

BC Timber Sales
Strait of Georgia Business Area



FOREST STEWARDSHIP PLAN
Sunshine Coast Operating Area
Approved February 8, 2007

Consolidated to Amendment # 1 effective February 4, 2009
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1 FOREST STEWARDSHIP PLAN

1.1 Term of the FSP ([Forest and Range Practices Act \(FRPA\) s. 6\(1\) and 6\(2\)](#))

The original term of the FSP was 5 years commencing on February 8, 2007. The term of the extension of the FSP will be as specified by the Minister.

1.2 Map ([FRPA s. 5\(1\) \(a\)](#) and [Forest Planning and Practices Regulation \(FPPR\) s. 14](#))

The attached overview map shows the boundaries of the Forest Development Units (FDUs) under this FSP which include portions of the Chapman, Howe, Bunster, Haslam, Homfray, Cortes, Brittain, Sechelt, Lois, Deserted and Brem Landscape Units. The map shows the areas that are excluded from the FDU and from this FSP.

1.2.1 Areas to which [FRPA s. 196\(1\) or \(2\)](#) or [FPPR s. 110](#) Applies ([FPPR s. 14\(1\) \(c\)](#))

The FSP Maps show the cutblocks and roads included in Forest Development Plans that are within a FDU under this FSP and considered approved under [FRPA s. 196\(1\) or \(2\)](#), including those cutblocks referred to in [FPPR s.110](#).

1.2.2 Designation in Effect Four Months Before Submission of this FSP ([FPPR s. 14\(3\)](#))

The FSP map shows the things described in [s. 14\(3\) of the FPPR](#) that were in effect on the Date of Submission., including, for ease of reference, the designations listed in Table 1, below.

Table 1: [FPPR 14\(3\) Designations for Sunshine Coast Forest District \(SCFD\) FSP](#)

FPPR 14 (3)(b) Wildlife Habitat Areas	FDU	Date Designated
#2-022 (Marbled Murrelet)	12 (Brittain)	December 20, 2001
#2-001 (Marbled Murrelet)	12 (Brittain)	May 15, 2003
#2-003 (Marbled Murrelet)	12 (Brittain)	May 15, 2003
#2-088 (Marbled Murrelet)	12 (Brittain)	May 15, 2003
#2-089 (Marbled Murrelet)	12 (Brittain)	May 15, 2003
#2-091 (Marbled Murrelet)	12 (Brittain)	May 15, 2003
#2-092 (Marbled Murrelet)	12 (Brittain)	May 15, 2003
#2-093 (Marbled Murrelet)	12 (Brittain)	May 15, 2003
#2-094 (Marbled Murrelet)	12 (Brittain)	May 15, 2003
#2-095 (Marbled Murrelet)	12 (Brittain)	May 15, 2003
#2-096 (Marbled Murrelet)	12 (Brittain)	May 15, 2003
# 2-082 (Marbled Murrelet)	Bunster	June 11, 2002
# 2-161 (Marbled Murrelet)	Howe	December 2, 2004
#2-162 (Marbled Murrelet)	Howe	December 2, 2004
#2-163 (Marbled Murrelet)	Howe	December 2, 2004

#2-164 (Marbled Murrelet)	Howe	December 2, 2004
#2-165 (Marbled Murrelet)	Howe	December 2, 2004
#2-166 (Marbled Murrelet)	Howe	December 2, 2004
#2-167 (Marbled Murrelet)	Howe	December 2, 2004
#2-168 (Marbled Murrelet)	Howe	December 2, 2004
#2-169 (Marbled Murrelet)	Howe	December 2, 2004
#2-170 (Marbled Murrelet)	Howe	December 2, 2004
#2-171 (Marbled Murrelet)	Howe	December 2, 2004
FPPR 14 (3)(e) Scenic Areas	FDU	Date Designated
Scenic areas as established and amended by the District Manager	All	April 22, 1997 Amended June 4, 1999
FPPR 14 (3) (g) Community Watersheds	FDU	Date Designated
Chapman Creek (900.008)	Chapman	June 15, 1995
Community Creek (900.012)	Lois	October 22, 1999
Dakota Creek (900.013)	Howe	June 15, 1995
Dysart Brook (900.094)	Sechelt	October 22, 1999
Greer Creek (900.021)	Haslam	June 15, 1995
Jefferd Creek (900.031)	Lois	June 15, 1995
Haslam/Lang Creek (900.034)	Haslam	May 15, 1996
McNair Creek (900.042)	Howe	June 15, 1995
McNeill Lake (900.026)	Sechelt	June 15, 1995
Milne Creek (900.044)	Sechelt	June 15, 1995
Slammon Creek (900.060)	Bunster	October 22, 1999
Thulin Lake (900.066)	Bunster	October 22, 1999
Wagh Lake (900.100)	Sechelt	October 22, 1999
FPPR 14 (3) (h) Old Growth Management Areas	FDU	Date Designated
Bunster Landscape Unit	Bunster	September 22, 2000
Sechelt Landscape Unit	Sechelt	August 16, 2004
Chapman Landscape Unit	Chapman	December 2, 2002
Lois Landscape Unit	Lois	December 2, 2002

1.2.3 Areas Within FDUs Subject to a Road Permit or Timber Sale Licence, But Not Subject to this FSP (**FPPR s. 14 (3) (k)**)

For the purposes of [s.14\(3\)\(k\)](#) of the FPPR, the FSP Maps identify the areas that are subject to a road permit or Timber Sale Licence and are not subject to this FSP. The Forest Practices Code of British Columbia Act (FPC) and associated regulations will continue to apply to these permits as per [FPPR s.](#)

197(7) unless the Holder of this FSP gives notice to the District Manager that the FRPA and associated regulations applies, effective on the date, and to the extent specified in the notice.

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

1.3 Results and Strategies

1.3.1 Land Use Objectives

1.3.1.1 Order Establishing Landscape Units and Objectives

Landscape Unit Plans have been established under [Section 4 of the FPC](#) for the Chapman, Bunster, Sechelt, and Lois Landscape Units.

1.3.1.1.1. Objectives set by government for the Chapman Landscape Unit

➤ Objective 1

(1.) Maintain or recruit old growth forest attributes, in old growth management areas, that are established as shown on map attached to LUP dated December 3, 2001. No timber harvesting, including salvage and single-tree harvesting, is to occur within old growth management areas. Road construction is not to occur within old growth management areas unless no other practicable options exist, in which case replacement old growth management areas may be required.

Maintenance, deactivation, removal of danger trees, or brushing and clearing on existing roads within the right-of-way for safety purposes are exempt from this objective.

The Statutory Decision Maker (SDM) may permit removal or falling of trees or road construction within an OGMA for reasons such as but not limited to the following:

- *To prevent the spread of insect infestations or diseases that pose a significant threat to forested areas outside of OGMAs. This will be done in a manner that retains as many old growth forest attributes as possible.*
- *Construction of roads and yarding corridors, if the SDM determines that no other practicable option exists.*
- *Partial-cut timber harvesting within immature (<100 years old) portions of OGMAs, where it can be demonstrated that harvesting will accelerate development of old growth forest attributes and improve the stand for biodiversity purposes, without compromising other resource values.*

Harvest entries for the acceleration of old growth attributes are to be limited to recruitment OGMAs in Lower Biodiversity Emphasis Option Landscape Units.

First Nations traditional use of forest resources, treaty negotiations or settlements will not be limited by this objective.

FDU	Result or Strategy
Chapman	<ol style="list-style-type: none"> 1. The timber sales manager will not carry out or authorize the harvest of timber, including salvage and single-tree harvesting, within Old Growth Management Areas (OGMAs) delineated as part of the Chapman Landscape Unit Plan established December 2, 2002. 2. The timber sales manager will not carry out or authorize the construction of new roads within OGMAs delineated as part of the Chapman Landscape Unit Plan established December 2, 2002 unless no other

	<p>practicable option exists, in which case replacement OGMA's may be required.</p> <p>3. Sections 1 and 2 of this strategy apply to subsequent amendments to OGMA's delineated within the Chapman LUP.</p> <p>4. Amendments to established OGMA's will be consistent with the "Administrative Adjustments, Amendments and Operational Procedures for Old Growth Management Areas ILMB – Coast Region", dated August 13, 2010.</p>
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➤ **Objective 2**

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

- *No timber harvesting, including salvage or single tree selection, is to occur within established Wildlife Tree Patches.*
- *Wildlife Tree Patches must include, if present, live or dead veteran trees (excluding danger trees), or remnant old growth patches.*
- *Wildlife Tree Patches must include larger trees for the stand and any existing moderate to high value wildlife trees (excluding danger trees).*

Table A. *Wildlife Tree Retention by Biogeoclimatic Ecosystem Classification Subzone*

<i>BEC Subzone</i>	<i>Total WTR (%)</i>
<i>CWHxm</i>	<i>7</i>
<i>CWHdm</i>	<i>10</i>
<i>CWHvm</i>	<i>12</i>
<i>MHmm</i>	<i>6</i>

WTR = Wildlife Tree Retention

BEC = Biogeoclimatic Ecosystem Classification

CWHxm: Coastal Western Hemlock biogeoclimatic zone, very dry maritime subzone.

CWHdm: Coastal Western Hemlock biogeoclimatic zone, dry maritime subzone.

CWHvm: Coastal Western Hemlock biogeoclimatic zone, very moist maritime subzone.

MHmm: Mountain Hemlock biogeoclimatic zone, moist maritime subzone.

FDU	Result or Strategy										
Chapman	<ol style="list-style-type: none"> The timber sales manager will identify WTRAs, for cutblocks for which harvesting has been completed, that meet the targets for each BEC subzone in the Chapman Landscape Unit as indicated in the table below: <table border="1"> <thead> <tr> <th>BEC Subzone</th><th>Total WTR (%)</th></tr> </thead> <tbody> <tr> <td>CWHxm</td><td>7</td></tr> <tr> <td>CWHdm</td><td>10</td></tr> <tr> <td>CWHvm</td><td>12</td></tr> <tr> <td>MHmm</td><td>6</td></tr> </tbody> </table> WTRAs must include: <ol style="list-style-type: none"> live or dead veteran trees (excluding danger trees) or remnant old growth patches if present, and larger trees for the stand and any existing moderate to high value wildlife trees (excluding danger trees). 	BEC Subzone	Total WTR (%)	CWHxm	7	CWHdm	10	CWHvm	12	MHmm	6
BEC Subzone	Total WTR (%)										
CWHxm	7										
CWHdm	10										
CWHvm	12										
MHmm	6										

1.3.1.1.2. Objectives set by government for the Bunster Landscape Unit

➤ Objective 1

Objective 1: Maintain or recruit old growth ecosystem values, in old growth management areas, that are established as shown on the attached Map 1. No timber harvesting, including salvage, is to occur within old growth management areas. Road construction is not to occur within old growth management areas unless no other practicable options exist, in which case replacement old growth management areas may be required.

FDU	Result or Strategy
Bunster	<ol style="list-style-type: none"> The timber sales manager will not carry out or authorize the harvest of timber, including salvage and single-tree harvesting, within OGMA's delineated as part of the Bunster Landscape Unit Plan established September 22, 2000. The timber sales manager will not carry out or authorize the construction of new roads within OGMA's delineated as part of the Bunster Landscape Unit Plan established September 22, 2000 unless no other practicable option exists, in which case replacement OGMA's may be required. Sections 1 and 2 of this strategy apply to subsequent amendments to OGMA's delineated within the Bunster LU.

