

Forest Stewardship Plan Nootka 2022-2027

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Nootka 2022-2027

Timberlands Management System

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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 holder will share information and work collaboratively with Mowachaht/Muchalaht First Nation, Ehattesaht First Nation, Nuchatlaht First Nation, and Ka:'yu:k't'h/Che:k:tles7et'h First Nation.

This Forest Stewardship Plan replaces a portion of the currently approved Central Island Forest Stewardship Plan (2017-2022), 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 in the FDU. 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, comprising TFL 19 and FL A19231, 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 Campbell River Forest District.

The WFP Nootka 2022-2027 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. Nootka Forest Operation Attn. Bruce Vinnedge, RPF Sr. Silviculture Forester fsp@westernforest.com

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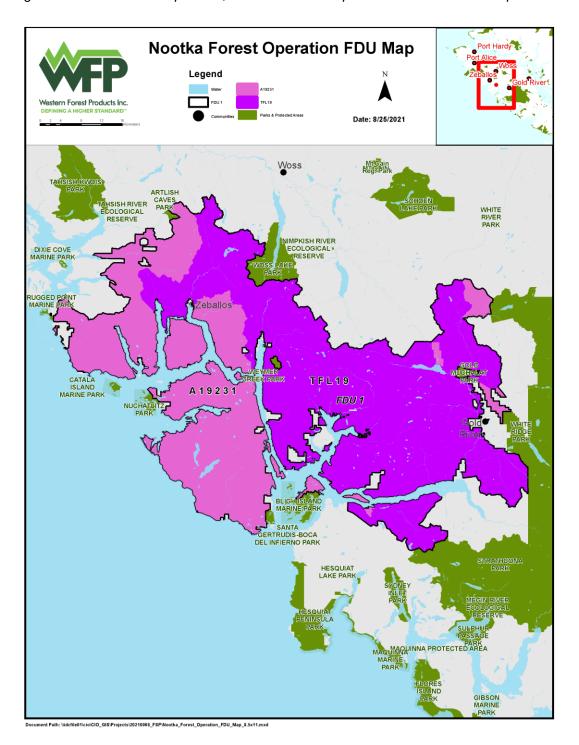
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Figure 1 – Nootka Forest Operation, FSP Forest Development Units – Overview Map



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1. Date of Submission

March 17, 2022

2. Interpretation and Definitions

2.1 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**).

2.2 Definitions:

2.3 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.

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

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- "Measure" means obligations required by FPPR ss.17-18.
- "Primary Forest Activity" has the same meaning as in FPPR s.1(1).
- "Result" and "Strategy" have same meanings as in FPPR s.1(1).
- "Stocking Standards" means obligations required by FPPR s.16.

3. Application of this FSP

3.1 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 19 (includes TLs within the TFL), FL A19231, T0862
Nuchatlaht First Nation	A83327, A90791
Nootka Sound Economic Development Corporation	A53746

3.2 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,

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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.

4. 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.

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

5.1 **Boundaries of the FDU**

1. The boundaries of the FDU under this FSP are shown on the FSP map (Figure 1), are deemed to follow the boundaries of TFL 19 and FL A19231, and to the extent that there is an inconsistency between the FDU Map and the boundaries of TFL 19 and FL A19231, the boundaries of TFL 19 and FL A19231 govern.

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.

5.3 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.

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

1. Not applicable.

5.5 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.

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

1. Not applicable.

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

1. See s.6.7.5 of this **FSP**.

5.8 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.
- 2. Blanket CPs issued for the purposes of salvage as listed in table:

Tenure	СР
TFL 19	99A, 99B
FL A19231	99A, 99B

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

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

6. FRPA Values and Results or Strategies

6.1 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.

6.1.1 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**.

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6.1.2 Permanent Access Structures Limits

Definitions for the Purposes of Results or Strategies in s.6.1.2

"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**.

6.2 Timber

OBJECTIVE SOURCE	: TIMBER	
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
- 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.

6.3 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.

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- 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.

6.3.1 Species at Risk

OBJECTIVE SOURCE: WILDLIFE: SPECIES AT RISK			
Authority	Category/Source	Effective Date of Objective	
BC Reg. 17/2004 s.11(1) BC Reg. 582/2004 s.13(1)	Order – Categories of Species at Risk (2004) Order – Categories of Species at Risk (2011 Update)	May 6, 2004 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 Campbell River Forest District	July 27, 2004	

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

"DCR 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 Campbell River Forest District (2004)".

"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.

6.3.1.1 Northern Goshawk (Accipiter gentilis laingi)

OBJECTIVE SOURCE: WI	CTIVE SOURCE: WILDLIFE: SPECIES AT RISK		
Authority	Category/Source	Effective Date of Objective	
BC Reg. 17/2004	Order – Wildlife Habitat Areas #1-085 to 1-088 and 1-090 to 1-096	December 1, 2004	

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

The Deputy Minister of Water, Land and Air Protection orders that:

- 1. the wildlife habitat areas shown in the maps set out in the attached Schedules A(# 1-085 to 1-088 and 1-090 to 1-096) are established;
- 2. the wildlife habitat areas in the attached Schedules A are established for Queen Charlotte Goshawks (Accipiter gentilis laingi); and
- 3. the general wildlife measures outlined in Schedule 1 are established for the wildlife habitat areas in the attached Schedules A
- 4. 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 for Queen Charlotte Goshawk in the Campbell River Forest District.

