

Jordan River Forest Stewardship Plan

TFL 61

2024 Replacement of FSP #801

Plan Preparer & Authorized Licensee Signature:

FSP I	HOLL	DERS:
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Pacheedaht Andersen Timber Holdings Limited Partnership (PATH) 11793 West Coast Road Jordan River, BC, V9Z 1L1

Authorized Licensee Signature:		
	Name:	Angus Hope, P.Eng, RPF, TFL Manager
		Angus Hope, P.Eng, RPF, TFL Manager
	Date:	
Pacheedaht Forestry Limited PO Box 170 Port Renfrew, BC, V0S 1K0		
Authorized Licensee Signature:	Name:	Angus Hope, P.Eng, RPF, Pacheedaht
	Date:	Forestry Limited Manager
SIGNING FORESTER:		
	Name:	Kelly McKinnon, RPF, RPBio, PAg
	Date:	

[&]quot;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 complete the work covered in this Plan."

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A. INTERPRETATION: ABBREVIATIONS, ACRONYMS, AND DEFINITIONS IN THIS FSP

BEC means Biogeoclimatic Ecosystem Classification

BEO means Biodiversity Emphasis Option

Cutblock described as an area that will be or has been harvested

DDM means Delegated Decision Maker

EFZ means Enhanced Management Zone under VILUP

FDU means forest development unit

FL means forest license

FPPR *means the Forest Planning and Practices Regulation of FRPA*

FRPA means the Forest and Range Practices Act

FSP means Forest Stewardship Plan

GAR means the Government Action Regulation of the FRPA

HLP means Higher Level Plan with established objectives by government

LU means Landscape Unit

IWMS means Identified Wildlife Management Strategy as defined in version

2004

NAR means Net Area to be Reforested

Non-Contributing

Land Base

means the non-contributing land base as described in the Timber Supply Review for the Arrowsmith Timber Supply Areas (effective date September 1, 2002), or the non-contributing land base described in the DRAFT Tree Farm License 61 Management Plan

No. 1-Version 1.0, dated December 7, 2018.

OGMA(s) *means old growth management area(s)*

PAS means Permanent Access Structures

Primary Forest

Activity

means, which in addition to harvesting and road building, includes road maintenance and deactivation, and silviculture treatments.

Qualified Professional means an applied scientist or technologist, acting alone or together

with another professional, if:

(a) the individual is registered and in good standing in British Columbia with an appropriate professional organization constituted under an Act, is acting under that association's code of ethics and is subject to

disciplinary action by that association; and

(b) the individual is acting within that individual's area of expertise.

RMA means riparian management area where defined practices are

carried out to protect stream banks or RRZ

RMZ means riparian management zone where activities are prescribed in

order to protect the adjacent stream

RRZ means riparian reserve zone where activities are prescribed in order

to protect the adjacent stream

Roads means a constructed and ballasted haul road for wheeled industrial

traffic, generally excluded from basic reforestation

RP means road permit

R/S means Results / Strategy

SIRD *Means South Island Resource District*

SMZ means Special Management Zone under VILUP

SU means Standard Unit

UWR means Ungulate Winter Range

VILUP means the Vancouver Island Land Use Plan and related

Higher-Level Plan Order

WHA means Wildlife Habitat Area

WTP is the same as wildlife tree retention area, defined in FPPR S. 1(1)

WTRA means wildlife tree retention area

1. APPLICATION OF THE FSP (FRPA SECTION 3(4))

The holder(s) has prepared this Forest Stewardship Plan (FSP) as required under Section 3(4) of the FRPA, in order to carry out and plan primary forest activities within forest development units. Reference to the legislation within this FSP refers to any legislation as it was on the date of submission of this FSP.

The FSP contains the following components:

- 1) Maps illustrating Forest Development Units (FDUs) A to F within which a primary forest activities may occur, and
- 2) Results and/or Strategies to address objectives set by government or through HLP.

1.1. LICENSEES AND LICENSES

This FSP applies to the Licensee(s) (FSP Holder(s)) and licenses indicated in Table 1.

Table 1: Application of Forest Stewardship Plan

Licensee	Licenses	Management Unit
Pacheedaht Andersen Timber	TFL 61	TFL
Holdings Limited Partnership (PATH)	TO011, TO022, TO002, TO055	TL within TFL
Pacheedaht Forestry Limited	TFL 61	TFL
	FL A94768	FL within TFL
	FLTC A86800	FLTC
	TO011, TO022, TO002, TO055	TL within TFL

12. AREAS TO WHICH FPPR SECTION 110 OR 14(4) APPLIES

The attached FSP Maps show the cutblocks and roads included in FSPs that are within a Forest Development Unit under this FSP and considered approved under S.196(1) or (2) of the Act, including those cutblocks referred to in S.110 of the FPPR.

1.3 AREAS SUBJECT TO CUTTING PERMIT OR ROAD PERMIT

The FSP map shows all cutblocks and roads subject to cutting permits and/or road permits issued to the Holder of this FSP before the FSP is approved unless the Holder of this FSP gives

notice to the Government that the FRPA and associated regulations applies, effective on the date, and to the extent specified in the notice.