	4. Amendments to established OGMAs will be consistent with the “Administrative Adjustments, Amendments and Operational Procedures for Old Growth Management Areas ILMB – Coast Region”, dated August 13, 2010.
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➤ **Objective 2**

Objective 2: Maintain structural diversity within managed stands by retaining wildlife trees within the boundaries of each cut-block to meet targets for each BEC subzone in the landscape unit as indicated in the table below:

- *All non-contributing areas with high value wildlife trees must be used first to achieve the overall cutblock target.*
- *25per cent of the % WTR will come from high value wildlife trees in the timber harvesting landbase averaged over the cutblocks in the forest development plan.*
- *It is acceptable on a single cutblock to be +/-2% WTR limits, for biological reasons, provided that the average level or retention is achieved on all blocks proposed within the applicable subzone of the current forest development plan..*

Wildlife Tree Retention by Biogeoclimatic Ecosystem Classification Subzone

<i>BEC Subzone</i>	<i>Total WTR (%)</i>
<i>CDFmm</i>	<i>7</i>
<i>CWHxm1</i>	<i>8</i>
<i>CWHdm</i>	<i>10</i>
<i>CWHvm2</i>	<i>10</i>
<i>MHmm1</i>	<i>6</i>

WTR = Wildlife Tree Retention

BEC = Biogeoclimatic Ecosystem Classification

CDFmm: Coastal Douglas-fir biogeoclimatic zone, moist maritime subzone

CWHxm1: Coastal Western Hemlock biogeoclimatic zone, very dry maritime subzone, windward variant

CWHdm: Coastal Western Hemlock biogeoclimatic zone, dry maritime subzone

CWHvm2: Coastal Western Hemlock biogeoclimatic zone, very moist maritime subzone, montane variant.

MHmm1: Mountain Hemlock biogeoclimatic zone, moist maritime subzone, variant 1-windward.

FDU	Result or Strategy												
Bunster	<p>1. Subject to subsection 2, the timber sales manager will identify WTRA areas within each cutblock that meet targets for each Biogeoclimatic Ecosystem Classification (BEC) subzone in the landscape unit as indicated in the table below:</p> <table border="1"> <thead> <tr> <th>BEC Subzone</th><th>Total WTR (%)</th></tr> </thead> <tbody> <tr> <td>CDFmm</td><td>7</td></tr> <tr> <td>CWHxm1</td><td>8</td></tr> <tr> <td>CWHdm</td><td>10</td></tr> <tr> <td>CWHvm2</td><td>10</td></tr> <tr> <td>MHmm1</td><td>6</td></tr> </tbody> </table> <p>2. It is acceptable for WTRAs to be within +/-2% of the targets on individual cutblocks provided that the average level of retention will be achieved on all cutblocks within an applicable subzone over the term of the FSP.</p> <p>3. WTRAs:</p> <ul style="list-style-type: none"> a) must include, high value wildlife trees if present, b) will be comprised of a minimum of 25% high value wildlife trees if present. 	BEC Subzone	Total WTR (%)	CDFmm	7	CWHxm1	8	CWHdm	10	CWHvm2	10	MHmm1	6
BEC Subzone	Total WTR (%)												
CDFmm	7												
CWHxm1	8												
CWHdm	10												
CWHvm2	10												
MHmm1	6												

1.3.1.1.3. Objectives set by government for the Sechelt Landscape Unit

➤ Objective 1

1. *Maintain or recruit old growth forests in established old growth management areas (OGMAs), as shown on the attached Sechelt Landscape Unit map dated January 23, 2004 subject to timber harvesting and road construction in accordance with section 2, 3 and 4 below.*
2. *(1) Where sufficient suitable replacement forest is available in the variants listed below, timber harvesting or road construction may be undertaken in OGMAs that are >10 ha in size for operational reasons up to a cumulative maximum of:*
 1. *20 ha in variant CWHxm1*
 2. *20 ha in variant CWHdm, and*
 3. *10 ha in variant CWHvm2,**provided that replacement OGMA of equivalent or better quality and quantity is identified in order of priority; 1) immediately adjacent to the existing OGMA, or 2) in the same variant and landscape unit as the existing OGMA.*

(2) The criteria in 2(1) is to apply to individual OGMAs within the categories below and must ensure that OGMA ecological attributes and spatial distribution are maintained or improved:

- i) OGMA's >10ha to < 50ha in size where the proposed activity affects the OGMA by <5ha,
 - ii) OGMA's \geq 50ha to < 100ha in size where the proposed activity affects the OGMA by < 10ha,
 - iii) OGMA's \geq 100ha in size where the proposed activity affects the OGMA by <10%,
 - iv) Construction of \leq 500m of road or a bridge within an OGMA where there is no other practicable option. As an alternative to finding replacement area, the licensee may permanently deactivate and rehabilitate a temporary road or bridge site within 4 years after construction.
- (3) Where OGMA boundary adjustments and replacement areas are required under section 2(1) and (2) they must be documented, mapped and submitted to the satisfaction of the Delegated Decision Maker (DDM) at the end of each calendar year for his/her approval.
- (4) The provisions in section 2(1) and (2) do not apply to the following OGMA's #4, 11, 12, 15, 16, 18, 19, 20, 32, 42, 53, 57, 65, 71, 73, 74, 82, 85, 87, 92, 100, 109, and 111.

3. Permissible activities:

- (1) Timber harvest may occur to prevent the spread of insect infestations or diseases that pose a significant threat to forested areas outside of OGMA's. Salvage within OGMA's will be done in a manner that retains as many old growth forest attributes as possible.
- (2) Construction of rock quarries and gravel pits under authority of forest tenure where the development will be located immediately adjacent to existing roads under tenure and will affect the OGMA by <0.5ha.
- (3) Intrusions, other than those specified, that affect an OGMA by less than 0.5 ha in total.
- (4) Where OGMA replacement forest is required as a result of activities under 3(1) or (2), it must be of equivalent or better quality and quantity and be identified in order or priority, 1) immediately adjacent to the existing OGMA, or 2) in the same variant and landscape unit as the existing OGMA; such that OGMA ecological attributes and spatial distribution are maintained or improved. OGMA replacement areas must be documented, mapped and submitted to the satisfaction of the DDM at the end of each calendar year for his/her approval.

4. Permissible Activities for Safety Purposes:

- a. Maintenance, deactivation, removal of danger trees, or brushing and clearing on existing roads under active tenure within the right-of-way for safety purposes.
- b. Felling of guyline clearance, tailhold anchor trees, or danger trees (except high value wildlife trees) along cutblock boundaries or within the right-of-way on new road/bridge alignments to meet safety requirements.

FDU	Result or Strategy
Sechelt	<p>1. The timber sales manager will not carry out or authorize the harvest of timber or the construction of new roads within OGMA's delineated as part of the Sechelt Landscape Unit Plan, established August 16, 2004 except for under the following permissible circumstances:</p> <ul style="list-style-type: none"> a) Where sufficient suitable replacement forest is available in the CWH xm1, CWH dm and CWH vm2, timber harvesting and road construction may be carried out or authorized by the timber sales manager in OGMA's >10ha in size for operational reasons up to a

		<p>cumulative maximum of:</p> <ul style="list-style-type: none"> i) 20 ha in CWH xml variant, ii) 20 ha in CWH dm variant, and iii) 10 ha in CWHvm2 variant, <p>provided individual OGMA's are within the categories below:</p> <ul style="list-style-type: none"> (1) OGMA's >10ha to <50ha in size where the proposed activity affects the OGMA by <5ha, (2) OGMA's ≥50ha to <100ha in size where the proposed activity affects the OGMA by <10ha, (3) OGMA's ≥100ha in size where the proposed activity affects the OGMA by <10%, or (4) OGMA where construction of <500m of road or a bridge within an OGMA where there is no other practicable option. As an alternative to finding replacement area, the licensee may permanently deactivate and rehabilitate a temporary road or bridge site within four years after construction. <ul style="list-style-type: none"> b) Timber is harvested to prevent the spread of insect infestations or diseases that pose a significant threat to forested areas outside of OGMA's. Salvage within OGMA's will be done in a manner that retains as many old growth forest attributes as possible, c) Construction of rock quarries and gravel pits located adjacent to existing roads that will affect the OGMA by <0.5 ha, d) Intrusions that affect an OGMA by less than 0.5 ha in total, e) Maintenance, deactivation, removal of danger trees, or brushing and clearing on existing roads under active tenure within the right-of-way for safety purposes, or f) Felling of guyline clearance, tailhold anchor trees, or danger trees along cutblock boundaries or within the right-of-way on new road/bridge alignments to meet safety requirements. <p>2. Subsection 1(a) of this strategy does not apply to OGMA # 4, 11, 12, 15, 16, 18, 19, 20, 32, 42, 53, 57, 65, 71, 73, 74, 82, 85, 87, 92, 100, 109, and 111.</p> <p>3. Section 1 of this strategy applies to subsequent amendments to OGMA's delineated within the Sechelt LUP.</p> <p>4. Where OGMA replacement is required as a result of activities under section 1 of this strategy, it must be of equivalent or better quality and quantity and be identified in order of priority, 1) immediately adjacent to the existing OGMA, or 2) in the same variant and landscape unit as the existing OGMA; such that OGMA ecological attributes and spatial distribution are maintained or improved. OGMA replacement areas must be documented, mapped and submitted to the satisfaction of the DDM at the end of each calendar year for his/her approval.</p>
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➤ **Objective 2**

Maintain stand level structural diversity by retaining wildlife tree patches (WTP). Cutblocks for which harvesting has been completed by each licensee by tenure will retain adequate amounts of wildlife tree patches to ensure that over each 3 year period, commencing on the date the objectives are established, the target percentages as noted in Table A is achieved. In addition:

- (1) WTPs must be well distributed across the BEC subzone and located within or immediately adjacent to a cutblock.*
- (2) Each cutblock >10ha in size must have a minimum of 2% wildlife tree retention.*
- (3) No timber harvesting, including single tree selection, is to occur within WTPs for at least one rotation, except as noted in (4) below.*
- (4) Salvage of windthrown timber and harvesting of remaining standing stems is only permitted within WTPs where catastrophic windthrow exceeds 50% of the dominant or co-dominant stems; or where forest health issues pose a significant threat to areas outside the WTP. Where salvage/harvesting is planned and authorized, replacement WTP of equivalent or better quality and quantity must be identified immediately to achieve the retention targets.*
- (5) WTPs must include, if present, remnant old growth patches and live or dead veteran trees (excluding danger trees).*
- (6) WTPs must include representative larger trees for the stand and any moderate to high value wildlife trees (excluding danger trees).*
- (7) Where differences exist between mapped and actual BEC subzones, subzones will be confirmed by site plan information.*

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

BEC Subzone	% Wildlife Tree Retention
<i>CDFmm (Coastal Deciduous Forest, moist maritime)</i>	<i>4</i>
<i>CWHdm (Coastal Western Hemlock, dry maritime)</i>	<i>10</i>
<i>CWHvm (Coastal Western Hemlock, very moist maritime)</i>	<i>11</i>
<i>CWHxm (Coastal Western Hemlock, very dry maritime)</i>	<i>10</i>
<i>MHmm(Mountain Hemlock, moist maritime)</i>	<i>7</i>

FDU	Result or Strategy
Sechelt	1. The timber sales manager will identify WTRA for cutblocks harvested to ensure that over each 3 year period, commencing on the date the objectives were established, the target percentages as noted in the table below are achieved.

