

PART OF THE
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# **FOREST STEWARDSHIP PLAN**

Chilliwack Natural Resource District Fraser Timber Supply Area

> Forest Licence: A19201 Timber Licence: T0822

> > October 22, 2021

# **TABLE OF CONTENTS**

1		DUCTION	2
2		CATION OF THIS FSP	5
3 FSP MAPS			5 5
4			
5	0, 2		
6		Subject to Cutting Permit or Road Permit	6
7		n 196(1) Cutblocks and Roads	6
8		LTS OR STRATEGIES	6
8		nd Use Objectives	6
	8.1.1		
	8.1.2	1 1	
8	8.2 Objectives Set By Government Under Section 149 of the FRPA		
	8.2.1	Soils	
	8.2.2	Wildlife	8
	8.2.		8
	8.2.		8
	8.2.	( , )	8
	8.2.		8
	8.2.		9
	8.2.		9
		2.7 Pacific Water Shrew	9
	8.2.	0	10
	8.2.		10
	8.2.3	Water, Fish, Wildlife and Biodiversity within Riparian Areas	
	8.2.4	Water in Community Watersheds	
	8.2.5	Wildlife and Biodiversity – Landscape Level	
	8.2.6	Wildlife and Biodiversity – Stand Level	14
	8.2.7	Cultural Heritage Resources	
	8.2.	7.1 Definitions	16
	8.2.	7.2 Conservation and Protection of Cultural Heritage Resources	17
8	.3 Ob	pjectives Enabled In Government Action Regulation	18
	8.3.1	Scenic Areas and Visual Quality Objectives	
	8.3.2	Karst Resource Features	
	8.3.3	Kweh-Kwuch-Hum Cultural Heritage Resource Feature	
9	MEAS	URES	19
g	.1 Inv	/asive Plants	
g		atural Range Barriers	
10	STOC	KING STĂNDARDS	20
11			

# **APPENDICES**

Appendix 1 – FSP Maps Appendix 2 – Cutblocks Under Cutting Permit

Appendix 3 – Stocking Standards

# 1 INTRODUCTION

# 1.1 Definitions

In this FSP, unless this FSP specifies, or the context requires, otherwise:

- (a) "BEC" means Biogeoclimatic Ecosystem Classification
- (b) "Burnt Timber" means a tree or a stand of trees that displays evidence of surface or sub-surface damage from a fire event where mortality has occurred or can reasonably be expected to occur;
- (c) "CP" means a Cutting Permit;
- (d) "Date of Submission" means \_\_\_\_\_, which is the date this FSP was submitted for approval;
- (e) "**DWR**" means Deer Winter Range;
- (f) "FDU" means a Forest Development Unit;
- (g) "**FPC**" means the *Forest Practices Code of British Columbia Act* R.S.B.C. 1996, c. 159 and all regulations there under;
- (g) **"FPPR**" means the *Forest Planning and Practices Regulation* B.C. Reg. 14/2004;
- (h) "FRPA" means the Forest and Range Practices Act S.B.C. 2002, c.69;
- (i) "FSP" means a Forest Stewardship Plan;
- (j) **"FSR**" means a Forest Service Road;
- (k) "GAR" means the Government Actions Regulation B.C. Reg. 582/2004;
- (I) "GWR" means Goat Winter Range;
- (m) "Legislated Planning Date" means:
  - (i) subject to clause (ii), the date 4 months before the **Date of Submission**; or
  - (ii) if an enactment or an objective set by government requires that a date different than the date referred to in clause (i) be applied under this FSP, then that different date;
- (n) "Licence" means an agreement under the Forest Act;
- (o) "Licensee" means, for each Licence specified in part 2 of this FSP, the holder of that Licence;
- (p) **"MFLNRORD**" means the Ministry of Forests, Lands, Natural Resource Operations and Rural Development;
- (q) "MITD" means Minimum Inter Tree Distance;
- (r) "OGMA" means an Old Growth Management Area;

- (s) **"Qualified Professional"** a person who has been deemed as eligible to practice, by a regulating or certifying organization, within their field of expertise;
- (t) "**RP**" means a Road Permit;
- (u) **"Scenic Area**" is defined in Section 1 of **FPPR**. **Scenic Areas** are shown on the **FSP** map as visual quality objectives;
- (v) **"TAUP**" means the Total Area Under Prescription and is the gross area of a cutblock plus any **WTP** or **WTRA** and areas of timber retention;
- (w) "**UWR**" means Ungulate Winter Range;
- (x) "WHA" means a Wildlife Habitat Area;
- (y) "WTP" means Wildlife Tree Patch;
- (z) **"WTRA**" means Wildlife Tree Retention Area.

## **1.2** Relevant Date for Legislation and Objective References

In this **FSP**, unless this **FSP** specifies otherwise, a reference to legislation, an established objective, a notice under Section 7(2) of **FPPR**, a designation of a species to which such a notice or established objective applies, an establishment of an area referred to in Section 14 (3)(a) to (i) of **FPPR** or an order made by government means that legislation, established objective, notice, designation, area or order as it was on the **Legislated Planning Date**.

## 1.3 Definitions from Legislation

In this **FSP**, unless this **FSP** specifies, or the context requires, otherwise words and phrases defined in **FRPA** or the *Forest Act* as of the **Legislated Planning Date** have the same meaning as those definitions.

# 1.4 Changes to Legislation

If legislation referred to in this **FSP** is renamed or a provision of legislation referred to in this **FSP** is renumbered, the reference in this **FSP** is to be construed as a reference to the provision as renamed or renumbered, as the case may be.

## **1.5 Expressions Inclusive**

In this FSP, unless this FSP specifies, or the context requires, otherwise:

- i) the singular includes the plural and the plural includes the singular;
- ii) the masculine, the feminine and the neutral are interchangeable and each includes the body corporate.

# 1.6 Organization

This **FSP** is divided into parts, paragraphs, subparagraphs, clauses and subclauses, illustrated as follows:

1. Part; 1.1 to 1.1.1.1 Paragraph; (a) Subparagraph; (i) Clause; (A) Subclause

and a reference to a subparagraph, clause, or subclause is to be construed as a reference to a subparagraph, clause or subclause of the paragraph, subparagraph or clause, as the case may be, in which the reference occurs.

## 1.7 Appendices Part of FSP

The Appendices to this **FSP** are a part of this **FSP** and any reference in this **FSP** to this **FSP** includes a reference to the Appendices.

## **1.8 Forest Investment Account**

The provisions of this **FSP** do not apply to the **Licensee** when carrying out a forest practice that is referred to in Section 2(1) of **FPPR**.

## 1.9 Cancellation of Designation, Objective, Notice, Species or Order

Without limiting any other provision in this FSP, if:

- (a) a designation or other thing referred to in Section 14(2) of **FPPR**, other than a **CP** or **RP**;
- (b) an established objective;
- (c) a notice under Section 7 of FPPR;
- (d) a designation of a species; or
- (e) an order in respect of the foregoing,

for or in respect of which a result or strategy is included under this **FSP**, is cancelled or is otherwise no longer in effect, the result or strategy under this **FSP** pertaining to that designation, objective, notice, species or order no longer applies effective the date it is cancelled or is otherwise no longer in effect.

# **1.10** Authority from Government

Without limiting any other provision in this **FSP**, this **FSP** does not apply to a primary forest activity undertaken by the **Licensee** if and to the extent the government, with the consent of the **Licensee**, expressly authorizes such activities to be undertaken in a manner that differs from the requirements of this **FSP**.

# 1.11 No Prohibition on Activities Otherwise Permitted or Required

Despite any other provision in this **FSP**, nothing in this **FSP** prevents, affects or limits the **Licensee** from carrying out an activity permitted by Section 4(1.1) of **FPPR**.

# 2 APPLICATION OF THIS FSP (FRPA Section 3(4))

This **FSP** applies to the **Licensee** and **Licences** as indicated in the following table:

Licensee	Licences
Teal Cedar Products Ltd.	Forest Licence A19201
Teal Cedar Products Ltd.	Timber Licence T0822

The portion of **FDU** 2 that is located within the Mission Tree Farm **Licence** 26 (TFL) is included in the **FSP** only for the purposes of allowing for road access through the TFL to Forest **Licence** A19201.

# **3** FSP MAPS (FRPA Section 5(1)(a))

The **FSP** maps are found in Appendix 1.

# 4 TERM OF THIS FSP (FRPA Section 6(1))

The term of this **FSP** is five years. The term commences on the date specified by government in approval of this **FSP**.

# 5 Prohibited Timber Harvesting by Another Enactment (FPPR Section 14(3)(i))

The Spotted Owl Designated Area No. 1 was established on March 11, 2021 under Section 169 (Order of the Lieutenant Governor in Council) and Section 170(2) (Order of the Minister of Forests, Lands, Natural Resource Operations and Rural Development) of the *Forest Act*. The 2021 Spotted Owl Designated Area No. 1 Order remains in effect until and is rescinded on February 28, 2022. The **Licensee** will not make an application for a permit or license unless otherwise permitted as described in the Order for the areas and duration to which the Order applies.

# 6 Areas Subject to Cutting Permit or Road Permit (FPPR Section 14(3)(j))

Areas within this **FSP** that are subject to **CP**'s that are held by the **Licensee** and were in effect on **July 1, 2021** are listed in Appendix 2.

Roads within this **FSP** that are subject to **RP**'s that are held by the **Licensee** and were in effect on the **July 1, 2021** are shown on the **FSP** map.

# 7 Section 196(1) Cutblocks and Roads

There are no cutblocks and/or roads to which Section 196(1) of **FRPA** applies described in this **FSP**.

# 8 RESULTS OR STRATEGIES (FRPA Section 5(1)(b))

## 8.1 Land Use Objectives

### 8.1.1 Established Landscape Units

#### Result

In the following **FDU**'s, or portions thereof, that occur within the Landscape Units indicated in the following table, as of the **Legislated Planning Date**:

FDU	Landscape Unit	Effective Date of Objective
3	Chehalis	March 15, 2006
3	West Harrison	June 24, 2005
4	Tretheway	June 24, 2005
5	Coquihalla	April 14, 2004
6	Anderson	January 13, 2004
7A	Nahatlatch	January 13, 2004
7B	Spuzzum	January 13, 2004
8	Ainslie	January 13, 2004
9	Silverhope	April 14, 2004
10	East Harrison	June 24, 2005
11	Big Silver	June 24, 2005
12	Mehatl	January 13, 2005
13	Yale	April 14, 2004
13	rale	February 3, 2005 (Variance)
16	Manning	April 14, 2004

 (a) the Licensee's timber harvesting and road construction activities will be consistent with Legal Objective 1 and Table A of Objective 2 for those Landscape Units, as those Legal Objectives were on the Legislated Planning Date. The remainder of Objective 2 is addressed in Section 8.2.6 of this FSP.

### 8.1.2 Established Landscape Units – Lower Fraser Landscape Units

#### Result

In the following **FDU**'s, or portions thereof, that occur within the Landscape Units indicated in the following table, as of the **Legislated Planning Date**:

FDU	Landscape Unit	Effective Date of Objective
1	Pitt	February 4, 2013
1	Widgeon	February 4, 2013
2	Hatzic	February 4, 2013
14	Stave	February 4, 2013
15	Fraser Valley South	February 4, 2013

(a) the Licensee's timber harvesting and road construction activities will be consistent with Part 2 – Objectives Section 4 for those Landscape Units, as those Legal Objectives were on the Legislated Planning Date.

## 8.2 Objectives Set By Government Under Section 149 of the FRPA

### 8.2.1 Soils (FPPR Section 5)

### Result

For all **FDU**'s the **Licensee** for primary forest activities adopts, as a result under this **FSP**, the following sections of **FPPR**, as they were on the **Legislated Planning Date**:

(a)	Section 35	Soil disturbance limits; and
(b)	Section 36	Permanent access structure limits.

### 8.2.2 Wildlife (FPPR Section 7)

### 8.2.2.1 Mountain Goat (Oreamnos americanus)

### Comment

In respect of the Order – Ungulate Winter Range U-2-001 Fraser TSA Mountain Goat (March 10, 2008), the Licensee will, for FDU's 1, 2, 3, 4, 5, 7A, 7B, 9, 10, 11, 12, 13, 14 & 16 under this FSP, manage Goat Winter Ranges (GWR), as spatially identified on the Schedule A Map and the FSP Map(s), in accordance with Schedule 1 (General Wildlife Measures) as described in the Order.

### 8.2.2.2 Black-tailed and Mule Deer (Odocoileus hemionus sp.)

### Comment

In respect of the Order - Ungulate Winter Range U-2-006 (September 22, 2009), the Licensee will, for FDU's 1, 2, 3, 4, 5, 6, 7A, 7B, 8, 9, 10, 11, 12, 13, 14 & 16 under this FSP, manage Deer Winter Ranges (DWR), as spatially identified on the Schedule A Map and the FSP Map(s), in accordance with Schedule 1 (General Wildlife Measures) as described in the Order.

### 8.2.2.3 Pacific (Coastal) Tailed Frog (Ascaphus truei)

### Comment

In respect of the Order - Wildlife Habitat Areas 2-511 to 2-513 (April 1, 2014), the Licensee will, for FDU 8 under this FSP, manage the Pacific (Coastal) Tailed Frog WHA's, as spatially identified on the Schedule A Map and the FSP Map(s), in accordance with Schedule 1 (General Wildlife Measures) as described in the Order.

### 8.2.2.4 Spotted Owl (Strix occidentalis)

### Comment

In respect of the Order - Wildlife Habitat Areas 2-494 to 2-510 (March 1, 2011), the Licensee will, for FDU's 2, 3, 4, 5, 6, 7A, 7B, 8, 9, 10, 11, 12, 13, 15 & 16 under this FSP, manage the Spotted Owl WHA's, as spatially identified on the Schedule A Map and the FSP Map(s), in accordance with Schedule 1 (General Wildlife Measures) as described in the Order.

## 8.2.2.5 Grizzly Bear (Ursus arctos)

## Comment

In respect of the Order - Wildlife Habitat Areas 2-099, 2-100, 2-101, 2-102 & 2-194 (March 17, 2005), the Order - Wildlife Habitat Areas 2-109, 2-112, 2-114, 2-118, 2-119, 2-195, 2-196, 2-197, 2-198, 2-199, 2-201, 2-202 & 2-203 (March 17, 2005), the Order - Wildlife Habitat Areas 2-097, 2-098, 2-105 to 2-107, 2-111, 2-113, 2-116 and 2-372 to 2-380 Grizzly Bear – Chilliwack Forest District (September 16, 2010) and the Order - Wildlife Habitat Areas 2-407 to 2-434 Grizzly Bear – Chilliwack Forest District (March 8, 2011), the Licensee will, for FDU's 1, 5, 7A, 7B, 8, 9, 10, 11, 12 & 16 under this FSP, manage the applicable Grizzly Bear WHA's, as spatially identified on the Schedule A Map(s) and the FSP Map(s), according to Schedule 1 (General Wildlife Measures) as described in the Orders.

# 8.2.2.6 Pacific (Coastal) Giant Salamander (Dicamptodon tenebrosus)

### Comment

In respect of the Order - Wildlife Habitat Areas 2-120 to 2-128, 2-130 to 2-138, 2-148 and 2-149 Pacific Giant Salamander – Chilliwack Forest District (August 24, 2007) and the Order – Wildlife Habitat Areas 2-580 to 2-587, 2-589 to 2-592, 2-594, 2-595, 2-656 to 2-661 and 2-663 to 2-666 Pacific Giant Salamander – Chilliwack Forest District (August 21, 2017), the Licensee will, for FDU 15 under this FSP, manage the applicable Pacific (Coastal) Giant Salamander WHA's, as spatially identified on the Schedule A Map(s) and the FSP Map(s), according to Schedule 1 (General Wildlife Measures) as described in the Order.

## 8.2.2.7 Pacific Water Shrew (Sorex bendirii)

### Comment

In respect of the Order – Wildlife Habitat Areas 2-514, 2-515 and 2-667 to 2-669 Pacific Water Shrew – Chilliwack Forest District (August 21, 2017), the Licensee will, for FDU's 2 & 3 under this FSP, manage the applicable Pacific Water Shrew WHA's, as spatially identified on the Schedule A Map(s) and the FSP Map(s), according to Schedule 1 (General Wildlife Measures) as described in the Order.

## 8.2.2.8 Tall Bugbane (Actaea elata)

### Comment

The known distribution of Tall Bugbane habitat does not lie within the **FDU**'s identified under this **FSP**; therefore, results and/or strategies have not been prepared to address this species.

There are no approved Tall Bugbane **WHA**'s located within the **FDU**'s identified under this **FSP**. See Order - Wildlife Habitat Areas 2-129, 2-139, 2-141 to 2-143, 2-145 and 2-146 Tall Bugbane – Chilliwack Forest District (August 24, 2007) and the Order – Wildlife Habitat Areas 2-567 to 2-579 and 2-670 Tall Bugbane – Chilliwack Forest District (August 21, 2017).

### 8.2.2.9 Northern Goshawk (Accipiter gentilis laingi)

### Comment

At the writing of this **FSP**, two new Wildlife Habitat Areas have been proposed in the Chilliwack Forest District (**WHA**s 2-696 to 2-697). The formal review and comment period commenced on July 14, 2021. In respect of these proposals and in anticipation of a new Order for Northern Goshawk, the **Licensee** will, for **FDU**'s 6 and 16 under this **FSP**, manage the proposed Northern Goshawk **WHA**'s, as spatially identified in the formal review and comment package and the **FSP** Map(s), in accordance with the proposed General Wildlife Measures. Once the Order is approved, the **Licensee** will manage **WHA**s 2-696 and 2-697 according to the General Wildlife Measures described in that Order.

# 8.2.3 Water, Fish, Wildlife and Biodiversity within Riparian Areas (FPPR Section 8 and 12(3))

### Result

For all **FDU**'s under this **FSP**, the **Licensee** while conducting primary forest activities:

- (a) adopts as a result, the following sections of **FPPR**, as they were on the **Legislated Planning Date**:
  - (i)Section 47Stream riparian classes;(ii)Section 48Wetland riparian classes;(iii)Section 49Lake riparian classes;
  - (iv) Section 50 Restrictions in a riparian management area;
  - (v) Section 52(2) Restrictions in a riparian management zone; and
  - (v) Section 52(2) Temperature sensitive streams.

(b) as per **FPPR** Section 12.3(5), has received a conditional exemption from **FPPR** Section 51(1) and (3).

