



Western Forest Products Inc.
DEFINING A HIGHER STANDARD™

FOREST STEWARDSHIP PLAN

With Backgrounder

North Island Forest Operation (NIFO)

Western Forest Products Inc.

**Licences: TFL 6, FL A94737, and associated
TL's**

PREAMBLE

This is a new Forest Stewardship Plan, replacing the 2012 amendment and extension to the May 22, 2007 Forest Stewardship Plan, which was the first under the Forest and Range Practices Act (FRPA).

FSPs are a key operational plan under FRPA. FSPs identify 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 show practices that will apply to broad areas called Forest Development Units (FDUs), do not show cutblocks and roads for approval, and are in effect for 5 years and may be extended. For each of the 11 FRPA values and their Objectives set by government, such as wildlife and biodiversity, the FSP identifies legally binding results and strategies, forest practices, measures, and standards that will be required to be implemented by the Holder of the FSP in the forest development units. Results and strategies must be consistent with government Objectives, and must be measurable and verifiable. The FSP also must be consistent with government Objectives set in Land-Use Plans, such as the Vancouver Island Land Use Plan, and sub-unit plans such as approved Landscape Unit Plans.

This FSP has been divided into FDUs as shown on the overview map in this FSP. The FDU boundaries correspond with License or Landscape Unit boundaries, and one FDU corresponds with Bill 28 takeback areas and Timber License's that were sold, for outstanding silviculture obligations. An overview map (fig. 1) in this FSP shows the location of all FDU's. More detailed FSP maps are available on the WFP website, and at the below address. This FSP differs from the previous FSPs, in that the FDU's for Upper and Lower Nimpkish are now contained within the WFP Central Island Forest Operations, Forest Stewardship Plan.

Forest Stewardship initiatives do not end at the FSP approval. The FSP forms only one part of the overall forest stewardship and due diligence process. Examples of other sustainability initiatives by WFP include ISO 14001 Environmental Management System, Standard Operating Procedures, CSA Z809-16 Sustainable Forest Management Plans, CSA public advisory groups, Land Based Investment Strategy (Forest Investment Account) administration, and TFL Management Plans. In addition to the legal framework in the FSP, other regulatory requirements are outside the FSP, such as the *Heritage Conservation Act*, *Wildlife Act*, *Foresters Act*, *Land Act*, *Federal Species at Risk Act*, *Federal Fisheries Act*, *WorkSafe BC regulations*, and *First Nations case law*.

The WFP North Island Forest Operation FSP with maps and appendices can be found at: <http://www.westernforest.com/sustainability/environmental-stewardship/planning-and-practices/our-forests/>

More information on FSPs and the public and First Nations input process is available at:

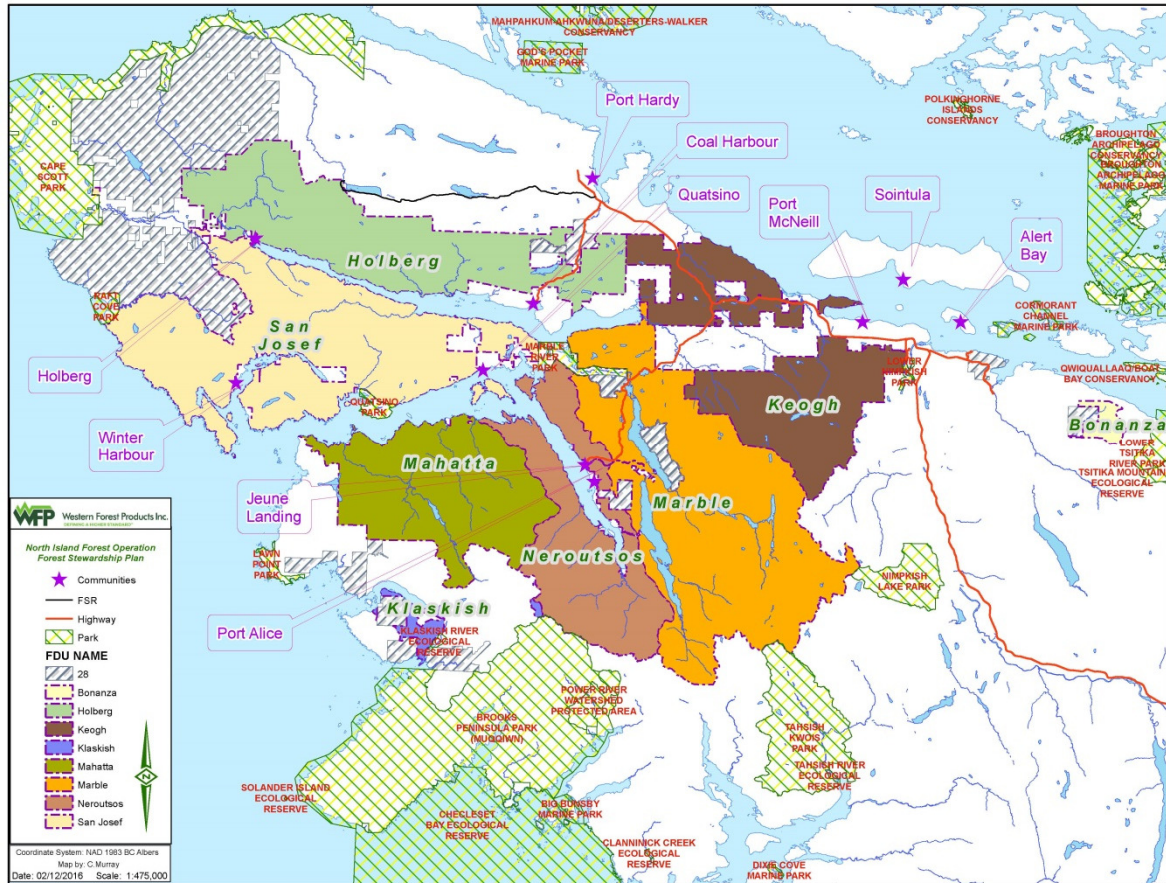
Be Heard: Get Involved in Forest Stewardship Plan Review
http://www.for.gov.bc.ca/code/training/frpa/FSP_brochure.pdf

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1.0 Date of Submission

September 22nd, 2017. Resubmitted February 8th, 2018. Resubmitted April 4th, 2018.

2.0 Interpretation

In this Forest Stewardship Plan (FSP):

Holder of the FSP has the same meaning as in the Acts.

Licensee refers to licensees or agreement holders that have prepared and obtained the minister's approval of the forest stewardship plan or are party to the Forest Stewardship Plan as described in Forest and Range Protection Act (FRPA) s.3 and FRPA s.5 and are "Holders of the Forest Stewardship Plan" or "Co-Holders of the Forest Stewardship Plan" as described in FRPA s.21 and Forest Practices and Planning Regulation (FPPR) s.106.3.

Results or Strategies in this FSP are proposed pursuant to FRPA s.5. Results or Strategies and Undertakings in this FSP refer to the FRPA, FPPR, and/or Government Actions Regulation (GAR) as they were on the date the FSP was submitted for approval; results and strategies apply within the specified FDU, during the term of the plan, for the primary forest activity by the licensees holding the FSP, subject to any qualifications or limitations in the Results or Strategies.

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. FSP sections may also be referred to with "s." in reference to numbered subsections in the Tables.

The FSP Measures and Stocking Standards may apply in the Bill 28 FDU; results and strategies do not apply in the Bill 28 FDU unless otherwise noted.

Bill 28 FDU areas taken from Tree Farm License (TFL) 6 and Forest License (FL) A19240 are now in the North Island TSA. The "Bill 28" FDU has been amended to include portions of former WFP areas from licenses that have been sold or expired since the original FSP was approved: T0596, T0615, T0626, T0326, T0632, T0306, T0293, T0216, T0611, T0629, and portions TFL 6 and former TFL 39 Block 4 now in North Island Community Forest K3Z.

Sections of Orders, Notices, and Objectives are quoted in *italics* in this FSP for convenience only; if there is a discrepancy between the FSP text and a quoted section, the text in the Act, Regulation, Order, or Notice prevails, and should be used in preference to the FSP text.

The term "Enactment" in this FSP, has the same meaning as it has in the Forest and Range Practices Act.

The abbreviation "R/S" in this FSP means "result or strategy".

Background Information where contained in this FSP, is not part of the FSP or the FSP results and strategies.

3.0 Application of This FSP

3.1 Licensee(s) and Licence(s) (FRPA s.3(4))

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:

Licensee	Licences
Western Forest Products Inc.	Tree Farm Licence 6
	FL A94737
	T0592 (Waukwaas Creek) and T0860 (Lemare Lake)
Quatsino First Nation	TSL A66259
Western Forest Products Inc. <i>"Bill 28 FDU": e.g. measures and silviculture obligations only</i>	FL A19240
	T0596, T0615, T0626, T0326, T0632, T0306, T0293, T0216, T0611, T0629, FL A19225, portions of TFL 6 and former TFL 39 Block 4 now in North Island Community Forest K3Z

and, for greater certainty, applies to the obligations of the licensee in respect of these permits under section 29(1) of the Act (FRPA) regarding the establishment of free growing stands, unless, and to the extent, the licensee makes application to add a licence, or gives written notice to remove a licence from this FSP.

3.2 Application of This FSP to FPC Obligations (FRPA ss.197 (4) (5) and (7) and FPPR s.14(1)(d) and (e))

This FSP applies to the following areas:

- (a) all cutblocks and roads subject to cutting permits issued to the licensee under the licences referred to in Paragraph 3.1 on or after the date approval of this FSP, or in accordance with an amendment that provided for a licence or agreement holder to become party to the FSP;
- (b) a cutblock or road subject to a cutting permit issued to the licensee under a licence referred to in Paragraph 3.1 before the FSP term commences, whether the cutting permit is still in effect or not, for which the licensee gives written notice to the Ministry of Forests, Lands, Natural Resource Operations & Rural Development (MFLNRORD) after the FSP term commences, effective the date, and to the extent, specified in the notice;
- (c) a road, or portion thereof, subject to a road permit in effect before the FSP term commences for which the licensee gives written notice to the Ministry of Forests, Lands, Natural Resource Operations & Rural Development (MFLNRORD) after the FSP term commences, effective the date, and to the extent, specified in the written notice;

(d) a Cutblock:

- (i) that is within the Bill 28 FDU;
- (ii) for licensee cutblocks where stocking standards set out in the Forest Practices Code, Forest Development Plan, or in a pre-FRPA prescription would otherwise apply (including a site plan, silviculture prescription or pre-harvest silviculture prescription);
- (iii) for which:

- (A) the *commencement date* occurred; and
- (B) a free growing declaration was not received by the Ministry of Forests, Lands, Natural Resource Operations & Rural Development (MFLNRORD) within RESULTS, before the FSP term commenced; and

(iv) the Licensee may elect to, for the purposes of otherwise specifying stocking standards under FRPA s. 197(4, 5 or 7) within an FDU as specified by FPPR s. 14(1)(d or e) and where ecologically appropriate, to have stocking standards approved under this plan apply to standards units within such cutblocks. For each standards unit, this election is to be made prior to the previously specified late free growing date by electronically providing notice using the Ministry's RESULTS system to indicate the replacement FSP standard.

(e) For licensee cutblocks where stocking standards set out in the Forest Practices Code, a Forest Development Plan, or in a pre-FRPA prescription that would otherwise apply (including a site plan, silviculture prescription or pre-harvest silviculture prescription), a Licensee may elect to, for the purposes of otherwise specifying stocking standards under FRPA s. 197(4, 5 or 7) within an FDU as specified by FPPR s. 14(1)(d or e) and where ecologically appropriate, have stocking standards approved under this plan apply to standards units within such cutblocks. For each standards unit, this election is to be made prior to the previously specified late free growing date by electronically providing notice using the Ministry's RESULTS system to indicate the replacement FSP standard.

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

The term of this FSP is 5 years.

The FSP may be terminated earlier if the licensee elects to replace it with another approved FSP; or may be extended pursuant to the Act and regulations.

The term of this FSP commences on the date the FSP is approved by the DDM.

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

5.1 Boundaries of FDU

The boundaries of the FDU's under this FSP are shown on the FSP map. The FDU boundaries include, despite any inconsistency between the FSP Map and the boundaries of a tree farm licence or timber licence referred to in Paragraph 3.1, the full area of such licence, except any area shown on the map as excluded.

The following FDU's are intended to follow Landscape Unit boundaries as they overlap the licensee tenures:

- 1) San Josef FDU
- 2) Holberg FDU
- 3) Keogh FDU
- 4) Bonanza FDU
- 5) Marble FDU
- 6) Neroutsos FDU
- 7) Mahatta FDU
- 8) Klaskish FDU

Note that LU boundaries and RMZ boundaries do not necessarily coincide.

The Bill 28 FDU encompasses WFP areas under Bill 28 takeback (now generally within the North Island TSA), and also includes licences sold (e.g. TL's 293, 306, 326, 596, 611, 615, 626, 629; not all the TL's are mapped) and portions of North Island Community Forest K3Z and TL 216, for which there are outstanding silviculture obligations.

Former FDUs Upper Nimpkish and Lower Nimpkish are no longer a part of this FSP and are included in the WFP Central Island Forest Operation FSP.

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

The FSP map shows the boundaries of all FDUs in the approved FSP.

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))

The previous FSP FDU's followed Landscape Units in the Holder of the FSPs licence areas.

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

There are no remaining areas to which FRPA s.196(1) applies.

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

The FSP map shows the designations and other areas listed in FPPR s.14(2) that were in effect 4 months before the FSP was submitted for approval. These include, but are not limited to, Ungulate Winter Ranges, Wildlife Habitat Areas, Fisheries Sensitive Watersheds, Scenic Areas, Community Watersheds, Old Growth Management Areas.

5.6 Areas within FDU's considered to be approved (FRPA ss.196(1) and (2) and FPPR ss.14(1)(c) and 110))

There are no areas to which section 196(1) or (2) of the Act applies as of the Date of Submission and that are within one of the FDU's.

5.7 Areas within FDU subject to Cutting Permit or Road Permit (FPPR s.14(3) and FRPA s.196 (transition from FDP))

The FSP map shows the areas within the FDUs that are subject to a cutting permit or road permit: a) held by the licensee, and b) in effect 4 months before the submission of the FSP for approval. (note: can include any CPs/RPs in effect up to submission date).

Blanket CPs issued for the purposes of salvage (post harvest and damaged timber) are listed below:

WFP Jeune Landing Operating Area – TFL 6, CP 92, 6/92; TFL 6, CP 97, 6/97
WFP Port McNeill Operating Area – TFL 6, CP 93, 6/93; TFL 6, CP 98, 6/98
WFP Holberg Operating Area – TFL 6, CP 90, 6/90; TFL 6, CP 91, 6/91
WFP Port McNeill Operating Area – former TFL 39 Block 4, CP 494, 6/494

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

The FSP map shows the areas within the FDUs, if any, that are declared areas under FPPR s.14(4).

6.0 FRPA Values and Results or Strategies

FRPA

s.5 (1) *A forest stewardship plan must*

- (b) specify intended results or strategies, each in relation to*
 - (i) objectives set by government, and*
 - (ii) other objectives that are established under this Act or the regulations and that pertain to all or part of the area subject to the plan, and*
- (c) conform to prescribed requirements.*

(1.1) The results and strategies referred to in subsection (1) (b) must be consistent to the prescribed extent with objectives set by government and with the other objectives referred to in section 5 (1) (b).

Results and Strategies or Undertakings in this section are proposed in accordance with the qualifications and limitations described in Section 2.0 Interpretation, of this FSP, and in accordance with the FRPA and the FPPR, as they were on the date of FSP submission:

6.1 FRPA Value: Soil

FPPR Section 5 - 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.