In accordance with S.197(5) of the FPRA, the Holder of this FSP may specify in a written notice to the Government that stocking standards approved as part of this FSP apply to cutblocks harvested by the Holder of this FSP prior to the commencement of this FSP.

2. TERM OF THE FSP (FRPA SECTION 6(1))

The term of this FSP will be for five years. The FSP may be terminated earlier if the licensee(s) elects to replace it with another approved FSP, or the FSP may be extended pursuant to the FRPA and its regulations.

2.1. COMMENCEMENT OF TERM OF THE FSP (FRPA SECTION 6(1)(B))

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

3. MAP (FRPA SECTION 5(1)(A) AND FPPR SECTION 14)

The attached FSP maps show the boundaries of the FDUs under this FSP. The FSP maps have been put together with the best available information to date; some of this information may change over the term of this FSP which may or may not necessitate an amendment to the FSP.

The FSP Maps also show the areas that are within the boundaries of the FDUs that may be available for primary forest activities and also those areas that are within the boundaries of the FDUs but are not part of the FSP.

As per S.14(4) of the FPPR, the FSP describes the elements that have been identified and in effect as of the date of approval of this FSP and where those elements are applicable to this FSP.

4. DESIGNATIONS AND OBJECTIVES IN EFFECT UNDER FPPR SECTION 14(3) AND/OR FRPA SECTION. 180/181

The following land use designation, objectives and notices apply to the FSP:

Table 2: Designations in Effect

Designations	FDU	Date Designated
FPPR 14 (3)(a): Ungulate Winter Ranges		
U-1-012: Unit 1 and 50	A	November 29, 2007
FPPR 14 (3)(b): Wildlife Habitat Areas		
Marbled Murrelet – 1-166	A	January 21, 2008
Marbled Murrelet – 1-167	A	January 21, 2008
Marbled Murrelet – 1-169	A	January 21, 2008
Marbled Murrelet – 1-170	A	January 21, 2008
Red-legged Frog – 1-216	A	April 1, 2009
Red-legged Frog – 1-217	A	April 1, 2009
Red-legged Frog – 1-218	A	April 1, 2009
Red-legged Frog – 1-219	A	April 1, 2009
Red-legged Frog – 1-220	A	April 1, 2009
Red-legged Frog – 1-223	С	April 1, 2009
Northern Goshawk – 1-730	A	Proposed
FPPR 14 (3)(e): Scenic Areas		
21 (Highway 14, Victoria to Port Renfrew)	A & B	Scenic Areas were Identified Nov 13, 1998. GAR Order:
22 (San Juan Ridge Trail/ SMZ 22)	E, F & C	December 15, 2005; Updated: December 14, 2011
FPPR 14 (3)(h): Old Growth Management Areas		, =
NAN_saju_334	Е	September 7, 2005
GAR 5(1)(f) of FRPA: Recreation Sites, Trails and Interpretive Forest Sites as Resource Features		
Kludahk Trail (reference # 900-6605)	C & D	December 1, 2005
Other non-GAR Recreation Sites and Trails		
Tansky Recreation Site (Rec Site #: REC160879)	A & B	

5. RESULTS AND STRATEGIES (FRPA S.5(1)(B)

Objectives Set by Government are outlined in Section 149 (1) of *FRPA*. In addition, the area is subject to grand parented objectives that result from previous executive orders as they relate to the Vancouver Island Land Use Plan. As per Section 5(1)(b) of the *FRPA*, a FSP must specify intended results or strategies, each in relation to (i) objectives set by government, and (ii) other objectives that are established under the Act or the regulations and that pertain to all or part of the area subject to the plan.

5.1 ORDER ESTABLISHING PROVINCIAL NON-SPATIAL OLD GROWTH OBJECTIVES

The Order Establishing Provincial Non-Spatial Old Growth Objectives (effective June 30, 2004) clarifies the amount of area available for timber harvesting. This order supplements but does not replace FPPR S. 9. To meet the Landscape Unit old growth retention targets by BEC variants, outlined in *Table 3*, the FSP holders(s) have derived draft OGMAs, identified on the FSP map, from the "Loss Tugwell Sooke Landscape Unit Report" from March 2006. There is a minor component of legal OGMAs, as described in Table 2, located in the San Juan LU that have portions located in the FSP area which are derived from the Renfrew Planning Area Order dated September 7, 2005.

OLD GROWTH TARGETS

Table 3: Landscape Unit old growth retention targets¹ by BEC variants in FSP

Landscape Unit (biodiversity emphasis)	FDU	BEC Variant	Natural Disturbance	Old Growth Target ¹ (%)
Loss		CWHvm1	1	>13%
(low)	A, C, F	CWHvm2	1	>13%
(low)		MHmm1	1	>19%
San Juan	F C	CWHvm1	1	>13%
(intermediate)	E, C	CWHvm2	1	>13%
	A, B, D	CWHmm1	2	>9%
Tugwell (low)		CWHmm2	2	>9%
		CWHvm1	1	>13%
		CWHvm2	1	>13%
		CWHxm2	2	>9%
		MHmm1	1	>19%

¹ The Old Growth Target % listed here is the full target amount listed in the Non-spatial Old Growth Order. Landscape Units with a low biodiversity emphasis, may be drawn down by 2/3^{rds}, as per the Order Implementation Policy, s. (3).

