to final SU REGEN / FG SEDRSS obligations				Only used during plots						
CWHvm1 - 01	Residual Layer (L1) (≥12.5dbh)	Per Appendix	0-8	9-15	16-22	23-28	29-39	≥ 40	N/A	N/A			
	BA (m²/ha)	1.1 by Site Series									N/A		
	Regen Layer (L2-L4)	Per Appendix 1.1 by Site Series ¹							6	L1 Drip line or 2.0 m (L2-L4)	Per	Per	
	TSS Target (WS /ha)		900	800	700	500	400	0			Appendix 1.1 by Site Series	Appendix 1.1 by Site Series	
	MSS Minimum (WS/ha)		500	400	300	200	100	0					

¹ Fdc

- ecologically suitable only in areas with <8 m²/ha BA;
- restricted to a maximum of 200 WS or FG/ha in plots with >=8 m² and <=15 m² BA;
- not suitable in plots with >15 m² BA, and
- not suitable on north aspects.

<u>Stocking Decision</u> – The SU is found to have met its regen obligation or free growing obligation if the mean regen or FG sph >= the MSS sph for the corresponding average crop BA from the table.

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Timberlands

Management System

Port McNeill and Quatsino Sound Forest Operations 2023-2028

Appendix 1.3.2 - SEDRSS Tabular Method for Fdc - Fd(CwHw) over HwCwFd - SI 30

	Layer	Regeneration Guide										
BGCU		Species	Site Occupancy								Free Gro	wing Guide
			All BA combinations are applicable to survey plots				Regen Delay MITD	Species	Height			
			Only used during plots	One of these 4 BA combinations are applicable to final SU REGEN / FG SEDRSS			Only used during plots	(max yrs)			(m)	
CWHxm - 01	Residual Layer (L1) (≥12.5dbh)	Per Appendix 1.1 by Site	-					-	N/A N/A N/A		/A	
	BA (m ² /ha)	Series	0-4	5-10	11-16	17-23	24-39	≥ 40	,			
	Regen Layer (L2-L4)	Per Appendix 1.1 by Site Series ^{1,2}							6	L1	Per Appendix	Per Appendix
	TSS Target (WS / ha)		900	800	700	500	400	0		Drip line or 2.0 m (L2-	1.1 by Site Series	1.1 by Site Series
	MSS Minimum (WS/ha)		500	400	300	200	100	0		2.0 III (L2- L4)	Jei 163	Series

¹ Fdc

- ecologically suitable only in areas with <10m²/ha BA;
- restricted to a maximum of 200 WS or FG/ha in plots with >=10 m² and <=16 m² BA;
- not suitable in plots with >16 m² BA, and
- not suitable on north aspects unless there are no residual trees within 2 stand tree lengths.

²Cw (n.b. For Cw and Hw dominated retention stands of SI <30, use the table in Appendix 1.3.1).

- ecologically suitable only in areas with <10m²/ha BA;
- restricted to a maximum of 200 WS or FG/ha in plots with >=10 m² and <=23 m² BA, and
- not suitable in plots with >23 m² BA.

<u>Stocking Decision</u> – The SU is found to have met a regen obligation or free growing obligation if the mean regen or FG sph >= the MSS sph for the corresponding average crop BA from the table.