As an intended result the Licensee will not,

- (i) cut, modify or remove trees in a riparian reserve zone, except for the following purposes:
  - (A) felling or modifying a tree that is a safety hazard, if there is no 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;
  - (E) creating guyline tiebacks;
  - (F) carrying out a sanitation treatment;
  - (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;
  - (H) felling or modifying a tree for the purpose of establishing or maintaining an interpretive forest site, recreation site, recreation facility or recreation trail;
  - felling or modifying a tree, if the felling or modifying will not have a material adverse impact on the riparian reserve zone, as prescribed by a Qualified Professional, for the purpose of improving one or more of the following:
    - i. water quality;
    - ii. fish habitat;
    - iii. wildlife habitat;
    - iv. biodiversity.
- (ii) carry out the following silviculture treatments in a riparian reserve zone:
  - (A) grazing or broadcast herbicide applications for the purpose of brushing;
  - (B) mechanized site preparation or broadcast burning for the purpose of site preparation;
  - (C) spacing or thinning, unless prescribed by a **Qualified Professional**, for the purpose of improving one or more of the following:
    - i. water quality;
    - ii. fish habitat;
    - iii. wildlife habitat;
    - iv. biodiversity.
- (c) will, at the completion of harvesting a cutblock, for the purpose of **FPPR** Section 12(3), ensure that for each of the following riparian classes, the total basal area retained within all of the riparian management zones combined for

each riparian class present within the **TAUP** meets the minimum requirements specified in the following table:

Column 1 Riparian Class	Column 2 Basal Area to be Retained in the RMZ (% of the total pre-harvest basal area to be retained within TAUP by Riparian Class)
S1-A, S1-B, S2, S3	≥ 20
S4	≥ 10
S5 (valley bottom)	≥ 10
S5 (non-valley bottom)	≥ 0
S6	≥ 0
W1, W2, W3, W4, W5	≥ 10
L2, L3, L4	≥ 10

and, for the purpose of calculating the total basal area retention requirement for a particular riparian class within the **TAUP**, the basal area is determined based on the amount of basal area that is present within the **TAUP** immediately before harvest commencement. The location and level of basal area retention within riparian management zones will be determined by a **Qualified Professional** based on the factors in **FPPR** Schedule 1, Section 2 and an assessment of the windthrow risk to ensure the identified basal area retention will have an acceptable exposure to damaging wind events.

### 8.2.4 Water in Community Watersheds (FPPR Section 8.2)

### Strategy

The community watersheds that were in effect on the **Legislated Planning Date**, under this **FSP**, are as follows:

- Gurney Community Watershed Located within **FDU** 1
- Deroche Community Watershed Located within FDU 2
- Norrish Community Watershed Located within FDU 2
- Elbow Community Watershed Located within FDU 2 & 3
- Cohen Community Watershed Located within FDU 3
- Domitian Creek Community Watershed Located within FDU 3
- Ichilaka Community Watershed Located within FDU 5
- Kopp Community Watershed Located within FDU 5
- Centre Community Watershed Located within FDU 7A
- Drachmann Community Watershed Located within FDU 7A
- Hallisey Community Watershed Located within FDU 7A
- Choate Community Watershed Located within FDU 7B
- Inkawthia Community Watershed Located within FDU 7B
- Skeemis Community Watershed Located within **FDU** 7B

- Coutlie Community Watershed Located within FDU 8
- One & One Quarter Community Watershed Located within FDU 8
- Jamieson Community Watershed Located within FDU 8
- Stoyoma Community Watershed Located within FDU 8
- Two Mile Community Watershed Located within FDU 8
- Stormy Community Watershed Located within FDU 9
- Edna Community Watershed Located within FDU 10
- Sasquatch Community Watershed Located within FDU 10
- Thunderbird Community Watershed Located within FDU 10
- Yale Community Watershed Located within FDU 10 & 13
- Pickney Community Watershed Located within FDU 13
- Schkam Lake Community Watershed Located within FDU 13
- Nevin Community Watershed Located within FDU 15
- Trite Community Watershed Located within FDU 16

To meet the objective described in Section 8.2(2) of the **FPPR** within a community watershed specified above, the **Licensee** will:

- (a) In conjunction with other potentially affected forest agreement holders, and preceding the commencement of primary forest activities, engage a Qualified Professional(s) to conduct a Watershed Assessment (WA) for the community watershed in which the activities are proposed. Through the engagement of a Qualified Professional (s), the assessment will be prepared to address the objectives described in Section 8.2(2) by assessing the equivalent clearcut area (ECA), road densities, terrain stability and general stream morphology and function. Subsequent assessments will be conducted at least once every 6 years, unless no primary forest activities have occurred or are proposed to occur in the community watershed(s) during that period; and
- (b) Ensure that planned primary forest activities are designed and implemented to be consistent with the results and recommendations in the Watershed Assessment.

### 8.2.5 Wildlife and Biodiversity – Landscape Level (FPPR Section 9)

### Result

For all **FDU**'s the **Licensee** adopts, as a result under this **FSP**, the following sections of **FPPR**, as they were on the **Legislated Planning Date**:

(a)	Section 64	Maximum cutblock size; and
(b)	Section 65	Harvesting adjacent to another cutblock.

### 8.2.6 Wildlife and Biodiversity – Stand Level (FPPR Section 9.1)

### Strategy

For **FDU**'s 1, 2, 14 and 15 the **Licensee** adopts, as a strategy under this **FSP**, Section 66 *Wildlife tree retention* of **FPPR**, as it was on the **Legislated Planning Date**.

For **FDU**'s 1, 2, 14 and 15 the **Licensee**, as per **FPPR** Section 12.5(2), has received conditional exemption from **FPPR** Section 67.

The **Licensee** will not harvest timber, including single tree selection, within a **WTP** or **WTRA** unless the trees on the net area to be reforested of the cutblock to which the **WTP** or **WTRA** relates have developed attributes that are consistent with a mature seral condition, or the following conditions have been met:

- (a) **WTP** and **WTRA** must be well distributed across the **BEC** subzone and located within or immediately adjacent to a cutblock;
- (b) the harvest of the WTP or WTRA timber is required due to:
  - (i) the construction of an access structure, where there is no other practicable location, or
  - (ii) the improvement of the harvesting operability of the adjacent cutblock, with specific regard to the isolation of timber or the limiting of a harvest opportunity, topographical conditions and stand attributes, as determined by a Qualified Professional, or
  - (iii) the salvage of windthrown or Burnt Timber where the harvesting of remaining standing stems is only permitted within a WTP or WTRA where catastrophic windthrown or Burnt Timber exceeds 50% of the dominant or co- dominant stems; or where forest health issues pose a significant threat to areas outside the WTP or WTRA. Where salvage/harvesting is planned and authorized, the Licensee will establish a replacement WTP or WTRA of equivalent or better quality and quantity to the portion of the WTP or WTRA from which the timber is being harvested.
- (c) where the WTP or WTRA was created by another Licensee, the Licensee has been consulted, to the extent practicable prior to harvest, to determine the significance of the original WTP or WTRA location in the context of meeting stand level wildlife and biodiversity requirements or the protection of non-timber forest values;
- (d) where the WTP or WTRA was created by the Licensee, the Qualified Professional had been consulted, to the extent practicable prior to harvest, to determine the significance of the original WTP or WTRA location in the context of meeting stand level wildlife and biodiversity requirements or the protection of non-timber forest values;

- (e) the Licensee, in consideration of the significance of the original WTP or WTRA, has identified a replacement WTP or WTRA that is of equivalent or better quality and quantity to the portion of the WTP or WTRA from which the timber is being harvested;
- (f) the replacement **WTP** or **WTRA** is reported to the government within one year; and
- (g) the WTP or WTRA replacement is completed by a Qualified Professional.

For **FDU**'s 3 to 13 and 16 the **Licensee**, for those Landscape Units indicated in the table in paragraph 8.1.1, as those Legal Objectives were on the **Legislated Planning Date**, has received **FPPR** Section 12.5 (2) conditional exemption from **FPPR** Section 67.

The **Licensee** will maintain stand level structural diversity by retaining a **WTP** or **WTRA**. Cutblocks for which harvesting has been completed by the Licensee will retain adequate amounts of **WTP** or **WTRA** to ensure that over each three-year period, commencing on the date the objectives are established, the target retention percentage as noted in Objective 2 Table A, for the applicable Landscape Unit, is achieved.

In addition:

- (a) **WTP** and **WTRA** must be well distributed across the **BEC** subzone and located within or immediately adjacent to a cutblock;
- (b) each cutblock greater than 10 hectares in size must have a minimum of 2% wildlife tree retention;
- (c) except as noted in (d), the Licensee will not harvest timber, including single tree selection, within a WTP or WTRA unless the trees on the net area to be reforested of the cutblock to which the WTP or WTRA relates have developed attributes that are consistent with a mature seral condition, or the following conditions have been met:
  - (i) the harvest of the WTP or WTRA timber is required due to:
    - (A) the construction of an access structure, where there is no other practicable location, or
    - (B) the improvement of the harvesting operability of the adjacent cutblock, with specific regard to the isolation of timber or the limiting of a harvest opportunity, topographical conditions and stand attributes, as determined by a Qualified Professional.
    - (C) salvage of windthrown or **Burnt Timber** where the harvesting of remaining standing stems is only permitted within a WTP or WTRA where catastrophic windthrown or **Burnt Timber** exceeds 50% of the dominant or co-dominant stems; or where forest health issues pose a significant threat to areas outside the WTP or WTRA. Where

salvage/harvesting is planned and authorized, the **Licensee** will establish a replacement **WTP** or **WTRA** of equivalent or better quality and quantity to the portion of the **WTP** or **WTRA** from which the timber is being harvested.

- (ii) where the WTP or WTRA was created by another Licensee, the Licensee has been consulted, to the extent practicable prior to harvest, to determine the significance of the original WTP or WTRA location in the context of meeting stand level wildlife and biodiversity requirements or the protection of non- timber forest values;
- (iii) where the WTP or WTRA was created by the Licensee, the Qualified Professional had been consulted, to the extent practicable prior to harvest, to determine the significance of the original WTP or WTRA location in the context of meeting stand level wildlife and biodiversity requirements or the protection of non- timber forest values;
- (iv) the Licensee, in consideration of the significance of the original WTP or WTRA, has immediately identified a replacement WTP or WTRA that is of equivalent or better quality and quantity to the portion of the WTP or WTRA from which the timber is being harvested;
- (v) the replacement **WTP** or **WTRA** is reported to the government within one year; and
- (vi) the WTP or WTRA replacement is completed by a Qualified Professional.
- (d) **WTP** or **WTRA** must include, if present, live or dead veteran trees (excluding danger trees), or remnant old growth patches;
- (e) **WTP** or **WTRA** must include representative larger trees for the stand and any existing moderate to high value wildlife trees (excluding danger trees); and
- (f) where differences exist between mapped and actual **BEC** subzones, subzones will be confirmed by a **Qualified Professional**.

### 8.2.7 Cultural Heritage Resources (FPPR Section 10)

### Strategy

### 8.2.7.1 Definitions

For the purpose of this strategy "**Aboriginal People**" (as used in FPPR Section 10) means an indigenous people whose asserted traditional territory overlaps with a **FDU** within this **FSP**. The term "**Indigenous People**" will be used in this **FSP**.

### 8.2.7.2 Conservation and Protection of Cultural Heritage Resources

For all FDUs under this FSP the Licensee will:

- (a) ensure that a primary forest activity to which this **FSP** applies will not cause a cultural heritage resource that is:
  - (i) referred to in Section 10 of **FPPR**, as it was on the **Date of Submission**;
  - (ii) likely to be adversely impacted by that primary forest activity;
  - (iii) not conserved or protected through:
    - (A) legislation, plans or policies; or
    - (B) other means or arrangements, developed or accepted through information sharing with an **Indigenous People**; and
  - (iv) important, valuable and scarce in the context of a traditional use by an **Indigenous People**, based on input from an **Indigenous People**

to become unavailable for its continuing extent of use by an **Indigenous People** up to the historical extent of its traditional use by that **Indigenous People**, unless it is confirmed by provincial government agencies in consultation with that **Indigenous People** that it is not necessary to conserve or protect the cultural heritage resource; and

- (b) share information with **Indigenous People** regarding primary forest activities to which this **FSP** applies that are proposed within the asserted traditional territory of that **Indigenous People** and are likely to affect that **Indigenous People**:
  - (i) according to established agreements made by provincial government agencies with an **Indigenous People** for information sharing in respect of timelines and content of information provided; or
  - (ii) as determined by a Qualified Professional based on those factors in FPPR Schedule 1, Section 4 where no agreements made by government with an Indigenous People are in place.
- (c) establish a communications protocol agreement in writing, if requested by an **Indigenous People** and if established, follow that agreement.
- (d) where practicable, develop and implement mutually agreed upon management strategies for Cultural Heritage Resources based on information provided by an **Indigenous People** with the **Indigenous People** likely affected by management strategies.
- (e) at the request of an **Indigenous People**, establish a protocol agreement with that **Indigenous People** for identifying a current and/or future supply of western red cedar and cypress trees suitable for traditional use and not cause, as a result of primary forestry activities, this supply to become unavailable for their continuing extent of use by an **Indigenous People** up to the extent of historical use.

# 8.3 Objectives Enabled In Government Action Regulation

### 8.3.1 Scenic Areas and Visual Quality Objectives (GAR Section 7 and 17)

### Result

In all **FDU**'s under this **FSP**:

- (a) subject to subparagraph (c), the Licensee will design timber harvesting and road construction activities, to which this FSP applies, to be consistent with the established visual quality objectives, as defined in Section 1.1 of the FPPR, that are in effect on the Legislated Planning Date and applicable to the Scenic Areas in which the timber harvesting or road construction activities are located;
- (b) the **Licensee** will harvest timber and construct road in a manner consistent with the design and the visual quality objective referred to in subparagraph (a); and
- (c) for the purpose of designing timber harvesting and road construction activities,
  - (i) dead or damaged stands are considered to have the same visual quality as though they were unaltered; and
  - (ii) power lines and utility corridors are not considered to impact visual quality.

## 8.3.2 Karst Resource Features (GAR Section 5)

### Comment

In FDU's 9 and 15 under this FSP:

- (a) the Licensee will, prior to commencing timber harvesting and road construction activities within the 'Karst GAR Order Area', to which this FSP applies, engage a Qualified Professional to conduct an assessment related to karst caves, the important features and elements within very high or high vulnerability karst terrain and significant surface karst features;
- (b) the Licensee will manage any area known or found to contain karst resource features as recommended in the assessment completed by a Qualified Professional; and
- (c) the **Licensee** will provide information related to karst resource features encountered at the request of the applicable government agency.

### 8.3.3 Kweh-Kwuch-Hum Cultural Heritage Resource Feature (GAR Section 5)

### Comment

In **FDU** 10 under this **FSP**:

(a) the **Licensee** will not engage in primary forest activities within the 'Kweh-Kwuch-Hum GAR Order Area', on Mount Woodside during the term of this **FSP**.

# 9 MEASURES

# 9.1 Invasive Plants (FPPR Section 17)

### Measures

In all FDU's to which this FSP applies, the Licensee will:

- (a) use a **Qualified Professional** to monitor the presence and spread of invasive plants while conducting field related forest management activities or road inspections within cutblocks and along roads that are subject to a **CP** or **RP** held by the **Licensee**.
- (b) report recorded invasive plant infestations annually through the Invasive Alien Plant Program (IAPP) Application;
- (c) in areas where invasive plants have been identified and more than 0.25 contiguous hectares of mineral soil has been exposed by road or landing construction or scarification within a cutblock ("the disturbed area"), a Qualified Professional will prescribe revegetation activities based on a risk assessment for the site and invasive species characteristics. The risk assessment will include one or more of the following considerations:
  - (i) biogeoclimatic ecosystem;
  - (ii) proximity to parks or protected areas;
  - (iii) proximity to **WHA**'s;
  - (iv) proximity to identified First Nations plant use areas;
  - (v) proximity to riparian areas;
  - (vi) planned exposed mineral soil;
  - (vii) proximity to town centers;
  - (viii) invasive species dispersal and reproduction mechanisms; and
  - (ix) invasive species annual dispersal/spread rate.
- (d) Where re-vegetation is prescribed, re-vegetate the disturbed area within two years of disturbance and within the growing season, with the exclusion of the road surface of active roads, if:

- (i) such disturbance is likely to result in the introduction or spread of invasive plants identified in the area; and
- (ii) such re-vegetating will materially reduce the likelihood of the spread of invasive plants identified in the area.
- (e) use seed to re-vegetate disturbed areas that will meet or exceed the Common #1 Forage mixture;
- (f) monitor re-vegetated areas as prescribed by a **Qualified Professional**.

# 9.2 Natural Range Barriers (FPPR Section 18)

### Measure

The Licensee will:

- (a) gather information from the **MFLNRORD** district range staff or regional experts to identify areas within **FDU**'s that are subject to or adjacent to range tenures under the *Range Act*;
- (b) prior to commencement, inform affected range tenure holders of planned primary forest activities within or adjacent to their range tenure; and
- (c) where the affected range tenure holder communicates that a primary forest activity will remove or render ineffective a natural range barrier, the **Licensee** will carry out reasonable and mutually agreed upon measures, within an agreed upon time, to mitigate the effect of removing or rendering ineffective a natural range barrier.

# 10 STOCKING STANDARDS

The stocking standards are specified in the following subparagraphs:

- (a) subject to subparagraph (e), the stocking standards under this FSP apply to all FDU's, in all situations where a free growing stand is required to be established under Section 29 of FRPA, in respect of all CP's issued after the date specified by government as of the date this FSP is approved;
- (b) the stocking standards included in this **FSP** consider the factors relating to stocking specifications as set out in FPPR Section 6 of Schedule 1;
- (c) Section 44 of **FPPR** applies in all situations where a free growing stand is required to be established under this **FSP**;

- (d) Section 45 of **FPPR** is not applicable to the **FSP** area;
- (e) pursuant to **FRPA** Section 197, the **Licensee** may, from time to time during the term of the plan, give notice to the **MFLNRORD** using the RESULTS system, that the stocking standards specified under this **FSP** apply to:
  - (i) a cutblock for which the **Licensee** is responsible for and the **CP** that pertains to that cutblock has expired; or
  - (ii) a cutblock included in a **CP** that was issued to the **Licensee** after the **Legislated Planning Date**, but before this **FSP** is approved.
- (f) Even–Aged Silviculture System Stocking Standards

The even–aged stocking standards in Appendix 3 will apply when the following even–aged silviculture systems are prescribed:

- (i) clearcut;
- (ii) clearcut with reserves;
- (iii) seed tree;
- (iv) shelterwood; or
- (v) variable retention.
- (g) Uneven-Aged Silviculture System Stocking Standards
  - (i) There are no uneven-aged stocking standards included in this **FSP**.
- (h) Hardwood Stocking Standards

The hardwood stocking standards listed in Appendix 3 will apply when a hardwood species management regime has been prescribed.