Table 1.1: Soils	
Objective	FPPR s.5
FPPR Practices	<p>The Practice is repeated here for convenience, but if differences exist between the text of the FPPR and the text herein, the text of the FPPR as it was at time of FSP submission prevails:</p> <p><i>FPPR 12.1 (1) An agreement holder who is required to prepare a forest stewardship plan is exempt for that plan from the requirement under section 5 of the Act that the plan specify intended results or strategies in relation to the objective for soils set out in section 5 of this regulation if the person</i></p> <ul style="list-style-type: none"> <i>(a) prepares the plan, including in it an undertaking that the person will comply with sections 35 and 36 of this regulation, during the term of the plan, and</i> <i>(b) receives the minister's approval to the plan.</i> <p><i>Soil disturbance limits</i></p> <p><i>35 (1)</i></p> <p><i>In this section:</i></p>

	<p><i>"roadside work area" means the area adjacent to a road where one or both of the following are carried out:</i></p> <ul style="list-style-type: none"> <i>(a) decking, processing or loading timber;</i> <i>(b) piling or disposing of logging debris;</i> <p><i>"sensitive soils" means soils that, because of their slope gradient, texture class, moisture regime, or organic matter content have the following risk of displacement, surface erosion or compaction:</i></p> <ul style="list-style-type: none"> <i>(a) for the Interior, a very high hazard;</i> <i>(b) for the Coast, a high or very high hazard.</i> <p><i>(2) Repealed [B.C. Reg. 580/04]</i></p> <p><i>(3) An agreement holder other than a holder of a minor tenure who is carrying out timber harvesting must not cause the amount of soil disturbance on the net area to be reforested to exceed the following limits:</i></p> <ul style="list-style-type: none"> <i>(a) if the standards unit is predominantly comprised of sensitive soils, 5% of the area covered by the standards unit, excluding any area covered by a roadside work area;</i> <i>(b) if the standards unit not is not predominantly comprised of sensitive soils, 10% of the area covered by the standards unit, excluding any area covered by a roadside work area;</i> <i>(c) 25% of the area covered by a roadside work area.</i> <p><i>(4) An agreement holder may cause soil disturbance that exceeds the limits specified in subsection (3) if the holder:</i></p> <ul style="list-style-type: none"> <i>(a) is removing infected stumps or salvaging windthrow and the additional disturbance is the minimum necessary, or</i> <i>(b) is constructing a temporary access structure and both of the following apply:</i> <ul style="list-style-type: none"> <i>(i) the limit set out in subsection (3) (a) or (b), as applicable, is not exceeded by more than 5% of the area covered by the standards unit, excluding the area covered by a roadside work area;</i> <i>(ii) before the regeneration date, a sufficient amount of the area within the standards unit is rehabilitated such that the agreement holder is in compliance with the limits set out in subsection (3).</i> <p><i>(5) The minister may require an agreement holder to rehabilitate an area of compacted soil if all of the following apply:</i></p> <ul style="list-style-type: none"> <i>(a) the area of compacted soil</i> <ul style="list-style-type: none"> <i>(i) was created by activities of the holder,</i> <i>(ii) is within the net area to be reforested, and</i> <i>(iii) is a minimum of 1 ha in size;</i> <i>(b) the holder has not exceeded the limits described in subsection (3);</i> <i>(c) rehabilitation would, in the opinion of the minister,</i> <ul style="list-style-type: none"> <i>(i) materially improve the productivity and the hydrologic function of the soil within the area, and</i> <i>(ii) not create an unacceptable risk of further damage or harm to, or impairment of, forest resource values related to one or more of the subjects listed in section 149 (1) of the Act.</i>
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	<p>(6) An agreement holder who rehabilitates an area under subsection (4) or (5) must</p> <ul style="list-style-type: none"> (a) remove or redistribute woody materials that are exposed on the surface of the area and are concentrating subsurface moisture, to the extent necessary to limit the concentration of subsurface moisture on the area, (b) de-compact compacted soils, and (c) return displaced surface soils, retrievable side-cast and berm materials. <p>(7) If an agreement holder rehabilitates an area under subsection (4) or (5) and erosion of exposed soil from the area would cause sediment to enter a stream, wetland or lake, or a material adverse effect in relation to one or more of the subjects listed in section 149 (1) of the Act, the agreement holder, unless placing debris or revegetation would not materially reduce the likelihood of erosion, must</p> <ul style="list-style-type: none"> (a) place woody debris on the exposed soils, or (b) revegetate the exposed mineral soils. <p><i>Permanent access structure limits</i> 36 (1) An agreement holder must ensure that the area in a cutblock that is occupied by permanent access structures built by the holder or used by the holder does not exceed 7% of the cutblock, unless</p> <ul style="list-style-type: none"> (a) there is no other practicable option on that cutblock, having regard to <ul style="list-style-type: none"> (i) the size, topography and engineering constraints of the cutblock, (ii) in the case of a road, the safety of road users, or (iii) the requirement in selection harvesting systems for excavated or bladed trails or other logging trails, or (b) additional permanent access structures are necessary to provide access beyond the cutblock. <p>(2) If an agreement holder exceeds the limit for permanent access structures described in subsection (1) for either of the reasons set out in that subsection, the holder must ensure that the limit is exceeded as little as practicable.</p> <p>(3) An agreement holder may rehabilitate an area occupied by permanent access structures in accordance with the results or strategies specified in the forest stewardship plan or by</p> <ul style="list-style-type: none"> (a) removing or redistributing woody materials that are exposed on the surface of the area and are concentrating subsurface moisture, as necessary to limit the concentration of subsurface moisture on the area, (b) de-compacting compacted soils, and (c) returning displaced surface soils, retrievable side-cast and berm materials. <p>(4) If an agreement holder rehabilitates an area under subsection (3) (a) and erosion of exposed soil from the area would cause sediment to enter a stream, wetland or lake, or a material adverse effect in relation to one or more of the subjects listed in section 149 (1) of the Act, the agreement holder,</p>
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	<p><i>unless placing debris or revegetation would not materially reduce the likelihood of erosion, must</i></p> <p><i>(a) place woody debris on the exposed soils, or</i></p> <p><i>(b) revegetate the exposed mineral soils.</i></p>	
Results or strategies pursuant to FRPA s.5 / Undertaking	<p><u>Results:</u></p> <p>1) The Holder of the FSP undertakes to comply with sections 35 and 36 of the FPPR, as it was at the time of submission, except the definition in Result or Strategy section 2 will apply.</p> <p>2) <u>Definitions for purposes of this result:</u></p> <p>Standards units for the purposes of FPPR s.1, ss.35(3)(a) and (b), and s.35(4), means:</p> <p>a) standards units defined based on homogeneous soil disturbance limits including groups of standard units within a cutblock with the same soil disturbance limit, or</p> <p>b) groups of standard units or the entire cutblock, if the most restrictive soil disturbance limit for the standards units or cutblock is applied.</p>	
Apply to these Forest Development Units:	<input checked="" type="checkbox"/> Keogh <input checked="" type="checkbox"/> Marble <input checked="" type="checkbox"/> Holberg <input checked="" type="checkbox"/> San Josef	<input checked="" type="checkbox"/> Mahatta <input checked="" type="checkbox"/> Neroutsos <input checked="" type="checkbox"/> Klaskish <input checked="" type="checkbox"/> Bonanza

6.2 FRPA Value: Timber

FPPR Section 6. 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.*

Table 2.1: Objective Set by Government for Timber	
Objective	FPPR s.6
Results or strategies pursuant to FRPA s.5	<p><u>Exemption:</u></p> <p>Results or strategies are not specified in this FSP under the FPPR 6 Objective, per the FPPR s.12(8) exemption for results or strategies for Timber, except as provided for the VILUP Land-Use Objectives 7 and 8 which are addressed in FSP Table 6.1.</p>

6.3 FRPA Value: Water, fish, wildlife and biodiversity within riparian areas

FPPR Section 8 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.

Table 3.1: Water, fish, wildlife and biodiversity within riparian areas

Objectives	<p><i>FPPR s.12.1(2) An agreement holder who is required to prepare a forest stewardship plan is exempt for that plan from the requirement under section 5 of the Act that the plan specify intended results or strategies in relation to the objective for water, fish, wildlife and biodiversity set out in section 8 of this regulation if the person (a) prepares the plan, including in it an undertaking that the person will comply with sections 47 to 51, 52 (2) and 53 of this regulation, during the term of the plan, and (b) receives the minister's approval to the plan.</i></p> <p>Objectives: FPPR Section 8</p> <p><i>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.</i></p> <p>The Practice is repeated here for convenience, but if differences exist between the text of the Order and the text herein, the text of the FPPR as it was at time of FSP submission prevails:</p> <p><i>FPPR Part 4: Division 3 – Riparian Areas</i></p> <p><i>Stream riparian classes</i></p> <p><i>47. (1) In this section, "active flood plain" means the level area with alluvial soils, adjacent to streams, that is flooded by stream water on a periodic basis and is at the same elevation as areas showing evidence of</i></p> <ul style="list-style-type: none"><i>(a) flood channels free of terrestrial vegetation,</i><i>(b) rafted debris or fluvial sediments, recently deposited on the surface of the forest floor or suspended on trees or vegetation, or</i><i>(c) recent scarring of trees by material moved by flood waters.</i> <p><i>(2) A stream that is a fish stream or is located in a community watershed has the following riparian class:</i></p> <ul style="list-style-type: none"><i>(a) S1-A, if the stream averages, over a 1 km length, either a stream width or an active flood plain width of 100 m or greater;</i><i>(b) S1-B, if the stream width is greater than 20 m but the stream does not have a riparian class of S1-A;</i><i>(c) S2, if the stream width is not less than 5 m but not more than 20 m;</i><i>(d) S3, if the stream width is not less than 1.5 m but is less than 5 m;</i><i>(e) S4, if the stream width is less than 1.5 m.</i> <p><i>(3) A stream that is not a fish stream and is located outside of a community watershed has the following riparian class:</i></p> <ul style="list-style-type: none"><i>(a) S5, if the stream width is greater than 3 m;</i><i>(b) S6, if the stream width is 3 m or less.</i> <p><i>(4) Subject to subsections (5) or (6), for each riparian class of stream, the minimum riparian management area width, riparian reserve zone width and riparian management zone width, on each side of the stream, are as follows:</i></p> <table><tr><th>Stream Class</th><th>RMA (m)</th><th>RRZ (m)</th><th>RMZ (m)</th></tr><tr><td>S1-A</td><td>100</td><td>0</td><td>100</td></tr></table>	Stream Class	RMA (m)	RRZ (m)	RMZ (m)	S1-A	100	0	100
Stream Class	RMA (m)	RRZ (m)	RMZ (m)						
S1-A	100	0	100						

S1-B	70	50	20
S2	50	30	20
S3	40	20	20
S4	30	0	30
S5	30	0	30
S6	20	0	20

(5) If the width of the active flood plain of a stream exceeds the specified width for the riparian management zone, the width of the riparian management zone extends to the outer edge of the active flood plain.

(6) The minister may specify a riparian reserve zone for a stream with a riparian class of S1-A if the minister considers that a riparian reserve zone is required.

(7) The riparian reserve zone for a stream begins at the edge of the stream channel bank and extends to the width described in subsection (4) or (6).

(8) The riparian management zone for a stream begins at

- (a) the outer edge of the riparian reserve zone, or
- (b) if there is no riparian reserve zone, the edge of the stream channel bank, and extends to the width described in subsection (4) or (5).

Wetland riparian classes

48. (1) Wetlands have the following riparian classes:

- (a) W1, if the wetland is greater than 5 ha in size;
- (b) W2, if the wetland is not less than 1 ha and not more than 5 ha in size and is in one of the following biogeoclimatic zones or subzones:
 - (i) Ponderosa Pine;
 - (ii) Bunch Grass;
 - (iii) Interior Douglas-fir, very dry hot, very dry warm or very dry mild;
 - (iv) Coastal Douglas-fir;
 - (v) Coastal Western Hemlock, very dry maritime, dry maritime or dry submarine;
- (c) W3, if the wetland is not less than 1 ha and not more than 5 ha in size and is in a biogeoclimatic zone or subzone other than one referred to in paragraph (b);
- (d) W4, if the wetland is
 - (i) not less than 0.25 ha and less than 1 ha in size and is in a biogeoclimatic zone or subzone referred to in paragraph (b) (i), (ii) or (iii), or
 - (ii) not less than 0.5 ha and less than 1 ha in size and is in a biogeoclimatic zone or subzone referred to in paragraph (b) (iv) or (v).

(2) Despite subsection (1), an area is to be treated as a single wetland with a riparian class of W5 if

- (a) the area contains
 - (i) two or more W1 wetlands located within 100 m of each other.

	<p>(i) not less than 0.25 ha and not more than 1 ha in size and is in a biogeoclimatic zone or subzone referred to in paragraph (c) (i), (ii) or (iii), or (ii) not less than 0.5 ha and not more than 1 ha in size and is in a biogeoclimatic zone or subzone referred to in paragraph (c) (iv) or (v).</p> <p>(2) Subject to subsection (3), for each riparian class of lake, the minimum riparian management area width, riparian reserve zone width and riparian management zone width are as follows:</p> <table><tr><th>Lake Class</th><th>RMA (m)</th><th>RRZ (m)</th><th>RMZ (m)</th></tr><tr><td>L1-A</td><td>0</td><td>0</td><td>0</td></tr><tr><td>L1-B</td><td>10</td><td>10</td><td>0</td></tr><tr><td>L2</td><td>30</td><td>10</td><td>20</td></tr><tr><td>L3</td><td>30</td><td>0</td><td>30</td></tr><tr><td>L4</td><td>30</td><td>0</td><td>30</td></tr></table> <p>(3) If the minister considers it necessary, the minister may specify a riparian management area and a riparian reserve zone for a lake with a riparian class of L1-A.</p> <p>(4) The riparian reserve zone for a lake begins at the edge of the lake and extends to the width described in subsection (2) or (3).</p> <p>(5) The riparian management zone for a lake begins at</p> <ul style="list-style-type: none">(a) the outer edge of the riparian reserve zone, or(b) if there is no riparian reserve zone, the edge of the lake, and extends to the width described in subsection (2) or (3). <p>Restrictions in a riparian management area</p> <p>50. (1) A person must not construct a road in a riparian management area, unless one of the following applies:</p> <ul style="list-style-type: none">(a) locating the road outside the riparian management area would create a higher risk of sediment delivery to the stream, wetland or lake to which the riparian management area applies;(b) there is no other practicable option for locating the road;(c) the road is required as part of a stream crossing. <p>(2) If a road is constructed within a riparian management area, a person must not carry out road maintenance activities beyond the clearing width of the road, except as necessary to maintain a stream crossing.</p> <p>(3) A person who is authorized in respect of a road must not remove gravel or other fill from within a riparian management area in the process of constructing, maintaining or deactivating a road, unless</p> <ul style="list-style-type: none">(a) the gravel or fill is within a road prism,(b) the gravel or fill is at a stream crossing, or(c) there is no other practicable option. <p>51. (1) An agreement holder must not cut, modify or remove trees in a riparian reserve zone, except for the following purposes:</p> <ul style="list-style-type: none">(a) felling or modifying a tree that is a safety hazard, if there is no other practicable option for addressing the safety hazard;(b) topping or pruning a tree that is not wind firm;(c) constructing a stream crossing;(d) creating a corridor for full suspension yarding;	Lake Class	RMA (m)	RRZ (m)	RMZ (m)	L1-A	0	0	0	L1-B	10	10	0	L2	30	10	20	L3	30	0	30	L4	30	0	30
Lake Class	RMA (m)	RRZ (m)	RMZ (m)																						
L1-A	0	0	0																						
L1-B	10	10	0																						
L2	30	10	20																						
L3	30	0	30																						
L4	30	0	30																						

	<p>(e) creating guyline tiebacks;</p> <p>(f) carrying out a sanitation treatment;</p> <p>(g) felling or modifying a tree that has been windthrown or has been damaged by fire, insects, disease or other causes, if the felling or modifying will not have a material adverse impact on the riparian reserve zone;</p> <p>(h) felling or modifying a tree under an occupant licence to cut, master licence to cut or free use permit issued in respect of an area that is subject to a licence, permit, or other form of tenure issued under the Land Act, Coal Act, Geothermal Resources Act, Mines Act, Mineral Tenure Act, Mining Right of Way Act, Ministry of Lands, Parks and Housing Act or Petroleum and Natural Gas Act, if the felling or modification is for a purpose expressly authorized under that licence, permit or tenure;</p> <p>(i) felling or modifying a tree for the purpose of establishing or maintaining an interpretative forest site, recreation site, recreation facility or recreation trail.</p> <p>(2) An agreement holder who fells, tops, prunes or modifies a tree under subsection (1) may remove the tree only if the removal will not have a material adverse effect on the riparian reserve zone.</p> <p>(3) An agreement holder must not carry out the following silviculture treatments in a riparian reserve zone:</p> <p>(a) grazing or broadcast herbicide applications for the purpose of brushing;</p> <p>(b) mechanized site preparation or broadcast burning for the purpose of site preparation;</p> <p>(c) spacing or thinning.</p> <p><i>Restrictions in a riparian management zone</i></p> <p>52. (1) A holder of a minor tenure who fells trees in a cutblock within a riparian management zone ...[The Holder of the FSP is not a minor tenure holder].</p> <p>(2) An authorized person who cuts, modifies or removes trees in a riparian management zone for an S4, S5 or S6 stream that has trees that contribute significantly to the maintenance of stream bank or channel stability must retain enough trees adjacent to the stream to maintain the stream bank or channel stability, if the stream</p> <p>(a) is a direct tributary to an S1, S2 or S3 stream,</p> <p>(b) flows directly into the ocean, at a point near to or where one or more of the following is located:</p> <p>(i) a herring spawning area;</p> <p>(ii) a shellfish bed;</p> <p>(iii) a saltwater marsh area;</p> <p>(iv) an aquaculture site;</p> <p>(v) a juvenile salmonid rearing area or an adult salmon holding area, or</p> <p>(c) flows directly into the ocean at a point near to the location of an area referred to in paragraph (b) and failure to maintain stream bank or channel stability will have a material adverse impact on that area.</p> <p><i>Temperature sensitive streams</i></p> <p>53. An authorized person who fells, modifies or removes trees in a riparian management area adjacent to a temperature sensitive stream, or a stream that is a direct tributary to a temperature sensitive stream, must retain either or both of the following in an amount sufficient to prevent the temperature of</p>
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	<p><i>the temperature sensitive stream from increasing to an extent that would have a material adverse impact on fish:</i></p> <ul style="list-style-type: none"> <i>(a) streamside trees whose crowns provide shade to the stream;</i> <i>(b) understory vegetation that provides shade to the stream.</i> <p><i>Fan destabilization</i></p> <p><i>54. An authorized person who carries out a primary forest activity on the Coast must ensure that the primary forest activity does not cause fan destabilization that has a material adverse effect in relation to one or more of the subjects listed in section 149 (1) of the Act.</i></p> <p><i>FPPR Schedule 1 section 2: Factors relating to objective set by government for water, fish, wildlife and biodiversity in riparian areas</i></p> <p><i>2. The following factors apply to a result or strategy for the objective set out in section 8 [objectives set by government for water, fish, wildlife and biodiversity within riparian areas]:</i></p> <ul style="list-style-type: none"> <i>(a) the type of management regime that is required for a riparian area, having regard to</i> <ul style="list-style-type: none"> <i>(i) the need to buffer the aquatic ecosystem of a stream, wetland or lake from the introduction of materials that are deleterious to water quality or fish habitat,</i> <i>(ii) the role played by trees and understory vegetation in conserving water quality, fish habitat, wildlife habitat and biodiversity,</i> <i>(iii) the need to maintain stream bank and stream channel integrity, and</i> <i>(iv) the relative importance and sensitivity of different riparian classes of streams, wetlands, and lakes in conserving water quality, fish habitat, wildlife habitat and biodiversity;</i> <i>(b) the type, timing or intensity of forest practices that can be carried out within the context of a management regime referred to in paragraph (a);</i> <i>(c) the role of forest shading in controlling an increase in a temperature sensitive stream, if the increase might have a deleterious effect on fish or fish habitat.</i>
Results or Strategies pursuant to FRPA s.5	<p><u>Strategies:</u></p> <p>1) In accordance with FPPR s.12.3¹:</p> <ul style="list-style-type: none"> a) the Holder of the FSP will comply with FPPR sections 47 to 53, except 52(1) which applies to minor tenure holders, and except 52(2) which is addressed in FSP Table 3.4, as results and strategies in this FSP, b) except for the RRZ widths set out in section 47(4), 48(3), and 49(2) that will not apply where a riparian variance prescription is prepared by a Qualified Professional prior to harvest, and implemented by the Holder of the FSP during primary forest activities in the following situations and circumstances: <ul style="list-style-type: none"> i. where it is not practicable to retain the full width of RRZ in these FPPR sections due to the results of a terrain stability assessment, existing road location and/or road location options, or high or very high windthrow risk; and