Applicable FDU	RESULT / STRATEGY
All FDUs	1. In this strategy:
	"non-contributing land base" means the non-contributing land base as described in the Timber Supply Review for the Arrowsmith Timber Supply Areas (effective date September 1, 2002), or the non-contributing land base described in the DRAFT Tree Farm License 61 Management Plan No. 1-Version 1.0, dated December 7, 2018;
	"Order" means the Order Establishing Provincial Non-Spatial Old Growth Objectives (effective June 30, 2004);
	"retention targets" means those retention targets, by biogeoclimatic (BEC) variant, that are specified in the Order Establishing Provincial Non-Spatial Old Growth Objectives; and
	"draft OGMA" Draft OGMAs identified on the FSP map are derived from the "Loss Tugwell Sooke Landscape Unit Report" from March 2006.
	2. Where draft OGMAs are identified, the holder(s) of the FSP in accordance with the written notice specifying that the draft OGMAs meet the intent of the Order:
	 a) Will maintain or recruit old growth forest attributes within draft OGMAs; and b) Will carry out road construction or timber harvesting or other such operations within draft OGMAs in accordance with direction in the written notice specifying that draft OGMAs meet the intent of the non-spatial Order for the LU; and c) May carry out road construction or timber harvesting within draft OGMAs, provided that replacement areas are selected by the holder(s) of the FSP that: i) are within the same BEC variant;
	 ii). have similar or more suitable ecological attributes for conserving biological diversity than the area being removed from draft OGMA; iii). such replacement will not result in the insufficient suitable forest being available to meet the retention targets.
	3. Where amendments are made to draft OGMAs as provided for in subsection 2(c), the holder(s) of the FSP will provide copies and shapefiles of the replacement area to the applicable Provincial ministry responsible for establishing and amending OGMAs by July 1 st of each calendar year.

5.2 OBJECTIVES RESULTING FROM HIGHER LEVEL PLANS FRPA S.5B(II)

5.2.1 VANCOUVER ISLAND LAND USE PLAN-HLP ORDER

The Vancouver Island Land Use Plan (VILUP) took effect December 1, 2000, which has established resource management zones and resource management objectives for the entire area covered under this FSP.

Table 4: VILUP Special Management Zones

Special Management Zone	Applicable HLP Objective	FDU
SMZ 22 - San Juan Ridge	VILUP 1, 2	C and D

Table 5: VILUP Management Zones

Enhanced Management Zone	Applicable HLP Objective	FDU
RMZ 47 - Loss-Jordan	VILUP 7, 9, 9.1	A and B

Table 6: VILUP Management Zones

General Management Zone	Applicable HLP Objective	FDU
RMZ 46 - Gordon-Caycuse-San Juan	VILUP	E and F

Special Management Zone (SMZ 22)

Reference Objective 1: sustain forest ecosystem structure and function in SMZs by:

- a) creating or maintaining stand structures and forest attributes associated with mature² and old³ 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;
- b) retaining, within cutblocks⁴, structural forest attributes and elements with important biodiversity functions⁵, and
- c) applying a variety of silviculture systems, patch sizes and patch shapes across the zone, subject to a maximum 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 applied⁶.

² The mature seral forest is defined as generally 80 to 120 years old or older, depending on species and site conditions. The structure of mature seral forests generally includes canopies that vary vertically or horizontally, or both. The age and structure of the mature seral stage will vary significantly by forest type and from one biogeoclimatic zone to another.

³ The old seral forest is defined as generally greater than 250 years old, containing live and dead (downed and standing) trees of various sizes, including large diameter trees, and of various tree species, including broad-leaved trees. The structure of old seral forest varies significantly by forest type and from one biogeoclimatic zone to another.

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

⁵ This included; but not limited to snags, wildlife trees and downed logs.

⁶ Silvicultural Systems Handbook for British Columbia, Ministry of Forest, Forest Practices Branch, March 2003.