Schedule 1 - General Wildlife Measures

1. Access

 Do not construct roads within WHA unless an exemption is approved by the designated decision maker.

2. Harvesting and Silviculture

- Do not harvest timber or salvage (e.g. cedar) except for traditional aboriginal purposes when an exemption is approved by the designated decision maker.
- Do not commercial thin, cedar-shake harvest or salal harvest within WHA unless the designated decision maker approves an exemption or harvest of these items is for traditional aboriginal purposes.

3. Additional Management Considerations:

 Minimize disturbance when working adjacent to a WHA between 15 February and 1 September. In general, avoid blasting, road construction, helicopter activity and other prolonged disturbance.

<u>Exemption from Result or Strategy – "Order – Wildlife Habitat Areas #1-085 to 1-088 and 1-090 to 1-096"</u>

 General Wildlife Measures have been established and the wildlife habitat area amount in the DCR s.7 Notice has been met for this species; therefore, each Holder of this FSP is exempt under FPPR s.7(3), from the obligation to specify a Result or Strategy for Northern Goshawks.

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6.3.1.2 Red-Legged Frog (Rana aurora)

OBJECTIVE SOURCE: WILDLIFE: SPECIES AT RISK		
Authority Category/Source		Effective Date of Objective
BC Reg. 582/2004 ss.9(2) and 10(1).	Order – Wildlife Habitat Areas – WHA 1-481, I-482, I-483, 1-484, I-485, I-486 Red-legged Frogs, Campbell River Natural Resource District	April 1, 2014

Schedule 1 - General Wildlife Measures (GWMs):

Access

- 1. Do not construct roads.
- 2. An authorized person who carries out a primary forest activity within WHAs with existing roads must conduct the activity at a time and in a manner that is unlikely to create road generated sedimentation that would harm Red-legged Frogs or destroy, damage or harmfully alter Red-legged Frog breeding habitat in the WHA.

Harvesting and silviculture

- 3. Do not fell trees or conduct timber harvesting, salvage or silvicultural activities, including crown modifications or windfirming treatments.
- 4. GWM 3 does not apply for felling of danger trees for worker safety and where guyline anchors and tailholds are required to facilitate timber harvesting outside a WHA.
- 5. Trees felled in accordance with GWM 3 must be retained on-site to provide coarse woody debris. Pesticides
- 6. Do not use pesticides, except for the control for invasive plants or noxious weeds and applied:
 - a) by stem injection, cut and paint, foliar wipe or other direct plant application; or
 - b) by spot spraying for individual plants or cluster of plants if direct plant application is not practicable; and
 - c) with no direct application to either Red-legged Frogs or water.

<u>Exemption from Result or Strategy – "Order – Wildlife Habitat Areas – WHA 1-481, I-482, I-483, I-484, I-485, I-486 Red-legged Frogs, Campbell River Natural Resource District"</u>

 General Wildlife Measures have been established and the wildlife habitat area amount in the DCR s.7 Notice has been met for this species; therefore, each Holder of this FSP is exempt under FPPR s.7(3), from the obligation to specify a Result or Strategy for Red-Legged Frogs.

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6.3.1.3 Marbled Murrelet (*Brachyramphus marmoratus*)

OBJECTIVE SOURCE: WILDLIFE: SPECIES AT RISK			
Authority	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 Campbell River Forest District.	July 27, 2004	

2) Marbled Murrelet (Brachyramphus marmoratus)

Amount:

- 1. An amount of suitable nesting habitat equivalent to a net mature timber harvesting landbase impact of 1431 ha.
- 2. An amount of habitat in the non-contributing landbase equal to the total amount of currently suitable nesting habitat in the non-contributing landbase.
- 3. Government policy for determining the amount of suitable nesting habitat is provided in the species account for Marbled Murrelet in the Accounts and Measures for Managing Identified Wildlife (Identified Wildlife Management Strategy Version 2004).

Distribution:

- 1. The amount of habitat referenced above must be distributed to provide:
 - areas of suitable nesting habitat of the size and spatial distribution identified in the species account for Marbled Murrelet in the Accounts and Measures for Managing Identified Wildlife (Identified Wildlife Management Strategy Version 2004).
- 2. Locate the areas described above within the ecosections and preferred elevations identified in the species account for Marbled Murrelet in the Accounts and Measures for Managing Identified Wildlife in the Identified Wildlife Management Strategy Version 2004.

Attributes:

1. Use the species account for Marbled Murrelet in the Accounts and Measures for Managing Identified Wildlife (Identified Wildlife Management Strategy Version 2004) to identify the attributes of suitable nesting habitat and goals for the management of wildlife habitat areas.