¹ Conditional exemption - from one or more of FPPR sections 47 to 53

	<p>ii. where due to the circumstances outlined in (i) the riparian variance prescription is expected to result in no net loss of RRZ area associated with the same cutblock or road, or along the same stream, wetland, or lake, and the variance will result in the same or better short and long term outcomes associated with those riparian areas and FPPR section 8 objectives [water quality, fish habitat, wildlife habitat and biodiversity]; and</p> <p>c) A riparian variance prescription implemented under 1(b) will include:</p> <p>i. the stream class, channel type, stream width, and the required RRZ width assessed by a Qualified Professional, any additional management regime prescribed for other FPPR Schedule 1 s.2 Factors, and an assessment that the situations and circumstances in 1(b) that allow the result or strategy to be applied;</p> <p>ii. the applicability of any other results or strategies in this FSP, if there are specific RRZ practices in relation to Fisheries Sensitive Watersheds, or Community Watersheds;</p> <p>iii. no net change in area in total riparian reserve zones as would have been achieved under ss.47(4), 48(3), 49(2) associated with the same cutblock or road, or along the same stream, wetland, or lake; and</p> <p>iv. the variances in the RRZ width are tracked spatially and are auditable.</p> <p>1.1) When using any result or strategy in R/S section 1, it is necessary to also apply Table 3.4 to specify retention for the RMZ.</p> <p>2) With respect to FPPR s.50(1), the criteria that are outlined in FPPR s.50(1) will also apply in a decision to rebuild versus relocate an existing non-status road.</p> <p>3) For the purpose that is identified as an allowable exception in FPPR s.51(1)(e) <i>creating guyline tiebacks</i>, creating tailhold tiebacks is also an allowable exemption for tiebacks in this FSP.</p>		
Apply to these Forest Development Units:	<input checked="" type="checkbox"/> Keogh <input checked="" type="checkbox"/> Marble <input checked="" type="checkbox"/> Holberg <input checked="" type="checkbox"/> San Josef	<input checked="" type="checkbox"/> Mahatta <input checked="" type="checkbox"/> Neroutsos <input checked="" type="checkbox"/> Klaskish <input checked="" type="checkbox"/> Bonanza	

Table 3.2: Water, fish, wildlife and biodiversity within riparian areas: alternative for windthrow management	
Objective	<p>FPPR Section 8</p> <p><i>FPPR 12.1(2) An agreement holder who is required to prepare a forest stewardship plan is exempt for that plan from the requirement under section 5 of the Act that the plan specify intended results or strategies in relation to the objective for water, fish, wildlife and biodiversity set out in section 8 of this regulation if the person (a) prepares the plan, including in it an undertaking</i></p>

	<i>that the person will comply with sections 47 to 51, 52 (2) and 53 of this regulation, during the term of the plan, and (b) receives the minister's approval to the plan.</i>
Results or Strategies pursuant to FRPA s.5	<p><u>Results:</u></p> <ol style="list-style-type: none"> 1) In accordance with FPPR s.12.3², the Holder of the FSP undertakes to comply with FPPR sections 47 to 53, except on the basis of FPPR s.12.3(5)³ the Holder of the FSP may fall and remove trees in an S3 stream RRZ, in the following situations or circumstances: harvesting in a riparian reserve zone is intended only for portions of S3 riparian reserve zones with a likely high or very high windthrow risk (Mitchell Classes, 1998), or where there is estimated to be likely greater than 50% of trees windthrown in the first tree length from what would be the default RRZ edge. 2) Prior to harvest an assessment and prescription for retention of trees in RMAs will be conducted by a Qualified Professional considering (in addition to the other considerations in this R/S): <ol style="list-style-type: none"> a) Water quality, fish habitat, wildlife habitat and biodiversity associated with those riparian areas; b) The FPPR Schedule 1 s.2 Factors; and c) Potential site specific safety and operational issues. 3) The FSP Holder will implement the prescription in R/S s.2 by designing cutblocks and roads and planning and conducting primary forest activities consistent with the prescription. 4) If either result above is not applicable or is not elected to be applied by the Holder of the FSP, Table 3.1 in this FSP will be applied. 5) When using any result or strategy in R/S section 1, it is necessary to also apply Table 3.4 to specify retention for the RMZ. <p><u>Strategy addressing the landscape level for FPPR s.8:</u></p> <ol style="list-style-type: none"> 6) An equivalent area and/or equivalent basal area (see definitions), as felled in S3 streams in the result above, will be located: <ol style="list-style-type: none"> a) in the same cutblock, or in other cutblocks in the same watershed, or in an immediately adjacent watershed; and b) the equivalent trees will be located in the following order of priority: <ol style="list-style-type: none"> i. stream class S1, S2, S3, or S4 alluvial reaches; ii. stream class S1, S2, S3, or S4; iii. along stream gullies with sediment delivery potential to downslope fish streams; and c) if a Holder of the FSP completes harvesting in one or more cutblocks to which the strategy applies during the 5 year term of the FSP, and then every 5 year period thereafter, the Holder of the FSP must ensure that, at the end of that period, the total area

² Conditional exemption - from one or more of FPPR sections 47 to 53

³ FPPR s.12.3(5) A person required to prepare a forest stewardship plan is exempt from section 51 (1) or (3) if the person (a) prepares and submits to the minister the proposed plan, including an intended result or strategy for the objective for water, fish, wildlife and biodiversity set out in section 8, in relation to the areas of primary forest activity under the plan, and (b) receives the minister's approval to the plan.

	<p>allocated to the other cutblocks will be within +/- 10%, and the balance will be carried into the subsequent period.</p> <p>7) If requirements for WTRA distribution at the landscape level are established in other results or strategies or in Landscape Unit Objectives applicable to the cutblocks, this strategy will be implemented to also meet those results or strategies.</p> <p>8) Definitions for purposes of the result or strategy: Equivalent area = area of RRZ with trees removed x estimated Basal Area of standing trees cut / estimated basal area before cutting. Equivalent basal area = total basal area of RRZ before felling x estimated Basal Area of standing trees cut / estimated basal area before felling.</p> <p>Stream sensitivity refers to an assessment of fish habitat and channel sensitivity to disturbance. For the purposes of this strategy, assessment of streams as alluvial (moderate-high sensitivity), semi-alluvial (low-high sensitivity), or non-alluvial (low-moderate sensitivity) will be an acceptable system.</p>	
Apply to these Forest Development Units:	<input checked="" type="checkbox"/> Keogh <input checked="" type="checkbox"/> Marble <input checked="" type="checkbox"/> Holberg <input checked="" type="checkbox"/> San Josef	<input checked="" type="checkbox"/> Mahatta <input checked="" type="checkbox"/> Neroutsos <input checked="" type="checkbox"/> Klaskish <input checked="" type="checkbox"/> Bonanza

Table 3.3: Silviculture treatments in a riparian reserve zone	
Objective	FPPR Section 8
FPPR Practices	<p>The Practice is repeated here for convenience, but if differences exist between the text of the Order and the text herein, the text of the FPPR as it was at time of FSP submission prevails: <i>FPPR 51(3) An agreement holder must not carry out the following silviculture treatments in a riparian reserve zone:</i></p> <p>(a) <i>grazing or broadcast herbicide applications for the purpose of brushing;</i></p> <p>(b) <i>mechanized site preparation or broadcast burning for the purpose of site preparation;</i></p> <p>(c) <i>spacing or thinning.</i></p>
Results or Strategies pursuant to FRPA s.5	<p>In accordance with FPPR s.12.3(5), the following are intended results or strategies:</p> <p><u>The forest development units applicable to the result or strategy:</u> Applies within all FDUs in the FSP. The FDUs affected are identified below.</p> <p><u>Results:</u></p> <p>1) The Holder of the FSP adopts FPPR s.51(3)(a) and (b), and in relation to the legislated practice requirement stated under FPPR s.51(3)(c) to enhance wildlife, fish habitat, and biodiversity values associated with riparian areas, the Holder instead may carry out silviculture treatments (spacing, thinning or alder conversion in immature (less than 120 years old)) under an appropriate cutting authority, in riparian reserve zones to:</p> <p>(a) enhance wildlife values;</p>

	(b) enhance coniferous or alder components to enhance fisheries values (c) create old growth characteristics or large woody debris; (d) enhance coniferous components to meet silviculture obligations approved under the FPC or stocking obligations authorized under this FSP subject to consideration of FPPR Schedule 1 s.2 factors; or (e) reduce future windthrow potential.	
Apply to these Forest Development Units:	<input checked="" type="checkbox"/> Keogh <input checked="" type="checkbox"/> Marble <input checked="" type="checkbox"/> Holberg <input checked="" type="checkbox"/> San Josef	<input checked="" type="checkbox"/> Mahatta <input checked="" type="checkbox"/> Neroutsos <input checked="" type="checkbox"/> Klaskish <input checked="" type="checkbox"/> Bonanza

Table 3.4: Retention of trees in a riparian management zone	
Objectives	<p>The Practice is repeated here for convenience, but if differences exist between the text of the FPPR and the text herein, the text of the FPPR as it was at time of FSP submission prevails:</p> <p><i>FPPR s.12(3) -- 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.</i></p> <p><i>FPPR s.12.1(2) An agreement holder who is required to prepare a forest stewardship plan is exempt for that plan from the requirement under section 5 of the Act that the plan specify intended results or strategies in relation to the objective for water, fish, wildlife and biodiversity set out in section 8 of this regulation if the person (a) prepares the plan, including in it an undertaking that the person will comply with sections 47 to 51, 52 (2) and 53 of this regulation, during the term of the plan, and (b) receives the minister's approval to the plan.</i></p> <p><i>FPPR s.52(2) An authorized person who cuts, modifies or removes trees in a riparian management zone for an S4, S5 or S6 stream that has trees that contribute significantly to the maintenance of stream bank or channel stability must retain enough trees adjacent to the stream to maintain the stream bank or channel stability, if the stream</i></p> <p style="padding-left: 40px;"> <i>(a) is a direct tributary to an S1, S2 or S3 stream,</i> <i>(b) flows directly into the ocean, at a point near to or where one or more of the following is located:</i> <ul style="list-style-type: none"> <i>(i) a herring spawning area;</i> <i>(ii) a shellfish bed;</i> <i>(iii) a saltwater marsh area;</i> <i>(iv) an aquaculture site;</i> <i>(v) a juvenile salmonid rearing area or an adult salmon holding area, or</i> <i>(c) flows directly into the ocean at a point near to the location of an area referred to in paragraph (b) and failure to maintain stream bank or channel stability will have a material adverse impact on that area.</i> </p> <p><i>FPPR Schedule 1 section 2: Factors relating to objective set by government for water, fish, wildlife and biodiversity in riparian areas</i></p> <p><i>2. The following factors apply to a result or strategy for the objective set out in section 8 [objectives set by government for water, fish, wildlife and biodiversity within riparian areas]:</i></p>

	<p>(a) the type of management regime that is required for a riparian area, having regard to</p> <ul style="list-style-type: none"> (i) the need to buffer the aquatic ecosystem of a stream, wetland or lake from the introduction of materials that are deleterious to water quality or fish habitat, (ii) the role played by trees and understory vegetation in conserving water quality, fish habitat, wildlife habitat and biodiversity, (iii) the need to maintain stream bank and stream channel integrity, and (iv) the relative importance and sensitivity of different riparian classes of streams, wetlands, and lakes in conserving water quality, fish habitat, wildlife habitat and biodiversity; <p>(b) the type, timing or intensity of forest practices that can be carried out within the context of a management regime referred to in paragraph (a);</p> <p>(c) the role of forest shading in controlling an increase in a temperature sensitive stream, if the increase might have a deleterious effect on fish or fish habitat.</p>
Results or Strategies pursuant to FRPA s.5	<p><u>Strategies:</u></p> <ol style="list-style-type: none"> 1) The strategy applies in cutblocks during timber harvesting in riparian management zones (RMZs). 2) Prior to harvest an assessment and prescription for retention of trees in the RMZ will be conducted by a Qualified Professional considering: <ol style="list-style-type: none"> a) Water quality, fish habitat, wildlife habitat and biodiversity associated with those riparian areas; b) The FPPR Schedule 1 s.2 Factors; c) FPPR s.52(2); d) Conservation of any specific resources (defined below) in the RMZ; e) Anticipated windthrow; and f) Potential site specific safety and operational feasibility given suitable harvest systems and stream density. 3) The FSP Holder will implement the prescription in R/S s.2 by designing cutblocks and roads and planning and conducting primary forest activities consistent with the prescription. This will include minimizing the introduction of CWD and sedimentation into streams to the extent practicable. 4) In respect of FPPR s.12(3), sections 2, 3, 5, and 6 of this result or strategy, determine the minimum retention of trees, in relation to the pre-harvest condition, to be retained as standing trees within the RMZ. 5) The strategy will not apply to the extent that results or strategies in this FSP for Fisheries Sensitive Watersheds, and Community Watersheds are applicable to the FSP, and specify other requirements for RMZ retention for the riparian classes. <p><u>6) Definitions for purposes of this Result or Strategy:</u></p> <p>Specific resources: refers to resource features, wildlife habitat features, general wildlife measures, specific high value wildlife trees, specific biodiversity or wildlife values, or Lakeshore Management Zone enactment.</p>

	Retention: an amount of basal area, or number of trees, or a non-harvested width.	
Apply to these Forest Development Units:	<input checked="" type="checkbox"/> Keogh <input checked="" type="checkbox"/> Marble <input checked="" type="checkbox"/> Holberg <input checked="" type="checkbox"/> San Josef	<input checked="" type="checkbox"/> Mahatta <input checked="" type="checkbox"/> Neroutsos <input checked="" type="checkbox"/> Klaskish <input checked="" type="checkbox"/> Bonanza

6.4 FRPA Value: Fish habitat in fisheries sensitive watersheds

FPPR 8.1 Until December 31, 2005 the objective set by government for fish habitat in fisheries sensitive watersheds is to prevent to the extent described in subsection (3) the cumulative hydrological effects of primary forest activities in the fisheries sensitive watershed from resulting in a material adverse impact on the habitat of the fish species for which the fisheries sensitive watershed was established.

Table 4.1: Fisheries sensitive watersheds	
Requirement	Objective set by Government: FPPR s.8.1 Objective enabled by legislation: GAR s.14
Objective	Enabled objectives: No watersheds are listed in FPPR Schedule 2. GAR ss.14(1) and (2): Ministry of Forests, Lands, Natural Resource Operations and Rural Development (MFLNRORD) has not established FSWs or objectives in these FDU's.
Results or Strategies pursuant to FRPA s.5	<p><u>Strategy:</u></p> <p>1) If FSWs are established during the term of the plan, and then for all new CPs and RPs approved after the FSP approval or the period specified in FRPA s.8, the licensee will comply with FPPR s.8.1 and conduct its primary forest activities in the fisheries sensitive portions of watersheds, in a manner consistent with any special practices that are determined in a Watershed Assessment or Hydrologic Evaluation prepared by a Qualified Professional, addressing the FSW objectives.</p> <p>2) Definitions for the purposes of this result or strategy:</p> <p><u>Watershed Assessment:</u> an assessment of Watershed Strategies and conditions prepared by a Qualified Professional and adopted for the FSP, that is consistent with the Coastal Watershed Assessment Procedure (CWAP), and addressing the applicable FSW objectives from the regulation and the enabled FSW watershed objectives.</p> <p><u>Hydrologic Evaluation:</u> are carried out to investigate site-specific concerns related to a disturbance (natural or development-related) that has occurred; or to assess the potential impacts from development or an event that has not yet occurred. A Hydrologic Evaluation is not a comprehensive watershed analysis, it is an investigation of a particular area, site, process or event within a watershed unit. A Hydrologic Evaluation will consider the current watershed assessments for the FSP if required in the result and strategy.</p>

6.5 FRPA Value: Water in Community Watersheds

FPPR section 8.2 (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.

(2) The objective set by government for water being diverted for human consumption through a licensed waterworks in a community watershed is to prevent to the extent described in subsection (3) the cumulative hydrological effects of primary forest activities within the community watershed from resulting in (a) a material adverse impact on the quantity of water or the timing of the flow of the water from the waterworks, or (b) the water from the waterworks having a material adverse impact on human health that cannot be addressed by water treatment required under (i) an enactment, or (ii) the licence pertaining to the waterworks.

(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.

(4) If satisfied that the objective set out in subsection (2) is not required to provide special management the minister responsible for the Wildlife Act must exempt a person from the requirement to specify a result or strategy in relation to the objective.

(5) If satisfied that the objective set out in subsection (2) is addressed, in whole or in part, by an enactment, the minister responsible for the Wildlife Act must exempt a person from the requirement to specify a result or strategy in relation to the objective set out in subsection (2) to the extent that the objective is already addressed.