(i) Intermediate Cutting and Commercial Thinning Stocking Standards

As per **FPPR** section 16(4) the situations or circumstances that determine when the stocking standards will be applied include the following:

- Intermediate Cutting: to increase timber availability and harvest opportunity for timber products and tree species that require independent extraction from the stand prior to final harvest; or
- (ii) Commercial Thinning: to enhance the growth of residual trees and to facilitate higher utilization of merchantable fibre produced by the stand during its rotation.

There are no applicable reforestation objectives when a **Qualified Professional** prescribes an intermediate cutting or commercial thinning treatment where the stand is not being managed as a part of an uneven–aged silviculture system. Subject to **FPPR** section 16(4) the area on which timber harvesting was carried out must conform to the following stocking standards for a period of 12 months after completion of harvest:

- (A) the post-harvest basal area is equal to or greater than 40 square metres;
- (B) there are no openings created that are greater than 0.25 hectare in size;
- (C) the residual stand is composed of commercially valuable and ecologically suitable species; and
- (D) the residual stand is substantially representative of the original stand in terms of health factors and health risk.

Intermediate Cutting and Commercial Thinning is limited to 5% of the Licensee's five year sum of allowable annual cuts measured at the end of a five year cut control period.

(j) Single Stem Harvesting Stocking Standards

As per **FPPR** section 16(4) the situations or circumstances that determine when the stocking standards will be applied include the following:

(i) Single Stem Harvesting: to increase timber availability and harvest opportunity in highly constrained areas of the timber harvesting land base.

There are no applicable reforestation objectives when a **Qualified Professional** prescribes a single stem harvesting treatment where the retention of trees is required to achieve one or more of the following non-timber objectives:

- (i) to ensure slope stability and the protection of soils;
- (ii) to ensure the protection of water, fish wildlife and biodiversity within riparian areas;
- (iii) to protect water in a community watershed;
- (iv) to maintain or enhance wildlife and biodiversity at the stand and landscape levels;
- (v) to meet a visual quality objective;
- (vi) to protect cultural heritage resources; or
- (vii) to protect the wildland urban interface or high value infrastructure or high resource values as identified in an approved district fire management plan; and

Subject to **FPPR** section 16(4) the area on which timber harvesting was carried out must conform to the following stocking standards for a period of 12 months after completion of harvest:

(A) the post-harvest basal area is equal to or greater than 40 square metres;

- (B) there are no openings created that are greater than 0.16 hectare in size;
- (C) the residual stand is composed of commercially valuable and ecologically suitable species;
- (D) the residual stand is substantially representative of the original stand in terms of health factors and health risk; and
- (E) the Douglas- fir, western redcedar, and yellow cedar post-harvest species composition varies less than 25% from the original species composition (measured by individual species).

Single Stem Harvesting is limited to 5% of the Licensee's five year sum of allowable annual cuts measured at the end of a five year cut control period.

(k) Single Entry Dispersed Retention Stocking Standards (SEDRSS)

SEDRSS (Appendix 3) apply to cutblocks where a **Qualified Professional** has prescribed a Single Entry Dispersed Retention Silviculture System where the post-harvest basal area falls between 5m<sup>2</sup>/ha and less than 40m<sup>2</sup>/ha, and the retention trees are intended to contribute towards a regeneration and free growing obligation. The application of a Single Entry Dispersed Retention Silviculture System will achieve one or more of the following non-timber objectives:

- (i) to ensure slope stability and the protection of soils;
- (ii) to ensure the protection of water, fish wildlife and biodiversity within riparian areas;
- (iii) to protect water in a community watershed;
- (iv) to maintain or enhance wildlife and biodiversity at the stand and landscape levels;
- (v) to meet a visual quality objective;
- (vi) to protect cultural heritage resources; or
- (vii) to protect the wildland urban interface or high value infrastructure or high resource values as identified in an approved district fire management plan.

The **Licensee** will implement the damage criteria and survey methodologies indicated in the following publications:

- Single Entry Dispersed Retention Stocking Standard Framework Implementation Guide (Coast Region FRPA Implementation Team September 14, 2011.)
- (ii) Appendix 3: Coastal Second Growth Douglas fir (Fdc) Retention Stocking Standard SEDRSS – Fdc (August 3, 2016)

Single Entry Dispersed Retention Harvesting is limited to 10% of the Licensee's five-year sum of allowable annual cuts measured at the end of a five year cut control period.

(I) Stocking Standards for the Harvesting of Special Forest Products

As per **FPPR** section 16(4) the situations or circumstances that determine when the stocking standards will be applied include the following:

(i) Harvesting of Special Forest Products: to increase the availability of harvest opportunities for special forest products.

The **Licensee** may harvest Special Forest Products within the **FDU**'s during the term of the **FSP**. This activity will be limited to the harvest of shake and shingle bolts, blocks and blanks.

If the area of harvesting is within a non-free growing standards unit, then the standards unit stocking standards continue to apply.

For all other areas, there is no regeneration objective and subject to **FPPR** section 16(4), the area on which the harvesting of special forest products was carried out must conform to the following stocking standards for a period of 12 months after completion of harvest:

- (A) All live trees will be retained.
- (m) Elk Stocking Standards

The Elk Stocking Standards (ESS) in Appendix 3 apply to standards units located in High Impact Zones. High Impact Zones are defined as high elk use landscapes where significant damage to regeneration has been recorded.

High Impact Zones

- (i) upper Pitt River watershed-below the 300m contour
- (ii) upper Stave River watershed-below the 300m contour

An ESS will be assigned to a standards unit in a High Impact Zone if it has been determined by a **Qualified Professional**, based on the following site factors, that elk will likely inhabit the standards unit and damage regeneration:

- (i) there is a presence of elk in the pre-harvest standards unit;
- (ii) there is evidence of elk in adjacent harvested cutblocks; and
- (iii) the standards unit mesoslope position is either lower slope, toe, depression, or level.

Outside of the High Impact Zones, throughout the **FDU** where elk damage has been documented by a silviculture survey and the damage has resulted in the well-spaced stem count falling below the minimum stocking standard for a standards unit, then the standards unit will be amended with an ESS.

The **Licensee** is under no obligation to fill plant or replant an ESS assigned standards unit if the following have occurred:

- (i) the standards unit had been initially planted and the well- spaced stocking level was equal to or greater than the original minimum stocking standard; and
- (ii) the standards unit well-spaced stem stocking level had fallen below the minimum ESS, as a result of elk damage.

For ESS assigned standards units where the well- spaced stocking level has fallen below the ESS, the **Licensee** will establish a free growing stand composed of the remaining well-spaced regeneration on the net area to be reforested, to the extent practicable.

(n) Reduced Minimum Inter-tree Distance

The **MITD** will be reduced in the following locations, by the specified amounts, in order to sufficiently restock a standards unit:

- (i) A 25% reduction:
  - (A) the roadside work area as defined in **FPPR** Section 35(1);
  - (B) 5m of the outer banks of any stream, lake or wetland;
  - (C) non-productive sites;
  - (D) 5m of mechanically piled slash; or
  - (E) helicopter harvested standards units.
- (ii) A 50% reduction:
  - (A) talus/ colluvium sites;
  - (B) hygric or wetter sites;
  - (C) root rot sites;
  - (D) areas that are extensively utilized by ungulate species;
  - (E) areas that are being managed for wildlife values;
  - (F) areas harvested under partial harvest silviculture systems; or
  - (G) riparian management areas, when basal area retention has been prescribed.
- (o) In addition to Appendix 3, the following stocking standards apply:
  - (i) the conifer to fireweed competition ratio will be not less than 1:1 at the free growing date.
  - (ii) naturally occurring coniferous species not listed in Appendix 3 for a site series will be treated as commercially valuable and ecologically suitable if they are performing well at the free growing date, provided that:
    - (A) no more than 5% of the target stocking standard will be composed of these trees; and

- (B) the minimum height of these trees will be the average of the minimum heights of the commercially valuable and ecologically suitable trees specified in Appendix 3, for that site series.
- (iii) the following hardwood species (not originating from a stump) are considered commercially valuable and ecologically suitable well-spaced stems within 10 meters of an S4, S5 or S6 stream, provided that the hardwood species well-spaced stem composition does not exceed 5% of the Standards Unit:
  - (A) A. rubra
  - (B) *P. tremuloides*
  - (C) B. papyrifera
  - (D) P. trichocarpa
  - (E) A. macrophyllum
- (iv) in areas with root rot (all species, including *Phellinus weirii*) centers with over 40% incidence:
  - (A) alternate species to Douglas-fir will be planted; and up to 20% natural Douglas-fir with good form and vigour will be acceptable at free growing in these areas.
- (v) in an effort to reduce white pine weevil (*Pissodes strobi*) damage on spruce trees, the following standard will apply:
  - (A) if the spruce trees being assessed are of acceptable form and vigour and meet all other acceptability criteria, and
  - (B) there is an active *Pissodes strobi* (white pine weevil) population on the block or within one kilometre as evident by the presence of weevil damaged trees, and
  - (C) in the opinion of a Professional Forester, supported by a written rationale, the spruce crop trees on the site are at an unacceptable increased risk for damage from white pine weevil if the overtopping vegetation is removed and if the overtopping vegetation is <u>not</u> removed the spruce trees are expected to continue to develop into a merchantable crop,

then, for the purpose of assessing the free growing status of spruce crop trees, all deciduous vegetation shall be assessed as noncompeting brush.

# **11 SIGNATURES**

Signature of Preparing Foresters:

Name:\_\_\_\_\_

Susan Pichugin, RPF

*"I certify that the work described herein fulfills the standards acceptable of a Registered Professional Forester and that I did personally supervise the work".* 

Date: \_\_\_\_\_

Name:

Rob Deines, RPF Chartwell Resource Group Ltd.

*"I certify that the work described herein fulfills the standards acceptable of a Registered Professional Forester and that I did personally supervise the work".* 

Date: \_\_\_\_\_

Signature of Person Required to Prepare the Plan (FPRA Section 5(3)):

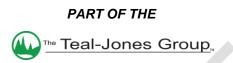
Name:\_\_\_\_

John Pichugin, RPF Teal Cedar Products Ltd.

"I certify that the work described herein fulfills the standards acceptable of a Registered Professional Forester and that I did personally supervise the work".

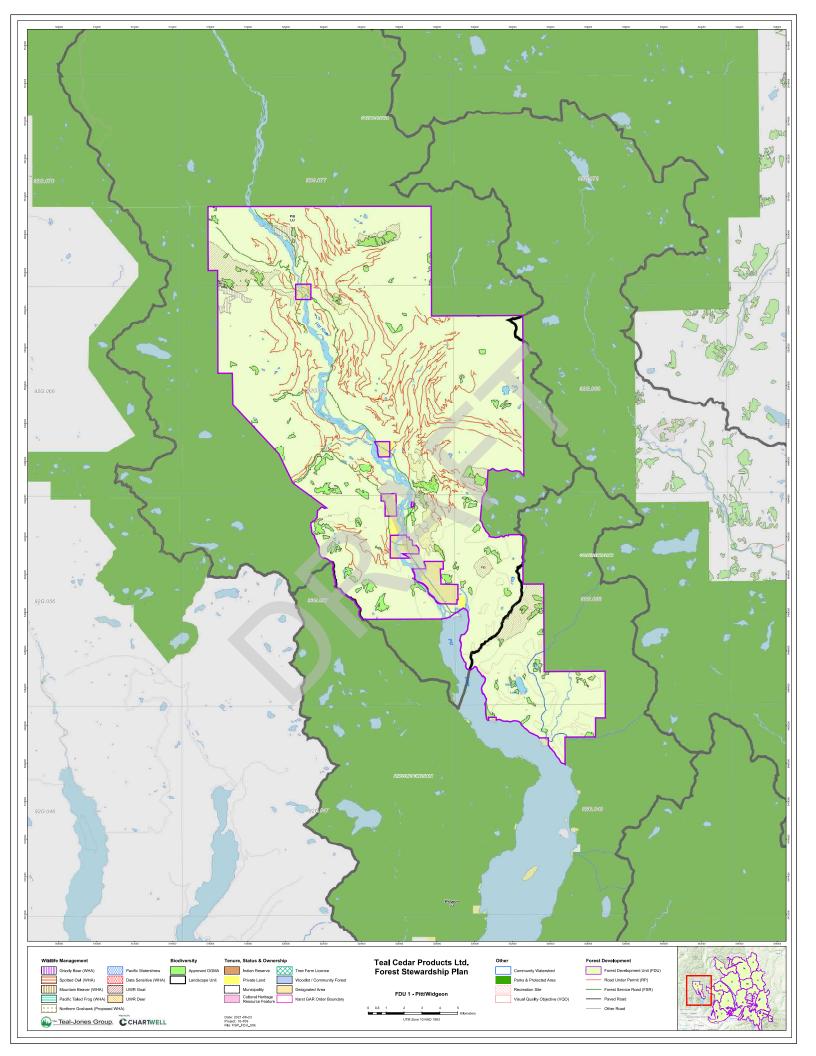
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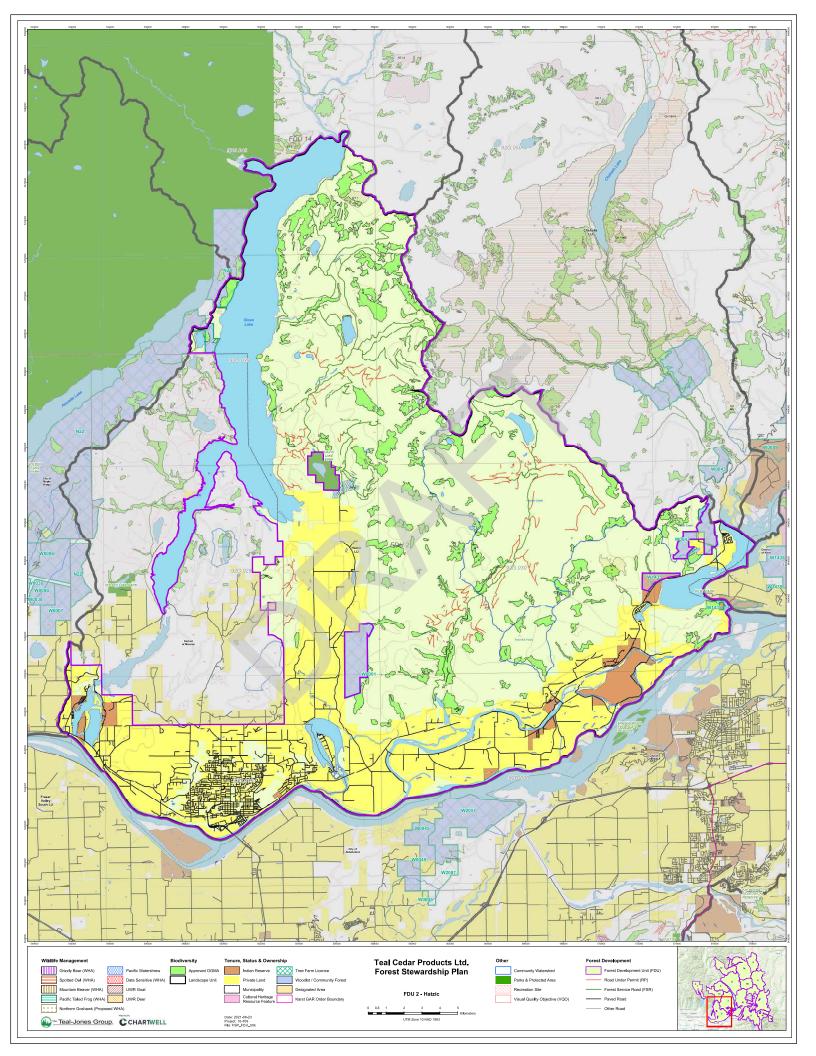


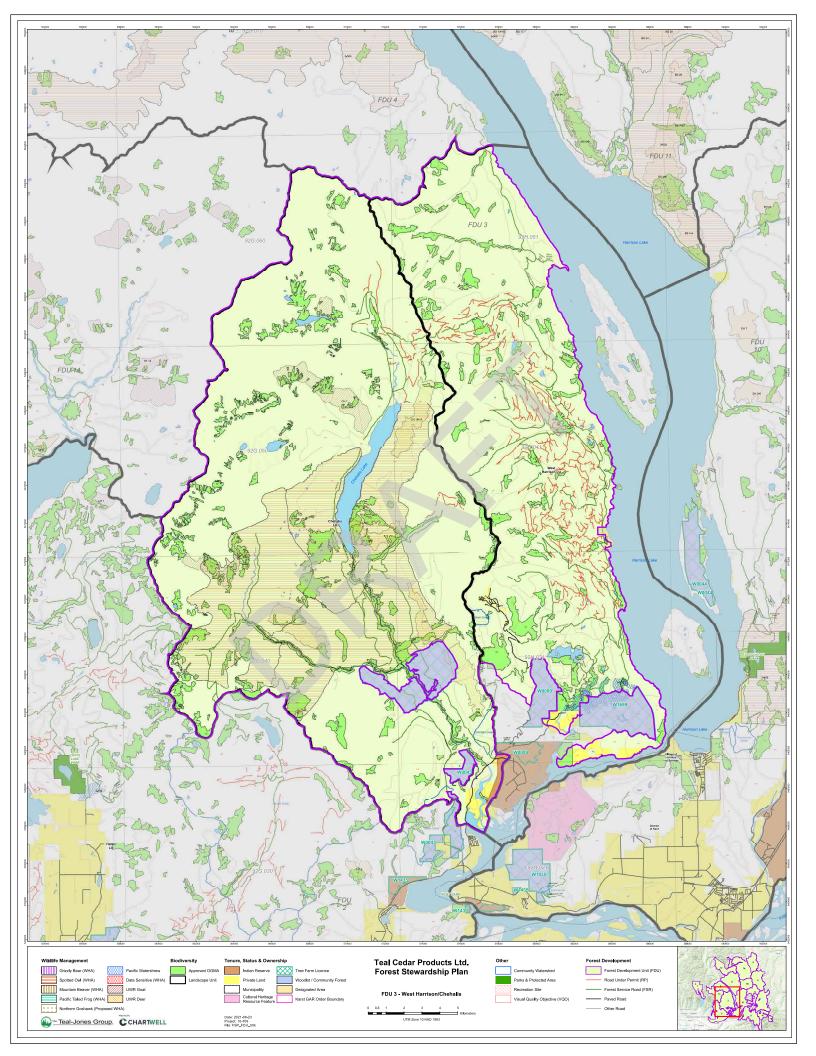


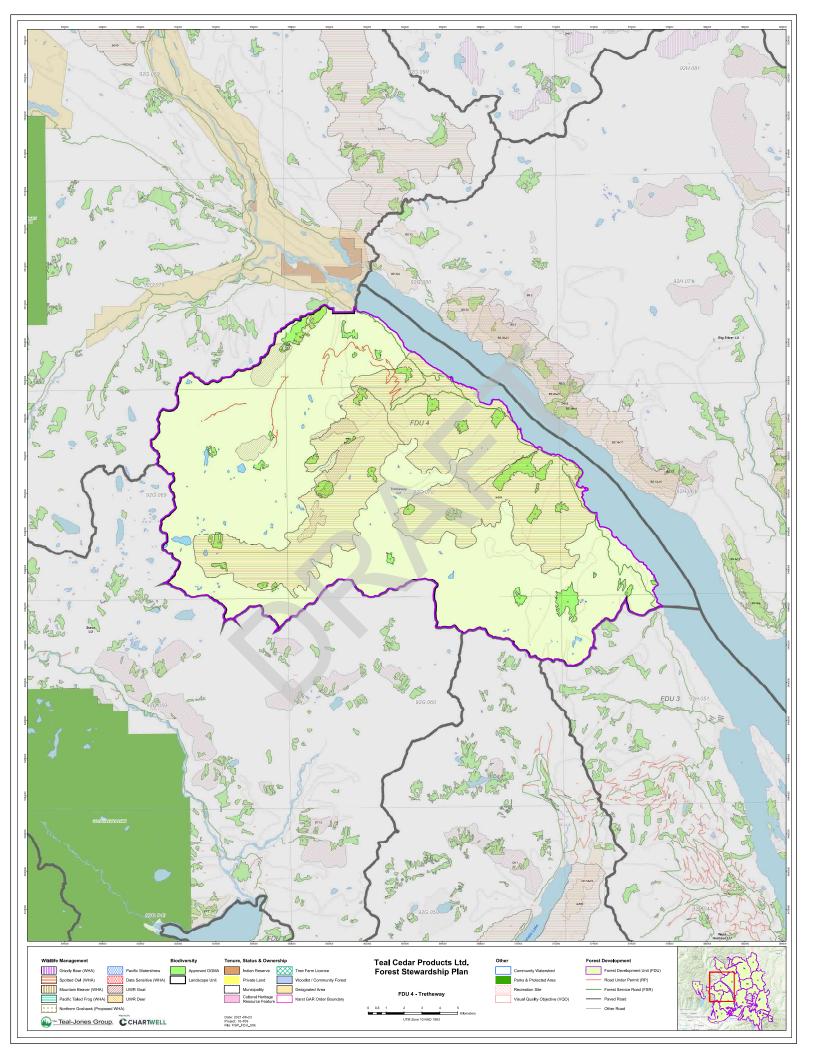
# Appendix 1 Forest Stewardship Plan Maps