Strategy

- 1. For FDU 1:
 - Subject to the conditions listed below, as a **Strategy**, to **comply** with the FPPR s.7 Notices, as updated from time to time, each **Holder**:
 - i. Will maintain:
 - A proportional amount of suitable nesting habitat equivalent to the net mature timber harvesting landbase required in the Notice which will update as new WHAs that are subsequently established are subtracted from the proportional amount, and

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- II. Will maintain the amount of habitat in the non-contributing landbase equal to the total amount of currently suitable nesting habitat in the non-contributing landbase;
- III. Will maintain a proportional amount of suitable nesting habitat by landscape unit and landscape unit aggregate;

or

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b. Each **Holder** will maintain the suitable nesting habitat target area that is established by a Land Use Objectives Regulation Order.

6.3.1.4 Great Blue Heron (Ardea herodias fannini)

OBJECTIVE SOURCE: WILDLIFE: SPECIES AT RISK			
Authority	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 Campbell River Forest District.	July 27, 2004	

5) Great Blue Heron (Ardea herodias fannini)

Amount^{*}

 1. 160 ha of suitable habitat not exceeding an impact to the mature timber harvesting landbase of 24 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. Locate the areas described above within the ecosections and preferred elevations identified in the species account for Great Blue Heron in the Accounts and Measures for Managing Identified Wildlife (Identified Wildlife Management Strategy Version 2004).

Attributes:

1. Use the species account for Great Blue Heron in the Accounts and Measures for Managing Identified Wildlife (Identified Wildlife Management Strategy Version 2004) to identify the attributes of suitable nesting habitat and goals for the management of wildlife habitat areas.

Great Blue Heron Potential Habitat Proportional Amount Calculation

Geographic Area	Proportion	Proportional Area (ha)	Proportional THLB (ha)
TFL 19	0.185806	29.7	4.5
FL A19231	0.204156	32.7	4.9

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Strategy – DCR s.7 Notice

 To comply with s.5 of Schedule 1 of the DCR s.7 Notice, as a Strategy, each Holder will maintain suitable habitat with attributes required in the DCR 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 DCR s.7 Notice is 160 ha total, of which 24 ha is in the timber harvesting land base, on the effective date of this FSP.

6.3.1.5 Quatsino Cave Amphipod (Stygobromus quatsinensis)

OBJECTIVE SOURCE: WILDLIFE: SPECIES AT RISK			
Authority Category/Source		Effective Date of Objective	
BC Reg. 582/2004 ss.9(2) and 10(1)	Government Actions Regulation Order, Wildlife Habitat Areas, WHA 1-489 - Quatsino Cave Amphipod, Campbell River Forest District	January 9, 2020	

Schedule 1 - General Wildlife Measures:

General Wildlife Measures

Access

- 1. Do not construct roads.
- 2. Do not remove rock or talus.

Harvesting and silviculture

3. Do not harvest, salvage or conduct silvicultural activities.

Pesticides

4. Do not use pesticides.

<u>Strategy – "Government Actions Regulation Order, Wildlife Habitat Areas, WHA 1-489 - Quatsino Cave Amphipod, Campbell River Forest District"</u>

 As a Result or Strategy, each Holder will conduct its Primary Forest Activities in the area subject to the "Government Actions Regulation Order, Wildlife Habitat Areas, WHA 1-489 -Quatsino Cave Amphipod, Campbell River Forest District" in a manner consistent with the General Wildlife Measures in Schedule 1 of the "Government Actions Regulation Order, Wildlife Habitat Areas, WHA 1-489 - Quatsino Cave Amphipod, Campbell River Forest District".

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6.3.2 Winter Survival of Specified Ungulate Species

6.3.2.1 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	Authority Category/Source Effective Date o Objective		
BC Reg. 17/2004 ss.9(2) and 12(1)	Order – Ungulate Winter Range #U1-014 – TFL 19	December 19, 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.
- 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 cut block 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 #U1-014 – TFL 19"

1. As a **Strategy**, each **Holder** will conduct its **Primary Forest Activities** in the area subject to the "Order – Ungulate Winter Range #U1-014 – TFL 19", in a manner consistent with the General Wildlife Measures in the "Order – Ungulate Winter Range #U1-014 – TFL 19".

OBJECTIVE SOURCE: WILDLIFE: WINTER SURVIVAL OF SPECIFIED UNGULATE SPECIES		
Authority Category/Source Effective Date of Objective		
BC Reg. 582/2004 ss.9(1-2) and 12(1)	Order – Amendment to Ungulate Winter Range #U1- 005 – Strathcona TSA	May 16, 2007

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. An

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

exemption is not required for the future construction of a road in UWR Unit #56 (KAS-13) to access an approved cutblock beyond. The road will be constructed in a manner that does not result in a material adverse impact on the unqulate winter range habitat (i.e. minimum clearing width).

- 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 normally only 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 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.

<u>Strategy – "Order – Ungulate Winter Range #U1-005 – Strathcona TSA"</u>

2. As a **Strategy**, each **Holder** will conduct its **Primary Forest Activities** in the area subject to the "Order – Amendment to Ungulate Winter Range #U1-005 – Strathcona TSA", in a manner consistent with the General Wildlife Measures in Schedule 1 of the "Order – Amendment to Ungulate Winter Range #U1-005 – Strathcona TSA".

6.4 Water, Fish, Wildlife and Biodiversity within Riparian Areas

6.4.1 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 areas.

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

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**.