Applicable FDU	RESULT / STRATEGY
FDU C and	1). Reference Objective 1(a) - Mature and Old Seral: In this result:
D	"areas" means the Net Area to be Reforested (NAR) plus the area occupied by Permanent Access Structures (PAS);
	"spatially defined areas" are areas of mature ² or older ³ forest that can be mapped at a 1:20,000 scale.
	2). The holder(s) of the FSP will only carry out harvesting such that no less than 25% of the forested area of the portion of the FDUs covered by SMZ 22 is retained as mature or old seral age classes.
	3). In addition to subsection 2, where the area of mature or old seral forest within the portions of the FDUs covered by SMZ 22 is currently less than 25%, the FSP holder(s) will ensure that mature and old seral forest within the portions of the FDUs covered by SMZ 22 is 25%, or more, within 50 years.
	4). Where applicable, the holder(s) of the FSP will consult with other forest tenure holders to ensure that this objective is being met for SMZ 22.
	² The mature seral forest is defined as generally 80 to 120 years old or older, depending on species and site conditions. The structure of mature seral forests generally includes canopies that vary vertically or horizontally, or both. The age and structure of the mature seral stage will vary significantly by forest type and from one biogeoclimatic zone to another.
	³ The old seral forest is defined as generally greater than 250 years old, containing live and dead (downed and standing) trees of various sizes, including large diameter trees, and of various tree species, including broad-leaved trees. The structure of old seral forest varies significantly by forest type and from one biogeoclimatic zone to another.
FDU C and	1). Reference Objective 1(b) - Structural Forest Attributes: In this result:
D	"structural forest attributes with important biodiversity functions" includes but is not limited to snags, wildlife trees, and downed logs.
	2. The holder(s) of the FSP will:
	 a) design cutblocks in a manner that is consistent with retaining structural forest attributes and elements with important biodiversity functions that exist in each of the following: i). wildlife tree patches/wildlife tree retention areas; ii). no-work zones; iii). riparian management areas; iv). other potential leave areas;
	that are generally within cutblock boundaries; and
	b) carry out harvesting or forest practices only if the forest practices are consistent with the design for the cutblock referred to in paragraph (a).

D

FDU C and 1). Reference Objective 1(c) - Silvicultural Systems: In this result:

- "**shelterwood silviculture system**" is defined as a system where the old stand is removed in a series of cuttings to promote the establishment of a new even-aged stand under the shelter of the old one. The intent is to protect and shelter the developing regeneration;
- "selection silviculture system" includes single tree and group selection and is defined as a system that removes mature timber either as single scattered individuals or in small groups at relatively short intervals, repeated indefinitely, where an uneven-aged stand is maintained. Regeneration should occur throughout the life of the stand with pulses following harvest entries. This system depends on recruitment of trees into successive age classes over time and the predictable yield from merchantable age classes;
- "retention silviculture system" is defined as sustaining the major ecological conditions and processes characteristic of a forest by maintaining a level of stand structure, complexity, and diversity. It is designed to retain individual trees or groups of trees to maintain structural diversity over the area of the cutblock for at least one rotation, and 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;
- "clearcut silviculture system" is defined as a system managing successive evenaged stands by cutting the entire stand of trees at planned intervals (the rotation) then regenerating and tending a new stand in place of the old;
- "Seed tree silviculture system" is defined as a system where the entire cutting unit is managed as it is with clearcut systems except that, for a designated time period, harvesting excludes those trees selected for the purpose of supplying seed.
- 2. The holder(s) of the FSP will:
 - a) design cutblocks in a manner that is consistent with:
 - i). establishing a variety of silvicultural systems and patch sizes and shapes across the SMZ; and
 - ii). for shelterwood, selection, or retention silvicultural systems:
 - A). maintaining varying levels of retention associated with cutblocks based on a consideration of the site-specific site conditions and the forest values; and
 - B). limiting the Net Area to be Reforested (NAR) to 40 hectares except as provided in FSP section 5.2.1 Objective 2 - Salvage; and
 - iii). for clearcut, clearcut with reserves or seed tree silvicultural systems, limiting the NAR to 5 hectares except as provided for in FSP section 5.2.1 Objective 2 - Salvage; and
 - b) carry out forest practices only if the forest practices are consistent with the design for the cutblock referred to in paragraph (a).

Reference Objective 2 - Salvage: Despite subsection 1(c), 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.

Applicable FDU	RESULT / STRATEGY
FDU C and D	 Reference Objective 1(a) - Salvage: In this result, if timber harvesting is to be carried out in a cutblock to recover timber damaged by fire, insects, wind or other similar events, the holder(s) of the FSP may plan the cutblock to have a NAR that exceeds: 40 hectares for shelterwood, selection, or retention silvicultural systems; and 5 hectares for clearcut, clearcut with reserves or seed tree silvicultural systems provided that the cutblock plan incorporates structural characteristics of natural disturbances into the cutblock where safe, and practicable.

Enhanced Management Zone - Objective 7 - Short-term Timber Availability

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.

Applicable FDU	RESULT / STRATEGY
FDU A and B	 In this result, the holder(s) of the FSP may carry out or authorize timber harvesting and road construction within cutblocks that: a) apply any silvicultural system; b) exceed 40 ha; and c) are adjacent⁷ to areas that are greened-up as defined in HLP Objective 7(b); and In determining the size of a proposed cutblock, the non-greened up portion of a cutblock adjacent to a cutblock proposed for harvest will be considered part of the NAP and
	NAR; and 3). In order to avoid or mitigate significant impacts to specific hydrological, wildlife, biodiversity, scenic or recreation values, cutblocks described in subsection (1) will be consistent with: a) results/strategies for FSP section 5.3.3, for Wildlife; b) results/strategies in FSP section 5.4, for Wildlife and Biodiversity; c) results/strategies in FSP section 5.4.3, for Water, Fish, Wildlife and Biodiversity within Riparian Areas; and e) results/strategies in FSP section 5.5 Visual Quality Objectives; and f) results/strategies in FSP section 5.6 for recreation features (Kludahk Trail) established as a Resource Feature pursuant to GAR s. 5(1)(f).
	7 "Adjacent" means an area that is sufficiently close to a cutblock that, due to its location, could directly impact on, or be impacted by, a forest practice carries out within the cutblock – from FPPR s. 65(1).