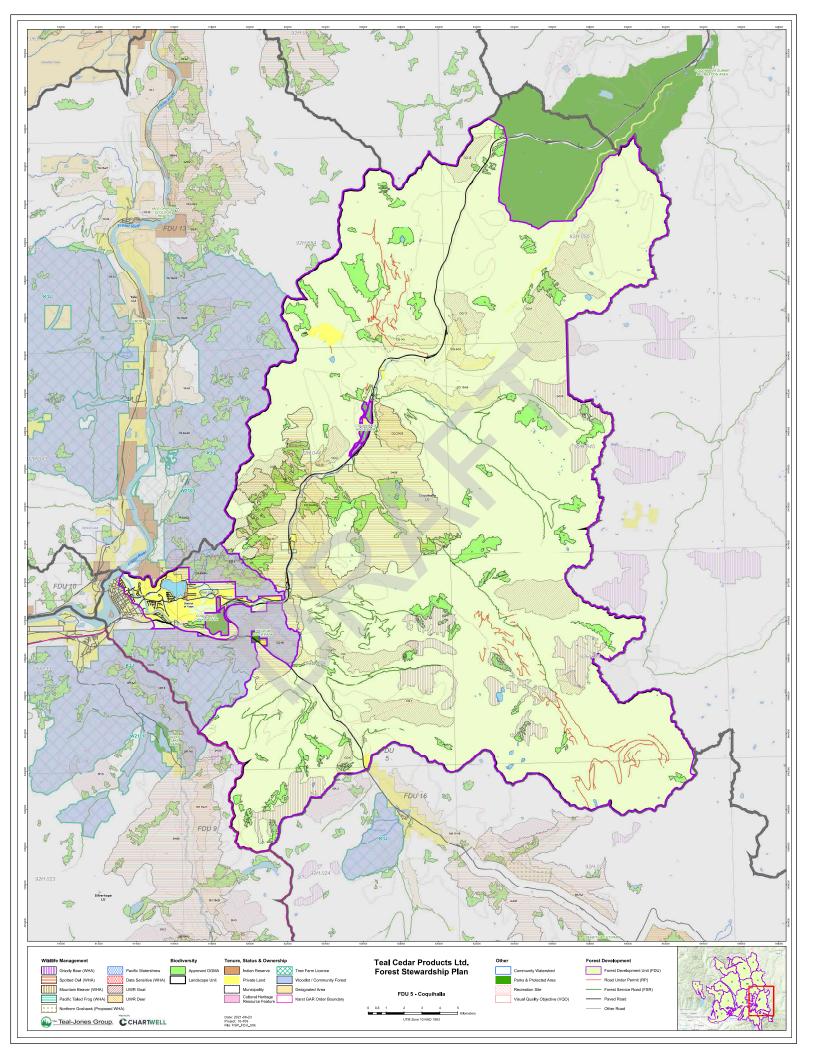
(Larger Forest Stewardship Plan Maps are Included as Separate Attachments)