6.4.2 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:
 - 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.**

6.5 Fish Habitat in Fisheries Sensitive Watersheds

OBJECTIVE SOURCE: FISH HABITAT IN FISHERIES SENSITIVE WATERSHEDS		
Authority Category/Source Effective Date 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

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OBJECTIVE SOURCE: FISH HABITAT IN FISHERIES SENSITIVE WATERSHEDS					
	Authority Category/Source Effective Date of Objective				
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.					

Definitions for the purposes of s.6.5 of this FSP

"Equivalent Clear-Cut Area (ECA)" means, for the purposes of tracking ECA, the R1b hydrologic recovery curve from TR-032¹ 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 Fisheries Sensitive 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 Fisheries Sensitive Watershed objectives.

Strategy – FPPR s.8.1

- 1. For the purposes of **FPPR** s.8.1 and to comply with the "Order Fisheries Sensitive Watersheds Vancouver Island, Schedule B", as a **Strategy** within the Artlish Fisheries Sensitive Watershed, each **Holder** will:
 - 1. Complete a **Watershed Assessment** if **Primary Forest Activities** are planned in the Fisheries Sensitive Watershed during the term of this **FSP**;
 - 2. Complete a Hydrologic Evaluation for a proposed cutblock or group of cutblocks; and
 - 3. 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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¹ Hudson, R., and G. Horel. "An operational method of assessing hydrologic recovery for Vancouver Island and south coastal BC." Res. Sec., Coast For. Reg., BC Min. For., Nanaimo, BC. Technical Report TR-032/2007.



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6.6 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
 - ii. established under the Government Actions Regulation.
- 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
 (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 unduly reduce the supply of timber from British Columbia's forests.

N.B. The McKelvie Creek Community Watershed area is currently subject to Ministerial Order No. M232 to defer harvest. See section 6.7.5.

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-032² 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.

² Hudson, R. and G. Horel, 2007.

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Strategy – FPPR s.8.2

- 1. To comply with **FPPR** s.8.2, as a **Strategy**, in the McKelvie 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**.

6.7 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).

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6.7.1 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.

6.7.1.1 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.

Strategy – Special Management Zones

- 1. In **Special Management Zones**, for the purposes of **FPPR** s.12.4(1), as a **Strategy**, each **Holder**:
 - a. 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:

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- 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
 - 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.

6.7.1.2 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	

Strategy – General Management Zones

- 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

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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
 - 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.

6.7.1.3 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

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OBJECTIVE SOURCE: WILDLIFE AND BIODIVERSITY – LANDSCAPE LEVEL: CUTBLOCK SIZE AND ADJACENCY LIMITS			
Authority	Category/Source	Effective Date of Objective	
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.

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

- 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

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- 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.

6.7.2 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, SMZ 11 (based on VRI data, 2020 reference year)

		Total Forest	
BEC	Mature and	Management Land	Proportion of Mature
Zone	Old Forest	Base	and Old Forest
CWH	1502	2954	
МН	996	1375	
Total	2498	4329	58%

Mature and Old Forest in FDU 1, SMZ 12 (based on VRI data, 2020 reference year)

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

Auth	ority	Category/Source		Effective Date of Objective
BEC Zone	Mature and		Proportion of Mature and Old Forest	
CWH	13653	16234		
Total	13653	16234	84%	

<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. For TFL 19:
 - a. As a Strategy, each Holder adopts VILUP Order Objective 1(a) in that portion of SMZ 11 within the FDU area:

and

- 2. For FL A19231:
 - a. As a Result or Strategy, each Holder adopts VILUP Order Objective 1(a) in that portion of SMZ 12 within the FDU area.

6.7.3 <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.

See analysis table in Appendix 2.

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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, including large diameter pieces (50 to 150 cm); deciduous broad-leaved trees, both in riparian and upland areas.³

"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 11 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) listed in Appendix 2, address the objectives, subject to the following conditions:
 - i. The analysis in Appendix 2 based on current Provincial **TEM** and **VRI** data;
 - ii. Where the analysis data in Appendix 2 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 in the analysis in Appendix 2;
 - 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**, with special emphasis on CWHvm1-12. CWHvm2-08 and MHmm1-03 site series:
 - iv. Field data collection may be used to revise and recruit areas to the table amounts in Appendix 2; 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 11 in the **FDU**, incorporate **Late Successional Habitat Elements** in wildlife

³ Footnote 8, "Vancouver Island Land Use Plan, Higher Level Plan Order".

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

6.7.4 Old Growth Management Areas (OGMAs)

OBJECTIVE SOURCE: WILDLIFE AND BIODIVERSITY - LANDSCAPE LEVEL: OLD GROWTH MANAGEMENT AREAS

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

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

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

<u>Strategy – "Order Establishing Provincial Non-Spatial Old Growth Objectives"</u>

1. 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

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disturbance type and biogeoclimatic zone to fall below the amounts specified in the **Order**, except as permitted by the Order.

6.7.5 Old Growth Designated Areas - McKelvie Creek

The following information is provided for the purposes of FPPR s.14(3)(i).