Enhanced Management Zone - Objectives 9 and 9.1 - Species Composition

Objective 9: When proposing the species composition for the purposes of OPR s. 39(3)(o), a person may, pursuant to OPR s. 41, select a single species that is ecologically suited to the area, if a mix of species was present on the area before the timber was harvested.

Objective 9.1: The area that may be subject to selection of a single species pursuant to objective 9 is limited to no more than 20% of the forested area of any variant within a given EFZ.

Applicable FDU	RESULT / STRATEGY
FDU A and	1). In this result;
В	"variant" is defined as a subset of a Biogeoclimatic zone and subzone as determined using the <i>Field Guide for Site Identification and Interpretation for the Vancouver Forest Region</i> .
	2). For those areas that are harvested within an Enhanced Forestry Zone (EFZ) during the term of this plan, the holder(s) of the FSP will ensure that not more than 20% of the total Net Area to Reforest (NAR) for all of the cutblocks in a variant will be reforested using a single species that is ecologically suited to the area, using a preferred species as set out in the applicable stocking standards.

5.3 OBJECTIVES PRESCRIBED UNDER FRPA SECTION 149

5.3.1 SOIL RESOURCES (FPPR S.5)

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

Applicable FDU	RESULT / STRATEGY
	The FSP Holder(s) will comply with the objectives set by government for soils (FPPR S.5). The default limits for soil disturbance and for permanent access structures as per Sections 35 and 36 of the FPPR will apply and no result and/or strategy is required.

5.3.2 TIMBER RESOURCES

The objectives set by government for timber are to:

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

Applicable FDU	RESULT / STRATEGY
Not	Licensee is exempt from the requirement to prepare results or strategies for an
applicable	objective set by government for timber, as per FPPR S.12(8).

5.3.3 WILDLIFE RESOURCES (FPPR S. 7, UWR AND SPECIES AT RISK)

- (1) The objective set by government for wildlife is to conserve sufficient wildlife habitat in terms of amount of area, distribution of areas and attributes of those areas, for
 - (a) the survival of the species at risk;
 - (b) the survival of regionally important wildlife; and
 - (c) the winter survival of specified ungulate species.
- (2) A person required to prepare a forest stewardship plan must specify a result or strategy in respect of the objective stated under subsection (1) only if the minister responsible for the Wildlife Act gives notice to the person of the applicable
 - (a) species referred to in subsection (1), and
 - (b) indicators of the amount, distribution and attributes of wildlife habitat described in subsection (1).
- (3) If satisfied that the objective set out in subsection (1) is addressed, in whole or in part, by an objective in relation to a wildlife habitat area or an ungulate winter range, a general wildlife measure, or a wildlife habitat feature, the minister responsible for the Wildlife Act must exempt a person from the obligation to specify a result or strategy in relation to the objective set out in subsection (1) to the extent that the objective is already addressed.
- (4) On or after December 31, 2004, a notice described in subsection (2) must be given at least 4 months before the forest stewardship plan is submitted for approval.

MARBLED MURRLET (BRACHYRAMPHUS MARMORATUS)

Applicable FDU	STRAT	TEGY			
FDU A	do s Mea		ith the following Order	and the associated General ,169 and170 – Marbled M	Wildlife
All FDUs		is Strategy "Order" means			of
	Mark	oled Murrelet (Brachyramp	ohus marmoratus) - effec	ctive December 2, 2021.	
	orig	itable Habitat" means the inal spatial dataset downloav.for.gov.bc.ca - /ftp/RCO/	aded from the following	link on December 2, 2021	•
		FSP holder(s), when plann comply with the Order by			nis FSP
		minimum habitat thresho Order, for the Renfrew a When planning and condu (MaMu) Suitable Habita	t will be retained in an a bld, as listed in Column ond East Coast Landscaped ting primary forest action will be retained in an all, as listed in Column "A	mount equal to or greater to "A" in Table 1 in Schedule to Unit (LU) Aggregates. Vities, Marbled Murrelet to or greater to "in Table 2 in Schedule 7	7 of the
		Marbled Murrelet	Landscape Unit	Landscape Unit	
		Conservation Region	Aggregate	Portion Portion	
		West and North		Loss	
		Vancouver Island	Renfrew	San Juan	
		(WNVI)		Tugwell WNVI	
		East Vancouver Island (EVI)	East Coast	Tugwell EVI	