BEC Subzone	Total WTR (%)
CDFmm	4
CWHdm	10
CWHvm	11
CWHxm	10
MHmm	7

2. WTRAs must:
 - a) include, if present, remnant old growth patches and live or dead veteran trees (excluding danger trees),
 - b) include representative larger trees for the stand and any moderate to high value wildlife trees, if present, (excluding danger trees),
 - c) be well distributed across the BEC subzone and located within or immediately adjacent to a cutblock.
3. No harvesting, including single tree selection, is to occur within WTRAs for at least one rotation, with the exception of:
 - a) salvage of windthrown timber and harvesting of remaining standing stems is permitted within WTRAs where catastrophic windthrow exceeds 50% of the dominant or co-dominant stems; or where forest health issues pose a significant threat to areas outside the WTP.
4. Where salvage/harvesting of WTRA is planned, replacement WTRA is required.

1.3.1.1.4. Objectives set by government for the Lois Landscape Unit

➤ Objective 1

(1.) Maintain or recruit old growth forest attributes, in old growth management areas, that are established as shown on map attached to LUP dated September 16, 2002. No timber harvesting, including salvage and single-tree harvesting, is to occur within old growth management areas. Road construction is not to occur within old growth management areas unless no other practicable options exist, in which case replacement old growth management areas may be required.

Maintenance, deactivation, removal of danger trees, or brushing and clearing on existing roads within the right-of-way for safety purposes are exempt from this objective.

The Statutory Decision Maker (SDM) may permit removal or falling of trees or road construction within an OGMA for reasons such as but not limited to the following:

- *To prevent the spread of insect infestations or diseases that poses a significant threat to forested areas outside of OGMAs. This will be done in a manner that retains as many old growth forest attributes as possible.*
- *Construction of roads and yarding corridors, if the SDM determines that no other practicable option exists.*

- *Partial-cut timber harvesting within immature (<100 years old) portions of OGMAs, where it can be demonstrated that harvesting will accelerate development of old growth forest attributes and improve the stand for biodiversity purposes, without compromising other resource values. Harvest entries for the acceleration of old growth attributes are to be limited to recruitment OGMAs in Lower Biodiversity Emphasis Option Landscape Units.*
- *Subsurface Resource exploration and development.*

First Nations traditional use of forest resources, treaty negotiations or settlements will not be limited by this objective.

FDU	Result or Strategy
Lois	<ol style="list-style-type: none"> 1. The timber sales manager will not carry out or authorize the harvest of timber, including salvage and single-tree harvesting, within OGMAs delineated as part of the Lois Landscape Unit Plan established December 2, 2002 except under the following permissible circumstances: <ol style="list-style-type: none"> a) Maintenance, deactivation, removal of danger trees, or brushing and clearing on existing roads within the right-of-way for safety purposes, b) Timber harvesting to prevent the spread of insect infestations or diseases that poses a significant threat to forested areas outside of OGMAs. This will be done in a manner that retains as many old growth forest attributes as possible, and c) Partial-cut timber harvesting within immature (<100 years old) portions of OGMAs, where it can be demonstrated that harvesting will accelerate development of old growth forest attributes and improve the stand for biodiversity purposes, without compromising other resource values. 2. The timber sales manager will not carry out or authorize the construction of new roads within OGMAs delineated as part of the Lois Landscape Unit Plan established December 2, 2002 unless no other practicable option exists, in which case replacement OGMAs may be required. 3. Sections 1 and 2 of this strategy apply to subsequent amendments to OGMAs delineated within the Lois LUP. 4. Amendments to established OGMAs will be consistent with the “Administrative Adjustments, Amendments and Operational Procedures for Old Growth Management Areas ILMB – Coast Region”, dated August 13, 2010.

➤ **Objective 2**

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

- No timber harvesting, including salvage or single tree selection, is to occur within established Wildlife Tree Patches.
- Wildlife Tree Patches must include, if present, live or dead veteran trees (excluding danger trees), or remnant old growth patches.
- Wildlife Tree Patches must include larger trees for the stand and any existing moderate to high value wildlife trees (excluding danger trees).
- No timber harvesting, including salvage or single trees selection, is to occur within established Wildlife Tree Patches.
- Wildlife Tree Patches are to include a representative component of the trees within the stand to be harvested.
- Wildlife Tree Patches are to include a component of the upper 10% of the diameter range of trees within the stand to be harvested.

Table A. Wildlife Tree Retention by Biogeoclimatic Ecosystem Classification Subzone

BEC Subzone	Total WTR (%)
CWHxm	12
CWHdm	14
CWHvm	14
MHmm	11

WTR = Wildlife Tree Retention

BEC = Biogeoclimatic Ecosystem Classification

CWHxm: Coastal Western Hemlock biogeoclimatic zone, very dry maritime subzone.

CWHdm: Coastal Western Hemlock biogeoclimatic zone, dry maritime subzone.

CWHvm: Coastal Western Hemlock biogeoclimatic zone, very moist maritime subzone.

MHmm: Mountain Hemlock biogeoclimatic zone, moist maritime subzone.

FDU	Result or Strategy										
Lois	<p>1. The timber sales manager will identify WTRAs that meet targets for each BEC subzone in the Lois Landscape Unit as indicated in the table below:</p> <table> <tr> <th>BEC Subzone</th><th>Total WTR (%)</th></tr> <tr> <td>CWHxm</td><td>12</td></tr> <tr> <td>CWHdm</td><td>14</td></tr> <tr> <td>CWHvm</td><td>14</td></tr> <tr> <td>MHmm</td><td>11</td></tr> </table>	BEC Subzone	Total WTR (%)	CWHxm	12	CWHdm	14	CWHvm	14	MHmm	11
BEC Subzone	Total WTR (%)										
CWHxm	12										
CWHdm	14										
CWHvm	14										
MHmm	11										

	<p>2. WTRAs must include:</p> <ul style="list-style-type: none"> a) live or dead veteran trees, if present, (excluding danger trees), or remnant old growth patches, b) larger trees for the stand and any existing moderate to high value wildlife trees (excluding danger trees), c) a representative component of the trees within the stand to be harvested, and d) a component of the upper 10% of the diameter range of trees within the stand to be harvested.
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1.3.1.2 Order Establishing Provincial Non-Spatial Old Growth Objectives

The Order Establishing Non-spatial Old Growth Objectives (effective June 30, 2004) (the Order) clarifies the amount of area available for timber harvesting. This Order supplements, but does not replace [FPPR s. 9](#).

FDU	Result or Strategy
Deserted Haslam Homfray Tahumming	<ol style="list-style-type: none"> 1. If the amount of old forest within a landscape unit is less than the specified retention targets as listed in Table 2¹ (Column 1 and 2) of this FSP, the timber sales manager: <ul style="list-style-type: none"> a) will not carry out or authorize timber harvesting or road construction in areas of <ul style="list-style-type: none"> i) old forest within the non-contributing land base² in that landscape unit, ii) old forest in the contributing land base³ to the extent necessary to meet the specified retention targets, iii) mature forest in the non-contributing land base to the extent necessary to meet the specified retention targets, iv) mature forest in the contributing land base to the extent necessary to meet the specified retention targets, and 2. The timber sales manager will not carry out or authorize the harvest of timber if doing so would result in the amount of old forest available to drop below the old forest retention targets as listed in Table 2 (Column 1 and 2) of this FSP. 3. In landscape units with a BEO of intermediate or high, younger age classes may be used to meet old growth targets where it can be demonstrated that the younger stands are of equal or better conservation value as per provision A6 of the Order Establishing Provincial Non-Spatial Old Growth Objectives. 4. Subject to subsection 5, the timber sales manager will not authorize or carry out timber harvesting or road construction within draft OGMA's that meet the intent of the Order that have been endorsed by government, and/or affected Licensee(s). 5. Amendments to draft OGMA's referred to under subsection 6 will be consistent with the "Administrative Adjustments, Amendments and Operational Procedures for Old Growth Management Areas ILMB – Coast Region", dated August 13, 2010.

¹ Information included in Table 2 derived from the RLUPs database V 3.2, August 15, 2005.

² non-contributing land base is as described in the RLUPs database V 3.2., dated August 15, 2005

³ contributing land base is as described in the RLUPs database V 3.2, dated August 15, 2005.

FDU	Result or Strategy				
	Table 2: Old Growth Retention Targets				
	FDU – Biodiversity Emphasis	BEC Variant	Targets		
			Column 1	Column 2	Column 3
			Old Forest: Retention Target (%)	Old Forest: Retention Target (ha)	Old Forest: Retention Target with 1/3 Drawdown Applied (ha)
Deserted High	CWH dm	>13%	45.9	n/a	
	CWH vm1	>19%	449.3	n/a	
	CWH vm2	>19%	356.0	n/a	
	MH mm1	>28%	411.5	n/a	
Jervis ⁴ Intermediate	CWH dm	>9%	625.3	n/a	
	CWH vm1	>13%	681.5	n/a	
	CWH vm2	>13%	1785.1	n/a	
	MH mm1	>19%	1112.6	n/a	
Haslam Low	CDF mm	>9%	19.2	6.4	
	CWH dm	>9%	1017.7	339.2	
	CWH vm2	>13%	367.4	122.5	
	CWH xm1	>9%	358.1	119.4	
	MH mm1	>19%	64.7	21.6	
Homfray Intermediate	CWH dm	>9%	642.5	n/a	
	CWH vm1	>13%	555.8	n/a	
	CWH vm2	>13%	651.0	n/a	
	CWH xm1	>9%	66.7	n/a	
	MH mm1	>19%	686.0	n/a	
Tahumming ⁵ Intermediate	CWH dm	>9%	164.4	n/a	
	CWH ms1	>9%	0.4	n/a	
	CWH vm1	>13%	789.9	n/a	
	CWH vm2	>13%	503.3	n/a	
	MH mm1	>19%	606.8	n/a	
	MH mm2	>19%	1.1	n/a	

Draft OGMA's have been advertised by the Ministry of Agriculture and Lands; Integrated Land Management Bureau for the Howe, Brittain and Cortes Landscape Units and are shown on the FSP maps.

FDU	Result or Strategy
Howe Brittain	1. The timber sales manager will not carry out or authorize the construction of new roads or the harvest of timber within draft OGMA polygons as shown on the FSP maps, subject to subsection 2.

⁴ A portion of the Deserted FDU is within the Jervis Landscape Unit. Old Forest Retention Targets for the Jervis include the entire LU and have not been adjusted to represent only the portion in the FSP.

⁵ Old Forest Retention Targets for the Tahumming FDU include the entire Brem LU and have not been adjusted to represent only the area in the FDU.