OBJECTIVE SOURCE: WILDLIFE AND BIODIVERSITY - LANDSCAPE LEVEL: OLD GROWTH DESIGNATED AREAS		
Authority	Category/Source	Effective Date of Objective
Forest Act s.169	Order in Council No. 500	September 11, 2020

Executive Council Chambers, Victoria

On the recommendation of the undersigned, the Lieutenant Governor, by and with the advice and consent of the Executive Council, orders that, it being in the public interest, the Crown land outlined in heavy black and shaded grey on the maps on file with GeoBC, Ministry of Forests, Lands, Natural Resource Operations and Rural Development, with the file name Old Growth PT13 No1 20200722, is specified as the Old Growth Designated Area No. 1 under section 169 of the Forest Act for the period ending August 31, 2022.

BC Reg. 228/2020 Ministerial Order No. M232	June 9, 2021
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- 1. Subject to section 3, any part of a Permit or Licence pertaining to a right to cut, damage or destroy standing timber in a Suspended Harvest Area under that Permit or Licence is suspended.
- 2. Subject to section 3, a person referred to in section 170 of the Forest Act who has a discretion to issue a Permit or Licence is directed to not issue the Permit or Licence to the extent to which that Permit or Licence relates to the cutting, damage or destruction of standing timber in a Suspended Harvest Area.
- 3. Sections 1 and 2 do not apply in relation to:
 - a. A free use permit referred to in section 48 (1) (a.1), (b), (g) or (h) of the Forest Act;
 - b. A licence to cut referred to in section 47.6 (2) (d) of the Forest Act, as that licence pertains to the cutting, damage or destruction of standing timber described in section 2 (1) of the Licence to Cut Regulation, B.C. Reg. # 221/2006;
 - c. A cutting permit, timber sale licence or forestry licence to cut referred to in section 72 (2) of the Forest Act, as that permit or licence pertains to the cutting, damage or destruction of standing Damaged Timber:
 - d. The right to cut, damage or destroy standing timber granted under a road permit, occupant licence to cut, or road use permit that is necessary to maintain or deactivate a road; or
 - The areas of Crown land shown outlined in heavy black and shaded grey on the map titled "Central Walbran Valley" in Schedule 2 of this Order.
- 4. Unless otherwise ordered, this Order is rescinded August 31, 2022.

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6.8 Wildlife and Biodiversity - Stand Level

6.8.1 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.

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.4

"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 area⁵ set aside for a **WTRA**:
 - a. Is a minimum of 7% of the sum area of a cutblock; and
 - b. 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

⁴ Biodiversity Guidebook, 1995. p.16. https://www.for.gov.bc.ca/hfd/library/documents/bib19715.pdf.

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⁵ 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.



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WTRA or **WTP** is not reduced below the minimum area requirements listed in s.1 of this **Result** or **Strategy**.

6.9 Visual Quality

OBJECTIVE SOURCE: VISUAL QUALITY		
Authority	Category/Source	Effective Date of Objective
FRPA s.2(2)(a), GAR s.7(1), 7(2)	Order – Establishment of Scenic Areas and Visual Quality Objectives for the Campbell River Forest District	December 14, 2005

Pursuant to Section 2(2)(a) of the Forest and Range Practices Act, I have been delegated the authority to establish scenic areas and visual quality objectives.

Pursuant to Section 7(1) of the Government Actions Regulation (GAR), I hereby establish scenic areas for the Campbell River Forest District (CRFD) as depicted by all polygons that have a designated visual quality objective on the attached maps, numbered 1 through 7, titled Campbell River Forest District: Scenic Areas and Visual Quality Objectives, December 14, 2005. These scenic areas reflect adjustments and corrections to the scenic areas originally made known in my letters of October 2, 2001, and February 26, 2003.

Also, pursuant to Section 7(2) of the GAR, I hereby establish visual quality objectives (VQOs) for the Campbell River Forest District as shown on the attached maps, numbered 1 through 7, titled Campbell River Forest District - Scenic Areas and Visual Quality Objectives, December 14, 2005. These VQOs cancel and replace those established under the Sayward Landscape Unit Plan on February 26, 2003, as well as the October 2, 2001, visual quality classes which were continued as VQOs pursuant to Section 17 of the GAR.

These VQOs apply as mapped to all Crown lands in the CRFD, and also as mapped to all Schedule A private lands forming part of Forest Act tenures in the CRFD.

Strategy - FPPR s.9.2

- For the purposes of FPPR s.9.2, as a Strategy, each Holder will comply with the Categories of Visually Altered Forest Landscape⁶ established by the "Order – Establishment of Scenic Areas and Visual Quality Objectives for the Campbell River Forest District" (2005);
- 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:
- 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

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⁶ As defined in FPPR s.1.1.



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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).

6.10 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.

Definitions for the purposes of this Strategy

"CHR" means Cultural Heritage Resource.

"Cedar" includes both western red-cedar (*Thuja plicata*) and yellow-cedar (*Chamaecyparis nootkatensis*)

"First Nation CHR Information" means information regarding a potentially affected CHR within the FDU provided to each Holder by a First Nation affected by this FSP:

- a. Prior to review and comment pertaining to the proposed form of this FSP under FPPR s.20;
- b. During review and comment pertaining to the proposed form of this **FSP**, in accordance **FPPR** s.21; or
- c. During the term of this **FSP**.