the Renfrew Landscape Unit Aggregate and, The FSP holder, when planning or conducting a primary forest activity under 4.3) this FSP must reach agreements with the other forest stewardship plan holder(s) in the Renfrew and East Coast Landscape Unit Aggregates prior to conducting a primary forest activity to ensure compliance with Sections 3(1)(a) and 3(2) of the MaMu Order. Variances from the MaMu Objectives in Section 3(1) to 3(3) of the Order for MaMu Suitable Habitat polygons, as shown in Schedule 1 to 6 of the Order may be allowed, provided that: A field assessment that identifies the characteristics of MAMU Suitable Habitat is conducted for the area by a Qualified Professional using an established standard; The Qualified Professional will confirm the alteration will result in no net loss or functional loss of MAMU Suitable Habitat: and 5.3) A Regional Ministry of FLNRORD biologist or equivalent Ministry Qualified Professional must approve the alteration. The FSP holder(s), when planning or conducting a primary forest activity under this FSP will participate collaboratively with First Nations, other forest licensees and FSP holder(s) and government agencies to ensure the FSP holder(s) meet or exceed MaMu Suitable Habitat target requirements and suitable habitat minimums for landscape unit aggregates and landscape unit portions listed in tables 2 and 3 in the *Notice – Indicators of the* Amount, Distribution and Attributes of Wildlife Habitat Required for the Survival of Marbled Murrelet (Brachyramphus marmoratus) (December 2, 2021).

ORDERS ESTABLISHING UNGULATE WINTER RANGE (UWR)

Orders u-1-012 Unit 1 and u-1-012 Unit C50 have been established on November 18, 2004 for Ungulate Winter Range in the plan area, that spatially defines winter ranges with attributes suitable for both black-tailed deer (*Odocoileus hemionus columbianus*) and Roosevelt elk (*Cervus elaphus roosevelti*) survival during a potentially critical winter.

Applicable FDU	RESULT / STRATEGY
	The FSP holder(s) will comply with the General Wildlife Measures in Schedule 1 of the Orders u-1-012 Unit 1 and u-1-012 Unit C50 for Ungulate Winter Range as long as the Order remains in effect through the term of this FSP.
	If any of the UWR areas should be decreased or increased, or the UWR should be cancelled, then the strategy for this FSP will be amended or cancelled accordingly.

ORDERS ESTABLISHING WILDLIFE HABITAT AREAS (WHA)

A list of approved Wildlife Habitat Areas is listed in S. 4 and is shown on the FSP map.

Applicable FDU	RESULT / STRATEGY
	The FSP holder(s) will comply with the General Wildlife Measures for approved Wildlife Habitat Areas relevant to the areas under this FSP, as long as the Order remains in effect through the term of this FSP.
	If any of the WHAs should be decreased or increased, or should be cancelled, then the strategy for this FSP will be amended or cancelled accordingly.

5.4 BIODIVERSITY AND WILDLIFE RESOURCES

5.4.1 LANDSCAPE LEVEL PLANOBJECTIVES

WILDLIFE AND BIODIVERISTY - LANDSCAPE LEVEL (FPPR S. 9)

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

Applicable FDU	RESULT / STRATEGY
FDUs E and F	1). The FSP holder(s) will undertake to comply maximum cutblock size as per FPPR Section 64 and adjacency requirements as per FPPR Section 65.
FDUs C and D	1). The FSP holder(s) will undertake to comply with cutblocks located in SMZ 22, cutblock harvesting will have a NAR in accordance with the result or strategy for FSP section 5.2.1 Objective 1(c) – Silviculture Systems or 5.2.1 Objective 2 - Salvage.
FDUs A and B	1). The FSP holder(s) will undertake to comply with cutblocks located within EFZ (Loss-Jordan), cutblock harvesting will be in accordance with the result or strategy for FSP section 5.2.1 Objective 7 – Short Term Timber Availability.

ORDER ESTABLISHING OLD GROWTH MANAGEMENT AREAS (OGMA)

A list of legal OGMAs is listed in Section 4, Table 2 and is shown on the FSP map.

Applicable FDU	RESULT / STRATEGY
	The FSP holder(s) will comply with the applicable objectives of the legal order for OGMAs.

5.4.2 STAND LEVEL PLAN OBJECTIVES

OBJECTIVE FOR WILDLIFE & BIODIVERSITY-STAND LEVEL (FPPR S.9.1)

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

Applicable FDU	RESULT / STRATEGY
	The FSP holder(s) will undertake to comply (FPPR S.12.1(4)) with the establishment of wildlife tree retention areas as per FPPR Sections 66 and 67.

5.4.3 OBJECTIVES FOR WATER, FISH, WILDLIFE AND BIODIVERSITY WITHIN RIPARIAN AREAS (FPPR S. 8)

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

Applicable Area	Results and Strategies
All FDUs	1) The FSP holder(s) will comply with the requirements listed in the FPPR for S. 47 (Stream Riparian Class), S. 48 (Wetland Riparian Class), S. 49 (Lake Riparian Class), S. 50 (restrictions in a riparian management area), S. 51 (restrictions in a riparian reserve zone), S. 52 (restrictions in a riparian management zone), and S. 53 (Temperature Sensitive Stream), where these requirements apply to areas under the FSP.
	2) The FSP holder(s) will consider the factors listed in FPPR Schedule 1(2) to determine the type of management regime on a site specific basis. A Qualified Professional will determine the retention levels necessary, at the site level, to meet the objectives set by government for water, fish, wildlife and biodiversity within riparian areas, at the landscape level prior to commencement of timber harvesting.
	3) The FSP holder(s) will design riparian retention to be consistent with Section 52(2) of the FPPR and conduct activities in the riparian management area that are consistent with the recommendations made by the Qualified Professional.