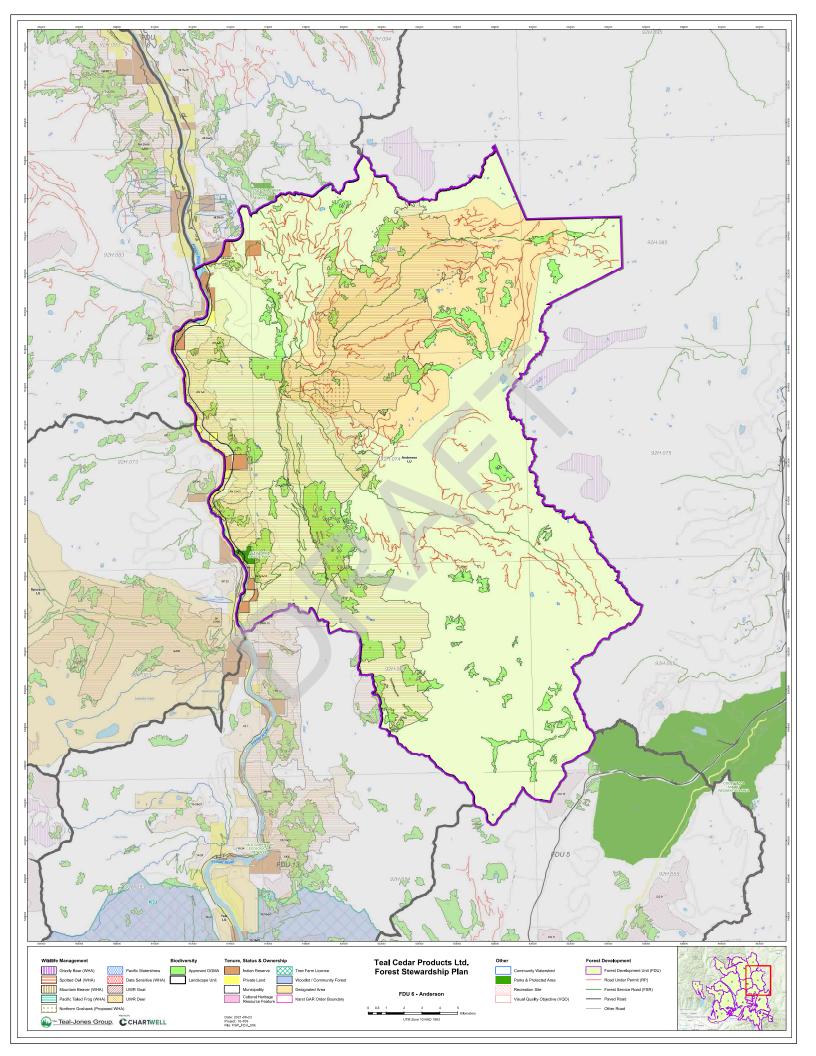


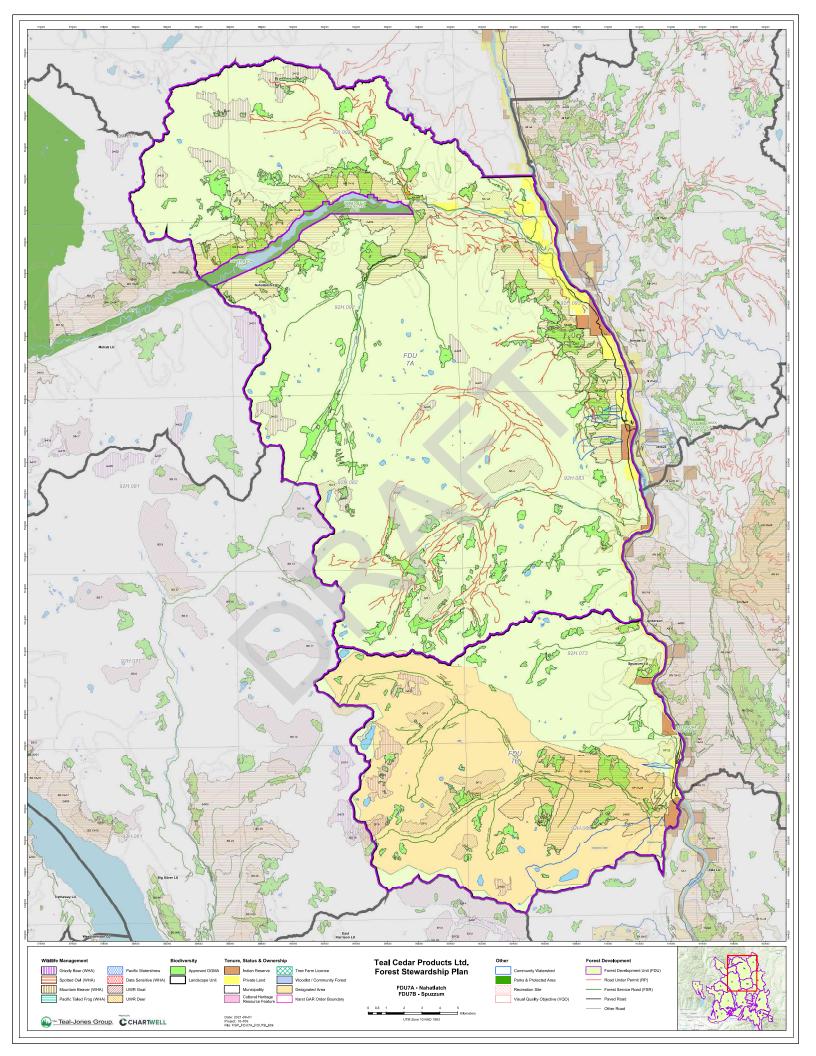


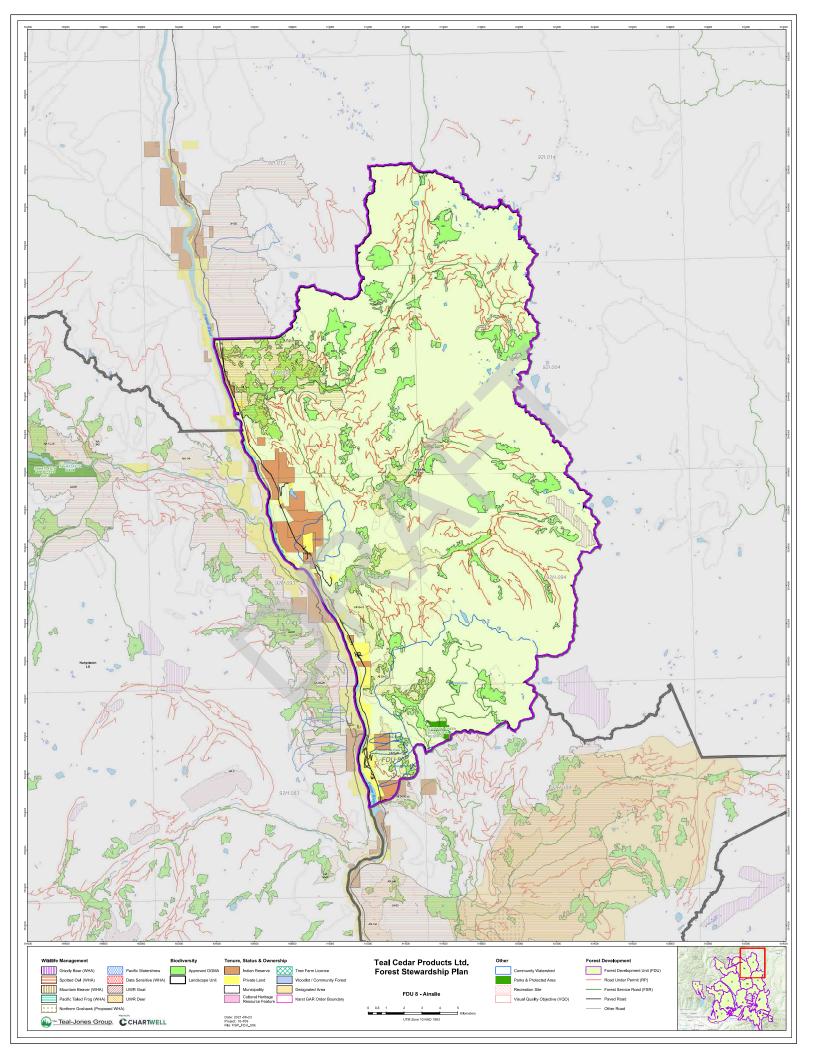


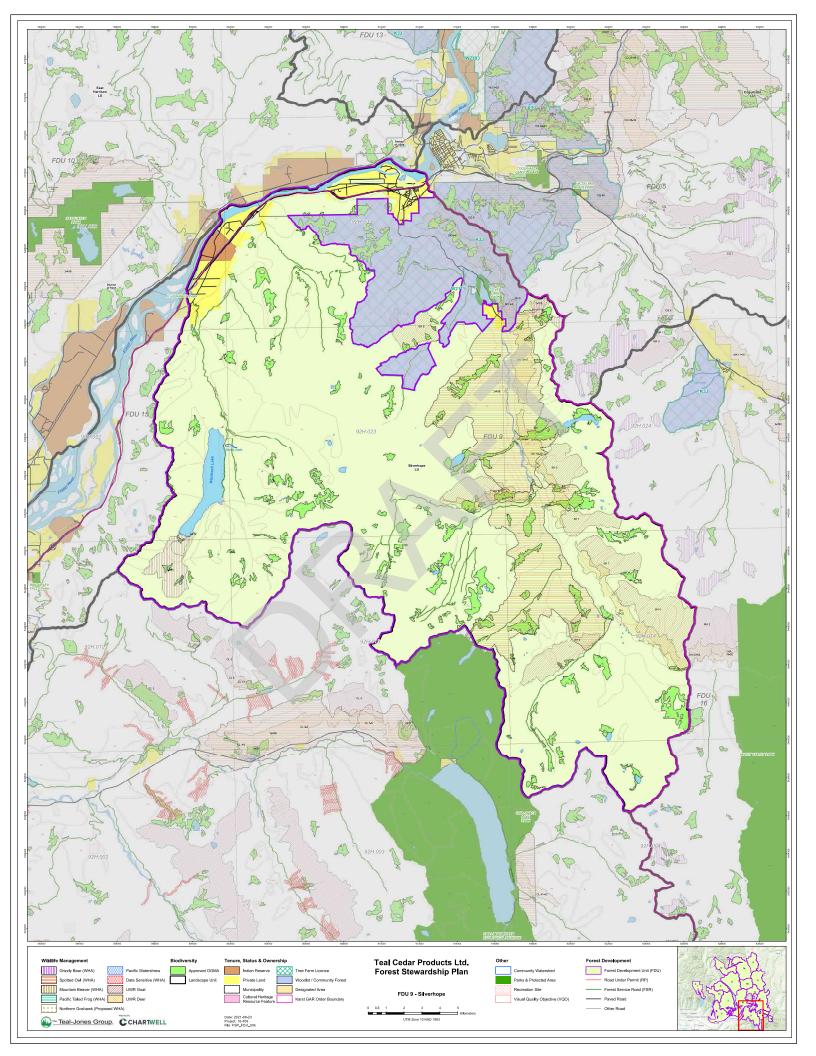


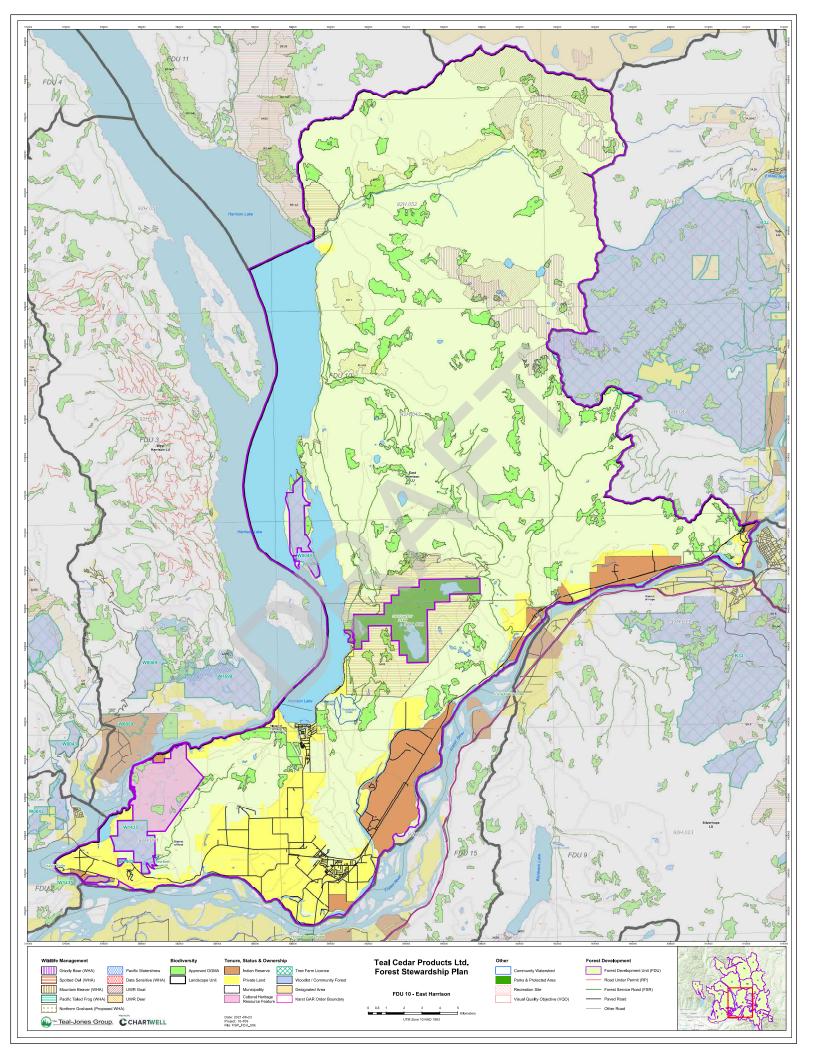


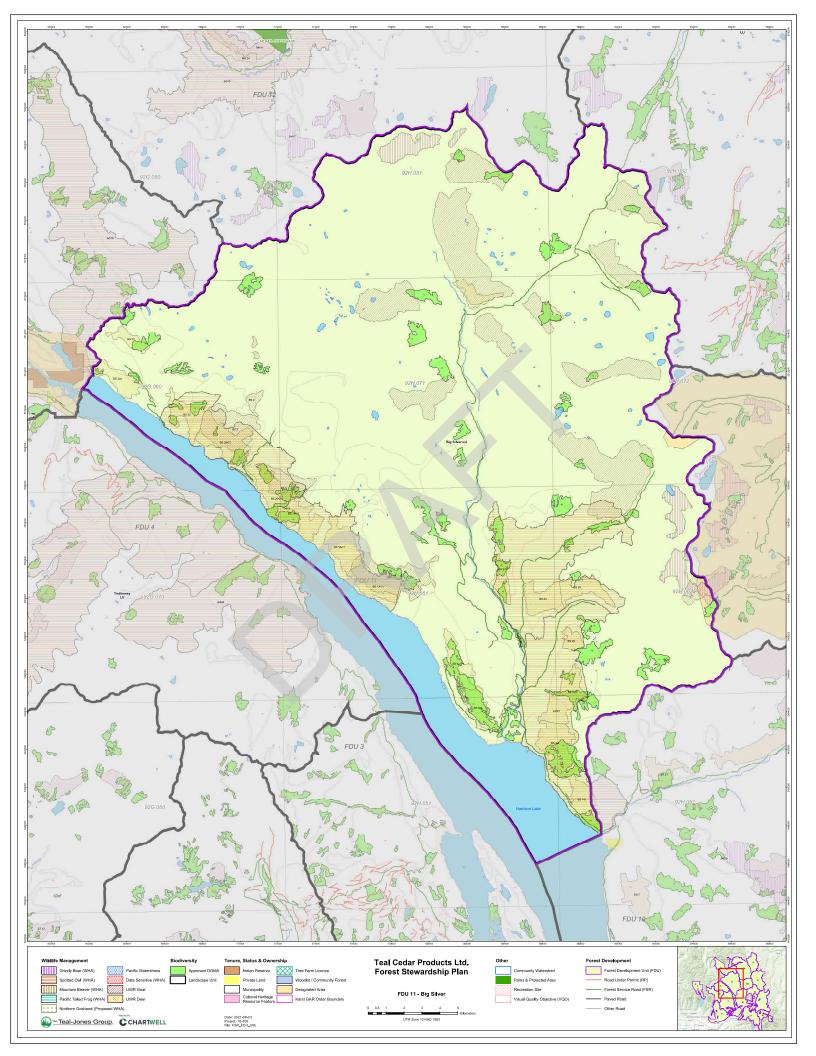


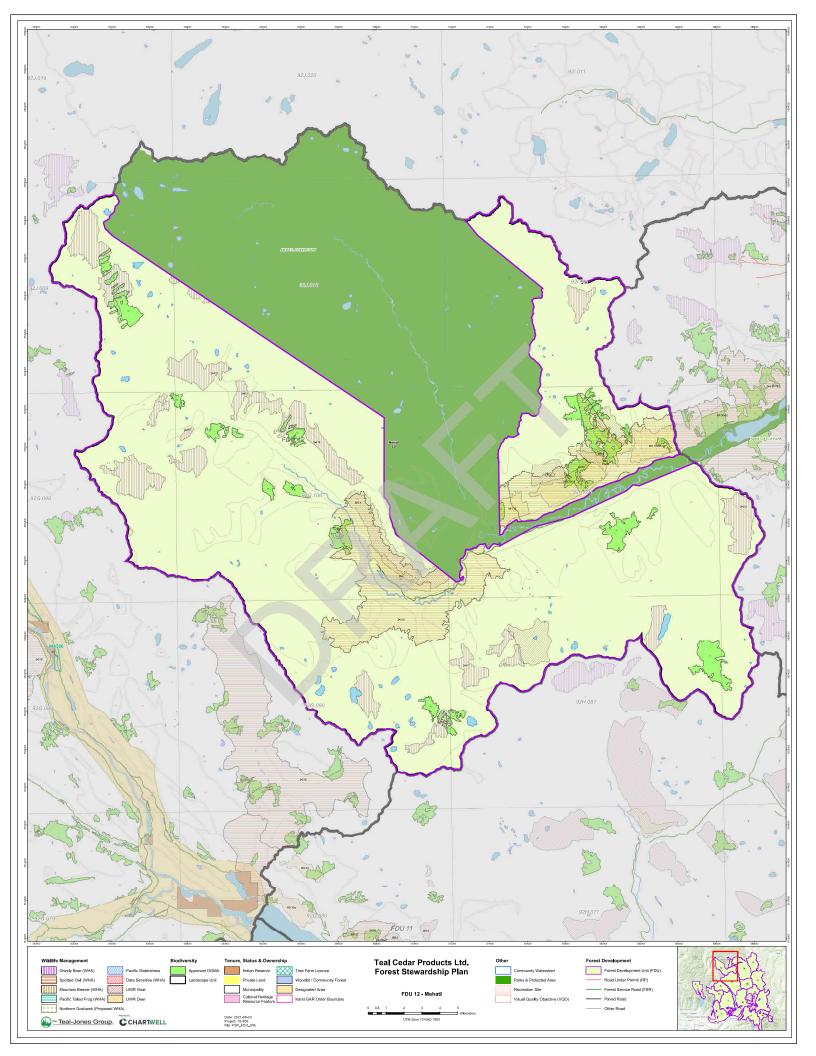


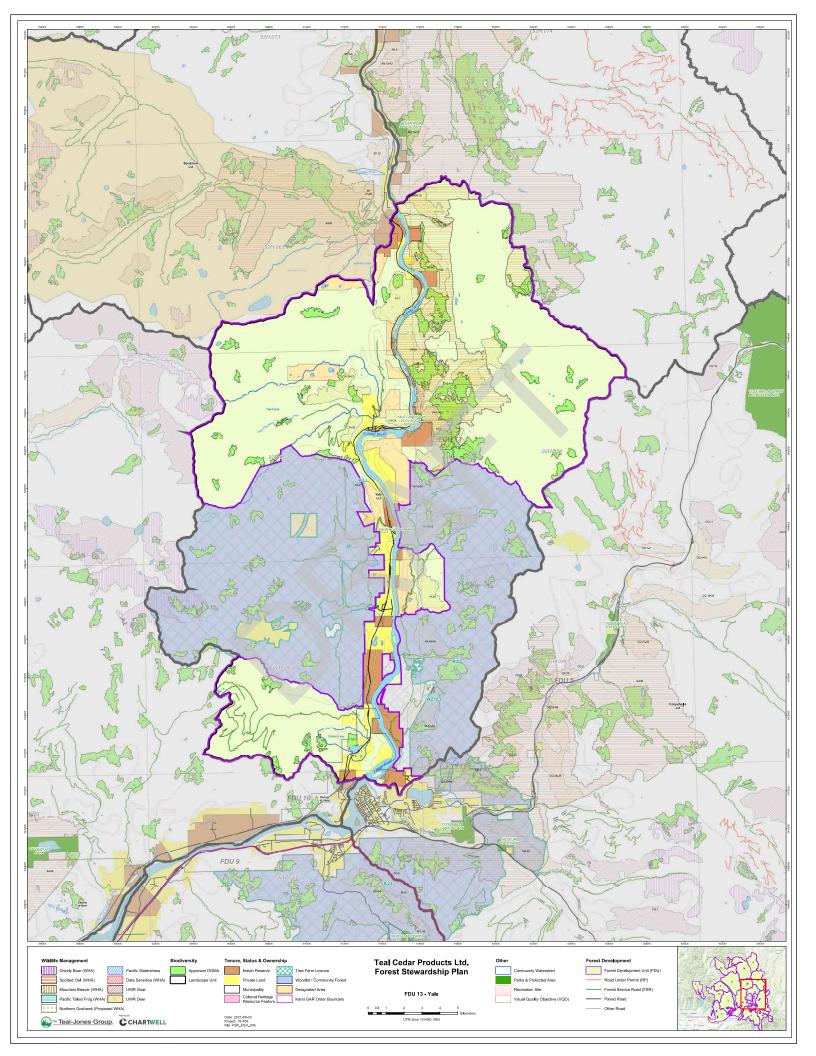


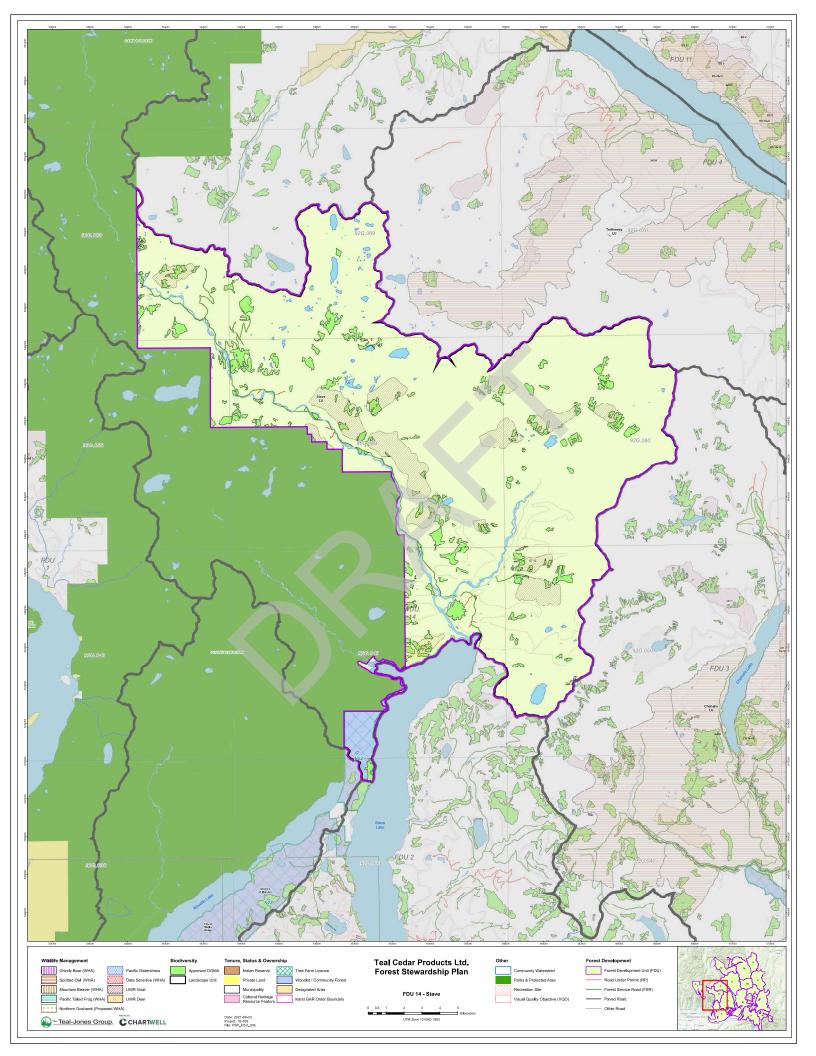


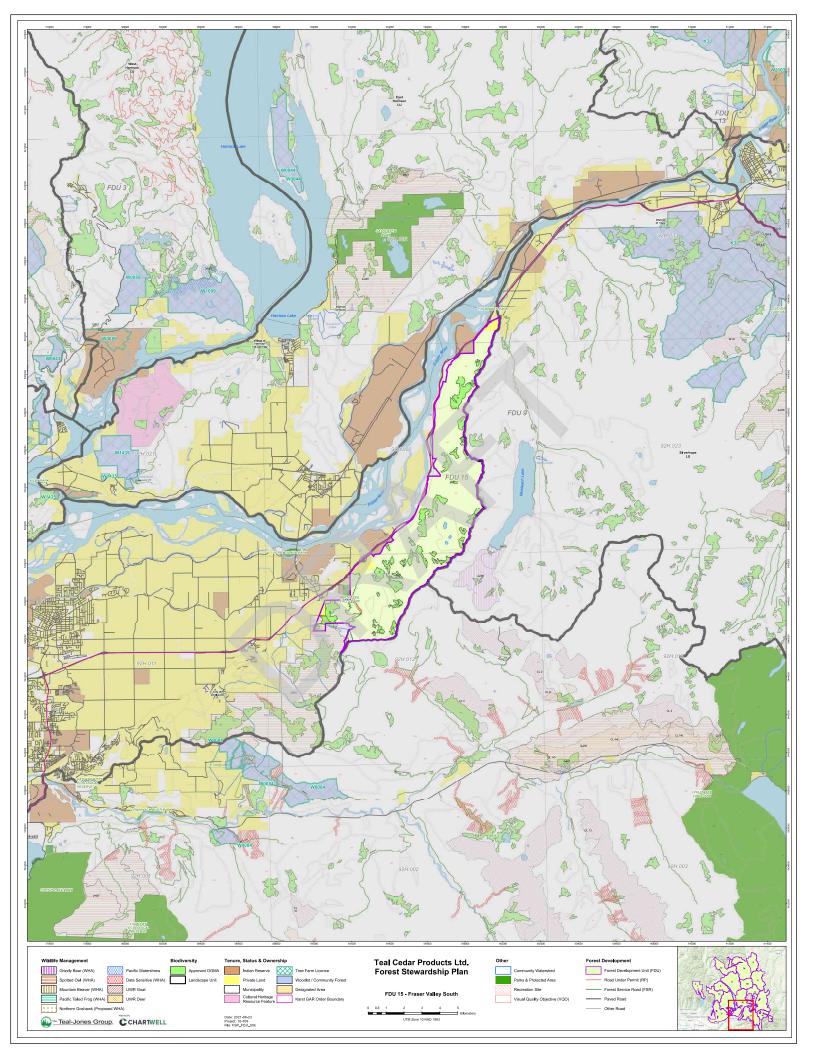


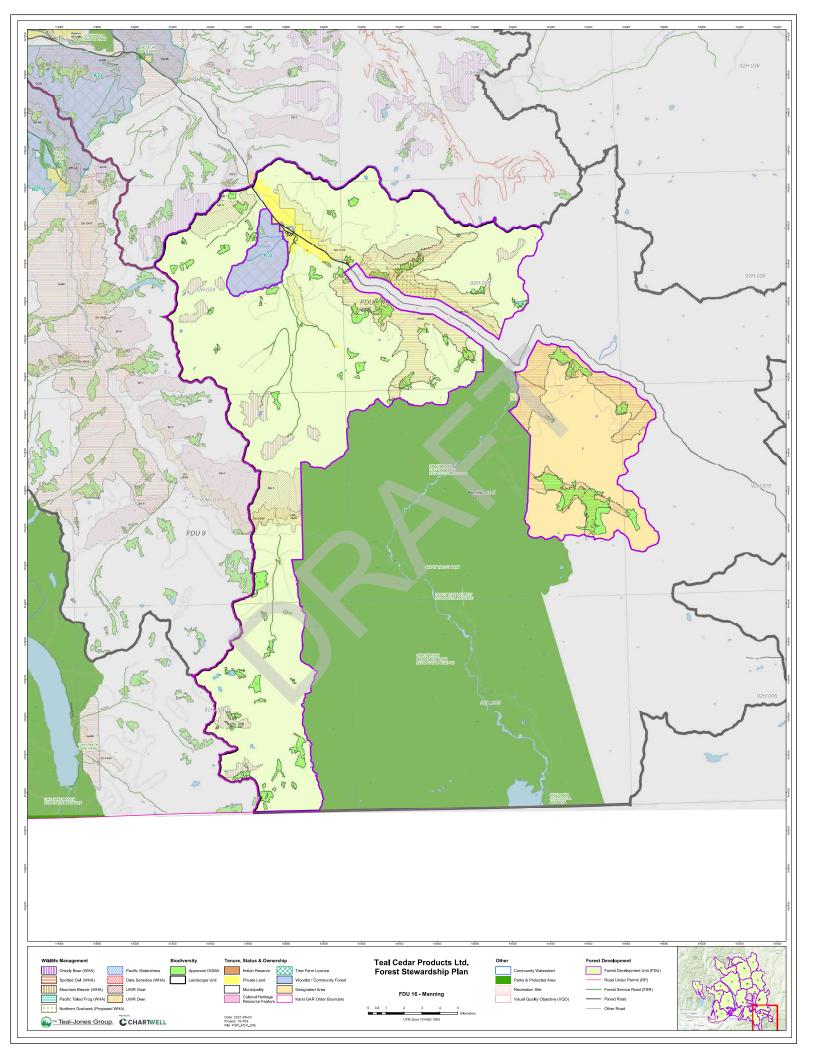
















# Appendix 2 Cutblocks Under Cutting Permit

(As of July 1, 2021)

FDU #	CP #	Cutblock	FDU #	CP #	Cutblock
1	151	309	1	157	550A
1	151	694	1	157	572A
1	151	909	1	157	574
1	151	H466			
1	151	H380	1	158	347
			1	158	550
1	152	359	1	158	552
1	152	H219			
1	152	H446	1	159	379
1	152	H468	1	159	549
1	152	H519	1	159	595
1	152	H533	1	159	669
1	153	571	1	160	567
1	153	672	1	160	696
1	153	H218			
			1	161	431
1	154	573	1	161	433
1	154	671	1	161	434
1	154	673	1	161	352
1	154	674	1	161	348
1	154	675	1	161	351
1	154	H696	1	161	348B
			1	161	313
1	155	358	1	161	H657
1	155	566	1	161	H656
1	155	695	1	161	H610
1	155	699	1	161	H471
1	155	H108	1	161	H646
1	155	H112	1	161	H516
1	155	H130	1	161	H41
1	155	H131			
1	155	H228	1	162	380
1	155	H312	1	162	502
1	155	H381	1	162	518
1	155	H513	1	162	523
1	155	H520A	1	162	531A
1	155	H565	1	162	563
1	155	H566	1	162	586
1	155	RKDZB	1	162	597
			1	162	598
1	156	662A	1	162	679
1	156	H470	1	162	683
1	156	H654	1	162	903A