Table 5.1: Community Watersheds	
Objective	<p>Objective set by Government for Water Quality in a Community Watershed Objectives enabled by regulation: GAR s.8.1: Minister of Agriculture and Lands designates by order a CWS, GAR s.8.2: Ministry of Agriculture and Lands establish water quality objectives</p> <p>Calbick Creek Community Watershed #930.003 of 63.7 ha near Coal Harbour was created June 15, 1995. Calbick Creek is grandfathered under the Forest Practices Code s.180, and has no established objectives, and no watershed assessment completed.</p>
Results or Strategies pursuant to FRPA s.5	<p><u>The forest development units applicable to the result or strategy:</u> Applies in all FDUs that have established Community Watersheds (CWS).</p> <p><u>Strategies:</u></p> <p>1) Situations or circumstances that determine where in the forest development units the result or strategy applies:</p> <ul style="list-style-type: none"> a) Currently applies in Calbick Creek Community Watershed which exists in Holberg FDU; b) Will apply in any newly established community watersheds in the FDUs. <p>2) Subject to subsection 1, in a Community Watershed:</p> <ul style="list-style-type: none"> a) the Holder of the FSP will comply with FPPR s.8.2 and conduct its primary forest activities in a manner that is consistent with any special practices that are determined in a Watershed Assessment or in a Hydrologic Evaluation prepared by a Qualified Professional; or the

	<p>Holder of the FSP will request exemption from the Minister under FPPR ss.8.2 (3), (4), or (5).</p> <p>b) The recommended practices from a Watershed Assessment under R/S s.2(a) may be modified by a Qualified Professional in a rationale that addresses the objectives, the changes from the original assessment, and sensitivity of the site, and based upon an assessment informed by site level factors. Changes will be vetted through the original Qualified Professional or a Qualified Professional of like credentials.</p> <p>c) The Watershed Assessment addressing the CWS objectives will be updated on a time period recommended in the assessment.</p> <p>d) The update period may be extended by a qualified professional if doing so is consistent with meeting the objectives, considering the amount of primary forest activity, and sensitivity of the particular site.</p> <p><u>3) Definitions for the purposes of this result or strategy:</u></p> <p><u>Watershed Assessment:</u> an assessment of Watershed Strategies and conditions prepared by a Qualified Professional and adopted for the FSP, that is consistent with the Coastal Watershed Assessment Procedure (CWAP), and addressing the applicable CWS objectives from the regulation and the enabled CWS watershed objectives. These are typically titled “Watershed Indicators” and “Watershed Management Strategies” reports.</p> <p><u>Hydrologic Evaluation:</u> are carried out to investigate site-specific concerns related to a disturbance (natural or development-related) that has occurred; or to assess the potential impacts from development or an event that has not yet occurred. A Hydrologic Evaluation is not a comprehensive watershed analysis, it is an investigation of a particular area, site, process or event within a watershed unit. A Hydrologic Evaluation will consider the current watershed assessments for the FSP if required in the result and strategy.</p>	
Apply to these Forest Development Units:	<input type="checkbox"/> Keogh <input type="checkbox"/> Marble <input checked="" type="checkbox"/> Holberg <input type="checkbox"/> San Josef	<input type="checkbox"/> Mahatta <input type="checkbox"/> Neroutsos <input type="checkbox"/> Klaskish <input type="checkbox"/> Bonanza

6.6 FRPA Value: Wildlife and Biodiversity at Landscape level

FPPR section 9: The objective set by government for wildlife and biodiversity at the landscape level is, without unduly reducing the supply of timber from British Columbia's 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.

Table 6.1: Cutblock size and green-up	
Requirements	<p>Land-Use Objective: Vancouver Island Land Use Plan, Higher Level Plan Order, October, 2000. Section D.</p> <p>Objective Set by Government: FPPR s.9</p>
Objectives	<p>Section D of the Order is repeated here for convenience, but if differences exist between the text of the Order and the text herein, the text of the Order prevails: <i>For all Enhanced Forestry Zones, save and except community watersheds:</i></p> <p><i>Objective 7 To increase the short term availability of timber:</i> <i>(a): A cutblock may be larger than 40 ha pursuant to section 11(2)(a) of the OPR; and</i> <i>(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></p> <ul style="list-style-type: none"> <i>i) the tallest tree in each 0.01 ha plot included in a representative sample, and</i> <i>ii) a commercially valuable species or other species acceptable to the District Manager</i> <p><i>is at least 1.3 meters;</i> <i>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.</i></p> <p><i>Objective 8: Avoid or mitigate adverse hydrological impacts, which may result from the practices referred to in Objective 7, in watersheds with significant watershed sensitivity and significant fisheries values as determined by the district manager and designated environmental official.</i></p> <p><i>Objective 9: When proposing the species composition for the purposes of OSPR 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.</i> <i>Objective 9.1: The area that may be subject to a single species pursuant to Objective 9 is limited to no more than 20% of the forested area within a given EFZ.</i></p>
	<p>The FPPR Practice is repeated here for convenience, but if differences exist between the text of the FPPR and the text herein, the text of the FPPR as it was at time of FSP submission prevails:</p> <p><i>s.64(1) If an agreement holder other than a holder of a minor tenure harvests timber in a cutblock, the holder must ensure that the size of the net area to be reforested for the cutblock does not exceed (a) 40 hectares.</i></p> <p><i>s.64(2): Subsection (1) does not apply to an agreement holder if</i></p> <ul style="list-style-type: none"> <i>a) timber harvesting</i> <ul style="list-style-type: none"> <i>(i) is being carried out on the cutblock</i> <ul style="list-style-type: none"> <i>(A) to recover timber damaged by fire, insect infestation, wind or other similar events, or</i> <i>(B) for sanitation treatments, or</i>

	<p>(ii) is designed to be consistent with the structural characteristics and the temporal and spatial distribution of an opening that would result from a natural disturbance, and</p> <p>(b) the holder ensures, to the extent practicable, that the structural characteristics of the cutblock after timber harvesting has been substantially completed resemble an opening that would result from a natural disturbance.</p> <p>s.64(3) Subsection (1) does not apply if the timber harvesting that is being carried out on the cutblock retains 40% or more of basal area of the stand that was on the cutblock before timber harvesting.</p> <p>s.64(4) Subsection (1) does not apply if no point within the net area to be reforested is (a) more than two tree lengths from either (i) the cutblock boundary, or (ii) a group of trees reserved from harvesting that is greater than or equal to 0.25 ha in size, or (b) more than one tree length from a group of trees reserved from timber harvesting that is less than 0.25 ha in size.</p> <p><i>Harvesting adjacent to another cutblock</i></p> <p>s.65(1)</p> <p><i>In this section:</i></p> <p>"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 carried out within the cutblock;</p> <p>"existing cutblock" means a cutblock that was previously harvested under an agreement other than a minor tenure;</p> <p>"new cutblock" means a cutblock on which harvesting has not yet started and that is adjacent to an existing cutblock;</p> <p>"non-conforming portion" means an area within an existing cutblock on which the stocking and height requirements of subsection (3) have not been met.</p> <p>(2) An agreement holder other than a holder of a minor tenure must not harvest timber on a new cutblock, unless</p> <p>(a) all existing cutblocks that are adjacent to the new cutblock meet the requirements set out in subsection (3), or</p> <p>(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 section 64 (1) [maximum cutblock size].</p> <p>(3) For the purpose of subsection (2) (a), an existing cutblock must meet the criteria set out in one of the following paragraphs:</p> <p>(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 10% of the trees on the area is a minimum of 3 m and</p> <p>(i) is stocked in accordance with the applicable stocking standards, as described under section 16 [stocking standards],</p> <p>(ii) if the area is on the Coast, other than the Nass timber supply area, is stocked with at least 500 trees/ha of a</p>
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	<p>commercially valuable species that are at least 1.3 m in height, or</p> <p>(iii) if the area is in the Interior or in the Nass timber supply area, is stocked with at least 700 trees/ha of a commercially valuable species that are at least 1.3 m in height;</p> <p>(b) the part of the net area to be reforested of the existing cutblock that is closest to the new cutblock</p> <p>(i) must be at least half of the net area to be reforested,</p> <p>(ii) is stocked such that the average height of the tallest 10% of the trees on the area is a minimum of 3 m, and</p> <p>(iii) is stocked</p> <p>(A) in accordance with the applicable stocking standards for that cutblock, as described under section 16,</p> <p>(B) if the area is on the Coast, other than the Nass timber supply area, with at least 500 trees/ha of a commercially valuable species that are at least 1.3 m in height, or</p> <p>(C) if the area is in the Interior or in the Nass timber supply area, with at least 700 trees/ha of a commercially valuable species that are at least 1.3 m in height.</p> <p>(4) Subsection (2) does not apply if section 64 (2), (3) or (4) apply to the new cutblock.</p>						
Results or Strategies pursuant to FRPA s.5	<p><u>Results:</u></p> <p>Cutblock size and adjacency limits</p> <p>1) The Holder of the FSP must not harvest timber on a new cutblock, unless the cutblock conforms with the applicable results and strategies for the situation and circumstances in the following table:</p> <table border="1"> <thead> <tr> <th>Situation and Circumstances</th><th>Result and Strategy</th></tr> </thead> <tbody> <tr> <td>General Management Zone Objectives</td><td> <p>1(a) The Holder of the FSP will comply with FPPR s.64 [maximum cutblock size] and s.65 [3m greenup],</p> <p>i) except for s.65(3) which is replaced by result and strategy s. 2 [for consistency of methods with VILUP Objectives].</p> </td></tr> <tr> <td>VILUP EFZ Cutblock Size Objectives, save and except community watersheds</td><td> <p>1(b) If the Holder of the FSP is applying VILUP Objective 7 (a), for cutblock size or combined cutblock size within Enhanced Forestry Zones:</p> <p>i) The new cutblock will conform with FPPR ss.64 and 65; except to apply VILUP HLP Order Objective 7(a), instead of the FPPR s. 64(1) maximum cutblock size, the combined area of the new cutblock and any non-conforming portions that are immediately adjacent to the new cutblock may be larger than 40 ha;</p> <p>ii) unless the cutblock would significantly impact specific hydrological (per R/S</p> </td></tr> </tbody> </table>	Situation and Circumstances	Result and Strategy	General Management Zone Objectives	<p>1(a) The Holder of the FSP will comply with FPPR s.64 [maximum cutblock size] and s.65 [3m greenup],</p> <p>i) except for s.65(3) which is replaced by result and strategy s. 2 [for consistency of methods with VILUP Objectives].</p>	VILUP EFZ Cutblock Size Objectives, save and except community watersheds	<p>1(b) If the Holder of the FSP is applying VILUP Objective 7 (a), for cutblock size or combined cutblock size within Enhanced Forestry Zones:</p> <p>i) The new cutblock will conform with FPPR ss.64 and 65; except to apply VILUP HLP Order Objective 7(a), instead of the FPPR s. 64(1) maximum cutblock size, the combined area of the new cutblock and any non-conforming portions that are immediately adjacent to the new cutblock may be larger than 40 ha;</p> <p>ii) unless the cutblock would significantly impact specific hydrological (per R/S</p>
Situation and Circumstances	Result and Strategy						
General Management Zone Objectives	<p>1(a) The Holder of the FSP will comply with FPPR s.64 [maximum cutblock size] and s.65 [3m greenup],</p> <p>i) except for s.65(3) which is replaced by result and strategy s. 2 [for consistency of methods with VILUP Objectives].</p>						
VILUP EFZ Cutblock Size Objectives, save and except community watersheds	<p>1(b) If the Holder of the FSP is applying VILUP Objective 7 (a), for cutblock size or combined cutblock size within Enhanced Forestry Zones:</p> <p>i) The new cutblock will conform with FPPR ss.64 and 65; except to apply VILUP HLP Order Objective 7(a), instead of the FPPR s. 64(1) maximum cutblock size, the combined area of the new cutblock and any non-conforming portions that are immediately adjacent to the new cutblock may be larger than 40 ha;</p> <p>ii) unless the cutblock would significantly impact specific hydrological (per R/S</p>						

		ss.3(b) and 4), wildlife, biodiversity, scenic, or recreational values.
VILUP EFZ Green-up Objectives, save and except community watersheds	1(c) If the Holder of the FSP is applying VILUP Objective 7 (b), for 1.3m greenup, within Enhanced Forestry Zones: i) the new cutblock will conform with FPPR ss.64 and 65; except to apply VILUP HLP Order Objective 7(b), instead of FPPR s.65 (3), a cutblock and any existing cutblocks will meet the requirements set out in s.2 of this result or strategy; ii) unless the cutblock would significantly impact specific hydrological (per R/S ss.3(b) and 4), wildlife, biodiversity, scenic, or recreational values.	
VILUP SMZ Objectives within VILUP Special Management Zones	1(d) See Table 6.3.	

2) For the purposes of this result or strategy, 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 100 tallest trees per hectare on the area is a minimum of 3 m in GMZs and SMZs, and in VILUP EFZs is at least 1.3 m, and:

i) is stocked in accordance with the applicable stocking standards for that cutblock, or

ii) is stocked with 500 sph of a commercially viable species that are at least 1.3 m in height.

b) The part of the net area to be reforested of the existing cutblock that is closest to the new cutblock:

i) must be at least half the net area to be reforested;

ii) is stocked such that the average height of the 100 tallest trees per hectare on the area is a minimum of 3 m in VILUP GMZs and SMZs, and in VILUP EFZs is 1.3 m, and

iii) is stocked:

A) in accordance with the applicable stocking standards for that cutblock, or

B) is stocked with 500 sph of a commercially viable species that are at least 1.3 m in height.

3) The Holder of the FSP will avoid or mitigate adverse hydrological impacts which may result from the practices referred to in R/S s.1 within Enhanced Forestry Zones, in the following situations:

a) watersheds with significant watershed sensitivity and significant fisheries values when determined by the DDM under VILUP section 8;

b) if the larger blocks/greenup practices in VILUP 7 and 8 are conducted;

c) where the DDM requires a Watershed Assessment, the Holder of the FSP will be exempt if the extent of activity in the watershed is

	<p><20% ECA, and will apply the existing Watershed Strategies that have been developed over the FSP area for watersheds over 1,000 ha, unless the DDM determines otherwise; and</p> <p>d) VILUP Objective 7 or 8 will not apply in a watershed in the event that the Minister responsible for the Lands Act during the term of the plan exempts the Holder of the FSP from the requirement per FPPR s.25(2)⁴.</p> <p>4) For the watersheds set out in result or strategy s.3, the Holder of the FSP will complete the following steps:</p> <p>a) a Qualified Professional will complete a site level Hydrologic Evaluation for the objective to not significantly impact specific hydrological values associated with the cutblock, that incorporates Watershed Management Strategy recommendations where available; and</p> <p>b) implement to the extent practicable the site level Hydrologic Evaluation recommendations, to avoid or mitigate adverse hydrologic impacts, if any, through applying one or more of: cutblock sizes, rate of cut on steep terrain, equivalent clearcut area, terrain risk management, stream management, and/or forest practices;</p> <p>c) complete the WFP Hydrologic Evaluation form (with the certification statement) for submission along with a CP application; and</p> <p>d) with the exception that, a watershed assessment will not be required when a low extent of cut is unlikely to increase the risk of cumulative hydrologic impacts, specifically:</p> <ul style="list-style-type: none"> i) harvest is limited to small cutblocks less than 10 ha, ii) salvage to address forest health or windthrow, iii) harvesting is limited to low extraction methods with <30% basal area removed, or iv) watersheds over 1,000 ha in which there will have been less than a total of 80 ha harvested in the preceding 5 years. <p>5) <u>Definitions for the purposes of this result or strategy:</u></p> <p><u>Watershed Assessment:</u> an assessment of Watershed Strategies and conditions prepared by a Qualified Professional and adopted for the FSP, that is consistent with the Coastal Watershed Assessment Procedure (CWAP), and addressing the applicable CWS objectives from the regulation and the enabled CWS watershed objectives.</p> <p><u>Hydrologic Evaluation:</u> are carried out to investigate site-specific concerns related to a disturbance (natural or development-related) that has occurred; or to assess the potential impacts from development or an event that has not yet occurred. A Hydrologic Evaluation is not a comprehensive watershed analysis, it is an investigation of a particular area, site, process or event within a watershed unit.</p> <p><u>"non-conforming portion"</u> means an area within an existing cutblock on which the stocking and height requirements of either subsection (3) of this result and strategy for VILUP green-up objectives, or FPPR 65(3) for FPPR green-up practices, as the case may be, have not been met.</p>
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⁴ FPPR s.25(2) On application by a person required to prepare a forest stewardship plan, the minister responsible for the *Land Act* may exempt the person from the requirement...

	<p><u>Cutblock size</u> refers to the size of the net area to be reforested.</p> <p><u>Adjacent</u> has the same meaning as in FPPR s.65(1).</p> <p><u>Certification statement</u> means, based on the information provided in the Hydrologic Evaluation, a statement to certify that the use of VILUP objective 7 for the cutblock will not have a significant impact on hydrological, wildlife, biodiversity, scenic or recreational values.</p> <p>HLP Objectives 9 and 9.1: 7) The Holder of the FSP adopts VILUP Higher Level Plan Objectives 9 and 9.1 as a result or strategy in EFZs.</p>	
Apply to these Forest Development Units:	<input checked="" type="checkbox"/> Keogh <input checked="" type="checkbox"/> Marble <input checked="" type="checkbox"/> Holberg <input checked="" type="checkbox"/> San Josef	<input checked="" type="checkbox"/> Mahatta <input checked="" type="checkbox"/> Neroutsos <input checked="" type="checkbox"/> Klaskish <input checked="" type="checkbox"/> Bonanza

Table 6.2: Cutblock size and green-up – Enhanced Forestry Zones	
Requirement	Land-Use Objective
Objective	VILUP HLP Order Objective 7
Results or Strategies	Addressed in Table 6.1 of this FSP.