FDU	Result or Strategy
Cortes	2. Changes to draft OGMA's will be guided by the document titled "Administrative Adjustments, Amendments and Operational Procedures for Old Growth Management Areas ILMB – Coast Region", dated August 13, 2010.

1.3.1.3 Vancouver Island Land Use Plan Higher Level Plan Order

Maurelle Island, within the Cortes Landscape Unit and Cortes FDU, is covered by the Vancouver Island Land Use Plan (VILUP). This island is located within VILUP Resource Management Zone 32 (RMZ 32). As this RMZ has no legal objectives established under VILUP, management is as per the FRPA and accordingly, all results and strategies within this FSP that pertain to the Cortes Landscape Unit apply to Maurelle Island.

1.3.2 Objectives Prescribed Under FRPA s. 149

1.3.2.1 Soils (FPPR s. 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.

The timber sales manager will adopt FPPR s. 35 and 36. In accordance with FPPR s. 12.1(1), the timber sales manager is exempt from the requirement to specify intended results and strategies set out in FPPR s. 5.

1.3.2.2 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 a strategy in respect of the objective stated under subsection (1) only if the minister responsible for the Wildlife Act gives notice to the person of the applicable*
 - (a) species referred to in subsection (1), and*
 - (b) indicators of the amount, distribution and attributes of wildlife habitat described in subsection (1).*
- (3.) If satisfied that the objective set out in subsection (1) is addressed, in whole or in part, by an objective in relation to a wildlife a habitat area or an ungulate winter range, a general wildlife measure, or a wildlife habitat feature, the minister responsible for the Wildlife Act must exempt a person from the obligation to specify a result or strategy in relation to the objective set out in subsection (1) to the extent that the objective is already addressed.*

(4.) On or after December 31, 2004, a notice described in subsection (2) must be given at least 4 months before the forest stewardship plan is submitted for approval.

FDU	Species	Result or Strategy
Deserted Homfray, Brittain, Tahumming	Grizzly Bear <i>Ursus arctos</i>	<ol style="list-style-type: none"> The timber sales manager will not carry out or authorize the construction of new road or the harvest of timber within an area that <ol style="list-style-type: none"> meets the amount, distribution, attributes and characteristics described in the Notice for the Sunshine Coast Forest District (dated March 2, 2006) for Grizzly Bear, or is identified as a draft WHA polygon for Grizzly Bear delineated by the Ministry of Environment (MoE) dated June 23, 2006 and shown on the FSP maps except as permitted in draft general wildlife measures. Section 1 of this result/strategy no longer applies once WHAs are legally established that meet the intent of the Notice for Grizzly Bear and an exemption is given under FPPR s. 7(3) from the obligation to write a result/strategy for Grizzly Bear in the SCFD.

FDU	Species	Result or Strategy
All	Mountain Goat <i>Oreamnos americanus</i>	<ol style="list-style-type: none"> The timber sales manager will not carry out or authorize the construction of new road or the harvest of timber within the draft UWR polygons delineated by the MoE (dated September 28, 2006) and as shown on the FSP maps, except as permitted in the draft general wildlife measures. Section 1 of this result/strategy no longer applies once UWRs are legally established that meet the intent of the Notice for the winter survival of ungulates in the SCFD and an exemption is given under FPPR s. 7(3) from the obligation to write a result/strategy for the winter survival of ungulates in the SCFD.

FDU	Species	Result or Strategy
All	Coastal Tailed Frog <i>Ascaphus truei</i>	<ol style="list-style-type: none"> The timber sales manager will not carry out or authorize the construction of new road or the harvest of timber within an area that <ol style="list-style-type: none"> meets the amount, distribution, attributes and

		<p>characteristics described in the Notice for the Sunshine Coast Forest District (dated March 2, 2006) for Coastal Tailed Frog, or</p> <p>b) is identified on the FSP maps as management areas for Coastal Tailed Frog.</p> <p>2. Section 1 of this result/strategy no longer applies once WHAs are legally established that meet the intent of the Notice for Coastal Tailed Frog in the SCFD and an exemption is given under FPPR s. 7(3) from the obligation to write a result/strategy for Coastal Tailed Frog in the SCFD.</p>
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FDU	Species	Result or Strategy
Chapman Howe Bunster Haslam Homfray Cortes Sechelt Lois	Queen Charlotte (Northern) Goshawk <i>Accipiter gentilis laingi</i>	<p>1. The timber sales manager will not carry out or authorize the construction of new road or the harvest of timber within an area that:</p> <p>a) has an active nest and meets the amount, distribution, attributes and characteristics described in the Notice for the Sunshine Coast Forest District (dated March 2, 2006) for Queen Charlotte Goshawk, or</p> <p>b) is identified on the FSP maps as management areas for Queen Charlotte Goshawk.</p> <p>2. Section 1 of this result/strategy no longer applies once WHAs are legally established that meet the intent of the Notice for Queen Charlotte Goshawk in the SCFD and an exemption is given under FPPR s. 7(3) from the obligation to write a result/strategy for Queen Charlotte Goshawk in the SCFD.</p>

FDU	Species	Result or Strategy
All	Marbled Murrelet <i>Brachyramphus marmoratus</i>	<p>1. The timber sales manager will not carry out or authorize the construction of new roads or the harvest of timber within Marbled Murrelet habitat as identified through the following process:</p> <p>a) Where a detailed survey has been conducted by a qualified professional, an area equal to the amount of suitable nesting habitat in the non-contributing</p>

		<p>land base in the FDU's in the FSP at the time the Notice was issued will be identified, and up to a maximum net mature timber harvesting landbase impact of 43 ha, where suitable nesting habitat is defined as Class 1, 2 or 3 Marbled Murrelet habitat (as described in <i>Standard Methods for Identifying Marbled Murrelet Habitat in British Columbia Using Air Photo Interpretation and Low-level Aerial Survey</i>), or</p> <p>b) Where a detailed survey has not been conducted, an area equal to the total amount of suitable nesting habitat in the non-contributing land base in the FDU's in the FSP at the time the Notice was issued will be identified, and up to a maximum net mature timber harvesting land base impact of 43 ha, where suitable nesting habitat is age class 8 or 9 that is height class 4 or greater.</p> <p>2. Section 1 of this result/strategy no longer applies once WHAs are legally established that meet the intent of the Notice for Marbled Murrelet in the SCFD and an exemption is given under FPPR s. 7(3) from the obligation to write a result/strategy for Marbled Murrelet in the SCFD.</p>
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1.3.2.3 Water, Fish, Wildlife and Biodiversity within Riparian Areas (FPPR s. 8)

The objective set by government for water, fish, wildlife and biodiversity within riparian areas is, 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.

➤ Stream, Lake and Wetland Riparian Classes (FPPR S. 47, 48, and 49)

FDU	Result or Strategy
All	<p>1. For areas of primary forest activity authorized or carried out by the Timber Sales Manager, the widths of the riparian management area, riparian reserve zone and riparian management zone will be:</p> <p>a) As specified in FPPR Sections 47(4) to (6), 48(3) to (5) and 49(2) to (3), <u>or</u></p> <p>b) As specified in a site, prepared prior to commencement of the primary forest activity.</p>

➤ **Restrictions in Riparian Management Areas, Riparian Reserve Zones and Riparian Management Zones (FPPR s. 50, 51 and 52(2))**

FDU	Result or Strategy
All	1. The timber sales manager will adopt FPPR s. 50, 51 and 52(2) as those sections were on the date of submission of this FSP as a result or strategy.

➤ **Retention in a Riparian Management Zone (FPPR S. 12(3))**

FDU	Result or Strategy
All	1. If the timber sales manager authorizes or carries out timber harvesting in a riparian management zone in a cutblock, the level of trees retained within the riparian management zone will be specified in a site plan prepared prior to commencement of harvesting.

1.3.2.4 Community Watersheds (FPPR s. 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.*

FDU	Result or Strategy
Sechelt Chapman Howe Lois Bunster Haslam	<ol style="list-style-type: none"> Before carrying out or authorizing a primary forest activity within the area designated as the Community Watershed area, the timber sales manager, will ensure that the primary forest activities authorized or undertaken by the holder of the FSP will not result in the Equivalent Clearcut Area (ECA) to: <ol style="list-style-type: none"> exceed 30% for community watersheds that do not have an ECA threshold specified as part of a CWAP; or exceed the ECA threshold of the most recent previously established Coastal Watershed Assessment for the community watershed. In addition to Subsection 1, where the qualified professional who completed or updated the CWAP or other similar assessment has provided additional recommendations that are applicable to BCTS forest practices, the timber sales manager will incorporate these recommendations into forest practices unless supported by a rationale written by a qualified professional. In respect of community watersheds, the timber sales manager will work with other tenure holders operating within the affected FDU to not exceed the ECA threshold.

1.3.2.5 Objectives Set by Government for Wildlife and Biodiversity (FPPR s. 9 and 9.1)

➤ Landscape Level (FPPR s. 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.

The timber sales manager will adopt with [FPPR s. 64 and 65](#). In accordance with [FPPR s. 12.1\(7\)](#), the timber sales manager is exempt from the requirement to specify intended results and strategies set out in [FPPR s. 9](#).

➤ Stand Level (FPPR s. 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 forest, to retain wildlife trees.

The timber sales manager will adopt with [FPPR s. 66 and 67](#). In accordance with [FPPR s. 12.1\(8\)](#), the timber sales manager is exempt from the requirement to specify intended results and strategies set out in [FPPR s. 9.1](#).

Where wildlife tree retention targets are legally established in Higher Level Plan, such as Landscape Unit Plans, wildlife tree retention will be identified consistent with targets and criteria specified.

1.3.2.6 Cultural Heritage Resources (FPPR s. 10)

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

(a) the focus of a traditional use by an aboriginal people that is of continuing importance to that people, and

(b) not regulated under the Heritage Conservation Act.