FDU #	CP #	Cutblock	FDU #	CP #	Cutblock
1	162	H42	2	431	ES401
1	162	H132	2	431	NC158
1	162	H357C	2	431	NC163
1	162	H361	2	431	NC171
			2	431	NC174
1	163	315			
1	163	393	2	432	ES300
1	163	575	3	432	MC401
1	163	600	3	432	MC700
1	163	685	3	432	MC600
2	420	ES200	3	342	HC107
			3	342	MC300
2	421	ES201	3	342	MC304
2	421	ES202	3	342	MC313
3	422	MA102	3	343	WC20
2	422	NC166	3	343	WH400
2	423	NC167	3	344	HC109
3	424	MC14	3	345	HC111
2	424	NC170	3	345	MC203
3	425	MA106	6	242	E602
			6	242	E701
2	427	ES100	6	242	E701A
2	427	NC154			
			6	244	E701B
2	428	NC165	6	244	E701C
2	428	NC168	6	244	U801
2	429	NC169	6	245	E610
			6	245	E611
3	430	MC100	6	245	U802A
3	430	MC101A			
3	430	MC106	6	246	E500
3	430	MC400	6	246	E501
3	430	MC501	6	246	E502
3	430	MC502	6	246	E503
			6	246	E600
2	431	ES101	6	246	U802B
2	431	ES103		•	
2	431	ES400			

FDU #	CP #	Cutblock	FDU #	CP #	Cutblock
6	247	E529A	8	765	MH134
6	247	E529B			
6	247	E529C			
6	247	E529D			
8	757	SA119			
8	757	SA120			
8	757	SA121			
8	757	SA122			
8	757	SA123			
8	757	SA124			
8	758	SA115			
8	758	SA116			
8	758	SA126			
8	758	SA128			
8	758	SA129			
8	758	SA130			
8	758	SA131			
8	758	SA132			
8	758	SA133			
8	758	SA134			
8	758	SA135			
8	758	SA136			
8	760	MH122			
8	760	MH123			
8	760	MH124			
8	760	MH125			
8	760	MH125B			
8	760	MH126			
8	760	MH128			
8	760	MH130A			
5	761	SQ225			
5	761	SQ226			
5	761	SQ227			
		1			
8	765	MH110		T	
8	765	MH115		1	
8	765	MH119		1	
8	765	MH127			
8	765	MH132			









(As of July 1, 2021)

## CWH dm Biogeoclimatic Zone

				Regen	eration Gui	ide				Free Grow	ing Guide
BGC			Species			Ste	ocking		Regen	Min. H	eight
Classification	RESULTS	Conifer	Climate Change	Broadleaf	Target	MIN	MIN Inter-	Tree HT	Delay	Species	Ht
Zone/SZ Series	Standards ID	Commercially Valual	ble and Ecologically Su	uitable Species	(well-spac	ed/ha)	tree (m)	> brush (min%)	(Max yrs)		(m)
CWHdm 01	1052045	Fdc Cw Hw			900	500	2.0	150	3	Fd, Hw	3.00
		Plc <sup>16</sup> Pw <sup>3</sup>								Pw	2.50
										Plc, Cw	1.50
Hardwood	1052047			Dr⁵Mb⁵Act⁵Ep⁵	1200	700	2.0	150	3	Dr, Mb	4.00
										Act, Ep	4.00
Roosevelt Elk conifer	1052046	Fdc Cw Hw			450	250	1.5	150	3	Fd, Hw,Ss	3.00
		SS Plc <sup>16</sup> Pw <sup>3</sup>								Pw	2.50
										Plc, Cw	1.50
Roosevelt Elk Hardwood	1052049		C	Dr <sup>11</sup> Mb <sup>11</sup> Act <sup>11</sup> Ep <sup>1</sup>	600	350	1.5	150	3	Dr, Mb, Atc, Ep	4.00
CWH dm 03	1052050	Fdc Hw <sup>7</sup> Cw <sup>7</sup>			800	400	1.5	150	3	Fd, Hw	2.00
		Plc <sup>4</sup> Pw <sup>3</sup>								Cw, Lw	1.00
										Pw	2.50
										PI	1.25
Roosevelt Elk conifer	1052051	Fdc Hw <sup>7</sup> Cw <sup>7</sup>			400	200	1.5	150	3	Fd, Hw	2.00
		Plc <sup>4</sup> Pw <sup>3</sup>								Cw, Lw	1.00
										Pw	2.50
										PI	1.25
Roosevelt Elk Hardwood	1052052		C	Dr <sup>11</sup> Mb <sup>11</sup> Act <sup>11</sup> Ep <sup>1</sup>	600	350	1.5	150	3	Dr, Mb, Atc, Ep	4.00
CWH dm 04	1052053	Fdc Hw <sup>7</sup> Cw <sup>7</sup>			900	500	2.0	150	3	Fd, Hw	3.00
		Pw <sup>3</sup>								Pw	2.50
										Cw	1.50
Roosevelt Elk conifer	1052054	Fdc Hw <sup>7</sup> Cw <sup>7</sup>			450	250	1.5	150	3	Fd, Hw	3.00
		Pw <sup>3</sup>								Pw	2.50
										Cw	1.50
Roosevelt Elk Hardwood	1052055			Dr <sup>11</sup> Mb <sup>11</sup> Act <sup>11</sup> Ep <sup>1</sup>	600	350	1.5	150	3	Dr, Mb, Atc, Ep	4.00

#### CWH dm Biogeoclimatic Zone

						eration Gui					Free Grow	ving Guide
	BGC			Species			Ste	ocking		Regen	Min. F	leight
Classific	ation	RESULTS	Conifer	Climate Change	Broadleaf	Target	MIN	MIN Inter-	Tree HT	Delay	Species	Ht
Zone/SZ	Series	Standards ID	Commercially Valua	ble and Ecologically Su	itable Species	(well-spac	ed/ha)	tree (m)	> brush (min%)	(Max yrs)		(m)
CWH dm	05	1052056	Fdc Cw Hw <sup>1</sup>			900	500	2.0	150	3	Fd, Hw	4.00
			SS <sup>6</sup> Pw <sup>3</sup>								Pw	2.50
											Cw	2.00
											Ss	3.00
Hardwood		1052057			Dr <sup>9</sup> Mb <sup>9</sup> Act <sup>9</sup> Ep <sup>9</sup>	1200	700	2.0	150	3	Dr, Mb,	4.00
											Act, Ep	4.00
Roosevelt Elk c	onifer	1052058	Fdc Cw Hw			450	250	2.0	150	3	Fd, Hw	4.00
			SS Pw <sup>3</sup>								Pw	2.50
											Cw	2.00
											Ss	3.00
Roosevelt Elk H	lardwood	1052059		C	Dr <sup>11</sup> Mb <sup>11</sup> Act <sup>11</sup> Ep <sup>1</sup>	600	350	1.5	150	3	Dr, Mb, Act, Ep	4.00
CWH dm	06	1052060	Fdc Hw Cw			900	500	2.0	150	6	Fd, Hw	3.00
			SS <sup>6</sup> Pw <sup>3</sup>								Cw	1.50
											Pw	2.50
											Ss	3.00
Hardwood		1052061		Dr	<sup>10</sup> Mb <sup>10</sup> Act <sup>10</sup> Ep <sup>10</sup>	1200	700	2.0	150	3	Dr, Mb,	4.00
											Act, Ep	4.00
Roosevelt Elk c	onifer	1052062	Fdc Hw Cw			450	250	1.5	150	6	Fd, Hw	3.00
			SS Pw <sup>3</sup>								Cw	1.50
											Pw	2.50
											Ss	3.00
Roosevelt Elk H	lardwood	1052063		Dr	<sup>11</sup> Mb <sup>11</sup> Act <sup>11</sup> Ep <sup>11</sup>	600	350	1.5	150	6	Dr, Mb,Act, Ep	4.00

#### CWH dm Biogeoclimatic Zone

					Regen	eration Gui	de				Free Growi	ing Guide
	BGC			Species			Ste	ocking		Regen	Min. H	eight
Classific	cation	RESULTS	Conifer	Climate Change	Broadleaf	Target	MIN	MIN Inter-	Tree HT	Delay	Species	Ht
Zone/SZ	Series	Standards ID	Commercially Valua	ble and Ecologically Sui	table Species	(well-space	ed/ha)	tree (m)	> brush (min%)	(Max yrs)		(m)
CWHdm	07	1052064	Fdc Hw <sup>1</sup> Cw Bg			900	500	2.0	150	3	Fd, Hw	4.00
			SS <sup>6</sup> Pw <sup>3</sup>								Cw	2.00
											Bg	3.50
											Pw	2.50
								<u> </u>			Ss	3.00
Hardwood		1052065		Dr	<sup>11</sup> Mb <sup>11</sup> Act <sup>11</sup> Ep <sup>11</sup>	1200	700	2.0	150	3	Dr, Mb,	4.00
											Act, Ep	4.00
Roosevelt Elk	conifer	1052066	Fdc Hw Cw Bg			450	250	1.5	150	6	Fd, Hw	4.00
			SS Pw <sup>3</sup>								Cw	2.00
											Bg	3.50
											Pw	2.50
											Ss	3.00
Roosevelt Elk	hardwood	1052067		Dr	<sup>11</sup> Mb <sup>11</sup> Act <sup>11</sup> Ep <sup>11</sup>	600	350	1.5	150	6	Dr, Mb,Atc, Ep	4.00
CWHdm	08	1052068		Dr	<sup>11</sup> Mb <sup>11</sup> Act <sup>11</sup> Ep <sup>11</sup>	1200	700	2.0	150	3	Dr, Mb,	4.00
											Act, Ep	4.00
CWHdm	09	1052069		Dr	<sup>11</sup> Mb <sup>11</sup> Act <sup>11</sup> Ep <sup>11</sup>	1200	700	2.0	150	3	Dr, Mb,	4.00
											Act, Ep	4.00

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#### CWH dm Biogeoclimatic Zone Single Entry Dispersed Retention Stocking Standard (SEDRSS)

					Regen	eration Guid	le					
		Species			Site O	ccupancy			Regen Delay (max yrs)	MITD	Free Grow	ing Guide
				All BA co	mbinations are	e applicable to	survey plots					
BGCU	Layer		Only used during plots		e 4 BA combina REGEN / FG S			Only used during plots			Species	Height (m)
	Residual Layer (L1) (≥12.5dbh) (BA m <sup>2</sup> /ha)	Fdc, Cw, Hw	0-4 m² /ha	5-10 m² /ha	11-16 m² /ha	17-23 m² /ha	24-39 m² /ha	≥ 40 m² /ha	6	N/A	Ν	/Α
04,05,06,07	Regen Layer (L2-L4) (WS / ha. TSS – Target <mark>MSS</mark> - Minimum)	Fdc Cw Hw	900 TSS 500 MSS	800 TSS 400 MSS	700 TSS 300 MSS	500 TSS 200 MSS	400 TSS 100 MSS	0 0	6	L1 Drip line <b>or</b> 2.0 m (L2- L4)	Fd Hw Cw	2.25
				All BA co	mbinations ar	e applicable to	survey plots					
BGCU	Layer		Only used during plots		e 4 BA combina REGEN / FG S			Only used during plots			Species	Height (m)
	Residual Layer (L1) (≥12.5dbh) (BA m <sup>2</sup> /ha)	Fdc, Cw, Hw	0-4 m² /ha	5-10 m² /ha	11-16 m <sup>2</sup> /ha	17-23 m² /ha	24-39 m² /ha	≥ 40 m² /ha	6	N/A	Ν	/Α
	Regen Layer (L2-L4) (WS / ha. TSS – Target MSS - Minimum)	Fdc Cw Hw	800 TSS 400 MSS	700 TSS 300 MSS	500 TSS 200 MSS	400 TSS 100 MSS	300 TSS 50 MSS	0 0	6	L1 Drip line <b>or</b> 2.0 m (L2- L4)	Fd Hw Cw	2.00

1) Fdc : applicable only to site series with Site Indexes 24 to 36 meters and Fdc second growth stands (>80% 2nd growth)

- Ecologically Suitable only in areas with < 10 m2 /ha. BA.;

- Layer 3 restricted to a maximum of 200 WS/FG /ha (1 per 3.99 m plot)

with ≥ 10 m2 /ha and ≤ 16 m2/ha. BA;

- Not Suitable > 16 m2/ha. BA;

## CWH ds1 Biogeoclimatic Zone

						eration Guid					Free Growi	ng Guide
	BGC			Species			Si	ocking		Regen	Min. H	eight
Classi	ification	RESULTS	Conifer	Climate Change	Broadleaf	Target	MIN	MIN Inter-	Tree HT	Delay	Species	Ht
Zone/SZ	Series	Standards ID		ole and Ecologically Su	itable Species	(well-spaced	l/ha)	tree (m)	> brush (min%)	(Max yrs)		(m)
CWHds1	01	1052070	Fdc Hw <sup>12</sup> Cw <sup>12</sup>			900	500	2.0	150	3	Fdc	2.25
			Py <sup>13</sup>								Hw	1.00
			Lw8**								Cw, Py	1.50
	01 Colluvial	1052071	Fdc Hw <sup>12</sup> Cw <sup>12</sup>			800	300	1.5	150	3	Fdc	2.25
			Py <sup>13</sup>								Hw	1.00
			Lw8**								Cw, Py	1.50
CWHds1	03	1052072	Fdc <sup>15</sup> Hw <sup>12</sup> Cw <sup>12</sup>			800	400	2.0	150	3	Fdc	1.50
			Plc <sup>4</sup> Py <sup>13</sup>								Hw, Cw	1.00
			Lw8**								Pl, Py	1.25
	03 Colluvial	1052073	Fdc Hw <sup>12</sup> Cw <sup>12</sup>			800	300	1.5	150	3	Fdc	1.50
			Plc <sup>4</sup> Py <sup>13</sup>								Hw, Cw	1.00
			Lw8**								Plc, Py	1.25
CWHds1	04	1052074	Fdc <sup>15</sup> Hw <sup>12</sup> Cw <sup>12</sup>			800	400	2.0	150	3	Fdc	2.25
			Py <sup>13</sup>								Hw	1.00
			Lw8**								Cw	1.50
											Py	1.25
	04 Colluvial	1052075	Fdc Hw <sup>12</sup> Cw <sup>12</sup>			800	300	1.5	150	3	Fdc	2.25
			Py <sup>13</sup>								Hw	1.00
			Lw8**								Cw	1.50
											Py	1.25
CWHds1	05	1052076	Fdc Hw <sup>12</sup> Cw <sup>12</sup>			900	500	2.0	150	3	Fdc	2.25
			Bg <sup>4</sup> Py <sup>13</sup>								Hw	1.00
											Cw	1.50
											Py, Bg	1.25
CWHds1	06	1052077	Fdc Hw Cw			900	500	2.0	150	6	Fdc	2.25
											Hw	1.00
											Cw	1.50
CWHds1	07	1052078	Fdc Hw <sup>13</sup> Cw Bg			900	500	2.0	150	3	Fdc	3.00
			Ū								Hw	1.25
											Cw, Bg	2.00

#### CWH ds1 Biogeoclimatic Zone Single Entry Dispersed Retention Stocking Standard (SEDRSS)

					Regen	eration Guid	le					
		Species			Site O	ccupancy			Regen Delay (max yrs)	MITD	Free Grow	ving Guide
				All BA co	mbinations are	e applicable to	survey plots					
BGCU	Layer		Only used during plots			ations are appl EDRSS obligat		Only used during plots			Species	Height (m)
	Residual Layer (L1) (≥12.5dbh) (BA m <sup>2</sup> /ha)	Fdc, Cw, Hw	0-4 m² /ha	5-10 m² /ha	11-16 m <sup>2</sup> /ha	17-23 m² /ha	24-39 m <sup>2</sup> /ha	≥ 40 m² /ha	6	N/A	N	/Α
CWH ds 01, 05,06,07	Regen Layer (L2-L4) (WS / ha. TSS – Target MSS - Minimum)	Fdc Cw Hw	900 TSS 500 MSS	800 TSS 400 MSS	700 TSS 300 MSS	500 TSS 200 MSS	400 TSS 100 MSS	0 0	6	Drip	Fd Hw Cw	1.75 1.00 1.50
				All BA co	mbinations ar	e applicable to	survey plots					
BGCU	Layer		Only used during plots			ations are appl EDRSS obligat		Only used during plots			Species	Height (m)
	Residual Layer (L1) (≥12.5dbh) (BA m² /ha)	Fdc, Cw, Hw	0-4 m² /ha	5-10 m <sup>2</sup> /ha	11-16 m <sup>2</sup> /ha	17-23 m <sup>2</sup> /ha	24-39 m <sup>2</sup> /ha	≥ 40 m² /ha	6	N/A	N	/Α
CWH ds 03,04	Regen Layer (L2-L4) (WS / ha. TSS – Target <mark>MSS</mark> - Minimum)	Fdc Cw Hw	800 TSS 400 MSS	700 TSS 300 MSS	500 TSS 200 MSS	400 TSS 100 MSS	300 TSS 50 MSS	0 0	6	Drip	Fd Hw Cw	1.50 1.00 1.00

1) Fdc : applicable only to site series with Site Indexes 24 to 36 meters and Fdc second growth stands (>80% 2nd growth)

- Ecologically Suitable only in areas with < 10 m2 /ha. BA.;

- Layer 3 restricted to a maximum of 200 WS/FG /ha (1 per 3.99 m plot)

with ≥ 10 m2 /ha and ≤ 16 m2/ha. BA;

- Not Suitable > 16 m2/ha. BA;

## CWH ms1 Biogeoclimatic Zone

					Regen	eration Gui	ide				Free Grow	ing Guide
	BGC			Species			St	ocking		Regen	Min. H	leight
Classi	fication	RESULTS	Conifer	Climate Change	Broadleaf	Target	MIN	MIN Inter-	Tree HT	Delay	Species	Ht
Zone/SZ	Series	Standards ID	Commercially Valua	ole and Ecologically Sui	table Species	(well-spac	ced/ha)	tree (m)	> brush (min%)	(Max yrs)		(m)
CWHms1	01	1052079	Fdc Hw Ba Cw Sx			900	500	2.0	150	3	Fdc	2.25
			Lw <sup>8**</sup>								Cw, Hw, Lw,	1.50
											Sx	1.00
											Ва	0.75
	01 Colluvial	1052080	Fdc Hw Ba Cw Sx			900	300	1.5	150	3	Fdc	2.25
			Plc <sup>4</sup>								Cw, Hw, Lw, Plc	1.50
			Lw <sup>8**</sup>								Sx	1.00
											Ва	0.75
CWHms1	03	1052081	Fdc Hw <sup>7</sup> Cw <sup>7</sup> Sx			800	400	1.5	150	3	Fdc	2.25
			Plc <sup>4</sup>								Cw, Hw, Plc	1.50
			Lw8**								Sx	1.00
CWHms1	04	1052082	Fdc Cw Ba Sx Hw			900	500	2.0	150	3	Fdc	3.00
											Cw, Hw	2.00
											Sx	1.25
											Ва	1.00
CWHms1	05	1052083	Cw Ba Hw Sx			900	500	2.0	150	6	Cw, Hw	1.50
			Bl <sup>4</sup> Yc <sup>4</sup>								Ba, Bl	0.75
											Sx	1.00
											Yc	1.50
CWHms1	06	1052084	Fdc Cw Ba Sx Hw <sup>4</sup>			900	500	2.0	150	3	Fdc	3.00
			Bg <sup>4</sup>								Cw, Hw	2.00
											Ba	1.00
											Sx	1.25
											Bg	2.50