Table 6.3: Cutblock size and silviculture systems – Special Management Zones	
Requirement	Land-Use Objective: Vancouver Island Land Use Plan, Higher Level Plan Order, October, 2000
Objective	<p>Objectives 1b, 1c, 2, 3, Special Management Zones HLP sections are repeated here for convenience, but if wording in the HLP Order differs, the HLP Order prevails:</p> <p><i>Sustain ecosystem structure and function in SMZs by:</i></p> <p><i>1b) retaining, within cutblocks (generally means non-contiguous with cutblock boundaries), structural forest attributes and elements with important biodiversity functions (includes, but is not limited to snags, wildlife trees, downed logs); and</i></p> <p><i>1c) 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 seedtree silviculture systems are applied, and 40 ha if shelterwood, selection, or retention silviculture systems are applied (maximum cutblock size refers to NAR).</i></p> <p><i>2) Despite section 1c 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 is damaged by fire, insects, wind, or other similar events and wherever possible the cutblock retains structural characteristics of natural disturbance.</i></p>

Results or Strategies pursuant to FRPA s.5	<p>The forest development units applicable to the result or strategy: The applicable FDUs are those with portions that overlap VILUP SMZs. These FDUs are identified below.</p> <p><u>Results:</u></p> <p>1) Applies only in the SMZ cutblocks or the SMZ portions of cutblocks⁵ in the FDU.</p> <p>2) Subject to the definitions in this result and strategy, the Holder of the FSP adopts HLP Objectives ss.1b, 1c and 2 as result or strategy.</p> <p>3) Retention silviculture systems are to be applied for cutblocks > 5 ha (NAR).</p> <p>4) Definitions: for purposes of this result or strategy "retention silviculture system" means a system that incorporates biodiversity function using:</p> <ul style="list-style-type: none"> a) Generally noncontiguous including timber peninsulas/strips attached to cutblock edges and edges along narrow areas of cutblocks <4 tree heights wide; and b) A minimum retention patch size of 0.25ha; and c) Distribution of retention to the extent practicable so that no areas >5 ha will be without retention; and d) A minimum of 50% forest influence by a combination of individual trees or groups of trees to maintain structural diversity over the area of the cutblock for at least one rotation and a retention level of 10-20% of the block area; or e) The criteria in FPPR s.64(4). 								
Apply to these Forest Development Units:	<table border="0"> <tr> <td><input type="checkbox"/> Keogh</td><td><input type="checkbox"/> Mahatta</td></tr> <tr> <td><input type="checkbox"/> Marble</td><td><input type="checkbox"/> Neroutsos</td></tr> <tr> <td><input type="checkbox"/> Holberg</td><td><input checked="" type="checkbox"/> Klaskish</td></tr> <tr> <td><input checked="" type="checkbox"/> San Josef</td><td><input checked="" type="checkbox"/> Bonanza</td></tr> </table>	<input type="checkbox"/> Keogh	<input type="checkbox"/> Mahatta	<input type="checkbox"/> Marble	<input type="checkbox"/> Neroutsos	<input type="checkbox"/> Holberg	<input checked="" type="checkbox"/> Klaskish	<input checked="" type="checkbox"/> San Josef	<input checked="" type="checkbox"/> Bonanza
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<input type="checkbox"/> Marble	<input type="checkbox"/> Neroutsos								
<input type="checkbox"/> Holberg	<input checked="" type="checkbox"/> Klaskish								
<input checked="" type="checkbox"/> San Josef	<input checked="" type="checkbox"/> Bonanza								

Table 6.4: Mature and old seral stages – Special Management Zones	
Requirement	Land-Use Objective: Vancouver Island Land Use Plan, Higher Level Plan Order October, 2000
Objectives	<p>1) VILUP HLP Objective 1a for SMZs 2, 3, 4 and 7:</p> <p><i>1. Sustain forest ecosystem structure and function in SMZs, by:</i></p> <ul style="list-style-type: none"> <i>a) creating or maintaining stand structure and forest attributes associated with mature (generally 80-100 years old or older depending on site conditions) and old (generally >250 years), subject to the following:</i> <ul style="list-style-type: none"> <i>i. the target for mature seral forest should range between one quarter and one third of the forested area of each SMZ; and</i> <i>ii. in SMZs where the area of mature forest is currently less than the mature target range referred to in (i)</i>

⁵ FPPR s.25.1 (1) ...intended results or strategies...as applicable to that area or that part.

	above, the target amount must be in place in 50 years;	
Results or Strategies pursuant to FRPA s.5	<p><u>The forest development units applicable to the result or strategy:</u> The result or strategy applies in VILUP SMZs. The applicable FDUs with SMZs are identified below.</p> <p><u>Results:</u></p> <p>1) Applies to cutblocks in SMZs when the Holder of the FSP submits CPs.</p> <p>2) The Holder of the FSP will comply with VILUP HLP Order Objective #1a and as a result of the FSP Holder timber harvested in cutblocks, will not cause the minimum SMZ mature/old seral to fall below 25%; and in the event that the area is currently less than the target range pursuant to HLP s.1a(ii), a recruitment plan will be followed.</p> <p>3) Where SMZs are not entirely in the FSP Holder FDUs, the results stated apply only to that portion of the SMZ within the FSP area until the mature and old is apportioned by licensee agreement between FSPs or licensees, or is apportioned by government.</p>	
Apply to these Forest Development Units:	<input type="checkbox"/> Keogh <input type="checkbox"/> Marble <input type="checkbox"/> Holberg <input checked="" type="checkbox"/> San Josef	<input type="checkbox"/> Mahatta <input type="checkbox"/> Neroutsos <input checked="" type="checkbox"/> Klaskish <input checked="" type="checkbox"/> Bonanza

Table 6.5: Late successional habitat elements and attributes of biodiversity – Special Management Zones	
Requirement	Land-Use Objective: Vancouver Island Land Use Plan, Higher Level Plan Order October, 2000
Objectives	<p>The HLP is repeated here for convenience, but if differences exist between the text of the Order and the text herein, the text of the HLP prevails: VILUP HLP Objective 4 and 5: For parts of SMZs (e.g. 3), which are located in Landscape Units with higher biodiversity emphasis:</p> <p>f) <i>Maintain late-successional habitat elements and attributes of biodiversity (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) in forested ecosystems with emphasis on Regionally rare and underrepresented ecosystems, by retaining old seral forest at the site series/surrogate level of representation (The level of representation of old seral forest will be applied through landscape unit planning).</i></p> <p>g) <i>Retain late-successional habitat elements and attributes of biodiversity in patches of variable size.</i></p>
Results or Strategies pursuant to FRPA s.5	<p><u>The forest development units applicable to the result or strategy:</u> The result or strategy applies in specified VILUP SMZs. The applicable FDUs with the SMZs are identified below.</p> <p><u>Results:</u></p> <p>1) Applies to cutblocks in SMZs at the conclusion of harvesting.</p>

	<p>2) HLP Objective s.4 applies in SMZ 3 until Landscape Unit Plans are approved.</p> <p>3) For SMZ 3 portions located in higher biodiversity emphasis, the Holder of the FSP will maintain late successional habitat elements and attributes of biodiversity in wildlife tree patches (per Table 7.1), riparian management leave areas, and other potential reserves, and include in variable size reserve patches, elements of regionally rare and under-represented ecosystems at the site series/surrogate level of representation, if these are present.</p>	
Apply to these Forest Development Units:	<input type="checkbox"/> Keogh <input type="checkbox"/> Marble <input type="checkbox"/> Holberg <input type="checkbox"/> San Josef	<input type="checkbox"/> Mahatta <input type="checkbox"/> Neroutsos <input checked="" type="checkbox"/> Klaskish <input type="checkbox"/> Bonanza

Table 6.6: Non-spatial Old Growth	
Requirement	Objective enabled by regulation: Provincial Non-spatial Old Growth Order June 30, 2004.
Objectives	<p>1) Ministerial Order June 30, 2004 Establishes Landscape Unit Objectives – under FRPA s.9. The Order sections are repeated here for convenience, and if wording in the Order differs from the text herein, the wording in the Order prevails (the Appendices and Tables cited below are located in the Order):</p> <p><i><u>I. The Landscape Units listed in Appendix 1, Table 1 are established as Landscape Units.</u></i></p> <p><i><u>II. This Order establishes landscape unit objectives for the landscape units listed in Appendix 1, Table 1.</u></i></p> <p><i><u>A1. For the purpose of implementing objective A2 below biodiversity emphasis is assigned as listed in Appendix 1, Table 1.</u></i></p> <p><i><u>A2. Old growth objectives -- To contribute to the conservation of biodiversity, licensees must maintain old forest by biogeoclimatic variant (see implementation policy) 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.</u></i></p> <p><i><u>A5. 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 (see implementation policy).</u></i></p> <p><i><u>A6. Use of younger forests to meet old forest objectives. In intermediate and high emphasis landscape units where it can be demonstrated that equal or better conservation benefits would result, stands less than the age of old, and preferably mature forest, may contribute to the percentage of old forest retention defined in Tables 1-4. (see implementation policy).</u></i></p> <p><i><u>A7. Recruitment and catastrophic natural disturbances. In landscape units where there is: a. An immediate recruitment situation due to insufficient old forest in a variant; or b. An epidemic or catastrophic natural event such as wildfire or insects, A recruitment strategy approved by the Minister of Sustainable Resource Management or his delegate can be used to meet the requirements of Objective 2.</u></i></p>

	<p><u>A8. Draft old growth management areas.</u> 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.</p> <p>2) Land-Use Objective: Vancouver Island Land Use Plan, Higher Level Plan Order October, 2000, Objective 10: <i>For RMZ 7 and 11: To avoid severe social and economic consequences, as determined by the district manager and designated environmental official, the full target amount for old growth retention in CWHvm1 may be reduced by up to one third provided that ecologically suitable second growth forest is identified to recruit the shortfall (the targets for recruitment of old forests will be achieved through establishment of OGMAs as part of LU Planning).</i></p> <p>3) Land-Use Objective: Vancouver Island Land Use Plan, Higher Level Plan Order October, 2000, Objective 15 and 16 for Mahatta-Neroutsos LUs: <i>15 Old growth to targets and MAMU requirements in the non-contributing to fullest extent possible.</i> <i>16 Retain old forest in the THLB to full target amount, if the DM and DEO determine that such retention is needed for critical MAMU habitat.</i></p>
Results or Strategies pursuant to FRPA s.5	<p>The forest development units applicable to the result or strategy: This Result or Strategy and the applicable FDUs will apply in relation to the existing established OGMAs and any new Landscape Unit Plans approved during the term of the FSP.</p> <p><u>For Landscape Units with legally established OGMAs:</u> <u>Strategies:</u> 1) In accordance with Section B of the Non Spatial Order, where spatially defined OGMAs are established for the entire LU area, Table 6.7 of this FSP will apply to those areas. (if LUPs are approved, in accordance with Section C of the NS Order, the Order does not apply to spatially located OGMAs established in a higher level plan).</p> <p><u>For Landscape Units with no legally established OGMAs:</u> <u>Results:</u> 2) In areas where result or strategy 1 cannot be applied, the Holder of the FSP will comply with the Non-spatial Old Growth Order June 30, 2004 (Objectives A1, A2, A5, A6, A7, A8). Harvesting activities will not cause the target % retention, for crown land, by biogeoclimatic variant to fall below the amounts specified in the Order, except as permitted under the order.</p> <p><u>Strategies:</u> 3) For RMZ 11 (Bonanza), Non Spatial order A5 or A6/A7 will be applied in conjunction with the guidance in VILUP HLP Order section 10.</p> <p>4) Where a Landscape Unit is not entirely in the FDUs, the results stated apply only to that portion of the Landscape Unit within the FSP area until the contributing old growth is apportioned by licensee agreement between FSPs or licensees, or is apportioned by government.</p>

Apply to these Forest Development Units:	<input checked="" type="checkbox"/> Keogh <input checked="" type="checkbox"/> Marble <input checked="" type="checkbox"/> Holberg <input checked="" type="checkbox"/> San Josef	<input checked="" type="checkbox"/> Mahatta <input checked="" type="checkbox"/> Neroutsos <input checked="" type="checkbox"/> Klaskish <input checked="" type="checkbox"/> Bonanza
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Table 6.7: Old Growth Management Areas approved in Landscape Unit Plans	
Requirement	Objectives enabled by regulation: Landscape Unit Plans (LUP) and Sustainable Resource Management Plans (SRMP)
Objectives	<p>1) LU Orders' Objective 1 - Old Growth Management Areas: San Josef LU Order -- the 2005 Order is repealed, and is replaced by the 2016 Order for Land Use Objectives for the San Josef Landscape Unit situated on Northern Vancouver Island within the North Island – Central Coast Resource District. Nahwitti, Tsulquate, and Marble LU Order -- July 26, 2010</p> <p>2) Land-Use Objectives: Vancouver Island Land Use Plan, Higher Level Plan Order October, 2000, Objective 10 for RMZ 7 (Marble): The full target amount for old growth retention in CWHvm1 may be reduced by up to one third provided that ecologically suitable second growth forest is identified to recruit the shortfall (the targets for recruitment of old forests will be achieved through establishment of OGMA as part of LU Planning).</p>
Results or Strategies pursuant to FRPA s.5	<p><u>The forest development units applicable to the result or strategy:</u> The applicable FDUs are those with portions that contain approved Landscape Unit Plans with old growth objectives, and will apply to FDUs with any new Landscape Unit Plans approved during the term of the FSP, or in FDUs where new objectives repeal and replace the existing objectives, unless the result or strategy is otherwise amended under result or strategy section 3.</p> <p><u>Strategies:</u> 1) The results and strategies apply when the Holder of the FSP harvests timber or builds roads, in areas subject to approved Landscape Unit Plans.</p> <p><u>Results:</u> 2) On the basis of FPPR s.25.1(2)⁶, the Holder of the FSP complies with San Josef and Marble Landscape Unit orders, and will comply with their land and resource data/digital warehouse maps as amended from time to time under the Orders.</p> <p><u>Strategies:</u> 3) On the basis of FPPR s.25.1(2), for any new Land Use Objectives for OGMA as that are established (during the term of the FSP or that repeal and replace existing Orders), the Holder of the FSP adopts as results or strategies the objectives as stated in the Order at the date on the effective date of the</p>

⁶ FPPR 25.1(2): If an established objective is comprised of measurable or verifiable steps, processes or outcomes, an intended result or strategy that (a) is specified in a forest stewardship plan for that objective, (b) restates the same measurable or verifiable steps, practices or outcomes, and (c) describes the circumstances in which those measurable or verifiable steps, practices or outcomes are to be achieved or carried out, is to be considered to be consistent with objectives set by government and with the other established objectives to the extent practicable, as described in subsection (1) of this section.

	<p>Order, and will comply with the Orders and land and resource data/digital warehouse maps as amended from time to time under the new Order, unless the Order is not measurable and verifiable and this FSP is amended per FRPA s.8 specific to the new land use objectives.</p> <p>4) As Landscape Unit Planning is complete in RMZ 7 (Marble), a Result or Strategy is not required for VILUP HLP Objective 10 for Marble.</p> <p>5) In established Landscape Unit Orders where surplus old seral forest exists, and the Order contains a requirement to identify Replacement Forest, the Holder of the FSP may request waiver from the delegated decision maker for the requirement to identify OGMA replacement forest, provided that the total area of mature and old seral forest maintained in OGMAs plus the contributing old seral forest area in protected areas meets or exceeds the targets. The procedure for calculating the surplus forest will be consistent with the Landscape Unit Planning Guide (1999), Section 2.2 Data and Report Preparation (p.15), unless the Established Order already specifies a table of old seral minimum requirements to be used for calculating surpluses.</p>	
Apply to these Forest Development Units (subject to approval of new LU plans):	<input type="checkbox"/> Keogh <input checked="" type="checkbox"/> Marble <input type="checkbox"/> Holberg <input checked="" type="checkbox"/> San Josef	<input type="checkbox"/> Mahatta <input type="checkbox"/> Neroutsos <input type="checkbox"/> Klaskish <input type="checkbox"/> Bonanza

6.7 FRPA Value: Wildlife and Biodiversity Stand level

FPPR Section 9.1: 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.

Table 7.1: Wildlife trees	
Requirement	Objective set by government: FPPR s.9.1
Objectives	<p>FPPR Section 9.1.</p> <p>Objectives Enabled by Regulation that contain wildlife tree objectives:</p> <p>1) 2016 Order for Land Use Objectives for the San Josef Landscape Unit situated on Northern Vancouver Island within the North Island – Central Coast Resource District -- does not contain wildlife tree retention objectives.</p> <p>2) Marble LU Order -- does not contain wildlife tree retention objectives.</p> <p>3) New LU orders with objectives for wildlife trees (if established).</p> <p>The Practice is repeated here for convenience, but if differences exist between the text of the FPPR and the text herein, the text of the FPPR as it was at time of FSP submission prevails:</p> <p><i>FPPR s.66: (1) If an agreement holder completes harvesting in one or more cutblocks during any 12 month period beginning on April 1 of any calendar year, the holder must ensure that, at the end of that 12 month period, the total area covered by wildlife tree retention areas that relate to the cutblocks is a minimum of 7% of the total area of the cutblocks</i></p>

	<p><i>(2) An agreement holder who harvests timber in a cutblock must ensure that, at the completion of harvesting, the total amount of wildlife tree retention areas that relates to the cutblock is a minimum of 3.5% of the cutblock.</i></p> <p><i>(3) For the purposes of subsection (1) and (2), a wildlife tree retention area may relate to more than one cutblock if all of the cutblocks that relate to the wildlife tree retention area collectively meet the applicable requirements of this section.</i></p> <p><i>s.67: An agreement holder must not harvest timber from a wildlife tree retention area unless the trees on the net area to be reforested of the cutblock to which the wildlife tree retention area relates have developed attributes that are consistent with a mature seral condition.</i></p> <p><i>s.91(2) The minister may exempt an agreement holder from section 67 if the minister is satisfied that the holder has specified one or more wildlife tree retention areas that provide an area, number of trees or habitat that is equivalent to the portion of the wildlife tree retention area from which the timber is being harvested.</i></p>
Results or Strategies pursuant to FRPA s.5	<p><u>Results:</u></p> <p>1) For areas without wildlife tree objectives specified in a higher level plan (e.g. LU Plan), R/S s.2 and 3 below apply as a result of the FSP Holder's harvesting activities in cutblocks during harvesting, and at the end of the period in FPPR s.66.</p> <p>2) The Holder of the FSP adopts FPPR s.66, as it was at the time of FSP submission, as a result or strategy, except that minor salvage cutblocks, of less than or equal to 2 ha of harvesting and/or less than or equal to 2,000m³ excluding road clearing width if the road is required to facilitate the removal of timber in the minor salvage cutblock, are exempt.</p> <p>3) With respect to FPPR s.67, the Holder of the FSP must not harvest timber from a wildlife tree retention area unless the trees on the net area to be reforested of the cutblock to which the wildlife tree retention area relates have developed attributes that are consistent with a mature seral condition, except:</p> <ul style="list-style-type: none"> a) timber may be harvested for establishment of tail holds or guyline tiebacks; b) danger trees may be felled; c) where wildlife tree retention in a cutblock is rendered ineffective by wind, fire, or another damaging agent, damaged timber may be removed from the wildlife tree retention area if total wildlife tree retention that relates to the cutblocks per FPPR s.66(1) is maintained in the period; or d) WTPs established under pre FRPA site plans may be managed to the current percentage retention requirements that are specified by higher level plan order or the FPPR; or e) where the Holder of the FSP harvests a WTP or WTRA (from previous site plans, pre harvest silviculture prescriptions, or silviculture prescriptions), and the Holder of the FSP specifies one or more replacement wildlife tree retention areas that provide an area, number of trees, or habitat, that is equivalent to the portion of the wildlife tree retention area from which the timber is being harvested. At a minimum, the retention objectives specified in FPPR s.66 or in approved landscape unit plans will be achieved.