FDU	Result or Strategy
All	<ol style="list-style-type: none"> 1. In these results or strategies “relevant” means, in respect of a cultural heritage resource, a cultural heritage resource to which the objective set by government in section 10 of the FPPR relates. 2. The timber sales manager will annually refer to applicable First Nations a map illustrating the areas identified for potential timber harvesting and road construction, if any, and request information respecting relevant cultural heritage resources within the identified areas within 60 days. 3. The timber sales manager will evaluate the nature and extent of a possible site-specific relevant cultural heritage resource identified within areas of potential timber harvesting and road construction activities, including making reasonable efforts to share information or consult with the applicable First Nation in respect of the relevant cultural heritage resource. 4. The timber sales manager, when designing a cutblock or road, will identify <ol style="list-style-type: none"> a) the portion of the area occupied by a relevant cultural heritage resource, b) the nature of the relevant cultural heritage resource, c) whether the relevant cultural heritage resource is to be protected or conserved, and d) if the relevant cultural heritage resource is to be conserved, what constraints, if any, are to apply to the forest practices carried out on the area. 5. The First Nations will be sent written documentation of discussions during referrals occurring as per subsection 2 of this result/strategy which will include specific actions to be taken, if any, to mitigate impacts and conserve and/or protect identified cultural heritage resource values. 6. For each relevant cultural heritage resource that has been identified under subsection (4) for protection, the timber sales manager will carry out or authorize a person to carry out a forest practice only to the extent that the forest practice does not damage or render ineffective the relevant cultural heritage resource. 7. For each relevant cultural heritage resource that has been identified under subsection (4)

FDU	Result or Strategy
	<p>for being conserved, the timber sales manager will carry out or authorize a person to carry out a forest practice only to the extent that the forest practice is consistent with the constraints, if any, specified in the design for the cutblock or road.</p> <p>8. If, within a cutblock or road where the timber sales manager is carrying out or has authorized timber harvesting or road construction, a previously unidentified relevant cultural heritage resource is encountered, the timber sales manager will consult with the applicable First Nation, and</p> <ul style="list-style-type: none"> a) require operations within the cutblock or road to cease or be modified to the extent necessary to protect the relevant cultural heritage resource, b) determine <ul style="list-style-type: none"> i) the nature of the relevant cultural heritage resource, ii) whether the relevant cultural resource is to be protected or conserved, and iii) if the relevant cultural heritage resource is to be conserved, what constraints, if any, are to apply to the forest practices carried out on the area, c) modify the design of the cutblock or road to conform with subsection (4), and d) authorize operations to resume within the cutblock or road to the extent that the operations are consistent with the modified design. <p>9. BCTS recognizes that mature Cedar and Cypress located within the identified FDUs are relevant cultural heritage resources to the applicable First Nations and will ensure that</p> <ul style="list-style-type: none"> a) these First Nations are provided with assistance in locating cedar and cypress which may be suitable for cultural requirements, and b) cedar and cypress, where ecologically suited, will be planted on areas referred to in section 29 (1) of the FRPA in accordance with the stocking standards specified in this FSP. <p>10. Upon request, BCTS will</p> <ul style="list-style-type: none"> a) provide a First Nation with any site specific information respecting sites capable of supplying medicinal plants suitable for cultural uses, where this information has been obtained through BCTS's operational field works, and b) maintain a list of medicinal plant species, as supplied by the First Nation.

1.3.3 Objectives Continued Under FRPA s. 181

1.3.3.1 Visual Quality

VQOs were established for the scenic areas in the SCFD by the District Manager on April 22, 1997.

FDU	Result or Strategy
All	<p>1. Subject to subsections 2 and 3, road construction and/or timber harvesting carried out or authorized by the timber sales manager within scenic areas established within the Sunshine Coast Forest District, will be consistent with:</p>

	<ul style="list-style-type: none"> a) the visual quality objectives as established by the District Manager on April 22, 1997; b) subsequent amendments made by the District Manager to the visual quality objectives; and c) the categories of visually altered forest landscape as defined in FPPR s. 1.1. <p>2. The holder of the FSP may authorize or carry out road construction or timber harvesting that produces a landscape alteration in excess of that specified in the VQOs where</p> <ul style="list-style-type: none"> a) The activity is in close proximity to private land, gravel pits and powerline right-of-ways; and b) the cutblock configuration exhibits aspects of good visual design. <p>3. The holder of the FSP may authorize or carry out road construction or timber harvesting that produces a landscape alteration in excess of the VQO for a specific polygon:</p> <ul style="list-style-type: none"> a) The cutblock where the proposed harvesting or road construction is assessed against the dominant VQO within a visible landscape rather than against a specific VQO for a landscape and b) The cutblock exhibits aspects of good visual design. <p>4. Where two sets of VQOs have been established for the same area (TFL and TSA), road construction or timber harvesting authorized or carried out by the holder of the FSP will be consistent with the VQOs established for the TFL.</p>
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1.3.3.2 Objectives Set for Recreation Sites and Trails

A series of recreation trails make up the Sunshine Coast Trail, including the Appleton Creek Recreation Site and the Lois Point Recreation Site. Portions of both these established trails are within the FDUs included in this FSP.

➤ Objectives set for the Appleton Creek Recreation Site

The objective is to manage the Appleton Creek Recreation Site for a semi-primitive, non motorised, day use recreation experience. Day use facilities will be maintained. The trail will be maintained. Opportunities for picnicking and hiking will be available, no mechanised uses permitted.

FDU	Result or Strategy
Bunster	<ul style="list-style-type: none"> 1. If the timber sales manager carries out or authorizes the construction of road or the harvest of timber within the area established as the Appleton Creek Recreation Site, the timber sales manager will not damage or render the recreation area ineffective.

➤ Objectives set for the Lois Point Recreation Site

The objectives are to manage the Lois Point Recreation Site for a semi-primitive non-motorised recreation experience. This site shall be managed as part of the Powell Forest Canoe Route. The campsite will be maintained. Opportunities for swimming, camping, picnicking and canoeing activities will be provided.

FDU	Result or Strategy
Lois	1. The timber sales manager will not carry out or authorize the construction of road or harvest of timber within the area designated as the Lois Point Recreation Site.

➤ Objectives set for the Nanton Lake Recreation Site

The objectives are to manage the Nanton Lake Recreation Site for a roaded recreation experience. This site shall be managed as part of the Powell Forest Canoe Route. The campsite and trail will be maintained. Opportunities for swimming, camping, picnicking and canoeing activities will be provided. Gravel road access to the site will be maintained for two wheel drive vehicles from late April to early October.

FDU	Result or Strategy
Lois	1. The timber sales manager will not carry out or authorize the construction of road or harvest of timber within the area designated as the Nanton Lake Recreation Site.

➤ Objectives set for the Big Tree Recreation Site

The objective is to manage the Big Tree Recreation Site for a semi primitive non motorised, wheel chair accessible recreation experience. The day use area and trail developed in 1998 shall be wheelchair accessible and will be maintained. Old trails running through the area shall not be developed or maintained. Opportunities for picnicking, and hiking will be available at the site

FDU	Result or Strategy
Sechelt	1. The timber sales manager will not carry out or authorize the construction of road or harvest of timber within the area designated as the Big Tree Recreation Site.

➤ Objective Set for Secret Cove Recreation Site

The objectives are to manage the Secret Cove Creek Recreation Site as a roaded recreation experience. Hiking and nature viewing will be available.

FDU	Result or Strategy
Sechelt	1. The timber sales manager will not carry out or authorize the construction of road or harvest of timber within the area designated as the Secret Cove Recreation Site.

➤ Objective set for Sprockids Recreation Site

The objectives are to manage the Sprockids Recreation Site for a roaded recreation experience providing a mountain bike trail/hiking trail area. The area will be managed and maintained co-operatively with the Ministry of Forests and the Gibson's Sprockids Mountain Bike Program.

FDU	Result or Strategy
Sechelt	1. The timber sales manager will not carry out or authorize the construction of road or harvest of timber within the area designated as the Sprockids Recreation Site.

1.4 **Measures to Prevent the Introduction and Spread of Invasive Plants** (FRPA s. 47 and FPPR s. 17)

FRPA s. 47:

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

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

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

FPPR s. 17

For the purpose of s. 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.

FDU	Measures
ALL	<ol style="list-style-type: none"> 1. In these measures <p>“applicable area” means an area where</p> <ol style="list-style-type: none"> a) it is likely that forest practices carried out or authorized by the timber sales manager will result in introduction or spread of invasive plants; b) there is a moderate to high risk invasive plants are likely to germinate on soil exposed that is a result of a person’s forest practices under this FSP; c) it is reasonably expected that grass would grow on these exposed sites; d) it is reasonably foreseeable that revegetation with grass seed would materially reduce the likelihood of invasive plant germination.; and e) the timber sales manager has not deemed the area to an active surface area. <p>“preferred seed” means seed with the following attributes:</p> <ol style="list-style-type: none"> a) high sod-forming content, except in areas that are planted with tree seedlings; b) has been certified by the Canadian Seed Growers Association that the seed; <ol style="list-style-type: none"> i) that has been certified by the Canadian Seed Growers Association that the seed meets Common #1 Forage Grade or better standards for varietal purity established by the Association for seed of that kind of species (Seeds Act, Seeds Regulation S. 2(1)); and ii) is of native origin. 2. The timber sales manager will: <ol style="list-style-type: none"> a) distribute information on moderate to high risk invasive plants to field team staff, and b) direct field team staff to report new incidences of invasive plants 3. If the timber sales manager carries out or authorizes a forest practice in an applicable area the timber sales manager, within one year of completing the activity authorized in the timber sale licence, will seed contiguous areas of exposed soil that exceed 0.25 ha giving preference to preferred seed that is: <ol style="list-style-type: none"> a) readily available; b) comparable in cost to agronomic mixtures, and c) comparable in effectiveness to agronomic mixtures. 4. These measures apply: <ol style="list-style-type: none"> a) In the case of cutblock harvesting and roads within cutblocks: until the timber sale license has expired, or until the harvested cutblock has been assessed as re-stocked. b) In the case of road construction and deactivation until the road permit has been deleted, or the road has been converted to an FSR.

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

There are no agreements under the Range Act that apply to FDUs in this FSP. Accordingly no measures have been specified for [FPPR s.18](#) or [s. 48](#).

1.6 Stocking Standards

1.6.1 Situations or Circumstances that determine whether Free Growing is assessed on a Block Basis or Across Blocks

[FPPR s. 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](#).

1.6.2 Regeneration Date and Stocking Standards, Free Growing Height

Section 1.7.3, below, specifies the regeneration date, free growing height and stocking standards for the situations or circumstances where [FPPR s. 44 \(1\)](#) applies.

1.6.3 Sunshine Coast TSA FSP Stocking Standards

Standard Unit		Regeneration Guide					Min		Free Growing Guide		
BGC		Species		Stocking			Intertree	Regen	Tree:	Min. Height	
Classification		Conifer		Target	MIN pa	MIN p	Spacing	Delay (Max yrs)	Brush	Species	Ht
Zone/SZ	Series	Preferred (p)	Acceptable (a)	(well-spaced/ha)			(m)		(min %)		(m)
CDFmm	01 1008180	Fd PI ⁶	Cw	900	500	400	2.0	4	150	Fd PI Cw	2.00 1.25 1.00
	02 1008181	Fd PI ⁶		400	200	200	2.0	4	150	Fd PI	2.00 1.25
	03 1008182	Fd PI ³		800	400	400	2.0	6	150	Fd PI	2.00 1.25
	04 1008183	Fd	Bg Cw	900	500	400	2.0	4	150	Fd Bg Cw	3.00 1.75 1.50
	05 1008184	Fd	Cw	900	500	400	2.0	4	150	Fd Cw	3.00 1.50
	06 1008185	Cw Fd	Bg	900	500	400	2.0	4	150	Fd Bg Cw	4.00 2.25 2.00
	07 1008186	Cw Fd	Bg	900	500	400	2.0	4	150	Fd Bg Cw	4.00 2.25 2.00
	08 1008187	Cw ¹	Bg ¹	900	500	400	2.0	4	150	Cw Bg	2.00 2.25
	10 1008188	PI ¹	Cw ¹	400	200	200	2.0	4	150	PI Cw	1.25 1.00
	11 1008189	Cw ¹		800	400	400	2.0	4	150	Cw	1.00
	12 1008190	Cw ¹ Fd ¹	Bg ¹	900	500	400	2.0	4	150	Fd Bg	4.00 2.25