"Potentially Affected CHR" means a Cultural Heritage Resource that is:

- a. Subject to FPPR s.10;
- b. Not conserved or protected by other arrangements;
- c. Capable of being addressed in the context of this **FSP**; and
- d. Important, valuable and scarce, as determined by government:
 - i. Based on traditional use by an aboriginal people, and
 - ii. From consultation with a First Nation regarding **First Nation CHR Information**, that government has provided.

Strategy – FPPR s.10

- 1. For the purposes of **FPPR** s.10, as a **Strategy**, each **Holder** will, at least once each calendar year:
 - a. For each First Nation with asserted traditional territory within the **FDU**:

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- i. Identify the approximate location of planned cutblocks and roads, if any, to which this **FSP** applies that are within that asserted traditional territory and not previously identified by each **Holder** to that First Nation;
- ii. Request from that First Nation information, regarding any Potentially Affected CHR and the historical extent of traditional use, not previously provided by the First Nation to each Holder; and
- iii. If information has been identified under s.1.b of this **Strategy**, request a meeting or communicate with that First Nation to review the access. conservation or, if necessary, protection of the **Potentially Affected CHR**;

and

b. Provide to the Crown any First Nation CHR Information not previously provided by each Holder;

- 2. Plant or promote natural regeneration of Cedar as a component of future stands on areas where:
 - a. Each **Holder** has an obligation under **FRPA** s.29(1):
 - b. Cedar is ecologically suited; and
 - c. If requested by a First Nation with asserted traditional territory within the FDU that has historically utilized western red-cedar or yellow-cedar from that traditional territory for making paddles, masks, totems, canoes or other similar traditional use items, and to the extent of such historical use, develop Cedar strategies and assist that First Nation in identifying or locating Cedar trees and obtaining logs suitable for such purpose.

6.11 FRPA Value: Recreation

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

- 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
 - 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

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 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 been established in the Campbell River Natural Resource District. See s.6.12 of this FSP.

6.12 FRPA Value: Resource Features

OBJECTIVE SOURCE: RESOURCE FEATURES		
Authority	Category/Source	Effective Date of Objective
BC Reg. 582/2004	Order to Identify Recreation Resource Features for the Campbell River Forest District	April 12, 2006
BC Reg. 582/2004	Order to Identify Karst Resource Features for the Campbell River Forest District	June 30, 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 Campbell River Forest District, effective June 30, 2007.

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

BC Reg. 580/2004	FPPR s.70(1)	January 31, 2004

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.

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.

7. FRPA Measures

7.1 Invasive Plants

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

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BACKGROUND INFORMATION: INVASIVE PLANTS		
Authority	Category/Source	Effective Date of Objective

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 Species⁷

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 Plants⁸

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

⁷ 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.

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⁸ Adopted from the definitions contained in the document titled 'Provincial Priority Invasive Species – BC Inter-Ministry Invasive Species Working Group' (March 2021).



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		establishment of occurrences outside the line to control
Management	Species is more widespread by 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
 - 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
 - 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

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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**

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[&]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.



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EDRR or **Provincial Containment Priority Categories**, or after consultation with a Provincial Invasive Species Specialist if in the Regional Containment/Control priority category.

7.2 Natural Range Barriers

OBJECTIVE SOURCE: NATURAL RANGE BARRIERS		
Authority	Category/Source	Effective Date of 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:
 - a. 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
 - 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**.

8. Stocking Standards

Definitions for the purposes of these Stocking Standards

- "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)

8.1 Application

- 1. These stocking standards apply to:
 - a. areas harvested under this FSP within the FDU; and

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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).

8.2 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**.

8.3 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 Date of Objective
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.		
BC Reg. 580/2004	FPPR s.44(1)	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.

8.4 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

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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.

8.4.1 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.

8.4.2 Stocking (Even-Aged Stocking Standards)

8.4.2.1 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.

8.4.2.2 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;

and

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

8.4.2.3 Minimum Horizontal Intertree Distance

- 1. Minimum intertree distances (MITDs) are listed in Appendix 1.2, along with application conditions; and
- 2. MITD may be assigned at the **SU** or **AA** level.

8.4.2.4 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.

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8.4.2.5 Regeneration Date

1. The regeneration date is 6 years.

8.4.2.6 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.

8.5 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.

8.6 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.

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

- 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**;

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- 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.

8.7 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;
- 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.
	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.

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Situations or Circumstances	Standard
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.

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9. 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	Date	
Senior Silviculture Forester		

LICENSEE SIGNATURE



Chris Boulton, RPF TFL Forester, Nootka Forest Operation June 27, 2022

Date

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Appendix 1 – Stocking Standards

The stocking standards IDs (SSIDs) in RESULTS are:

Even-aged conifer management: 1071159

Even-aged hardwood: 1071160

Intermediate Cut: 1071161

SEDRSS for HwCw over HwCw: 1071162 SEDRSS for Second Growth Fd: 1071163

Heavy Elk Use Areas: 1071164

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

BEC	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, PI-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