5.4.4 FISHERIES SENSITIVE WATERSHEDS

There are no "fisheries sensitive watersheds" established under Sections 180(f) and 180(g) of *FRPA* for any area under this FSP. No result or strategy is required.

5.4.5 COMMUNITY WATERSHEDS

There are no "community watersheds" established in the FSP. No result / strategy is required.

5.5 VISUAL QUALITY OBJECTIVES

The objectives set by government under the GAR establishes the Visual Quality Objectives (VQO) for a scenic area in the South Island Natural Resource District.

Applicable FDU	RESULT / STRATEGY
	1). The Holder of the FSP will ensure that its harvesting design and the extent of alteration resulting from the shape, size, and location of cutblocks and roads, meets the established VQOs, as defined by the categories prescribed in FPPR s.1.1, from significant public viewpoints.

5.6 RESOURCE FEATURES

The Kludahk Trail has been established as a Resource Feature pursuant to GAR s. 5(1)(f).

Applicable FDU	RESULT / STRATEGY
	The FSP holder(s) will ensure that primary forest activities do not damage or render ineffective a resource feature, including recreation features, sites, or trails identified by Order of the Minister or delegate, the FSP Holder(s) will adhere to the requirements of FPPR s. 70(1).

5.7 OBJECTIVES FOR CULTURAL HERITAGE RESOURCES (FPPR S. 10)

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

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

Applicable FDU	RESULT / STRATEGY
All FDUs	The FSP holder(s) will comply with the objectives set by government for cultural heritage resources by:
	(a) During the planning and field layout stages for road/cutblock development, the FSP holder(s) will observe and document evidence of cultural heritage resources that may be impacted by development through:
	a. Ongoing engagement with First Nations; andb. Information provided by a Qualified Professional.
	(b) Committing to a minimum of one engagement session with those First Nations who may be affected by this Plan, or as requested by First Nations, each calendar year, to provide operational level updates and information on future proposed developments.
	(c) Cedar is recognized as a cultural resource and opportunities for continued traditional use by First Nations will be provided for through the planting of cedar on ecologically suitable sites and through the protection of cedar in areas of retention for riparian areas, wildlife habitat, old-growth management areas, wildlife tree retention, etc.
	(d) Through engaging with First Nations, the FSP holder(s) will work to identify areas of cultural cedar logs for First Nations' use, where possible in otherwise constrained areas.

5.8 STOCKING STANDARDS

FPPR Section 16: FPPR Section 44(1) applies in all situations and circumstances under this FSP and in all FDUs, where a free growing stand is required to be established under *FRPA* Section 29, and on those portions of harvested areas that are in the net area to be reforested.

The regeneration date, stocking standards, free growing heights and species as per *FPPR* Section 44(1)(a) and (b) are outlined in Appendix B. The standards recognize several silviculture systems and regeneration situations that may occur as a result of harvesting or other disturbances.

5.8.1 EVEN AGED MANAGEMENT

The stocking standards in Appendix B apply to the regeneration layer of all harvest units and/or SUs where even aged management is practiced. The standards are based on the BEC zone, subzone/variant and site series where the appropriate standards will be applied within each FDU.

5.8.2 ROOT DISEASE MANAGEMENT STRATEGIES & STOCKING STANDARDS

If the block planning indicates a root rot survey is warranted (i.e. noted forest health agent on site), a survey will be conducted, and the results will be reviewed by a qualified professional who will apply management strategies as outlined in the *Guidebook for Managing Root Disease in BC* (April 2018) to amend the approved stocking standards, which may include, but are not limited to the following:

- 1) Indicate and manage stocking with moderately susceptible or tolerant coniferous species as acceptable; or
- 2) Apply stumping treatments and manage for Douglas Fir, where cost effective, when it is deemed that managing with only moderately susceptible or tolerant coniferous species is not sufficient; and
- 3) Apply with the Ministry of Forests, Lands, Natural Resource Operations and Rural Development to amend approved stocking standards as required.

5.9 MEASURES TO PREVENT THE INTRODUCTION AND SPREAD OF INVASIVE PLANTS (FPPR S. 17)

As per Section 47 of the *FRPA*, 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 under the *Invasive Plants Regulation* if the introduction or spread is likely to be the result of the person's forest practices. "Invasive Plants" refers to only those plants listed in the Invasive Plants Regulation (B.C. Reg. 18/2004). Relevant=[invasive plants found within the plan area include: Gorse, Japanese Knotweed, Giant Knotweed, Scotch Broom, Purple Loosestrife and Yellow Iris.

More information on invasive species can be found on the Capital Reginal District website at https://www.crd.bc.ca/education/our-environment/concerns/invasive-species.