Standard Unit		Regeneration Guide					Min		Free Growing Guide		
BGC Classification		Species		Stocking			Intertree	Regen	Tree:	Min. Height	
		Conifer		Target	MIN pa	MIN p	Spacing	Delay (Max yrs)	Brush	Species	Ht
		Preferred (p)	Acceptable (a)	(well-spaced/ha)							
Zone/SZ	Series										
										Cw	2.00
13	1008191	Bg ¹ Cw ¹ Fd ¹		900	500	400	2.0	4	150	Fd	4.00
										Bg	2.25
										Cw	2.00
14	1008192	Cw ¹	Bg ¹	800	400	400	2.0	4	150	Cw	1.00
										Bg	1.40
Root Rot Sites All All	1008193	Cw Pw	PI	900	500	400	2.0	4	150	Cw	1.50
										Pw	2.50
										PI	1.25
CWHdm	01 1008194	Fd Hw ²⁴	Cw Pw ³¹	900	500	400	2.0	4	150	Fd, Hw	3.00
										Pw	2.50
										Cw	1.50
02	1008195	PI Fd		400	200	200	2.0	4	150	Fd	2.00
										PI	1.25
03	1008196	Fd	Cw Hw	800	400	400	2.0	4	150	Fd, Hw	2.00
										Cw	1.00
04	1008197	Fd	Cw Pw ³¹	900	500	400	2.0	4	150	Fd	3.00
										Pw	2.50
										Cw	1.50
05	1008198	Cw Fd	Hw Pw ³¹	900	500	400	2.0	4	150	Fd, Hw	4.00
										Pw	2.50
										Cw	2.00
06	1008199	Cw Hw	Fd ¹	900	500	400	2.0	6	150	Fd, Hw	3.00
										Cw	1.50
07	1008200	Cw Fd Bg	Hw Ss ^{35,56}	900	500	400	2.0	4	150	Fd, Hw, Ss	4.00
										Bg	3.50
										Cw	2.00
08	1008201	Bg Cw	Ss ^{35,56}	900	500	400	2.0	4	150	Bg, Ss	3.50

Standard Unit		Regeneration Guide					Min		Free Growing Guide		
BGC Classification		Species		Stocking			Intertree	Regen	Tree:	Min. Height	
		Conifer		Target	MIN pa	MIN p	Spacing	Delay (Max yrs)	Brush	Species	Ht
		Preferred (p)	Acceptable (a)	(well-spaced/ha)							
Zone/SZ	Series										
										Cw	2.00
09 1008202		Cw ¹	Bg ¹ Ss ^{35,56}	900	500	400	2.0	4	150	Cw Bg, Ss	2.00 3.50
11 1008203		Pl ¹	Cw ¹	400	200	200	2.0	4	150	Pl Cw	1.25 1.00
12 1008204		Cw ¹	Hw ^{1,2} Pw ³¹ Ss ^{35,56}	800	400	400	2.0	4	150	Ss Pw Hw Cw	3.00 2.50 2.00 1.00
13 1008205		Bg Cw Fd ¹	Ss ^{35,56}	900	500	400	2.0	4	150	Fd, Ss Bg Cw	4.00 3.50 2.00
14 1008206		Bg ¹ Cw ¹	Ss ^{35,56}	900	500	400	2.0	4	150	Cw Bg, Ss	2.00 3.50
15 1008207		Cw ¹		800	400	400	2.0	4	150	Cw	1.00
CWHds1	Root Rot Sites All 1008208	Cw Pw	Pl	900	500	400	2.0	4	150	Cw Pw Pl	1.50 2.50 1.25
	01 1008209	Fd	Cw Hw Pw ³¹	900	500	400	2.0	4	150	Pw Fd Cw Hw	2.50 2.25 1.50 1.00
	02 1008210	Pl Fd		400	200	200	2.0	4	150	Fd Pl	1.50 1.25
	03 1008211	Fd Pl ⁶	Py ^{7,18,23} Cw Hw	800	400	400	2.0	4	150	Fd Pl Cw, Py Hw	1.50 1.25 1.00 0.80

Standard Unit		Regeneration Guide					Min		Free Growing Guide			
BGC Classification		Species		Stocking		Intertree Spacing	Regen Delay (Max yrs)		Tree:	Min. Height		
		Conifer		Target	MIN pa				MIN p	Brush	Species	Ht
		Preferred (p)	Acceptable (a)	(well-spaced/ha)					(min %)			
Zone/SZ	Series					(m)						
	04 1008212	Fd	Cw Pw ³¹	800	400	400	2.0	4		150	Pw Fd Cw	2.50 2.25 1.50
	05 1008213	Fd Se ^{13,18}	Cw Hw Pw ^{13,31}	900	500	400	2.0	4		150	Pw Fd Cw Sw/Se/Sx Hw	2.50 2.25 1.50 1.00 1.00
	06 1008214	Hw Fd	Cw	900	500	400	2.0	6		150	Cw Fd Hw	1.50 2.25 1.00
	07 1008215	Cw Fd	Bg Hw Ss ^{35, 56}	900	500	400	2.0	4		150	Fd, Ss Bg, Cw Hw	3.00 2.00 1.25
	08 1008216	Cw	Ss ³⁵ Bg	900	500	400	2.0	4		150	Ss Bg, Cw Bg, Cw, Ss	3.00 2.00 2.00
	09 1008217	Cw ¹	Bg ¹ Ss ^{35, 56}	900	500	400	2.0	4		150		2.00
	11 1008218	Pl ¹	Cw ¹	400	200	200	2.0	4		150	Cw Pl	1.00 1.25
CWHms1	12 1008219	Cw ¹	Pl ⁷	800	400	400	2.0	4		150	Cw Pl	1.00 1.25
	01 1008220	Cw Fd Se ^{13,18} Hw ^{10,13} Ba ^{10,13}		900	500	400	2.0	4		150	Fd Cw, Hw Sw/Se/Sx Ba	2.25 1.50 1.00 0.75
	02 1008221	Pl Fd		400	200	200	2.0	4		150	Pl Fd	1.25 1.50
	03	Cw Fd Se ^{13,18}	Hw Ba ¹⁰	800	400	400	2.0	4		150	Fd	2.25

Standard Unit		Regeneration Guide					Min		Free Growing Guide		
BGC Classification		Species		Stocking			Intertree	Regen	Tree:	Min. Height	
		Conifer		Target	MIN pa	MIN p	Spacing	Delay (Max yrs)	Brush	Species	Ht
		Preferred (p)	Acceptable (a)	(well-spaced/ha)							
Zone/SZ	Series										
1008222											
04 1008223		Cw Fd Se ^{13,18} Ba ^{10,13}	Hw ^{10,13} Pw ³¹ Yc ^{13,17}	900	500	400	2.0	4	150	Cw, Hw Sw/Se/Sx Ba	1.50 1.00 0.75
05 1008224		Cw Hw Yc ^{13,17} Ba ^{10,13}		900	500	400	2.0	4	150	Fd Pw Cw, Hw, Yc Sw/Se/Sx Ba	3.00 2.50 2.00 1.25 1.00
06 1008225		Cw Fd Yc ^{13,17} Se ¹³	Ba ¹³ Bg ^{14,17} Hw	900	500	400	2.0	4	150	Ba Cw, Hw, Yc	0.75 1.50
07 1008226		Ba ¹³ Cw Ss ³⁵	Fd ¹ Se ¹⁸	900	500	400	2.0	4	150	Fd Bg Cw, Hw, Yc Sw/Se/Sx Ba	3.00 2.50 2.00 1.25 1.00
08 1008227		Cw ¹	Ba ¹	900	500	400	2.0	4	150	Ss Fd Cw Sw/Se/Sx Ba	4.00 3.00 2.00 1.25 1.00
10 1008228		Pl ¹	Cw ¹	400	200	200	2.0	4	150	Ba Cw	1.00 2.00
11 1008229		Cw ¹ Yc ^{13,17}	Pw ³¹ Se ¹	800	400	400	2.0	4	150	Pl Cw	1.25 1.00
CWHvm1	01	Cw Hw Fd ^{9,16}	Ss ^{7,35}	900	500	400	2.0	6	150	Pw Cw, Yc Sw/Se/Sx	2.50 1.00 0.75
										Fd, Hw,	3.00

Standard Unit		Regeneration Guide					Min		Free Growing Guide		
BGC Classification		Species		Stocking			Intertree	Regen	Tree:	Min. Height	
		Conifer		Target	MIN pa	MIN p	Spacing	Delay (Max yrs)	Brush	Species	Ht
		Preferred (p)	Acceptable (a)	(well-spaced/ha)							
Zone/SZ	Series										
	1008230	Ba ²⁶								Ss	
										Ba	1.75
										Cw	1.50
02	1008231	Pl Cw Fd ^{9,16}	Hw	400	200	200	2.0	4	150	Fd, Hw	2.00
										Pl	1.25
										Cw	1.00
03	1008232	Cw Hw Fd ^{9,16}	Pl ⁵³	800	400	400	2.0	6	150	Fd, Hw	2.00
										Pl	1.25
										Cw	1.00
04	1008233	Cw Hw Fd ^{9,16}	Ba	900	500	400	2.0	4	150	Fd, Hw	3.00
										Ba	1.75
										Cw	1.50
05	1008234	Ba Cw Hw Fd ^{1,9,16}	Ss ³⁵	900	500	400	2.0	4	150	Fd, Hw, Ss	3.00
										Ba	1.75
										Cw	1.50
06	1008235	Ba ²⁶ Cw Hw	Ss ^{7,35} Fd ^{1,9,23}	900	500	400	2.0	6	150	Fd, Hw, Ss	3.00
										Ba	1.75
										Cw	1.50
07	1008236	Ba Cw Fd ^{1,9,23} Hw ²	Ss ³⁵	900	500	400	2.0	4	150	Fd, Hw, Ss	4.00
										Ba	2.25
										Cw	2.00
08	1008237	Ba Cw Hw ²	Ss ³⁵	900	500	400	2.0	4	150	Hw, Ss	4.00
										Ba	2.25
										Cw	2.00
09	1008238	Ba Cw Hw	Ss ³⁵	900	500	400	2.0	4	150	Hw, Ss	4.00
										Ba	2.25
										Cw	2.00
10	1008239	Ba ¹ Cw ¹	Ss ^{1,35}	900	500	400	2.0	4	150	Ss	4.00
										Ba	2.25
										Cw	2.00