#### CWH ms1 Biogeoclimatic Zone Single Entry Dispersed Retention Stocking Standard (SEDRSS)

					Regen	eration Guid	le					
		Species			Site O	ccupancy			Regen Delay (max yrs)	MITD	Free Gro	wing Guide
				All BA co	mbinations are	e applicable to	survey plots					
BGCU	Layer		Only used during plots			ations are appl EDRSS obligat		Only used during plots			Species	Height (m)
	Residual Layer (L1) (≥12.5dbh) (BA m <sup>2</sup> /ha)	Fdc, Cw, Hw, Ba	0-4 m² /ha	5-10 m² /ha	11-16 m² /ha	17-23 m² /ha	24-39 m² /ha	≥ 40 m² /ha	6	N/A	1	J/A
ms 01,04, 05,06	Regen Layer (L2-L4) (WS / ha. TSS – Target MSS - Minimum)	Fdc, Cw Hw, Ba	900 TSS 500 MSS	800 TSS 400 MSS	700 TSS 300 MSS	500 TSS 200 MSS	400 TSS 100 MSS	0 0	6	L1 Drip line <b>or</b> 2.0 m (L2- L4)	Fd Hw, Cw Ba	1.75 1.00 0.75
				All BA co	mbinations ar	e applicable to	survey plots					
BGCU	Layer		Only used during plots			ations are appl EDRSS obligat		Only used during plots			Species	Height (m)
	Residual Layer (L1) (≥12.5dbh) (BA m² /ha)	Fdc, Cw, Hw	0-4 m <sup>2</sup> /ha	5-10 m <sup>2</sup> /ha	11-16 m <sup>2</sup> /ha	17-23 m² /ha	24-39 m² /ha	≥ 40 m² /ha	6	N/A	1	J/A
	Regen Layer (L2-L4) (WS / ha. TSS – Target MSS - Minimum)	Fdc, Cw Hw	800 TSS 400 MSS	700 TSS 300 MSS	500 TSS 200 MSS	400 TSS 100 MSS	300 TSS 50 MSS	0 0	6	or	Fd Hw Cw	1.75 1.50 1.50

1) Fdc : applicable only to site series with Site Indexes 24 to 36 meters and Fdc second growth stands (>80% 2nd growth)

- Ecologically Suitable only in areas with < 10 m2 /ha. BA.;

- Layer 3 restricted to a maximum of 200 WS/FG /ha (1 per 3.99 m plot)

with ≥ 10 m2 /ha and ≤ 16 m2/ha. BA;

- Not Suitable > 16 m2/ha. BA;

## CWH vm1 Biogeoclimatic Zone

					Regen	eration Gui	ide				Free Grow	ving Guide
В	GC			Species			St	ocking		Regen	Min. H	leight
Classificatio	n	RESULTS	Conifer	Climate Change	Broadleaf	Target	MIN	MIN Inter-	Tree HT	Delay	Species	Ht
Zone/SZ Se	ries	Standards ID	Commercially V	aluable and Ecological	ly Suitable	(well-spac	ced/ha)	tree (m)	> brush (min%)	(Max yrs)		(m)
CWHvm1 (	)1	1052085	Hw Cw Ba Fdc			900	500	2.0	150	6	Fdc, Hw, Ss	3.00
			SS <sup>6,</sup> Pw <sup>3</sup>								Ва	1.75
											Cw	1.50
											Pw	2.50
Hardwood		1052086			Dr <sup>5</sup> Mb <sup>5</sup> Act <sup>5</sup> Ep <sup>5</sup>	1200	700	2.0	150	3	Dr, Mb	4.00
											Act, Ep	4.00
Roosevelt Elk conif	ier	1052087	Hw Cw Ba Fdc			450	250	1.5	150	6	Fdc, Hw, Ss	3.00
			SS Pw <sup>3</sup>								Ва	1.75
											Cw	1.50
											Pw	2.50
Roosevelt Elk hardv	wood	1052088		[	Or <sup>11</sup> Mb <sup>11</sup> Act <sup>11</sup> Ep <sup>1</sup>	600	350	1.5	150	6	Dr, Mb, Act, Ep	4.00
CWHvm1 (	)3	1052089	Fdc Hw Cw			800	400	1.5	150	6	Fd, Hw	2.00
			Plc <sup>4</sup> Pw <sup>3</sup>								Cw	1.00
											Plc	1.25
											Pw	2.50
Roosevelt Elk		1052090	Fdc Hw Cw			400	200	1.5	150	6	Fd, Hw	2.00
			Plc <sup>4</sup> Pw <sup>3</sup>								Cw	1.00
											Plc	1.25
											Pw	2.50
CWHvm1 (	)4	1052091	Fdc Hw Cw Ba <sup>2</sup>			900	500	2.0	150	3	Fdc, Hw, Ss	3.00
			SS <sup>6</sup> Pw <sup>3</sup>								Cw	1.50
											Pw	2.50
											Ва	1.75
Roosevelt Elk conif	ier	1052092	Fdc Hw Cw Ba			450	250	1.5	150	3	Fdc, Hw, Ss	3.00
			SS Pw <sup>3</sup>								Cw	1.50
											Pw	2.50
											Ва	1.75
Roosevelt Elk hardv	wood	1052093		D	r <sup>11</sup> Mb <sup>11</sup> Act <sup>11</sup> Ep <sup>11</sup>	600	350	1.5	150	3	Dr, Mb, Act, Ep	4.00

## CWH vm1 Biogeoclimatic Zone

			R	egenerati		de				Free Grow	ing Guide
BGC			Species			Ste	ocking		Regen	Min. H	leight
Classification	RESULTS	Conifer	Climate Change Broadle	eaf Tar	rget	MIN	MIN Inter-	Tree HT	Delay	Species	Ht
Zone/SZ Series	Standards ID	Commercially Va	aluable and Ecologically Suitable	(1	well-space	ed/ha)	tree (m)	> brush (min%)	(Max yrs)		(m)
<b>CWHvm1</b> 05	1052094	Fdc Hw Cw Ba			900	500	2.0	150	3	Fdc, Hw, Ss	3.00
		SS <sup>6</sup> Pw <sup>3</sup>								Ва	1.75
										Cw	1.50
										Pw	2.50
Hardwood	1052095		Dr <sup>11</sup> Mb <sup>11</sup> Act	<sup>1</sup> Ep <sup>11</sup>	1200	700	2.0	150	3	Dr, Mb, Act, Ep	4.00
Roosevelt Elk conifer	1052096	Fdc Hw Cw Ba			450	250	1.5	150	3	Fdc, Hw, Ss	3.00
		SS Pw <sup>3</sup>								Ва	1.75
										Pw	2.50
										Cw	1.50
Roosevelt Elk hardwood	1052097		D <mark>r<sup>11</sup>Mb<sup>11</sup>Act</mark>	<sup>1</sup> Ep <sup>11</sup>	600	350	1.5	150	3	Dr, Mb, Act, Ep	4.00
<b>CWHvm1</b> 06	1052098	Ba Cw Hw Fdc			900	500	2.0	150	6	Fdc, Hw, Ss	3.00
		SS <sup>6</sup> Pw <sup>3</sup>								Ва	1.75
										Cw	1.50
										Pw	2.50
Hardwood	1052099		Dr <sup>10</sup> Mb <sup>10</sup> Act	<sup>0</sup> Ep <sup>10</sup>	1200	700	2.0	150	3	Dr, Mb, Act, Ep	4.00
Roosevelt Elk conifer	1052100	Ba Cw Hw Fdc			450	250	1.5	150	6	Fdc, Hw, Ss	3.00
		SS Pw <sup>3</sup>								Ва	1.75
										Cw	1.50
										Pw	2.50
Roosevelt Elk hardwood	1052101		Dr <sup>11</sup> Mb <sup>11</sup> Act	<sup>1</sup> Ep <sup>11</sup>	600	350	1.5	150	6	Dr, Mb, Act, Ep	4.00
<b>CWHvm1</b> 07	1052102	Ba Cw Hw Fdc SS <sup>6</sup>			900	500	2.0	150	3	Fdc, Hw, Ss	4.00
		Pw <sup>3</sup>								Ва	2.25
										Pw	2.50
										Cw	2.00
Hardwood	1052103		D <mark>r<sup>11</sup>Mb<sup>11</sup>Act</mark>	<sup>1</sup> Ep <sup>11</sup>	1200	700	2.0	150	3	Dr, Mb, Act, Ep	4.00
Roosevelt Elk conifer	1052104	Ba Cw Hw Fdc SS			450	250	1.5	150	3	Fdc, Hw, Ss	4.00
		Pw <sup>3</sup>								Ва	2.25
										Pw	2.50
										Cw	2.00
Roosevelt Elk hardwood	1052105		D <mark>r<sup>11</sup>Mb<sup>11</sup>Act</mark>	<sup>1</sup> Ep <sup>11</sup>	600	350	1.5	150	6	Dr, Mb, Act, Ep	4.00

## CWH vm1 Biogeoclimatic Zone

					Regen	eration Gui	de				Free Growi	ing Guide
	BGC			Species			St	ocking		Regen	Min. He	eight
Classifi	cation	RESULTS	Conifer	Climate Change	Broadleaf	Target	MIN	MIN Inter-	Tree HT	Delay	Species	Ht
Zone/SZ	Series	Standards ID	Commercially V	aluable and Ecologicall	y Suitable	(well-space	ed/ha)	tree (m)	> brush (min%)	(Max yrs)		(m)
CWHvm1	08	1052106	Ba Cw Hw			900	500	2.0	150	3	Hw, Ss	4.00
			SS <sup>6</sup> Pw <sup>3</sup>								Ва	2.25
											Pw	2.50
											Cw	2.00
CWHvm1	09	1052107	Ba Cw Hw			900	500	2.0	150	3	Hw, Ss	4.00
			SS <sup>6</sup>								Ва	2.25
											Cw	2.00
CWHvm1	10	1052108	Cw Ba			900	500	2.0	150	6	Hw, Ss	4.00
			Ss <sup>6</sup>								Ва	2.25
											Cw	2.00

#### CWHvm1 Biogeoclimatic Zone Single Entry Dispersed Retention Stocking Standard (SEDRSS)

					Regen	eration Guid	le					
		Species			Site O	ccupancy			Regen Delay (max yrs)	MITD	Free Grow	ving Guide
				All BA co	ombinations are	e applicable to	survey plots					
BGCU	Layer		Only used during plots		e 4 BA combina REGEN / FG S			Only used during plots			Species	Height (m)
смн	Residual Layer (L1) (≥12.5dbh) <mark>(BA</mark> m <sup>2</sup> /ha)	Fdc, Cw, Hw, Ba	0-4 m² /ha	5-10 m² /ha	11-16 m <sup>2</sup> /ha	17-23 m² /ha	24-39 m <sup>2</sup> /ha	≥ 40 m² /ha	6	N/A	Ν	/A
vm1 01,04, 05,06, 07, 08	Regen Layer (L2-L4) (WS / ha. TSS – Target <mark>MSS</mark> - Minimum)	Fdc, Cw Hw, Ba	900 TSS 500 MSS	800 TSS 400 MSS	700 TSS 300 MSS	500 TSS 200 MSS	400 TSS 100 MSS	0 0	6	L1 Drip line <b>or</b> 2.0 m (L2- L4)	Fd, Hw Cw Ba	2.25 1.50 1.75
				All BA co	mbinations ar	e applicable to	survey plots					
BGCU	Layer		Only used during plots		e 4 BA combina REGEN / FG S			Only used during plots			Species	Height (m)
	Residual Layer (L1) (≥12.5dbh) <mark>(BA</mark> m <sup>2</sup> /ha)	Fdc, Cw, Hw	0-4 m² /ha	5-10 m² /ha	11-16 m <sup>2</sup> /ha	17-23 m² /ha	24-39 m² /ha	≥ 40 m² /ha	6	N/A	Ν	/A
CWH vm1 03	Regen Layer (L2-L4) (WS / ha. TSS – Target MSS Minimum)	Fdc, Cw Hw	800 TSS 400 MSS	700 TSS 300 MSS	500 TSS 200 MSS	400 TSS 100 MSS	300 TSS 50 MSS	0 0	6	L1 Drip line <b>or</b>	Fd,Hw	2.00
	Target <mark>MSS</mark> - Minimum)			300 MSS	200 MSS	100 MSS	50 MSS	0	Ĵ		Cw	1

1) Fdc : applicable only to site series with Site Indexes 24 to 36 meters and Fdc second growth stands (>80% 2nd growth)

- Ecologically Suitable only in areas with < 10 m2 /ha. BA.;

- Layer 3 restricted to a maximum of 200 WS/FG /ha (1 per 3.99 m plot)

with ≥ 10 m2 /ha and ≤ 16 m2/ha. BA;

- Not Suitable > 16 m2/ha. BA;

## CWH vm2 Biogeoclimatic Zone

				Regen	eration Gui					Free Grow	wing Guide
BGC			Species			S	tocking		Regen	Min.	Height
Classification	RESULTS	Conifer	Climate Change	Broadleaf	Target	MIN	MIN Inter-	Tree HT	Delay	Species	Ht
Zone/SZ Series	Standards ID		le and Ecologically Su	itable Species	(well-space	ed/ha)	tree (m)	> brush (min%)	(Max yrs)		(m)
<b>CWHvm2</b> 01	1052110	Cw Hw Ba Fdc			900	500	) 2.0	150	6	Ss	3.00
		SS <sup>6</sup> Pw <sup>3</sup>								Hw, Pw	2.50
		Hm <sup>2</sup> Yc								Fdc	2.25
										Ва	1.75
										Cw, Yc	1.50
										Hm	1.00
Roosevelt Elk conifer	1052111	Cw Hw Ba Fdc			450	250	) 1.5	150	6	Ss	3.00
		SS Pw <sup>3</sup>								Hw, Pw	2.50
		Hm <sup>2</sup> Yc								Fdc	2.25
										Ва	1.75
										Cw, Yc	1.50
										Hm	1.00
Roosevelt Elk hardwood	1052112		Dr	r <sup>11</sup> Mb <sup>11</sup> Act <sup>11</sup> Ep <sup>11</sup>	600	350	) 1.5	150	6	Dr, Mb, Act, Ep	4.00
<b>CWHvm2</b> 03	1052113	Fdc Hw Cw Yc Ba <sup>4</sup>			800	400	) 2.0	150	6	Pw	2.50
		Plc <sup>4</sup> Hm <sup>2</sup> SS <sup>6</sup> Pw <sup>3</sup>								Ss	2.00
										Hw	1.75
										Ba, Fdc	1.50
										Plc	1.25
										Cw, Yc	1.00
										Hm	0.75
Roosevelt Elk conifer	1052114	Fdc Hw Cw Yc Ba			400	200	) 1.5	150	6	Pw	2.50
		Plc <sup>4</sup> Hm <sup>2</sup> SS Pw <sup>3</sup>								Ss	2.00
										Hw	1.75
										Ba, Fdc	1.50
										Plc	1.25
										Cw, Yc	1.00
				11 11 11 11						Hm	0.75
Roosevelt Elk hardwood	<b>i</b> 1052115		Dr	<sup>11</sup> Mb <sup>11</sup> Act <sup>11</sup> Ep <sup>11</sup>	600	350	) 1.5	150	6	Dr, Mb, Act, Ep	4.00

#### CWH vm2 Biogeoclimatic Zone

					Regen	eration Guio					Free Grow	ing Guide
	BGC			Species				tocking		Regen	Min. H	
Classif	fication	RESULTS	Conifer	Climate Change	Broadleaf	Target	MIN	MIN Inter-	Tree HT	Delay	Species	Ht
Zone/SZ	Series	Standards ID	Commercially Valuat	le and Ecologically Su	iitable Species	(well-space	d/ha)	tree (m)	> brush (min%)	(Max yrs)		(m)
CWHvm2	04	1052116	Cw Hw Ba Yc Fdc			900	500	2.0	150	6	Pw	2.50
			Hm <sup>2</sup> SS <sup>6</sup> Pw <sup>3</sup>								Ss	2.00
											Hw	1.75
											Ba, Fd	1.50
											Cw, Yc	1.00
											Hm	0.75
CWHvm2	05	1052117	Cw Hw Ba Yc			900	500	2.0	150	3	Ss	3.00
			Hm <sup>2</sup> SS <sup>6</sup> Pw <sup>3</sup>								Hw, Pw	2.50
			Fdc <sup>17</sup>								Fdc	2.25
											Ва	1.75
											Cw, Yc	1.50
											Hm	1.00
Roosevelt Ell	k conifer	1052118	Cw Hw Ba Yc			450	250	1.5	150	3	Ss	3.00
			Hm <sup>2</sup> SS Pw <sup>3</sup>								Hw, Pw	2.50
			Fdc <sup>17</sup>								Fdc	2.25
											Ва	1.75
											Cw, Yc	1.50
											Hm	1.00
Roosevelt Ell	k hardwood	1052119		Di	<sup>11</sup> Mb <sup>11</sup> Act <sup>11</sup> Ep <sup>11</sup>	600	350	1.5	150	3	Dr, Mb, Act, Ep	4.00
CWHvm2	06	1052120	Ba Cw Hw Yc			900	500	2.0	150	6	Hm	1.00
			Hm <sup>2</sup> SS <sup>6</sup> Pw <sup>3</sup>								Hw,Pw	2.50
			Fdc <sup>17</sup>								Fdc	2.25
											Ва	1.75
											Cw, Yc	1.50
											Ss	3.00
CWHvm2	07	1052121	Ba Cw Hw Yc Ss <sup>6</sup>			900	500	2.0	150	3	Ss	4.00
			Hm <sup>2</sup>								Hw	3.50
											Ва	2.25
											Cw, Yc	2.00
											Hm	1.00