Applicable FDU	RESULT / STRATEGY				
	 The holder(s) of the FSP, will use the following strategies to counter the introduction or spread of invasive plant species, likely to be the result of the Holder's forest practices: Ascertain known locations of invasive plants prior to any site or soil disturbance; Educate staff and contractors to identify invasive plants that exist or threaten to establish within the plan area; Report new infestations of invasive plant species; Prevent the establishment and spread of invasive plants; and Implement effective invasive plant treatment plans should invasive plants establish and spread as a result of forest practices. A) Strategy: Ascertain known locations of invasive plants prior to any site or soil disturbance. The licensee will determine invasive plant species within the plan area by conducting an invasive plant survey (using the Invasive Alien Plant Program (IAPP1) application), and will include the survey results in the site plan. B) Strategy: Educate staff and contractors to identify invasive plants that exist or threaten to establish within the plan area. All staff and contractors will be trained to recognize invasive plant species located within the plan area. 				

- 2) Annual invasive plant identification training will be provided to all staff and contractors at the start of field activities.
- C) Strategy: Report new infestations of invasive plant species.
- 1) All staff and contractors will report new invasive plant infestations through the Report-A-Weed app (www.gov.bc.ca/invasive-species).
- **D)** Strategy: Prevent the establishment and spread of invasive plants.
- 1) Equipment and vehicles will not be parked on invasive plant infestations.
- 2) Work will begin in un-infested areas before moving to infested locations.
- 3) Clothing/vehicle/equipment undercarriages will be regularly inspected for plant parts or propagules if working in areas known to contain invasive plants.
- 4) Infested sites will be avoided for staging, parking, and log sorting, both in the bush and storage yards.
- 5) Soil, subgrade or surfacing material that is being moved during road construction will be maintained free of invasive weed plants or seeds.
- 6) Equipment yards and storage areas will be kept free of invasive plants using appropriate treatment methods.
- 7) The licensee will inspect and ensure fill and erosion-control materials are free of invasive plants before transport and use.
- 8) The licensee will revegetate disturbed areas that exceed 0.25ha of contiguous area, that have exposed mineral soil, within one year of disturbance by forage seeding using Common #1 Forage Mixture or better. Always request the certificate of seed analysis and reject lots of seed that contain weed seeds of listed or non-listed invasive plants and/or invasive plants that are high priority to the area. Seeding should occur as:
 - a) part of road, landing and skid trail construction, maintenance, or site preparation;
- E) Strategy: Implement effective invasive plant treatment plans should invasive plants establish and spread in the plan area.
- 1) The licensee will develop an invasive plant treatment plan with assistance from the FLNRO Invasive Plant Specialist, and implement it on invasive plant sites that become established or spread in the plan area.
- 2) The licensee will monitor the revegetated areas, repeating revegetation as necessary until exposed soil is eliminated.
- 3) The licensee will enter monitoring and invasive plant treatment information into the IAPP application.

5.10 MEASURES RELATED TO NATURAL RANGE BARRIERS (FPPR S. 18)

The FSP holder(s) must carry out measures specified in an FSP to mitigate the removal or ineffectiveness of a range barrier caused, directly or indirectly, through carrying out a forest practice.

There are no known range resources within the area of this plan, therefore no measures are provided to meet the objectives.

5.11 RESOURCE FEATURES – KARST (FPPR 70(1) & GAR 5(1)(A))

Identified resource features are subject to practice requirements; no result or strategy is required as objectives have not been established for the management of the resource feature. Where applicable within the plan area, the holder(s) of the FSP will adhere to the requirements of FPPR S. 70(1) with respect to resource features: An authorized person who carries out a primary forest activity must ensure that the primary forest activity does not damage or render ineffective a resource feature.

Applicable FDU	RESULT / STRATEGY		
All FDUs	1). For this section, in accordance to S. 5(1)(a) of the GAR under FRPA, the following are defined as surface or subsurface elements of a karst system as resource features wherever they are found within the South Island Forest District:		
	(a) karst caves;(b) significant surface karst features; and,(c) important features and elements within high and very high vulnerability karst terrain.		
	2). In this strategy, the holder(s) of this FSP will ensure that any primary forest activities carried out by the holder(s) of the FSP will be carried out in accordance with the established Resource Feature Order under S. 5(1)(a) of the Government Actions Regulation (B.C. Reg. 17/04), surface or subsurface element or karst system Order dated January 15, 2010 or as subsequently amended.		
	3). The holder(s) of the FSP will not publicly disclosed the location of a surface or subsurface element of a karst system, as described in section (1) as a Practice Requirement.		
	4). Where a surface or subsurface element of a karst system as described in section (1) of this Practice Requirement has been located, and has not been previously reported, the agreement holder(s) will satisfy the annual reporting requirements for karst resource features as per FPPR S. 86(3)(b).		

6	APPENDIX	A. FOREST	STEWARDSHIP	PLAN MAPS
1).		/1. I' \ / I\ I'/\ 7 I	17 14 14 15 15 15 15 15 15	

Insert maps for FDUs A to F here.

APPENDIX B: STOCKING STANDARDS

B.1 : Stocking Standards Table for Even-Aged Management

APPENDIX C: FIRST NATIONS ENGAGEMENT (REFERRALS AND CORRESPONDENCE)

APPENDIX D: PUBLIC REVIEW AND COMMENT