	<p>4) For areas subject to wildlife tree retention objectives in a higher level plan (LU Plan), R/S s.2 and 3 will not apply, and on the basis of FPPR s.25.1(2)⁷, the following Landscape Unit Plan objectives for WTPs or WTRAs are adopted as the result or strategy:</p> <p>a) The Holder of the FSP will comply with measurable and verifiable objectives for WTPs or WTRAs, if these objectives are included in any new Landscape Unit Plans;</p> <p>b) Except, in the WTPs or WTRAs that are subject to R/S s.4, other permissible practices will include: felling of guyline clearance, tailhold anchor trees, or danger trees; salvage of windthrown timber as described in the Orders; and, if the Holder of the FSP harvests a WTP or WTRA, the Holder of the FSP will specify one or more replacement wildlife tree retention areas within or immediately adjacent to the cutblock that provide an area, number of trees, or habitat, that is equivalent to the portion of the wildlife tree retention area from which the timber is being harvested up to the amount of the Order's WTP or WTRA requirement.</p> <p>5) Definition for purposes of the result or strategy: WTRA % means assessed as NAR + permanent road area in the cutblock.</p>	
Apply to these Forest Development Units:	<input checked="" type="checkbox"/> Keogh <input checked="" type="checkbox"/> Marble <input checked="" type="checkbox"/> Holberg <input checked="" type="checkbox"/> San Josef	<input checked="" type="checkbox"/> Mahatta <input checked="" type="checkbox"/> Neroutsos <input checked="" type="checkbox"/> Klaskish <input checked="" type="checkbox"/> Bonanza

6.8 FRPA Value: Wildlife

Objectives set by government for wildlife: FPPR s.7(1): The objective set by government for wildlife is, without unduly reducing the supply of timber from British Columbia's forests, to conserve sufficient wildlife habitat in terms of amount of area, distribution of areas and attributes of those areas, for (a) the survival of species at risk, (b) the survival of regionally important wildlife, and (c) the winter survival of specified ungulate species.

(2) A person required to prepare a forest stewardship plan must specify a result or strategy in respect of the objective stated under subsection (1) only if the minister responsible for the Wildlife Act gives notice to the person.

(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.

⁷ FPPR s.25.1(2) If an established objective is comprised of measurable or verifiable steps, processes or outcomes, an intended FSP result or strategy that restates the same measurable or verifiable steps, practices or outcomes, and describes the circumstances in which those are to be achieved or carried out, is to be considered to be consistent with objectives set by government and with the other established objectives to the extent practicable.

Table 8.1: Marbled Murrelet (<i>Brachyramphus marmoratus</i>)	
Requirement	<p>1) Species at risk Order-categories of species at risk, May 3, 2004;</p> <p>2) Objectives enabled by regulation: Notice for indicators of the amount, distribution and attributes of wildlife habitat required for the survival of the species at risk in the NICCFD, March 2, 2006</p> <p>3) Land-Use Objective: Vancouver Island Land Use Plan, Higher Level Plan Order October, 2000, Objective 15 and 16:</p>
Objectives	<p>The Order objectives are repeated here for convenience, but if differences exist between the text of the Order and the text herein, the text of the Order prevails:</p> <p>March 2, 2006 Notice: Forest District MAMU Amount Objectives.</p> <p>1) <i>An amount equal to the total amount of currently suitable nesting habitat in the noncontributing landbase. Government policy for determining the amount of suitable nesting habitat is provided in the species account and measures for Marbled Murrelet in IWMS 2004;</i></p> <p>2) <i>Within TFL 37, a total of 7,100 ha of suitable nesting habitat within the non-contributing landbase;</i></p> <p>3) <i>An amount of suitable Marbled Murrelet nesting habitat within Old Growth Management Areas consistent with the direction from landscape unit planning; and</i></p> <p>4) <i>An amount of suitable nesting habitat to a maximum net mature timber harvesting landbase impact of 1,434 ha.</i></p> <p>March 2, 2006 Notice: MAMU Habitat Distribution Objectives:</p> <p>1) <i>The amount of habitat referenced above must be distributed to provide: areas of suitable habitat of the size, spatial distribution and connectivity in the species account and measures for Marbled Murrelet in IWMS 2004.</i></p> <p>2) <i>The areas described above are located within the biogeoclimatic units and preferred elevations identified in the species account and measures for Marbled Murrelet in IWMS 2004.</i></p> <p>VILUP HLP Order: Objectives 15 and 16 for RMZ 8 Mahatta-Neroutsos:</p> <p><i>s.15 Old growth to targets and MAMU requirements in the non-contributing to fullest extent possible</i></p> <p><i>s.16 Retain old forest in the THLB to full target amount, if the DM and DEO determine that such retention is needed for critical MAMU habitat.</i></p>
Results or Strategies pursuant to FRPA s.5	<p><u>The forest development units applicable to the result or strategy:</u> Applies to all FDU's.</p> <p><u>Situations or circumstances that determine where in the forest development units the result or strategy applies:</u> Applies with FRPA's levels of cutblock protection such as at the time blocks are declared or CP submitted, to the licensee's timber harvesting under this FSP.</p> <p><u>Results:</u></p> <p>1) The Holder of the FSP will comply with Section 7 notices in the Plan area, as adjusted periodically by Ministry of Environment & Climate Change Strategy (MECCS) for any new WHAs to be subtracted from the amount:</p> <p>a) Subject to section 2, the Holder of the FSP will maintain <i>the amount of suitable nesting habitat equivalent to the net mature timber harvesting landbase required in the Notice;</i></p>

	<p>b) The Holder of the FSP will maintain the <i>amount of habitat in the non-contributing landbase equal to the total amount of currently suitable nesting habitat in the non-contributing landbase.</i></p> <p><u>Strategies:</u></p> <p>2) Until WHAs and/or other reserves are established and the Notice is “turned off”, the Holder of the FSP will manage for the Holder of the FSP’s proportion of the suitable habitat in the District, and will provide the fair and effective amounts for sharing the responsibility between or among the holders of forest stewardship plans.</p> <p>3) If an exemption is provided by the appropriate Minister, the terms of the exemption will prevail.</p> <p>4) If the district manager and the designated environment official determine that VILUP Objective 15 or 16 retention is required to maintain critical marbled murrelet habitat, the Holder of the FSP will retain old forests in the timber harvesting land base, up to the full target amount, through landscape unit planning [met through approved LU Plans].</p> <p><u>Definition:</u> Marbled murrelet nesting habitat, for the purposes of this FSP, is defined as Rank 1-3 as classified by low-level aerial reconnaissance following a provincially accepted standard (Burger 2004).</p>	
Apply to these Forest Development Units:	<input checked="" type="checkbox"/> Keogh <input checked="" type="checkbox"/> Marble <input checked="" type="checkbox"/> Holberg <input checked="" type="checkbox"/> San Josef	<input checked="" type="checkbox"/> Mahatta <input checked="" type="checkbox"/> Neroutsos <input checked="" type="checkbox"/> Klaskish <input checked="" type="checkbox"/> Bonanza

Table 8.2: “Queen Charlotte” Northern Goshawk (<i>Accipiter gentilis laingi</i>)	
Requirement	<p>1) Species at risk Order-categories of species at risk, May 3, 2004;</p> <p>2) Objective enabled by regulation: Notice for indicators of the amount, distribution and attributes of wildlife habitat required for the survival of the species at risk in the NICCFD, March 2, 2006;</p> <p>3) The result or strategy is proposed to apply to any new Notices enabled during the term of the Plan, subject to the timing in FRPA, if the notice is measurable and verifiable using the proposed results and strategies. If a new Order does not meet tests for being measurable and verifiable under FPPR section 12.1(2), an amendment to the result and strategy will be proposed within the time limits specified under FRPA.</p>
Objectives	<p>The current Order objectives are repeated here for convenience, but if differences exist between the text of the Order and the text herein, the text of the Order prevails:</p> <p><i>Amount Objective: 462 ha not exceeding an impact to the mature timber harvesting landbase of 128 ha.</i></p> <p><i>Distribution Objective: 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 “Queen Charlotte” Goshawk in the Accounts and Measures for Managing Identified Wildlife</i></p>

	<p>(Identified Wildlife Management Strategy Version 2004); areas of suitable goshawk breeding habitat to minimize overlap between goshawk home ranges (approximately 5-8 km separation). <i>Distribution Objective: located within the biogeoclimatic units and preferred elevations identified in the species account.</i></p>	
Results or Strategies pursuant to FRPA s.5	<p><u>The forest development units applicable to the result or strategy:</u> Applies to all FDUs.</p> <p><u>Strategies:</u></p> <p>1) Applies to Holder of the FSP primary forest activity in cutblocks and roads.</p> <p>2) Subject to 3) and 4), the FSP Holders' development activities (primary forest activities) will comply with the notices given under authority of section 7(2) of the FPPR within the North Island – Central Coast Natural Resource District, subject to the timing for application of new objectives in FRPA s. 7(2).</p> <p>3) The Holder of the FSP will base the compliance on a proportional amount of the modelled breeding habitat including the habitat around known nests or newly discovered nests located within the Holders of the FSP FDUs and applicable licence areas.</p> <p>4) The strategy applies until the earlier of the replacement of this Plan or the effective date of an exemption provided by the appropriate Minister or delegate with respect to the establishment of WHA's and/or other reserves by the appropriate Minister. If an exemption is provided, the terms of the exemption and any associated general wildlife measures will prevail thereafter.</p>	
Apply to these Forest Development Units:	<input checked="" type="checkbox"/> Keogh <input checked="" type="checkbox"/> Marble <input checked="" type="checkbox"/> Holberg <input checked="" type="checkbox"/> San Josef	<input checked="" type="checkbox"/> Mahatta <input checked="" type="checkbox"/> Neroutsos <input checked="" type="checkbox"/> Klaskish <input checked="" type="checkbox"/> Bonanza

Table 8.3: Great Blue Heron (<i>Ardea herodias fannini</i>)	
Requirement	<p>1) Species at risk Order-categories of species at risk, May 3, 2004; 2) Objective enabled by regulation: Notice for indicators of the amount, distribution and attributes of wildlife habitat required for the survival of the species at risk in the NICCFD, March 2, 2006; 3) The result or strategy is proposed to apply to any new Notices enabled during the term of the Plan, subject to the timing in FRPA, if the notice is measurable and verifiable using the proposed results and strategies. If a new Order does not meet tests for being measurable and verifiable under FPPR section 12.1(2), an amendment to the result and strategy will be proposed within the time limits specified under FRPA.</p>
Objectives	<p>The Order objectives are repeated here for convenience, but if differences exist between the text of the Order and the text herein, the text of the Order prevails:</p> <p>Great Blue Heron (<i>Ardea herodias fannini</i>) Amount Objective 1: 240 ha not exceeding an impact to the mature timber harvesting landbase of 36 ha. Distribution Objective 1: The amount of habitat referenced above must be distributed to provide: areas of suitable habitat of the size, spatial distribution</p>

	<p>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).</p> <p>Distribution Objective 2: <i>The areas described above are located within the biogeoclimatic units and preferred elevations identified in the species account.</i></p>	
Results or Strategies pursuant to FRPA s.5	<p><u>The forest development units applicable to the result or strategy:</u> Applies in all FDUs.</p> <p><u>Strategies:</u></p> <p>1) Applies to Holder of the FSP primary forest activity in cutblocks and roads, in all FDUs.</p> <p>2) Subject to 3) and 4), the FSP Holders' development activities (primary forest activities) will comply with the notices given under authority of section 7(2) of the FPPR within the North Island – Central Coast Natural Resource District, subject to the timing for application of new objectives in FRPA s. 7(2).</p> <p>3) Prior to establishment of WHAs by the appropriate Minister, the Holder will base the compliance on a proportional amount of the habitat required in the THLB under the notice within the Holders of the FSP applicable licence areas, if sufficient habitat information is available to estimate a proportion. In the absence of habitat information, the proportion will be based on the proportion of the mature timber harvesting landbase.</p> <p>4) The strategy applies until the earlier of the replacement of this Plan or the effective date of an exemption provided by the appropriate Minister or delegate with respect to the establishment of WHA's and/or other reserves by the appropriate Minister. If an exemption is provided, the terms of the exemption and any associated general wildlife measures will prevail thereafter.</p>	
Apply to these Forest Development Units:	<input checked="" type="checkbox"/> Keogh <input checked="" type="checkbox"/> Marble <input checked="" type="checkbox"/> Holberg <input checked="" type="checkbox"/> San Josef	<input checked="" type="checkbox"/> Mahatta <input checked="" type="checkbox"/> Neroutsos <input checked="" type="checkbox"/> Klaskish <input checked="" type="checkbox"/> Bonanza

Table 8.4: Coastal Tailed Frog (<i>Ascaphus truei</i>)		
Requirement	<p>1) Species at risk Order-categories of species at risk, May 3, 2004; 2) Objective enabled by regulation: Notice for indicators of the amount, distribution and attributes of wildlife habitat required for the survival of the species at risk in the NICCFD, March 2, 2006</p>	
Objectives	Per Orders above	
Results or Strategies pursuant to FRPA s.5	<p><u>Strategy:</u></p> <p>1) The known range of this species does not overlap the FSP area. No results or strategies are proposed.</p>	
Apply to these Forest Development Units:	<input type="checkbox"/> Keogh <input type="checkbox"/> Marble <input type="checkbox"/> Holberg <input type="checkbox"/> San Josef	<input type="checkbox"/> Mahatta <input type="checkbox"/> Neroutsos <input type="checkbox"/> Klaskish <input type="checkbox"/> Bonanza

Table 8.5: TFL 6 Black-tailed deer (<i>Odocoileus hemionus columbianus</i>)		
Requirement	Provincial Order, Category of ungulate species, signed May 3, 2004: Identifies black-tailed deer, and elk, as category of species for which an ungulate winter range (UWR) may be required.	
Objectives	The minister responsible for the Wildlife Act did not give notice in TFL 6 or TFL 39 Block 4 of the indicators of the amount, distribution and attributes of wildlife habitat with respect to s.7(1)(c) the winter survival of specified ungulate species.	
Results or Strategies pursuant to FRPA s.5	<p><u>The forest development units applicable to the result or strategy:</u> Applies in TFL 6. A FPPR s.7 notice was not received in TFL 6 as Ungulate Winter Ranges were already established, and UWR Orders U-1-006 and U-1-010 did not establish objectives; therefore the Holder of the FSP has not specified a Result or Strategy in the FSP. However, the general wildlife measures apply within the established UWRs.</p> <p>As of January 1st, 2015, TFL 39 Block 4 was amalgamated into TFL 6.</p>	
Apply to these Forest Development Units:	<input checked="" type="checkbox"/> Keogh <input checked="" type="checkbox"/> Marble <input type="checkbox"/> Holberg <input checked="" type="checkbox"/> San Josef	<input checked="" type="checkbox"/> Mahatta <input checked="" type="checkbox"/> Neroutsos <input type="checkbox"/> Klaskish <input type="checkbox"/> Bonanza

Table 8.6: North Island TSA (FL A94737 and TL's): Black-tailed deer (<i>Odocoileus hemionus columbianus</i>) and Roosevelt Elk (<i>Cervus elephus roosevelti</i>)		
Requirement	Provincial Order, Category of ungulate species, signed May 3, 2004: Identifies black-tailed deer, and elk, as category of species for which an ungulate winter range may be required.	
Objectives	UWR Order U-1-011 June 29, 2006 does not give objectives.	
Results or Strategies pursuant to FRPA s.5	<p>A result or strategy is not required. UWR Order U-1-011 exempts the Holder of the FSP from the need to specify results and strategies in the North Island TSA. However, the general wildlife measures apply within the established UWRs.</p> <p>As of January 1st, 2017, the Great Bear Rainforest (Forest Management) Act and Regulation resulted in the creation of the North Island TSA out of the former Kingcome TSA.</p>	
Apply to these Forest Development Units:	<input type="checkbox"/> Keogh <input type="checkbox"/> Marble <input type="checkbox"/> Holberg <input checked="" type="checkbox"/> San Josef	<input checked="" type="checkbox"/> Mahatta <input type="checkbox"/> Neroutsos <input checked="" type="checkbox"/> Klaskish <input checked="" type="checkbox"/> Bonanza

Table 8.7: Other General wildlife measures	
Requirement	GAR 9 General wildlife measures, regionally important wildlife
Objectives	None are designated in these FDU's. These will be practices outside the FSP.

6.9 FRPA Value: Visual Quality

FPPR s.1: "altered forest landscape" means forest landscape that (a) is viewable from a significant public viewpoint, (b) contains cutblocks or roads, and (c) is in one of the categories prescribed under section 1.1

FPPR s.1.1 Categories of visually altered forest landscape

The following categories are prescribed, each according to the extent of alteration resulting from the size, shape and location of cutblocks and roads -- consisting of an altered forest landscape in which the alteration, when assessed from a significant public viewpoint is:

(a) preservation: (i) very small in scale, and (ii) not easily distinguishable from the pre-harvest landscape;

(b) retention: (i) difficult to see, (ii) small in scale, and (iii) natural in appearance;

(c) partial retention: (i) easy to see, (ii) small to medium in scale, and (iii) natural and not rectilinear or geometric in shape;

(d) modification: (i) is very easy to see, and (ii) is (A) large in scale and natural in its appearance, or (B) small to medium in scale but with some angular characteristics;

(e) maximum modification: (i) is very easy to see, and (ii) is (A) very large in scale, (B) rectilinear and geometric in shape, or (C) both.