Standard Unit		Regeneration Guide					Min		Free Growing Guide		
BGC Classification		Species		Stocking			Intertree	Regen	Tree:	Min. Height	
		Conifer		Target	MIN pa	MIN p	Spacing	Delay (Max yrs)	Brush	Species	Ht
		Preferred (p)	Acceptable (a)	(well-spaced/ha)							
CWHvm2	12 1008240	Cw ¹ Hw ¹ Yc ¹	Pl ¹	800	400	400	2.0	4	150	Hw Pl Cw,Yc	2.00 1.25 1.00
	13 1008241	Pl ¹	Cw ¹	400	200	200	2.0	4	150	Cw Pl	1.00 1.25
	14 1008242	Cw ¹	Hw ¹ Ss ^{1,35}	800	400	400	2.0	4	150	Hw, Ss Cw	3.00 1.50
	01 1008243	Fd ^{1,9,23} Hw Cw Yc Ba	Ss ^{7,15,35} Hm ¹³	900	500	400	2.0	6	150	Ss Hw Fd Ba Cw, Yc Hm	3.00 2.50 2.25 1.75 1.50 1.00
	02 1008244	Pl Cw Fd ^{9,16} Yc	Hw Hm ¹³	400	200	200	2.0	6	150	Hm Hw Fd Pl Cw, Yc	0.75 1.75 1.50 1.25 1.00
	03 1008245	Cw Hw Fd ^{9,16} Yc	Pw ^{16,31} Hm ¹³	800	400	400	2.0	6	150	Pw Hw Fd Cw, Yc Hm	2.50 1.75 1.50 1.00 0.75
	04 1008246	Cw Hw Fd ^{9,16} Yc	Ba Pw ¹⁶ Hm ¹³	900	500	400	2.0	6	150	Pw Cw, Yc Hw Ba, Fd Hm	2.50 1.00 1.75 1.50 0.75
	05 1008247	Cw Hw Yc Ba	Fd ^{1,8,9,23} Ss ^{15,35} Hm ¹³	900	500	400	2.0	6	150	Ss Hw	3.00 2.50

Standard Unit		Regeneration Guide					Min		Free Growing Guide			
BGC Classification Zone/SZ Series		Species		Stocking		Intertree Spacing (m)	Regen Delay (Max yrs)		Tree:	Min. Height		
		Conifer		Target	MIN pa				MIN p	Brush (min %)	Species	Ht (m)
		Preferred (p)	Acceptable (a)	(well-spaced/ha)								
										Fd Ba Cw, Yc Hm	2.25 1.75 1.50 1.00	
06 1008248		Cw Hw Yc Ba	Fd ^{1,9} Ss ⁷ Hm ¹³	900	500	400	2.0	6		150	Ss Hw Fd Ba Cw, Yc Hm	3.00 2.50 2.25 1.75 1.50 1.00
07 1008249		Cw Hw ² Yc Ba	Ss ^{15,35} Hm ¹³	900	500	400	2.0	6		150	Ss Hw Ba Cw, Yc Hm	4.00 3.50 2.25 2.00 1.00
08 1008250		Cw ¹⁴ Hw ^{2,30} Yc Ba	Ss ^{30,35} Hm ¹³	900	500	400	2.0	6		150	Ss Hw Ba Cw, Yc Hm	4.00 3.50 2.25 2.00 1.00
09 1008251		Cw ¹ Hw ¹ Yc ¹	Ba Hm ¹³	800	400	400	2.0	6		150	Ba Hw Cw, Yc Hm	1.50 1.75 1.00 0.75
10 1008252		Pl ¹ Yc ¹	Hm	400	200	200	2.0	6		150	Pl Yc Hm	1.25 1.00 0.75
11 1008253		Cw ¹ Yc ¹	Hw ¹ Ss ³⁵ Hm ^{13,53}	800	400	400	2.0	6		150	Cw, Yc Ss Hw Hm	1.00 2.00 1.75 0.75

CWHxm	01 1008254	Fd	Hw ²⁴ Cw Pw ³¹	900	500	400	2.0	4		150	Fd Pw Hw Cw	3.00 2.50 2.00 1.50
	02 1008255	PI Fd		400	200	200	2.0	4		150	PI Fd	1.25 2.00
	03 1008256	Fd PI ⁶	Cw	800	400	400	2.0	4		150	Cw Fd PI	1.00 2.00 1.25
	04 1008257	Fd	Cw Pw ³¹	900	500	400	2.0	4		150	Fd Pw Cw	3.00 2.50 1.50
	05 1008258	Cw Fd	Hw Pw ³¹ Bg ⁵³	900	500	400	2.0	4		150	Fd Bg Pw Cw Hw	4.00 3.50 2.50 2.00 1.75
	06 1008259	Cw Hw Fd ¹⁸		900	500	400	2.0	6		150	Fd Hw Cw	3.00 2.00 1.50
	07 1008260	Cw Fd	Bg Hw Ss ^{35,56}	900	500	400	2.0	4		150	Fd, Ss Bg Cw Hw	4.00 3.50 2.00 1.75
	08 1008261	Cw Ss ³⁵	Bg	900	500	400	2.0	4		150	Ss Bg Cw	4.00 3.50 2.00
	09 1008262	Cw ¹	Bg ¹ Ss ^{35,56}	900	500	400	2.0	4		150	Cw Bg, Ss	2.00 3.50
	11 1008263	PI ¹	Cw ¹	400	200	200	2.0	4		150	Cw PI	1.00 1.25
	12 1008264	Cw ¹	Hw ¹ Pw ³¹ Ss ^{35,56}	800	400	400	2.0	4		150	Pw, Ss Hw	2.50 2.00

										Cw	1.00	
	13 1008265	Cw Bg Fd	Ss ^{35,56}	900	500	400	2.0	4		150	Fd, Ss Bg Cw	4.00 3.50 2.00
	14 1008266	Bg ¹ Cw ¹	Ss ^{35,56}	900	500	400	2.0	4		150	Cw Bg, Ss	2.00 3.50
	15 1008267	Cw ¹		800	400	400	2.0	4		150	Cw	2.00
MHmm1	Root Rot Sites All 1008268	Cw Pw	PI	900	500	400	2.0	4		150	Cw Pw PI	1.50 2.50 1.25
	01 1008269	Ba Hm Yc	Se ²³ Hw ^{14,53}	900	500	400	2.0	7		125	Ba Hm, Hw, Yc Sw/Se/Sx	0.60 1.00 1.00
	02 1008270	Hm Yc	Ba Se ²³	800	400	400	2.0	6		125	Hm, Yc Sw/Se/Sx Ba	0.75 0.75 0.60
	03 1008271	Ba Hm Yc	Hw ^{14,53}	900	500	400	2.0	6		125	Ba Hm, Hw, Yc	0.60 1.00
	04 1008272	Ba Hm Yc	Hw ^{14,53}	900	500	400	2.0	7		125	Ba Hm, Hw, Yc	0.60 1.00
	05 1008273	Ba Yc	Hm Hw ^{14,53}	900	500	400	2.0	6		125	Ba Hm, Hw, Yc	0.60 1.00
	06 1008274	Hm ¹ Yc ¹	Ba ¹	800	400	400	2.0	7		125	Hm, Yc Ba	0.75 0.60
	07 1008257	Ba ¹ Yc ¹	Hm ¹	900	500	400	2.0	6		125	Hm, Yc Ba	0.75 0.60
	08 1008276	Hm ¹ Yc ¹		400	200	200	2.0	6		125	Hm, Yc	0.75
09 1008277	Yc ¹	Hm ¹	800	400	400	2.0	6		125	Hm, Yc	0.75	

MHmm2	01 1008278	Ba Hm Yc ¹⁷ Se	Hw ^{14,44}	900	500	400	2.0	7		125	Ba Hm, Hw, Yc Sw/Se/Sx	0.60 1.00 1.00
	02 1008279	Bl ^{45,53} Hm Se Yc ¹⁷	Ba Hw ^{14,44,53}	440	400	400	2.0	6		125	Hm, Hw, Yc Sw/Se/Sx Ba Bl	0.75 0.75 0.60 1.00
	03 1008280	Ba Hm Se Yc ¹⁷	Hw ^{14,44}	900	500	400	2.0	6		125	Ba Hm, Hw, Yc Sw/Se/Sx	0.60 1.00 1.00
	04 1008281	Ba Hm Yc ¹⁷	Hw ^{14,44}	900	500	400	2.0	7		125	Ba Hm, Hw, Yc	0.60 1.00
	05 1008282	Ba Se Yc ¹⁷	Hm Hw ^{14,44}	900	500	400	2.0	6		125	Ba Hm, Hw, Yc Sw/Se/Sx	0.60 1.00 1.00
	06 1008283	Hm ¹ Yc ¹⁷	Ba ¹	800	400	400	2.0	7		125	Hm, Yc Ba	0.75 0.60
	07 1008284	Ba ¹ Se ¹ Yc ¹⁷	Hm ¹ Hw ^{14,44}	900	500	400	2.0	6		125	Hm, Hw, Yc Sw/Se/Sx Ba	0.75 1.00 0.60
	08 1008285	Hm ¹ Yc ^{1,17}		400	200	200	2.0	6		125	Hm, Yc	0.75
	09 1008286	Hm ¹ Yc ^{1,17}	Se ¹	800	400	400	2.0	6		125	Hm, Yc Sw/Se/Sx	0.75 1.00

Conifer Tree Species

"Ba" means amabilis fir;
"Bg" means grand fir;
"Bl" means subalpine fir;
"Bp" means noble fir;
"Cw" means western red cedar;
"Fd" means Douglas-fir;
"Hm" means mountain hemlock;
"Hw" means western hemlock;
"Lt" means tamarack;
"Lw" means western larch;
"Pa" means whitebark pine;
"Pl" means lodgepole pine;
"Pw" means white pine;
"Py" means ponderosa pine;
"Sb" means black spruce;
"Se" means Engelmann spruce;
"Ss" means Sitka spruce;
"Sw" means white spruce;
"Sx" means hybrid spruce or interior spruce;
"Sxs" means hybrid Sitka spruce;
"Sxw" means hybrid white spruce;
"Yc" means yellow cedar.
"MIN" or "Min" means minimum.

Broadleaf Tree Species

"Acb" means balsam poplar;
"Act" means black cottonwood;
"At" means trembling aspen;
"Dr" means red alder;
"Ep" means common paper birch;
"Mb" means bigleaf maple;
"Qg" means garry oak;
"Ra" means arbutus;

"MIN" or "Min" means minimum.

Biogeoclimatic unit" or "BGC classification" means the zone, subzone, variant and site series described in the most recent field guide published by the Ministry of Forests for the identification and interpretation of ecosystems, as applicable to a harvested area.

Footnote #	<u>Footnote</u>
1	elevated microsites are preferred
2	suitable on thick forest floors
3	restricted to coarse-textured soils
4	restricted to medium-textured soils
5	footnote retired
6	restricted to nutrient-very-poor sites
7	restricted to nutrient-medium sites
8	restricted to steep slopes
9	restricted to southerly aspects
10	restricted to northerly aspects
11	restricted to crest slope positions
12	suitable on cold air drainage sites
13	restricted to upper elevations of biogeoclimatic unit
14	restricted to lower elevations of biogeoclimatic unit
15	restricted to northern portion of biogeoclimatic unit in region
16	restricted to southern portion of biogeoclimatic unit in region
17	restricted to western portion of biogeoclimatic unit in region
18	restricted to eastern portion of biogeoclimatic unit in region
19	restricted, not in Queen Charlotte Islands
20	restricted, not near outer coast
21	restricted to mainland
22	restricted to southern Gardner Canal-Kitlope area
23	restricted to trial use
24	suitable (as a major species) in wetter portion of biogeoclimatic unit
25	suitable on sites lacking salal
26	suitable minor species on salal-dominated sites
27	partial canopy cover required for successful establishment
28	limited by moisture deficit
29	risk of heavy browsing by moose
30	risk of porcupine damage
31	risk of white pine blister rust
32	limited by growing-season frosts
33	footnote retired and replaced with footnote 'a'
34	risk of snow damage
35	risk of weevil damage
36	suitable major species on salal-dominated sites
37	risk of heart rots
38	footnote retired
39	avoid exposed and windy sites

Footnote #	<u>Footnote</u>
40	risk of redheart
41	limited by poorly drained soils
42	restricted to fresh soil moisture regimes
43	suitable on mainland coast only (QCI only)
44	suitable in areas with stronger maritime influence
45	suitable in areas with stronger continental influence
46	restricted to area north of the Dean Channel
47	risk of balsam wooly adelgid
48	risk of heavy browsing by deer
49	applies only to rust resistant, planted stock.
50	restricted to sites where the species occurs as a major species in a pre-harvest, natural stand
51	restricted to areas with proven PI performance
52	restricted to sheltered microsites with deep soil
53	minor component
54	risk of unsuccessful release of advance regeneration
55	acceptable in sx-sm portion of site series
56	must be present in the pre-harvest stand and be restricted to weevil resistant stock
#	<u>Broadleaf Management Constraints</u>
a	productive, reliable, and feasible regeneration option
b	limited in productivity, reliability and/or feasibility

Rules for Modifying Stocking Standards

RULE NUMBER ONE

Site Series Mosaics/Complexes

Where more than one site series is located within a logical standards unit area the standard that applies will be that of the dominant site series. This standard can be modified with the inclusion of additional species selected from the standard of the subdominant site series for those specific areas of the mosaic or complex.