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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, PI-1.25, Yc-1.25
	12	400	200	Cw, Pl, Yc	Cw-1.0, PI-1.25, Yc-1.0
	13	800	400	Cw, Hw, PI, 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, Fd⁵, Hw, PI-1.25, Yc ⁶	Ba-1.25, Cw-1.0, Fd-2.0, Hw-2.0, Pl-1.25, Yc-1.0
	04	1000	500	Ba¹,², Cw, Fd⁵, Hw, Ss⁴, Yc⁶	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	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
	07*	1000	500	Ba ¹ , Cw, Fd ⁵ , Hw, Ss ⁴ , Yc ⁶	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, Yc ⁶	Ba-2.25, Cw-2.0, Hw-4.0, Ss-4.0, Yc-1.5
	10	1000	500	Ba¹, Cw, Ss⁴, Yc ⁶	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, PI-1.25, Yc-1.0

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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, Hm ⁶ , 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, Pl-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, Pl, 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, Yc-1.5
	06	1000	500	Ba, Cw, Fd ⁵ , Hm ⁶ , 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, Fd ⁵ , Hm ⁶ , 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, Fd ⁵ , Hm ⁶ , 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
CWHxm	01*	1000	500	Cw, Fd, Hw, Pw	Cw-1.5, Fd-3.0, Hw-2.0, Pw-2.5
	02	400	200	Fd, Pl	Fd-2.0, Pl-1.25
	03	800	400	Cw, Fd, Hw, PI	Cw-1.0, Fd-2.0, Hw-1.25, PI-1.25
	04	1000	500	Cw, Fd, Hw⁴, Pw	Cw-1.5, Fd-3.0, Hw-2.0, Pw-2.5
	05*	1000	500	Bg¹, Cw, Fd, Hw, Pw, Ss²	Bg-3.5, Cw-2.0, Fd-4.0, Hw-1.75, Pw-2.5, Ss-4.0
	06	1000	500	Bg, Cw, Fd, Hw	Bg-3.0, Cw-1.5, Fd-3.0, Hw-2.0
	07*	1000	500	Bg¹, Cw, Fd, Hw, Ss ⁹	Bg-3.5, Cw-2.0, Fd-4.0, Hw-1.75, Ss-4.0

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BEC	Site Series	TSS	MSS	Species Selection	Minimum Free Growing Heights						
	08*	1000	500	Bg, Cw, Fd⁵, Ss	Bg-3.5, Cw-2.0, Fd-4.0, Ss-4.0						
	09	1000	500	Bg, Cw	Bg-3.5, Cw-2.0, Ss-4.0						
	11	400	200	Cw, PI	Cw-1.0, PI-1.25						
	12	800	400	Cw, Hw, Pw, Ss	Cw-1.0, Hw-1.5, Pw-2.5, Ss-1.5						
	13*	1000	500	Bg, Cw, Fd, Ss ⁹	Bg-3.5, Cw-2.0, Fd-4.0, Ss-4.0						
	14	1000	500	Bg, Cw, Ss ⁹	Bg-3.5, Cw-2.0, Ss-4.0						
	15	800	400	Cw	Cw-2.0						
MHmm1	01	1000	500	Ba, Bp³, Cw, Hm, Hw, Yc	Ba-0.6, Bp-1.25, 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, 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						
	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.

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Notes for Appendix 1.1:

Site-Specific Notes

- 1 Risk of balsam woolly adelgid. Ba or Bq 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.

Ba – 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.

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.

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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.

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Appendix 1.3 – SEDRSS Stocking Standard

Appendix 1.3.1 - SEDRSS Tabular Method for HwCw over HwCw

					R	egenerat	ion Guide	:				
BGCU	Layer	Species	Site Occupancy								Free Gro	wing Guide
			All BA combinations are applicable to survey plots Only used during plots One of these 4 BA combinations are applicable to final SU REGEN / FG SEDRSS obligations obligations					y plots	Regen Delay (max yrs.)	MITD	Species	Height(m)
								used during				
CWHvm1 - 01	Residual Layer (L1) (≥12.5dbh)	Per Appendix						≥ 40		N/A	N/A	
	BA (m²/ha)	1.1 by Site Series	0-8	9-15	16-22	23-28	29-39		N/A			
	Regen Layer (L2-L4)	Per Appendix							6	L1 Drip line	Per	Per
	TSS Target (WS /ha)	1.1 by Site 900	900 800 700		500	400	0		or	Appendix 1.1 by Site	Appendix 1.1 by Site	
	MSS Minimum (WS/ha)	Series ¹	500	400	300	200	100	0		2.0 m (L2-L4)	Series	Series

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

	Lauren				Reg	generation	n Guide					
BGCU	Layer	Species	Site Occupancy								Free Gro	wing Guide
			All BA combinations are applicable to survey plots					ey plots	Regen Delay MITD	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	
	BA (m²/ha)	Series	0-4	5-10	11-16	17-23	24-39	≥ 40	,	,		
	Regen Layer (L2-L4)	Per Appendix								L1	Per Appendix	Per Appendix
	TSS Target (WS / ha)	1.1 by Site	900	900 800	700	500	400	0	6	Drip line or 2.0 m (L2-	1.1 by Site Series	1.1 by Site Series
	MSS Minimum (WS/ha)	Series ^{1,2}	500	400	300	200	100	0		2.0 m (L2- L4)	Series	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 1.2.1).

- 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.