Table 9.1: Visual quality	
Objectives	<p>The following objectives are enabled in the plan area:</p> <p><u>VILUP HLP, Objective 6:</u> Maintain the visual quality of known scenic areas in accordance with the recommended visual quality classes in the visual landscape inventory, until the district manager establishes visual quality objectives for the area.</p> <p><u>FRPA s.180:</u> Every area established or continued under the Code as (c) a scenic area that was in effect immediately before the effective date is continued under this Act.</p> <p><u>GAR s.7 (1):</u> The minister responsible for the Land Act by order may establish an area as a scenic area if satisfied that the area (a) is visually important based on its physical characteristics and public use, and (b) requires special management that has not otherwise been provided for by this regulation or another enactment. GAR s.7 (2) The minister responsible for the Forest Act by order may establish for a scenic area visual quality objectives that are consistent with subsection (1) and are within the categories of altered forest landscape prescribed under section 1.1 of the Forest Planning and Practices Regulation.</p>

	<p><u>GAR s.17:</u> A visual quality class for a scenic area is continued under this regulation as visual quality objective if (a) the visual quality class has been (i) set out before October 24, 2002 in a letter from the district manager to the holder of an agreement under the Forest Act, or (ii) included in the most recent tree farm licence visual landscape inventory prepared by the holder of a tree farm licence and approved by the regional manager, and (b) in existence on the coming into force of this section.</p>	
Results or Strategies pursuant to FRPA s.5	<p>The forest development units applicable to the result or strategy: All portions of FDUs that have established Known Scenic Areas.</p> <p><u>Strategies:</u></p> <p>1) The Strategies apply in portions of the FDUs that are Known Scenic Areas, and apply in relation to the VQOs continued under GAR s.17, or established under GAR s.7, as those scenic areas and objectives were on the earlier of the date the cutblock or road is a) submitted for cutting or road permit, or b) becomes a declared area under FPPR s.14(4). The strategies apply to new objectives established under GAR s.7 on the effective date of the order.</p> <p>2) 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.</p> <p>3) 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, the objective may be exempted by the District Manager under FPPR s.12(7) on a case by case basis.</p> <p>4) For SMZs 2, 3 and 7, with primary visual resource values, VILUP HLP Objective 6 is now addressed by established VQOs. Objective 6 only applied until VQOs were established. A Result or Strategy is therefore not required.</p> <p>5) <u>Definitions for purpose of the strategies:</u> “Cutblocks and roads” means cutblocks harvested and roads constructed pursuant to the Forest Act.</p> <p>“Viewpoint” means a place or location on the water or land that has the same or higher viewpoint significance used to determine the visual quality objective for the landscape being assessed.</p> <p>Altered forest landscape has the same meaning as in FPPR s.1.</p>	
Apply to these Forest Development Units:	<input checked="" type="checkbox"/> Keogh <input checked="" type="checkbox"/> Marble <input checked="" type="checkbox"/> Holberg <input checked="" type="checkbox"/> San Josef	<input checked="" type="checkbox"/> Mahatta <input checked="" type="checkbox"/> Neroutsos <input checked="" type="checkbox"/> Klaskish <input checked="" type="checkbox"/> Bonanza

6.10 FRPA Value: 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.

Table 10.1: Cultural Heritage Resources	
Objectives	<p>FPPR section 10</p> <p><i>FPPR Schedule 1 section 4: Factors relating to objective set by government for cultural heritage resources</i></p> <p>4. The following factors apply to a result or strategy for the objective set out in section 10 [objectives set by government for cultural heritage resources]:</p> <ul style="list-style-type: none"> (a) the relative value or importance of a particular cultural heritage resource to a traditional use by an aboriginal people; (b) the relative abundance or scarcity of a cultural heritage resource that is the focus of a traditional use by an aboriginal people; (c) the historical extent of a traditional use by an aboriginal people of a cultural heritage resource; (d) the impact on government granted timber harvesting rights of conserving or protecting a cultural heritage resource that is the focus of a traditional use by an aboriginal people; (e) options for mitigating the impact that a forest practice might have on a cultural heritage resource that is the focus of a traditional use by an aboriginal people.
Results or Strategies pursuant to FRPA s.5	<p><u>The forest development units applicable to the result or strategy:</u> Applies in all FDUs.</p> <p><u>Situations or circumstances that determine where in the forest development units the result or strategy applies:</u> The strategy outlines a process to determine this.</p> <p><u>Strategies:</u></p> <ul style="list-style-type: none"> (1) In respect of the objective set by government for cultural heritage resources, the Holder of the FSP will: <ul style="list-style-type: none"> (a) gather data over the term of this FSP to identify the cultural heritage resources to which the objective relates by: <ul style="list-style-type: none"> (i) initiating ongoing, regular, reasonable efforts in writing and in person to gather data from First Nations, qualified persons, and the designated decision maker (DDM); and (ii) seeking confirmation from the DDM and First Nations of whether any potential cultural heritage resource that has been identified, is in fact a cultural heritage resource to which the objective relates, and/or whether the data gathered in 1(a)(i) indicates the resource requires further assessment under 1(b). (b) assess the identified cultural heritage resources in relation to the risk from forest practices, using FPPR Schedule 1 s.4 Factors and information gathered from available, knowledgeable sources including

	<p>traditional use and archaeological studies, First Nations, qualified persons, and the DDM; and</p> <p>(c) as part of the assessment, make reasonable efforts to:</p> <ul style="list-style-type: none"> (i) establish options for mitigating the impact that a forest practice or forest development carried out by the Holder of the FSP may have on an identified cultural heritage resource, (ii) seek information and advice on the options from First Nations, qualified persons or the DDM, and (iii) select the most appropriate option and implement in Holder of the FSP primary forest activities. <p>(2) The Holder of the FSP will ensure that the strategies set out in subsection (1)(b) and (c) are applied in respect of monumental cedar resources.</p> <p><u>Definitions for the purpose of this result or strategy:</u></p> <p>“First Nation” and “Band” in this FSP means: First Nations as recognized by government where asserted territories and FDU’s overlap, or Tribal Council for a group of First Nations where territories and FDUs overlap.</p> <p>“Forest developments” means proposed cutblocks and roads or portions of FDUs proposed for cutblocks and roads.</p> <p>“Western red cedar or cypress for monumental art” refers to cedar or cypress used for making paddles, poles, masks, totems, canoes, and similar traditional use items.</p> <p>“Cultural heritage resources” is as defined in Forest Act s. 1 and in respect of FPPR s.10.</p>	
Apply to these Forest Development Units:	<input checked="" type="checkbox"/> Keogh <input checked="" type="checkbox"/> Marble <input checked="" type="checkbox"/> Holberg <input checked="" type="checkbox"/> San Josef	<input checked="" type="checkbox"/> Mahatta <input checked="" type="checkbox"/> Neroutsos <input checked="" type="checkbox"/> Klaskish <input checked="" type="checkbox"/> Bonanza

6.11 FRPA Value: Recreation

FRPA section 56(3) The minister may establish an objective for an interpretive forest site, recreation site or recreation trail established under subsection (1).

Table 11.1: Recreation sites and trails	
Objectives	FRPA s.56 objectives have not been created for the existing recreation sites.
Results or Strategies pursuant to FRPA s.5	No results or strategies required. WFP manages FRPA s.56 and FPC s.102 established sites in accordance with the s.56 or grandfathered s.102 agreement for the site, as amended from time to time.

6.12 FRPA Values: Resource Features

GAR s.5 (1) Subject to subsection (2), the minister responsible for the Forest Act by order may identify one or more of the following as resource features in relation to a specified area:

- (a) a surface or subsurface element of a karst system;*
- (b) a range development;*
- (c) Crown land used for research or experimental purposes;*
- (d) a permanent sample site used as a snow course by or on behalf of the federal or Provincial government for the purpose of measuring the water content of the snow pack on a given area;*
- (e) a cultural heritage resource that is the focus of a traditional use by an aboriginal people and that is not regulated by the Heritage Conservation Act;*
- (f) an interpretive forest site, recreation site or recreation trail;*
- (g) a trail or other recreation facility referred to in section 57 of the Act that is authorized by the minister or under another enactment;*
- (h) a recreation feature that the minister considers to be of significant recreational value.*

(2) The minister responsible for the Forest Act may make an order under subsection (1) if the minister is satisfied that the resource feature requires special management not otherwise provided for under this regulation or another enactment.

(3) The identification of a resource feature under subsection (1) (a) may be by category or type, and may be restricted to a specified geographic location, and (b) must be sufficiently specific to enable a person affected by it to identify the resource feature in the ordinary course of carrying out forest practices or range practices.

(4) Despite subsections (1) to (3), if the minister responsible for the Forest Act reasonably believes that a resource feature may be subject to damage or disturbance if the location of the resource feature is, he or she (a) must not disclose the location of the feature in the order, disclosed (b) must provide written notice of the location of the feature to the holders of agreements under the Forest Act or the Range Act that will be affected by the order, and (c) may attach conditions to the order (i) prohibiting those holders from disclosing the location of the feature, or (ii) restricting the extent to which, or the persons to whom, those holders may disclose the location of the feature.

(5) A person to whom a condition referred to in subsection (4) (c) applies must comply with the condition.

Table 12.1: Resource features	
Objectives	<p>Resource features are practice requirements outside of the FSP, and are mentioned here only as background information supporting the plan. Because no objectives are specified in resource feature orders, results or strategies are not required. GAR s.5: Minister may identify resource features. FPPR s.70(1): Must ensure that the activity does not damage or render ineffective a resource feature FPPR s.91(1): Minister may grant exemption to s.70(1) if not practicable in particular area</p> <p>Current Order(s): 1) Karst Features: Order to Identify Karst Features for North Island Central Coast Forest District. March 29th, 2007.</p>

	<p>Per the Order, the following Karst Resource Features for surface or subsurface elements of a karst system will apply:</p> <ul style="list-style-type: none"> • Karst caves • The important features or elements within very high or high vulnerability karst • Significant surface karst features.
Background Information	<p>Results and strategies are not prepared for resource features; however, FPPR s.70 will apply.</p> <p>Other types of resource features have not yet been designated, but when designated, FPPR s.70 will apply.</p> <p>Western Forest Products has prepared a Karst Management Standard that is based on the Provincial Guidance and best available information.</p>

7.0 FRPA Measures: Invasive plants

FPPR s.17: For the purpose of section 47 [invasive plants] of the Act, a person who prepares a forest stewardship plan must specify measures in the plan to prevent the introduction or spread of species of plants that are invasive plants under the Invasive Plants Regulation, if the introduction or spread is likely to be the result of the person's forest practices.

Table 13.1: Invasive Plants	
Objectives	FPPR s.17 requires measures to be specified in a FSP. Applies to species listed as an invasive plant listed in the Invasive Plants Regulation B.C. Reg. 18/2004, as that Regulation may be amended from time to time during the term of the Plan.
Measures	<p>INVASIVE PLANT MEASURES</p> <p>Measure 1: Identification at a site: For purposes of identifying site level occurrences, the Holder of the FSP will: a) provide appropriate personnel (e.g. forester, engineers and individuals involved in roadside brushing projects) training the recognition of invasive plants that are, or may potentially be within (i.e. known to occur in adjacent non-Plan areas) the Plan area; b) check IAPP database for reported occurrences near a proposed cutblock or road on an annual basis or prior to the site plan preparation; and c) detect weeds that are likely to be spread by the Holder of the FSP's forest practices during Road and Cutblock Site Plan field work.</p> <p>Measure 2: Reporting: Holder of the FSP will report infestation sites found on sites of the Holder's forest practices to the government system (IAPP) for the Priority Species identified for this FSP in Measure 3.</p> <p>Measure 3: Priority Species: The following are identified as Priority Species for the term of the FSP:</p> <ul style="list-style-type: none"> • Scotch Broom • Tansy Ragwort • Knotweeds • Giant Hogweed • Orange Hawkweed

	<p>Background Information: These species and their priorities are based on review of the following:</p> <ul style="list-style-type: none"> - IAPP database, March 2018. - <i>Invasive Plant Pest Management Plan for Provincial Crown Lands in the South Coastal Region of British Columbia</i> Ministry of Forests, Lands, Natural Resource Operations & Rural Development, p.18: https://www.for.gov.bc.ca/hra/publications/invasive_plants/pmps/FLNR_South_Coastal_PMP_Draft.pdf - <i>Coastal ISC Priority Invasive Plant List (current to: April 21, 2016)</i>: http://www.coastalisc.com/images/pdfs/2016_Coastal_ISC_Priority_Plant_List_web.pdf - As compared to the most recent available review of priority plants for FSPs: <i>Plant Section Information For FSP Preparers & Reviewers within Coastal Area, May 11, 2011, by Jeff Hallworth Invasive Plants Specialist.</i> <p>Measure 4: Locations:</p> <p>If priority plants are detected in Measure 1, the Holder of the FSP will focus mitigation efforts by conducting a site assessment of the risk of introduction and/or spread of the invasive species as a result of the Holder of the FSP's practices considering:</p> <ul style="list-style-type: none"> • Risk of spread; • Level of "invasiveness"; • Potential to cause social, economic or environmental damage; • Legal designation for control; and • Likelihood of success, which depends on a combination of the control methods/tools available for the particular species, and its current range or distribution. <p>Measure 5: Practices:</p> <p>The Holder of the FSP will implement one or more of the following practices if needed at an infested site to prevent foreseeable introduction or spread of a priority invasive species as a result of Holder of the FSP activities in the areas as determined per Measure 4:</p> <p>a) Road maintenance: mitigating spread of knotweeds (e.g. avoid mowing) and scotch broom (e.g. avoid mowing when in seed);</p> <p>b) Road construction: assessing active gravel pits and shop yards for scotch broom, and if the pit is infested, the Holder of the FSP will either avoid using it or employ one or more mitigative measures (e.g. stockpile plants and dispose in a manner to prevent from going to seed further, spray germinants, or monitor for sprouting at new site); and,</p> <p>c) Cutblocks: The Holder of the FSP will mitigate a likely introduction or spread of a priority species from the Holder's activity within cutblocks into uninfested areas as required in Measure 4, by implementing one or more of the following measures:</p>
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	<ul style="list-style-type: none"> i. grass seed promptly with weed free seed (e.g. Common #1 forage mixture or better, not ground cover mixture) on exposed mineral soils disturbed by the Holder of the FSP within 100 m of invasive site, if this is likely to reduce species spread, and plant trees to reinitiate shading; ii. pull, spray or stockpile the invasive plants and dispose, to control for a period of time necessary if it prevents the forest practice from spreading the species (pulling not recommended for knotweeds); iii. if spread to a new cutblock or road is anticipated to be unavoidable, then spray germinants at new site or monitor at new site; iv. work in uninfested sites before moving to infested sites; or for some species and seasons clean ground based equipment before moving it to uninfested areas or sensitive areas; v. other practices determined from the risk assessment in Measure 4, and the literature (e.g. Best Practices for Preventing the Spread of Invasive Plants during Forest Management Activities, as updated and amended from time to time); vi. In these measures, mitigating a likely introduction or spread refers to a treatment(s) or action(s) needed to prevent spread by the particular operational activity in the season of activity. <p>Measure 6: Participation in a Multi-Agency Approach: The Holder of the FSP will actively participate in the development and implementation of a multi-agency approach to controlling the introduction and spread of Giant and Japanese Knotweeds, Giant Hogweed and Scotch Broom (or other identified invasive species) on the Plan area, guided by the applicable multi-agency Invasive Plant Pest Management Plan for Provincial Crown Lands, BC invasive plant treatment guidelines, and Regional Plant Specialist(s).</p>
Apply to these Forest Development Units:	<div> <input checked="" type="checkbox"/> Keogh <input checked="" type="checkbox"/> Marble <input checked="" type="checkbox"/> Holberg <input checked="" type="checkbox"/> San Josef </div> <div> <input checked="" type="checkbox"/> Mahatta <input checked="" type="checkbox"/> Neroutsos <input checked="" type="checkbox"/> Klaskish <input checked="" type="checkbox"/> Bonanza </div>

Table 13.2: Natural Range Barriers	
Requirement	FPPR s.18 requires measures to be specified in a FSP
Background Information	There are no natural range barriers in the FDUs under this FSP.

8.0 Stocking Standards

8.1 Application

The stocking standards are to apply to areas harvested under this FSP, in all FDU's.

The stocking standards apply to the Net Area to be Reforested (NAR). Landslides are excluded from the NAR. Riparian Reserve Zones (RRZ) harvested under the Results or Strategies outlined in Table 3.2 are included in the NAR.

8.2 Application to Cutblocks Where Harvesting Began Before Term Commences (FRPA s.197(5)) and declaration was not received by MFLNRORD within RESULTS

See section 3.2.

8.3 Situation or Circumstances that Determine Whether Free Growing is Assessed on a Block Basis (FPPR s.44(1)) or Across Blocks (FPPR ss.45(1) and (2)) (FPPR s.16(1))

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

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

In order to accommodate mosaics, transitional sites and site conditions found within standard units (SU), elements of the stocking standards will be assigned and assessed at the Assessment Area (AA) level or the SU level. This will enable the elements of the stocking standard to reflect the conditions found on the site.

8.4.1 Species

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

8.4.2 Stocking

The stocking standards will address the two components of stocking: the stocking level and the stocking distribution. Stocking level will be addressed by using Minimum Stocking Standards (MSS). The stocking distribution will be addressed by using minimum horizontal inter-tree distances and M-values derived from Target Stocking Standards (TSS) during stocking assessment.

8.4.2.1 Target Stocking Standards

M-value derived from the Target Stocking Standard (TSS) listed in Appendix 1.2 will be used to ensure that stocking distribution is taken into account when assessing stocking levels. TSS will be assigned at the SU level. The dominant site series or the management regime of the SU will be used to assign the TSS to the SU.

8.4.2.2 Minimum Stocking Standards

Minimum Stocking Standards (MSS) listed in Appendix 1.3 will be used to assess the achievement of an acceptable stocking level on individual SUs (or portion thereof). MSS will be assigned at the SU level. The dominant site series or the management regime of the SU will be used to assign the MSS to the SU. MSS can be adjusted as per Appendix footnotes.

8.4.2.3 Minimum Horizontal Inter-Tree Distance

Minimum Horizontal Inter-Tree Distances listed in Appendix 1.4 will be used to ensure that stocking distribution is taken into account when assessing stocking levels. Minimum Horizontal Inter-Tree Distance will be assigned at the Assessment Area (AA) level as per Appendix 1.4. The dominant site series or the site condition of the AA will be used to assign the Minimum Horizontal Inter-Tree Distance.