These additional components to the standard will be supported by a rationale, documented and should be incorporated into the Site Plan.

RULE NUMBER TWO

Transitional Sites

On transitional sites occurring between two BEC units the standard that applies will be that of the dominant BEC unit. This standard can be modified with the inclusion of components of the standard associated with the sub-dominant BEC unit. These additional components to the standard will be supported by a rationale, documented and should be incorporated into the Site Plan.

RULE NUMBER THREE

Minimum Intertree Distance (MITD)

The general MITD of 2.0 metres can be reduced down to 1.5 metres for any given site where productive and plantable sites are limited by pre-harvest site characteristics.

These can include but are not limited to colluvial, hygric and subhygric sites.

Justification for a reduced MITD will be supported by a rationale, documented and should be incorporated into the Site Plan.

RULE NUMBER FOUR

Leave Trees

The minimum characteristics of any leave trees that contribute toward the free growing stand must be of good form, health and vigour and otherwise meet the stocking standards for that site.

In situations where leave trees will not contribute to the free growing stand the leave trees within the harvest area must have characteristics appropriate to meet forest management objectives developed for the site.

The forest management objectives must be supported by a rationale, documented and should be incorporated into the site plan.

White pine blister rust strategy:

Artificial regeneration with white pine will be restricted to root rot pockets. White pine blister rust "resistant" seed must be used as much as possible when available. Pruning of white pine will not be required for trees grown from blister rust "resistant" seed. Pruning will be required for white pine trees not grown from blister rust "resistant". Where pruning is required, two lifts will be required. The 1st lift will be completed when the mean white pine height is 1.0 to 2.5 m. The 2nd lift will be completed when the mean white pine height is 5.0 m or greater. Prune to 50 per cent of the total tree height for the 1st lift and prune to 2.5 m or 50 per cent of total tree height for the 2nd lift, whichever is greater.

White pine weevil or "Sitka spruce weevil" *Pissodes strobi* strategy:

Artificial regeneration with Sitka spruce will be limited to weevil resistant planting stock and less than 20% composition at free growing within a standards unit.

Red Alder Management Strategy:

Regeneration with alder will be restricted primarily to root rot pockets on suitable sites. Regeneration with alder, including root rot pockets, will total not more than 4 percent of the total area harvested during the term of the FSP.

Management Objectives

The primary objective is to provide quality sawlogs for processing and sale to the furniture market in rotations of 25 to 40 years. The implementation of an alder management strategy will help avoid a supply deficit in the medium-term (25 to 40 years) and promote a supply of sawlogs in the long-term through the establishment of alder plantations.

Stand Establishment

The establishment of red alder plantations will be restricted to suitable sites as outlined in the attached alder stocking standards (Dr standards 1500 and 1100). The primary focus will be on sites under 300 m in elevation which are nutrient-rich and do not suffer from moisture deficits. Preferred sites are rich and moist (05 and 07) sites and richer zonal sites although alder can be established in root rot centres on other suitable sites.

Stand Density Management

To establish a Free Growing stand of red alder, where the number of alder trees per hectare greater than 4m tall exceeds the upper density maximum of 1500 sph at survey time, a spacing treatment must be carried out on the area before the late free growing date to reduce the number of alder trees per hectare to within the range of 500-900sph. Spacing is required to ensure that target rotations and product objectives are met. Spacing should occur at about 10m in top height and before the live crown has dropped below 40%.

Red alder standards “Alder 1500” (based on standards ID 1008287)

Stocking Standards for sites suitable for alder management to a target of 1500

Regen delay 3
Early FG 5
Late FG 15
MITD 2
TSS/MSSpa/MSSp 1500/1000/1000
Post-spacing min/max 500/900
Preferred Species Dr
Minimum Height 4 m
Height relative to comp 150%

CWHdm 01 (non salal), 05, 06 (non salal), 07, 08, 09, 13, 14

CWHds1 05, 06 (non salal), 07, 08, 09

CWHms1 05, 06, 07, 08

CWHxm1/2 05, 06(non salal), 07, 08, 09, 13, 14 - within the xm2 non-salal 01sites may be acceptable as minor inclusions within management units.

CWHvm1 01 (non salal), 05, 06, 07, 08, 09, 10, 14 (as minor inclusion within other management units only)

CWHmm1 01(non salal), 05, 06(non salal), 07, 08, 09

CDFmm 05, 06(non salal), 07, 08, 12, 13

Minimum inter tree distance can be reduced to 1.5m on wetter or rockier micro sites to take advantage of the best planting sites.

Red alder standards “Alder 1100” (based on standards ID 1008288)

Stocking Standards for sites suitable for alder management to a target of 1100

Regen delay 3
Early FG 5
Late FG 15
MITD 2
TSS/MSSpa/MSSp 1100/700/700
Post-spacing min/max 500/900
Preferred Species Dr
Minimum Height 4 m
Height relative to comp 150%

CWHdm 01 (non salal), 05, 06 (non salal), 07, 08, 09, 13, 14

CWHds1 01, 05, 06 (non salal), 07, 08, 09

CWHms1 05, 06, 07, 08

CWHxm1/2 05, 06(non salal), 07, 08, 09, 13, 14 - within the xm2 non-salal 01sites may be acceptable as minor inclusions within management units.

CWHvm1 01 (non salal), 05, 06, 07, 08, 09, 10, 14 (as minor inclusions within other management units only)

CWHmm1 01(non salal), 05, 06, 07, 08, 09

CDFmm 05, 06(non salal), 07, 08, 12, 13

Minimum inter tree distance can be reduced to 1.5m on wetter or rockier micro sites to take advantage of the best planting sites.

Red alder standards “TSG PR red alder” (standards ID)

Regen delay	3
Early FG	5
Late FG	20
MITD	2.0
TSS/MSSpa/MSSp	1200/700/500
Post-spacing min/max	500/900
Preferred (Acceptable) Species / Heights	Dr / 4.0 (Mb / 4.0, Ep / 4.0)
Height relative to comp	150%

CWHdm	01, 05, 06, 07
CWHxm1/2	01, 05, 06, 07, 13
CWHvm1	01, 05, 06, 07
CWHmm	01, 05, 06, 07

Minimum inter tree distance can be reduced to 1.5m on wetter or rockier micro sites to take advantage of the best planting sites.

Stocking Standard for Areas of Heavy Elk Use (standards ID)

An area of heavy elk use is defined as an area that will not achieve free growing standards described in the site plan (SP) due to continuous and ongoing browse and/or rubbing. The damage must be significant enough that it is either reducing tree vigour or causing mortality such that crop trees cannot achieve minimum heights and/or the stocking standard (SU) cannot achieve minimum densities as stated in the SP.

Elk browse has three major influences on crop trees in the area affected. The first influence occurs early in the establishment of the new stand where browse is severe and continued, resulting in mortality of the seedling. Severe browsing at this stage of seedling development sometimes results in the elk pulling the seedling from the ground. The lower stocking that results within the area affected, despite fill planting, could potentially make stocking standards described in the SP unachievable. The second influence occurs where seedlings and young trees are continuously browsed but not killed. The seedling is generally short, stunted and very bushy in appearance. It is difficult for an affected crop tree to achieve minimum free growing height. The third type of damage is primarily due to rubbing of the stems on crop trees in localized areas and/or along elk trails. This damage also reduces vigour, causes poor form and can also result in mortality of the crop trees.

For the purposes of measuring and verifying for stratification, the following description will be used as a guide to assess for heavy damage or the likelihood that damage will continue to reduce the value of the stand post-free growing. An area will be considered as having heavy elk use if the number of locations where groups of 4 or more neighbouring (within 20 m) trees are damaged such that they will not meet free growing standards occur at least once per hectare averaged across the SU or at least once per SU where 10 or more trees are damaged, the area will be considered as having heavy elk use. With evidence the damage is chronic and ongoing, the new stocking standard will be applied to either the whole SU or a new SU will be created.

Stocking standards must be flexible for these areas and it may only be economically feasible to achieve 200 to 300 trees per hectare. The stocking standards described below will be applied to the entire affected SU or a new SU will be created.

Elk Stocking Standard

- 1) In areas where elk have substantially affected regeneration efforts as described above, the target stocking will aim for 900 well-spaced stems/ha preferred and acceptable. However, the minimum preferred and acceptable will be reduced to 300 well-spaced stems/ha and the minimum preferred will be reduced to 275 well-spaced per/ha. Minimum inter tree distance will be reduced to 1.5 m. If the minimum inter tree distance in the SP is less than 1.5 m it will remain unchanged. The following species and the associated minimum free growing heights are to be considered preferred (acceptable) species for this elk stocking standard: Fdc/3.0, Hw/2.0, Cw/1.5, Dr/4.0 (Ba/1.8, Yc/1.5, Pw/2.5). Species selection will be subject to a particular species' productivity, reliability, and feasibility for any given site series generally consistent with LMH 28.
- 2) The use of deciduous species mixed with the conifer will be an acceptable strategy to reduce damage caused by elk (Henigman et al. 2005). Dr will comprise not more than 5% of the crop trees per hectare for a SU. Dr may comprise up to 100% of the crop trees per hectare if the area within the SU contains root rot. Where there are 10 or less maple coppices/ha in a heavy elk use area they will be accepted as a component of biodiversity.
- 3) Conifer crop trees will be considered free growing with 1.0 m inter-tree distance between the stems of crop trees and deciduous trees at breast height. Conifer crop trees must not exhibit any signs of reduced leader growth over the previous two growing seasons.

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

1.7 Signatures of Persons Required to Prepare Plan

BC Timber Sales, Strait of Georgia Business Area

RPF Signature: _____

Name: Norm Kempe, R.P.F.

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

Date: _____

BCTS Authorizing Signature: _____

Name: Don Hudson, R.P.F.

Position: Timber Sales Manager, BC Timber Sales, Strait of Georgia Business Area

Date: _____