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Appendix 2 – Site Series Representation Analysis for SMZ 11 (R/S 6.7.3)

FDU Site Series Representation Analysis for SMZ 11 (based on VRI data, 2020 reference year)

CWHvm1	Area (ha)	% of Total Area	Underrepresented Ecosystem	CDC Listing	Target (%)	Target (ha)	NHLB Old (ha)	Percent NHLB Old (%)	POGMAs THLB Old- July 19, 2021 (ha)	Revised with POGMAs (%)	Recruitment NHLB (ha)	*Conserved in OGMA (%)
00	25.8	0.6%	Yes		>19	4.9	10.5	40.8%	0.1	41.2%	0.0	41.2%
01	667.8	16.4%			19	126.9	220.8	33.1%	12.0	34.9%	0.0	34.9%
03	45.0	1.1%	Yes	Blue	>19	8.6	32.1	71.2%	6.3	85.1%	0.0	85.1%
05	347.8	8.5%		Blue	>19	66.1	88.9	25.6%	0.1	25.6%	0.0	25.6%
06	21.9	0.5%	Yes	Blue	>19	4.2	5.1	23.5%	0.7	26.7%	12.8	85.3%
07	135.3	3.3%		Blue	>19	25.7	78.7	58.2%	5.3	62.1%	0.0	62.1%
09	52.9	1.3%	Yes	Red	>19	10.1	33.1	62.5%	0.0	62.5%	0.0	62.5%
10	24.2	0.6%	Yes	Blue	>19	4.6	16.7	69.0%	0.0	69.0%	0.0	69.0%
12	6.0	0.1%	Yes		>19	1.1	0.4	6.2%	0.0	6.2%	0.0	6.2%
14	31.6	0.8%	Yes	Blue	>19	6.0	21.9	69.1%	0.0	69.1%	0.0	69.1%

^{*} Comprising established and proposed old growth management areas, including recruitment.

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Timberlands

Management System

Nootka 2022-2027

CWHvm2	Area (ha)	% of Total Area	Underrepresented Ecosystem	CDC Listing	Target (%)	Target (ha)	NHLB Old (ha)	Percent NHLB Old (%)	POGMAs THLB Old- July 19, 2021 (ha)	Revised with POGMAs (%)	Recruitment NHLB (ha)	*Conserved in OGMA (%)
00	41.2	1.0%	Yes		>19	7.8	25.0	60.7%	1.5	64.4%	0.0	64.4%
01	1,098.6	26.9%			19	208.7	325.2	29.6%	18.3	31.3%	0.0	31.3%
02	3.5	0.1%	Yes		19	0.7	2.4	67.4%	0.6	84.4%	0.0	84.4%
03	149.8	3.7%		Blue	>19	28.5	59.9	40.0%	0.0	40.0%	0.0	40.0%
05	34.6	0.8%	Yes	Blue	>19	6.6	19.1	55.3%	0.8	57.6%	0.0	57.6%
06	114.5	2.8%		Blue	>19	21.7	28.5	24.9%	8.6	32.4%	0.0	32.4%
07	122.4	3.0%		Blue	>19	23.3	52.3	42.7%	2.6	44.8%	0.0	44.8%
08	0.2	0.0%	Yes	Blue	>19	0.0	0.0	15.8%	0.0	15.8%	0.0	15.8%
09	22.0	0.5%	Yes		>19	4.2	6.2	28.2%	0.8	31.8%	0.0	31.8%
11	11.0	0.3%	Yes		>19	2.1	8.9	81.2%	0.0	81.2%	0.0	81.2%

^{*} Comprising established and proposed old growth management areas, including recruitment.





Nootka 2022-2027

Timberlands

Management System

MHmm1	Area (ha)	% of Total Area	Underrepresented Ecosystem	CDC Listing	Target (%)	Target (ha)	NHLB Old (ha)	Percent NHLB Old (%)	POGMAs THLB Old- July 19, 2021 (ha)	Revised with POGMAs (%)	Recruitment NHLB (ha)	*Conserved in OGMA (%)
00	53.2	1.3%	Yes		>28	14.9	33.6	63.1%	0.0	63.1%	0.0	63.1%
01	729.0	17.9%			28	204.1	371.9	51.0%	0.0	51.0%	0.0	51.0%
02	81.5	2.0%			28	22.8	65.0	79.8%	0.1	79.9%	0.0	79.9%
03	11.4	0.3%	Yes		>28	3.2	2.0	17.8%	0.0	17.8%	0.0	17.8%
04	6.8	0.2%	Yes		>28	1.9	2.5	36.6%	0.0	36.6%	0.0	36.6%
05	101.1	2.5%			>28	28.3	41.9	41.5%	0.0	41.5%	0.0	41.5%
06	24.2	0.6%	Yes		>28	6.8	18.2	75.1%	0.0	75.1%	0.0	75.1%
07	46.5	1.1%	Yes		>28	13.0	16.1	34.7%	0.0	34.7%	0.0	34.7%
08	1.2	0.0%	Yes		>28	0.3	1.1	93.4%	0.0	93.4%	0.0	93.4%
09	65.9	1.6%	Yes		>28	18.4	44.6	67.7%	0.0	67.7%	0.0	67.7%

 $^{^{\}star}$ Comprising established and proposed old growth management areas, including recruitment.