8.4.3 Regeneration Date

Regeneration date will be 6 years.

8.4.4 Minimum Free Growing Height

Minimum free growing heights listed in Appendix 1.5 will be used to demonstrate that the trees are adapted to the site, and are growing well and can reasonably be expected to continue to do so. Minimum free growing height will be assigned at the Assessment Area (AA) level based on the AA's ecosystem classification. The dominant site series of the AA will be used to assign minimum free growing heights within the AA.

8.4.5 Stocking Levels to Address Wildlife

Where the circumstances below apply, stocking level may vary as described.

Heavy Ungulate Use Areas

Where elk and/or deer significantly impede the ability of a stand to achieve the stocking level set out in Table 2, despite reasonable efforts by the FSP Holder, the FSP Holder will use the *Post Harvest Option* described in the Roosevelt Elk Impacts on Reforestation: Mitigation Options, June 29, 2011 (p. 10). This will involve amendments to stocking standards, and application of FPPR s.46.11 and FPPR s.97.1.

8.5 Mixed Hardwood/Conifer and Hardwood Management

Deciduous species may be the leading species for Mixed Hardwood/Conifer and/or Hardwood management (Patch Mixedwood Strategy) on up to 65 ha in the TFL 6 management unit per year. These hectares are Net Area to be Reforested. For operational reasons, these limits are averages over the term of the plan rather than yearly limits.

8.6 Free-Growing Damage Criteria

Sources for damage criteria include:

- Conifers: Free-Growing Damage Criteria for Even-Aged (Age Class 1) Coniferous Trees (2000)
- Broadleaf and Conifers: Silviculture Survey Procedures Manual (2015)
- Broadleaf: Hardwood Management in the Coast Forest Region (2009)

9.0 Signature(s) (FRPA 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



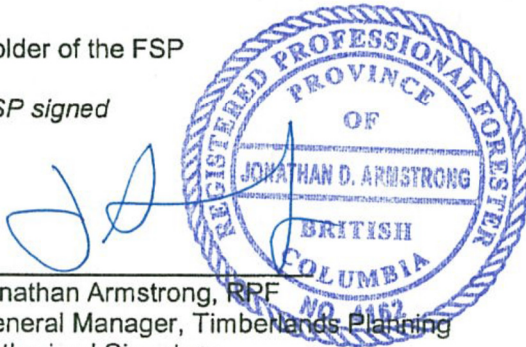
Jonathan D. Flintoft, RPF
Sr. Operations Planner
North Island Forest Operation

June 7 / 2018
Date

SIGNATURE OF PERSON REQUIRED TO PREPARE PLAN (FRPA s.5(3))

Holder of the FSP

FSP signed



Jonathan Armstrong, RPF
General Manager, Timberlands Planning
Authorized Signatory

June 7 / 2018
Date

Appendix 1: Stocking Standards

Appendix 1.1 Species Selection

Species selection will occur at the Assessment Area (AA) level based on the AA's dominant site series. Ecologically suitable species for each site series are listed in the table below.

Ecosystem Classification ¹⁴		Coniferous Species									Deciduous Species	
BEC	Site Series	Ba	Cw	Fdc	Hm	Hw	Plc	Pw ¹¹	Ss ¹²	Yc	Act ⁹	Dr ⁸
CWHvm1	01, 05, S1ha, S13	X	X	X		X		X ¹⁹	X	X ¹		X
CWHvm1	01s, 06s, S1ch, S1ch-ha, S10		X	X ³		X	X ¹⁰	X ¹⁹		X ¹		
CWHvm1	S1ha-ch	X ²	X	X ³		X			X ²	X ¹		
CWHvm1	03, S2		X	X		X	X ¹⁰	X ¹⁹		X ¹		
CWHvm1	04, S12ha	X ¹⁷	X	X		X		X ¹⁹	X	X ¹		
CWHvm1	06, 07, 08, S3, S15	X	X	X		X		X ¹⁹	X	X ¹		X
CWHvm1	09	X	X			X			X		X	X
CWHvm1	10, S4	X	X						X		X	X
CWHvm1	14 ⁵ , S6		X			X	X ¹⁰	X ¹⁹		X		
CWHvm1	13, S7, S8		X				X			X		
CWHvm1	14 ⁶ , S5		X			X		X ¹⁹	X			X
CWHvm1	S12ch		X	X		X				X		
CWHvm2	01, 05, M1, M3	X	X	X ⁷	X ¹³	X		X ¹⁹		X		
CWHvm2	03, 04, M2		X	X	X ¹³	X		X ¹⁹		X		
CWHvm2	06, 07, 08, M5	X	X		X ¹³	X		X ¹⁹		X		
CWHvm2	09, 11, M4		X		X	X		X ¹⁹		X		

Ecosystem Classification ¹⁴		Coniferous Species									Deciduous Species	
CWHvh1	01, CP	X ¹⁸	X		X	X	X		X	X		
CWHvh1	03, 11,		X		X	X	X			X		
CWHvh1	04, 05, 06, 07, 08, 09	X ¹⁸	X		X	X	X		X	X		
MHmm1	01, 03, 04, 05	X			X	X ¹⁶		X ⁷				
MHmm1	02, 09				X	X ¹⁶		X ⁷				
MHmm1	06, 07	X			X	X ¹⁶		X ⁷				

Appendix 1.1 Footnotes:

- 1 Restricted to areas influenced by CWHvm2 or CWHvh1, or to cold air drainage sites.
- 2 Suitable in the absence of salal in proximity to the tree.
- 3 Restricted to areas of low to moderate salal competition. In the Holberg FDU, restricted to sites where Fdc comprised part of the harvested volume.
- 4 Footnote retired in December 2017.
- 5 Soil Nutrient Regime (SNR) C-D.
- 6 Soil Nutrient Regime (SNR) E.
- 7 Restricted to the Marble FDU on lower elevations and/or warm aspects.
- 8 Restricted to SUs designated for Mixed Hardwood/Conifer management or Hardwood management; or to conifer leading SUs for root rot management or for rehabilitating disturbed, degraded or unstable sites.
- 9 Restricted to SUs designated for Mixed Hardwood/Conifer management or Hardwood management.
- 10 The use of Plc to meet the MSS is limited to 20%.
- 11 Pw is to be from seed which has been selected to be resistant to *Cronartium ribicola* or is to be pruned prior to FG declaration. Pruned means that the lowest live branches have been removed to a height of 1.3 m when trees are greater than or equal to 2.5 m tall. For trees less than 2.5 m tall, at least 40% of tree height will remain as live crown.
- 12 Planted Ss from sources genetically resistant to *Pissodes strobe* are acceptable in all weevil risk zones, but not to exceed 25% of target stocking in high weevil risk zones. In areas mapped as moderate to high weevil risk, saplings of local provenance may be individually accepted if current and historic weevil attacks are one or none. In areas mapped as low risk at time of stand establishment, any Ss provenance established in accordance with Climate Based Seed Transfer (CBST) equations in use at time of establishment is acceptable.

Appendix 1.1 Footnotes:

- 13 Restricted to areas influenced by MHmm1 or to cold air drainage sites.
- 14 Some areas in the Holberg operating area mapped as CWHvh1 can be managed to the CWHvm1 standards using the Lewis Ecosystem Classification due to the transitional nature of the CWHvh1 in this area.
- 15 Footnote retired in December 2017.
- 16 Restricted to lower elevations.
- 17 Restricted to the wetter portion of the Holberg operating area on sites that are not distinctly water shedding.
- 18 Restricted to nutrient medium sites
- 19 Restricted to warm aspects of the Marble, Keogh, Neroutsos and Holberg FDUs (Holberg = east of the Coal Harbour Highway).

Appendix 1.2 Target Stocking Standards

Target Stocking Standards (TSS) will be assigned at the SU level as per the table below.
The dominant site series or the management regime of the SU will be used to assign the TSS to the SU.

TSS	Site Series ¹
1500	Dr leading SUs designated for Mixed Hardwood/Conifer management or Hardwood management.
1200	CWHvm1 S1ch, S1ch-ha
800	CWHvh1 03, 11, 13, CP,; CWHvm1 03, 14, S2, S5, S6, S7; CWHvm2 03, 09, 11, M2, M4; MHmm1 02, 06, 09
400	CWHvm1 13, S8
900	All other site series not listed above in the CWHvh1, vm1, vm2 and MHmm1; Act leading SUs designated for Mixed Hardwood/Conifer management or Hardwood management.

Footnotes:

- 1 Some areas in the Holberg operating area mapped as CWHvh1 can be managed to the CWHvm1 standards using the Lewis Ecosystem Classification due to the transitional nature of the CWHvh1 in this area.

Appendix 1.3 Minimum Stocking Standards

Minimum Stocking Standards (MSS) will be assigned at the SU level as per the table below.
The dominant site series or the management regime of the SU will be used to assign the MSS to the SU.
MSS can be adjusted as per table footnotes.

MSS	Site Series ¹
1000	Dr leading SUs designated for Mixed Hardwood/Conifer management or Hardwood management.
800	CWHvm1 S1ch, S1ch-ha
400	CWHvh1 03, 11, 13, CP; CWHvm1 03, 14, S2, S5, S6, S7; CWHvm2 03, 09, 11, M2, M4; MHmm1 02, 06, 09.
200	CWHvm1 13, S8.
500	All other site series not listed above in the CWHvh1, vm1, vm2 and MHmm1; Act leading SUs designated for Mixed Hardwood/Conifer management or Hardwood management.

Footnotes:

- 1 Some areas in the Holberg operating area mapped as CWHvh1 can be managed to the CWHvm1 standards using the Lewis Ecosystem Classification due to the transitional nature of the CWHvh1 in this area.

Appendix 1.4 Minimum Horizontal Inter-Tree Distance

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

The dominant site series or the site condition of the Assessment Area (AA) will be used to assign the MHID to the SU.

MHID (m)	Site Series ¹
1.6	CWHvh1 ³ 03, 11, 13, CP; CWHvm1 ³ 03, 04, 09, 10, 13, 14, S2, S4, S5, S6, S7, S8; CWHvm2 ³ 03, 04, 09, 11, M2, M4; MHmm1 02, 06, 07, 09. All site series in helicopter logging areas. Within 10 m of roadsides and/or on talus sites ² and/or on root rot sites where stump avoidance is necessary.
2.0	All other site series not listed above in the CWHvh1, vm1, vm2 and MHmm1.

Footnotes:

- 1 Some areas in the Holberg operating area mapped as CWHvh1 can be managed to the CWHvm1 standards using the Lewis Ecosystem Classification due to the transitional nature of the CWHvh1 in this area.
- 2 Talus slopes should be avoided during harvesting. The intention of including talus slopes above is to address only incidental amounts that may be included in the NAR of cutblocks (i.e. a small portion of helicopter cutblocks).
- 3 Situations or Circumstances where 1.6 metre Minimum Horizontal Intertree Distance applies:
 - 1) < 20 metres from road centerline;
 - 2) Immediately adjacent to any:
 - a) Stream – riparian area;
 - b) Natural non-productive area;
 - c) Unplantable slash that has been mechanically piled or results from helicopter operations where slash treatment is not practicable; or
 - 3) On any:
 - a) Hygric or wetter site;

- b) Very harsh site where protected microsites are critical;
- c) Area where stump avoidance is necessary on a root rot site;
- d) Area extensively utilized for grizzly bear, deer or other wildlife habitat or browse; or
- e) Area directly adjacent to the dripline of retained trees.

Appendix 1.5 Minimum Free Growing Heights

Minimum free growing height will be assigned at the Assessment Area (AA) level based on the AA's ecosystem classification. The dominant site series of the SU will be used to assign the Minimum Free Growing Heights for the AA.

Ecosystem Classification ¹		Coniferous Species									Deciduous Species	
BEC	Site Series	Ba	Cw	Fdc	Hm	Hw	Plc	Pw	Ss	Yc	Act	Dr
CWHvm1	01, 04, 05, 06, S1ha, S1ha-ch, S12ch, S12ha, S13, S15, 01s, 06s, S1ch, S1ch-ha, S10	1.75	1.50	3.00		3.00	1.50	2.50	3.00	1.50		3.00
CWHvm1	03, 13, 14, S2, S5, S6, S7, S8		1.00	2.00		2.00	1.25	2.50	3.00	1.00		
CWHvm1	07, 08, 09, 10, S3, S4	2.25	2.00	4.00		4.00		2.50	4.00	2.00	4.00	4.00
CWHvm2	01, 05, 06, M1, M3	1.75	1.50	2.25	1.00	2.50		2.50		1.50		
CWHvm2	03, 04, 09, 11, M2, M4	1.50	1.00	1.50	0.75	1.75		2.50		1.00		
CWHvm2	07, 08, M5	2.25	2.00		1.00	3.50		2.50		2.00		
CWHvh1	01, CP	1.75	1.50		2.00	2.00	1.50		3.00	1.50		
CWHvh1	03, 11, 13		1.00		1.25	1.25	1.25		2.00	1.00		
CWHvh1	04, 05, 06, 07, 08, 09	2.25	2.00		1.75	1.75	1.50		4.00	2.00		
MHmm1	01, 03, 04, 05	0.60			1.00	1.00				1.00		
MHmm1	02, 06, 07, 08, 09	0.60			0.75	0.75				0.75		

Footnotes:

- 1 Some areas in the Holberg Forest Operation mapped as CWHvh1 can be managed to the CWHvm1 standards using the Lewis Ecosystem Classification due to the transitional nature of the CWHvh1 in this area.

Appendix 1.6 Revisions to Terrain-Ecosystem Mapping

Terrain-ecosystem mapping was undertaken on WFP's tenures on northern Vancouver Island in the 1980's. Since that time there have been revisions to the terrain classification system and the understanding of ecosystems has increased based on both operational experience and formal research. The original WFP ecosystem classification (Lewis, 1982 and 1985) pre-dated the current version of the bio-geoclimatic ecosystem classification (BEC, Green and Klinka, 1994) and although there are many analogous ecosystems (site series) in both classifications, there are also significant differences. A subsequent update/review was completed in 2005 (Review of Ecosystem Classification in TFL 6, McWilliams and Klinka, WFP). Largely because of the mobility of forestry personnel and the restructuring of the forest industry, it became increasingly desirable to bring the WFP classification into conformance with that of the MFLNRORD. There is sufficient flexibility within the BEC system to incorporate local differences recognized in the WFP inventory, by the use of various modifiers and phases. Revision to the WFP ecosystem classification, and to both terrain attributes and ecosystem attributes of existing map units (polygons) was completed in 2007 (Phase II Review of Ecosystem Classification in TFL 6, McWilliams and Green, FIA Project #6549005). The WFP document *The Ecosystems of Northern Vancouver Island* (Lewis, 2007) summarizes this work and the document continues to be referenced by Forest Professionals working on the plan area. Table 1 below is a correlation of old and new WFP/Lewis ecosystem symbology and its relationship to BEC for the CWHvm1, vm2 and vh1 subzones. In the new symbology, there is a direct one-to-one relationship to the BEC site series, but there are often additional modifiers. This cross-walk table should assist in relating the original and revised site classifications in relation to site plans and stocking standards. For additional background information, refer back to the documents listed above. WFP Forest Professionals utilized the WFP ecosystem classification system in the two previous WFP North Island FSPs because it provided for more 'granular' site diagnosis of the unique landforms that are found on Northern Vancouver Island. The WFP system continues to be utilized in this FSP.

Table 1. Relationship between old and new Lewis units with BEC units

WFP CLASS'N – (Lewis, 1982, 1985)	WFP REVISED CLASS'N – (Lewis, 2007)	WFP POTENTIAL MODIFIERS	BEC UNIT (Green & Klinka, 1994)	COMMENTS
S1HA	VS01		vm1/01*	Expected to include VS06dr; VH04 where mapped in CWHvh1.
S1HA-CH and S1CH-HA	VS01 and VS01s	fo, po	vm1/01*	S1HA-CH and S1CH-HA were associated with the fo and po modifiers, based on level of "salal risk".
S1CH	VS01s	fo, po	vm1/01s*	salal phase (long-term salal); expected to include VS06dr; VH04s where mapped in CWHvh1
S2	VS03		vm1/03	
S2F	VS02F		vm1/02	Douglas-fir phase – locally drier climate
S2P	VS02P		vm1/02	shore pine phase
S3 – terraces ('benches')	VS09		vm1/09	
S3 – on fans	VS05F		vm1/05	also minor VS07, vm1/07
S3B	VS04B		vm1/04	raised beach deposits
S4	VS10		vm1/10	seral red alder

WFP CLASS'N – (Lewis, 1982, 1985)	WFP REVISED CLASS'N – (Lewis, 2007)	WFP POTENTIAL MODIFIERS	BEC UNIT (Green & Klinka, 1994)	COMMENTS
S5	VS14F		vm1/14	richer skunk cabbage sites; in a fluvial setting
S6	VS14O		vm1/14	poorer skunk cabbage sites; depressional; VH13 in CWHvh1
S7	VS14WS		vm1/14	PI-Cw swamp forest
S8	VS13 (WB51)		vm1/13	PI bog woodland
S9	WB51, WB52		--	open bog; WB52 in CWHvh1
S10	VS06	fo, dr & wt	vm1/06	minor components with S1 were not mapped in earlier work
S11	WF51		--	open sedge fen
S12	VS05L		vm1/05 (/04)	also minor VS04L
S13	VS05C & VS07C			commonly colluvial
S13L	VS07CL			limestone colluvium
S15	VS06, VS06s	fo, dr, wt, mn		this ecosystem was not mapped in the earlier work; not expected to include VS06dr
M1	VM01	c	vm2/01	montane
M2	VM03		vm2/03	
M3	VM05		vm2/05	
M4	VM11		vm2/11	
M5	VM08	c	vm2/08	
CP	VH01		vh1/01	
S2	VH03		vh1/03	
S1HA or S1CH	VH04	c, f, s	vh1/04	Well drained sites
S15	VH06	c, f, l	vh1/06	Well drained and richer than VH04 sites
S3	VH08		vh1/08	Later seral Fluvial site, highly productive, Red-listed
S4	VH10		vh1/10	Early seral Fluvial site, associated with active floodplains
S6	VH13	f	vh1/13	