## CWH vm2 Biogeoclimatic Zone

					Regen	eration Gui	de				Free Growi	ing Guide
	BGC			Species			S	tocking		Regen	Min. H	eight
Classif	ication	RESULTS	Conifer	Climate Change	Broadleaf	Target	MIN	MIN Inter-	Tree HT	Delay	Species	Ht
Zone/SZ	Series	Standards ID	Commercially Valua	ble and Ecologically Su	itable Species	(well-space	ed/ha)	tree (m)	> brush (min%)	(Max yrs)		(m)
CWHvm2	08	1052122	Ba Cw Hw Yc			900	500	2.0	150	3	Ss	4.00
			Hm <sup>2</sup> SS <sup>6</sup>								Hw	3.50
											Ва	2.25
											Cw, Yc	2.00
											Hm	1.00
CWHvm2	09	1052123	Cw Hw Yc <sup>,</sup>			800	400	2.0	150	3	Hw	1.75
			Plc <sup>4</sup> Ba Hm <sup>2</sup>								Ва	1.50
											Plc	1.25
											Cw, Yc	1.00
											Hm	0.75
CWHvm2	11	1052124	Cw Yc			800	400	2.0	150	3	Ss	2.00
			Ss <sup>6</sup> Hm <sup>2</sup> Hw <sup>2</sup>								Hw	1.75
											Cw, Yc	1.00
											Hm	0.75

#### CWHvm2 Biogeoclimatic Zone Single Entry Dispersed Retention Stocking Standard (SEDRSS)

				Regen	eration Guid	le					
	Species			Site O	ccupancy			Regen Delay (max yrs)	MITD	Free Grow	ing Guide
			All BA co	mbinations are	e applicable to	survey plots					
Layer		Only used during plots					Only used during plots			Species	Height (m)
Residual Layer (L1) (≥12.5dbh) (BA m <sup>2</sup> /ha)	Fdc, Cw, Hw, Ba, Yc	0-4 m² /ha	5-10 m <sup>2</sup> /ha	11-16 m <sup>2</sup> /ha	17-23 m² /ha	24-39 m <sup>2</sup> /ha	≥ 40 m² /ha	6	N/A	N	Ά
Regen Layer (L2-L4) (WS / ha. TSS – Target <mark>MSS</mark> - Minimum)	Fdc, Cw Hw, Ba, Yc	900 TSS 500 MSS	800 TSS 400 MSS	700 TSS 300 MSS	500 TSS 200 MSS	400 TSS 100 MSS	0 0	6	L1 Drip line <b>or</b> 2.0 m (L2- L4)	Fd, Hw Cw, Yc Ba	1.75 1.50 1.75
			All BA co	mbinations ar	e applicable to	survey plots					
Layer		Only used during plots					Only used during plots			Species	Height (m)
Residual Layer (L1) (≥12.5dbh) ( <mark>BA</mark> m <sup>2</sup> /ha)	Fdc, Cw, Hw, Ba, Yc	0-4 m² /ha	5-10 m <sup>2</sup> /ha	11-16 m <sup>2</sup> /ha	17-23 m² /ha	24-39 m <sup>2</sup> /ha	≥ 40 m² /ha	6	N/A	N	Ά
Regen Layer (L2-L4) (WS / ha. TSS – Target MSS - Minimum)	Fdc, Cw Hw, Ba, Yc	800 TSS 400 MSS	700 TSS 300 MSS	500 TSS 200 MSS	400 TSS 100 MSS	300 TSS 50 MSS	0 0	6	L1 Drip line <b>or</b>	Hw Ba, Fdc	1.75 1.50 1.00
	Residual Layer (L1) (≥12.5dbh) (BA m <sup>2</sup> /ha) Regen Layer (L2-L4) (WS / ha. TSS – Target MSS - Minimum) Layer Residual Layer (L1) (≥12.5dbh) (BA m <sup>2</sup> /ha) Regen Layer (L2-L4) (WS / ha. TSS –	LayerLayerResidual Layer (L1) (≥12.5dbh) (BA m² /ha)Fdc, Cw, Hw, Ba, YcRegen Layer (L2-L4) (WS / ha. TSS – Target MSS - Minimum)Fdc, Cw Hw, Ba, YcLayerFdc, Cw Hw, Ba, YcResidual Layer (L1) (≥12.5dbh) (BA m² /ha)Fdc, Cw, Hw, Ba, YcRegen Layer (L2-L4) (WS / ha. TSS – TargetFdc, Cw, Hw, Ba, Yc	LayerOnly used during plotsResidual Layer (L1) (≥12.5dbh) (BA m²/ha)Fdc, Cw, Hw, Ba, Yc0-4 m²/haRegen Layer (L2-L4) (WS / ha. TSS – Target MSS - Minimum)Fdc, Cw Hw, Ba, Yc900 TSS 500 MSSLayerFdc, CW Hw, Ba, Yc000 TSS 900 TSS 500 MSSLayerFdc, CW Hw, Ba, Yc000 TSS 900 TSS 500 MSSResidual Layer (L1) (≥12.5dbh) (BA m²/ha)Fdc, Cw, Hw, Ba, Yc0.4 m²/haRegen Layer (L2-L4) (WS / ha. TSS – TargetFdc, Cw Hw, Ba, Yc800 TSS 400 MSS	LayerAll BA coLayerOnly used during plotsOne of these SUResidual Layer (L1) (≥12.5dbh) (BA m²/ha)Fdc, Cw, Hw, Ba, Yc0-4 m² /ha5-10 m² /haRegen Layer (L2-L4) (WS / ha. TSS – Target MSS - Minimum)Fdc, Cw Hw, Ba, Yc900 TSS 500 MSS800 TSS 400 MSSLayerFdc, Cw Hw, Ba, Yc900 TSS 500 MSS800 TSS 400 MSSLayerFdc, Cw Hw, Ba, Yc900 TSS 900 TSS 500 MSS800 TSS 400 MSSLayerFdc, Cw Hw, Ba, Yc0-4 m² /ha5-10 m² /haResidual Layer (L1) (≥12.5dbh) (BA m² /ha)Fdc, Cw, Hw, Ba, Yc0-4 m² /ha5-10 m² /haRegen Layer (L2-L4) (WS / ha. TSS – TargetFdc, Cw Hw, Ba, Yc800 TSS 400 MSS700 TSS 300 MSS	Species Site O   Layer All BA combinations are Only used during plots One of these 4 BA combinations are SU REGEN / FG S   Residual Layer (L1) (212.5dbh) (BA m² /ha) Fdc, Cw, Hw, Ba, Yc 0-4 m² /ha 5-10 m² /ha 11-16 m² /ha   Regen Layer (L2-L4) (WS / ha. TSS – Target MSS - Minimum) Fdc, Cw Hw, Ba, Yc 900 TSS 500 MSS 800 TSS 400 MSS 700 TSS 300 MSS   Layer Fdc, Cw Hw, Ba, Yc All BA combinations are Only used during plots One of these 4 BA combinations are SU REGEN / FG S   Residual Layer (L1) (212.5dbh) (BA m² /ha) Fdc, Cw, Hw, Ba, Yc 0-4 m² /ha 5-10 m² /ha 11-16 m² /ha   Regen Layer (L2-L4) (WS / ha. TSS – Target Fdc, Cw, Hw, Ba, Yc 0-4 m² /ha 5-10 m² /ha 11-16 m² /ha	Species Site Occupancy   Layer All BA combinations are applicable to Only used during plots One of these 4 BA combinations are applicable to SU REGEN / FG SEDRSS obligat   Residual Layer (L1) (≥12.5dbh) (BA m <sup>2</sup> /ha) Fdc, Cw, Hw, Ba, Yc 0-4 m <sup>2</sup> /ha 5-10 m <sup>2</sup> /ha 11-16 m <sup>2</sup> /ha 17-23 m <sup>2</sup> /ha   Regen Layer (L2-L4) (WS / ha. TSS – Target Fdc, Cw Hw, Ba, Yc 900 TSS 500 MSS 800 TSS 400 MSS 700 TSS 300 MSS 500 TSS 200 MSS   Layer Fdc, Cw Hw, Ba, Yc 901 TSS 400 MSS 800 TSS 300 MSS 700 TSS 300 MSS 500 TSS 200 MSS   Residual Layer (L1) (≥12.5dbh) (BA m <sup>2</sup> /ha) Fdc, Cw, Hw, Ba, Yc 0-4 m <sup>2</sup> /ha 5-10 m <sup>2</sup> /ha 11-16 m <sup>2</sup> /ha 17-23 m <sup>2</sup> /ha   Residual Layer (L1) (≥12.5dbh) (BA m <sup>2</sup> /ha) Fdc, Cw, Hw, Ba, Yc 0-4 m <sup>2</sup> /ha 5-10 m <sup>2</sup> /ha 11-16 m <sup>2</sup> /ha 17-23 m <sup>2</sup> /ha   Regen Layer (L2-L4) (WS / ha. TSS – Target Fdc, Cw Hw Ba, Yc 800 TSS 400 TSS 300 MSS 500 TSS 200 MSS 400 TSS 100 MSS	All BA combinations are applicable to survey plots   Layer Only used during plots One of these 4 BA combinations are applicable to final SU REGEN / FG SEDRSS obligations   Residual Layer (L1) (212.5dbh) (BA m <sup>2</sup> /ha) Fdc, Cw, Hw, Ba, Yc 0-4 m <sup>2</sup> /ha 5-10 m <sup>2</sup> /ha 11-16 m <sup>2</sup> /ha 17-23 m <sup>2</sup> /ha 24-39 m <sup>2</sup> /ha   Regen Layer (L2-L4) (WS / ha. TSS – Target Fdc, Cw Hw, Ba, Yc 900 TSS 500 MSS 800 TSS 400 MSS 700 TSS 300 MSS 500 TSS 200 MSS 400 TSS 100 MSS   Layer Fdc, Cw Hw, Ba, Yc Only used during plots One of these 4 BA combinations are applicable to survey plots   Residual Layer (L1) (212.5dbh) (BA m <sup>2</sup> /ha) Fdc, Cw, Hw, Ba, Yc O-4 m <sup>2</sup> /ha 5-10 m <sup>2</sup> /ha 11-16 m <sup>2</sup> /ha 17-23 m <sup>2</sup> /ha 24-39 m <sup>2</sup> /ha   Residual Layer (L1) (212.5dbh) (BA m <sup>2</sup> /ha) Fdc, Cw, Hw, Ba, Yc 0-4 m <sup>2</sup> /ha 5-10 m <sup>2</sup> /ha 11-16 m <sup>2</sup> /ha 17-23 m <sup>2</sup> /ha 24-39 m <sup>2</sup> /ha   Regen Layer (L2-L4) (WS / ha. TSS – Target Fdc, CW Hw, Ba, Yc 0-4 m <sup>2</sup> /ha 5-10 m <sup>2</sup> /ha 11-16 m <sup>2</sup> /ha 17-23 m <sup>2</sup> /ha 24-39 m <sup>2</sup> /ha	Species Site Occupancy   Layer All BA combinations are applicable to survey plots   Only used during plots One of these 4 BA combinations are applicable to final SU REGEN / FG SEDRSS obligations Only used during plots   Residual Layer (L1) (212.5dbh) (BA r <sup>2</sup> /ha) Fdc, Cw, Hw, Ba, Yc 0.4 m <sup>2</sup> /ha 5-10 m <sup>2</sup> /ha 11-16 m <sup>2</sup> /ha 17-23 m <sup>2</sup> /ha 24-39 m <sup>2</sup> /ha ≥ 40 m <sup>2</sup> /ha   Regen Layer (L2-L4) (WS / ha. TSS – Target Fdc, Cw, Hw, Ba, Yc 900 TSS 500 MSS 800 TSS 400 MSS 700 TSS 300 MSS 500 TSS 400 MSS 400 TSS 0 0 MSS 0   Layer Fdc, Cw, Hw, Ba, Yc 900 TSS 500 MSS 800 TSS 400 MSS 700 TSS 300 MSS 500 TSS 200 MSS 400 TSS 0 0 MSS 0   Residual Layer Chi (L2) (L1) (212.5dbh) (BA Layer (L1) (212.5dbh) (BA r <sup>3</sup> /ha) Fdc, Cw, Hw, Ba, Yc 0-4 m <sup>2</sup> /ha 5-10 m <sup>2</sup> /ha 11-16 m <sup>2</sup> /ha 17-23 m <sup>2</sup> /ha 24-39 m <sup>2</sup> /ha ≥ 40 m <sup>2</sup> /ha   Regen Layer (L2-L4) (WS / ha. TSS – Target Fdc, Cw, Hw, Ba, Yc 800 TSS 400 MSS 500 TSS 300 MSS 300 TSS 100 MSS 300 TSS 50 MSS 300 TSS 50 MSS 0	Species Site Occupancy Regen Delay (max yrs)   Layer All BA combinations are applicable to survey plots Only used during plots One of these 4 BA combinations are applicable to final SU REGEN / FG SEDRSS obligations Only used during plots One of these 4 BA combinations are applicable to final SU REGEN / FG SEDRSS obligations Only used during plots One of these 4 BA combinations are applicable to final SU REGEN / FG SEDRSS obligations Only used during plots One of these 4 BA combinations are applicable to final SU REGEN / FG SEDRSS obligations Only used during plots One of these 4 BA combinations are applicable to final SU REGEN / FG SEDRSS obligations One of these 4 BA combinations are applicable to survey plots 0 6   Regen Layer (L2-L4) (WS / ha. TSS - Target Fdc, Cw Hw, Ba, YC 900 TSS 500 MSS 800 TSS 300 MSS 700 TSS 300 MSS 500 MSS 0 6   Layer Only used during plots One of these 4 BA combinations are applicable to survey plots 0 6   Layer One of these 4 BA combinations are applicable to final SU REGEN / FG SEDRSS obligations Only used during plots 0 6   Residual Layer (L1) (212.5dbh) (BA Fdc, Cw, Hw, Ba, YC 0-4 m² /ha 5-10 m² /ha 11-16 m² /ha 17-23 m² /ha 24-39 m² /ha 240 m² /ha 6   Regen Layer (L2) (L2.5dbh) (BA	Species   Site Occupancy   Regen Delay (max yrs)   MITD     Layer   All BA combinations are applicable to survey plots   MITD     Chiy used during plots   One of these 4 BA combinations are applicable to survey plots   Only used during plots   Only used during plots   Only used during plots   MITD     Residual Layer (L1) (212.5dbh) (BA m <sup>2</sup> /ha)   Fdc, Cw, Hw, Ba, Yc   0.4 m <sup>2</sup> /ha   5-10 m <sup>2</sup> /ha   11-16 m <sup>2</sup> /ha   17-23 m <sup>2</sup> /ha   24-39 m <sup>2</sup> /ha   240 m <sup>2</sup> /ha   6   N/A     Regen Layer (L2-L4) (WS / ha. TSS – Target   Fdc, Cw, Hw, Ba, Yc   900 TSS 500 MSS   800 TSS 500 MSS   700 TSS 500 MSS   500 TSS 200 MSS   400 TSS 100 MSS   0   6   L1 Drip line or 2.0 m (L2-L4)     Layer   Only used during plots   One of these 4 BA combinations are applicable to survey plots   0   6   N/A     Residual Layer (L1) (c12.5dbh) (BA Fdc, Cw, Hw, Ba, Yc   0.4 m <sup>2</sup> /ha   5-10 m <sup>2</sup> /ha   11-16 m <sup>2</sup> /ha   17-23 m <sup>2</sup> /ha   24.39 m <sup>2</sup> /ha   240 m <sup>2</sup> /ha   6   N/A     Residual Layer (L1) (c12.5dbh) (BA Fdc, Cw, Hw, Ba, Yc   0.4 m <sup>2</sup> /ha   5-10 m <sup>2</sup> /ha   11-16 m <sup>2</sup> /ha   17-23 m <sup>2</sup> /ha   24.39 m <sup>2</sup> /ha   240 m <sup>2</sup> /ha <td>Species Site Occupancy Regen Delay (max yrs) MITD (max yrs) Free Grow (max yrs)   Layer All BA combinations are applicable to survey plots Only used during plots One of these 4 BA combinations are applicable to final SU REGEN / FG SEDRSS obligations Only used during plots One of these 4 BA combinations are applicable to final SU REGEN / FG SEDRSS obligations Only used during plots Species Species   Residual Layer (L1) (212.5dbh) (BA * <sup>1</sup> ha; 140 MS; - Minimum) Fdc, Cw, Hw, Ba, Yc 0.4 m² /ha 5-10 m² /ha 11-16 m² /ha 17-23 m² /ha 24-39 m² /ha 240 m² /ha 6 N/A N/A   Regen Layer (L2-L4) (WS / ha, TSS - Target Fdc, CW Hw, Ba, Yc 900 TSS 500 MSS 800 TSS 400 MSS 700 TSS 300 MSS 500 TSS 200 MSS 400 TSS 100 MSS 0 6 L1 Drip or 2.0 m (L2-L4) Fd, Hw Cw, Yc   Layer Only used during plots One of these 4 BA combinations are applicable to survey plots 0 6 N/A Species   Residual Layer One of these 4 BA combinations are applicable to survey plots 0 6 N/A N/A   Residual Layer One of these 4 BA combinations are applicable to final SU REGEN / FG SEDRSS obligations 0nly used during plots 0 6 N/A</td>	Species Site Occupancy Regen Delay (max yrs) MITD (max yrs) Free Grow (max yrs)   Layer All BA combinations are applicable to survey plots Only used during plots One of these 4 BA combinations are applicable to final SU REGEN / FG SEDRSS obligations Only used during plots One of these 4 BA combinations are applicable to final SU REGEN / FG SEDRSS obligations Only used during plots Species Species   Residual Layer (L1) (212.5dbh) (BA * <sup>1</sup> ha; 140 MS; - Minimum) Fdc, Cw, Hw, Ba, Yc 0.4 m² /ha 5-10 m² /ha 11-16 m² /ha 17-23 m² /ha 24-39 m² /ha 240 m² /ha 6 N/A N/A   Regen Layer (L2-L4) (WS / ha, TSS - Target Fdc, CW Hw, Ba, Yc 900 TSS 500 MSS 800 TSS 400 MSS 700 TSS 300 MSS 500 TSS 200 MSS 400 TSS 100 MSS 0 6 L1 Drip or 2.0 m (L2-L4) Fd, Hw Cw, Yc   Layer Only used during plots One of these 4 BA combinations are applicable to survey plots 0 6 N/A Species   Residual Layer One of these 4 BA combinations are applicable to survey plots 0 6 N/A N/A   Residual Layer One of these 4 BA combinations are applicable to final SU REGEN / FG SEDRSS obligations 0nly used during plots 0 6 N/A

1) Fdc : applicable only to site series with Site Indexes 24 to 36 meters and Fdc second growth stands (>80% 2nd growth)

- Ecologically Suitable only in areas with < 10 m2 /ha. BA.;

- Layer 3 restricted to a maximum of 200 WS/FG /ha (1 per 3.99 m plot)

with ≥ 10 m2 /ha and ≤ 16 m2/ha. BA;

- Not Suitable > 16 m2/ha. BA;

## ESSFmw Biogeoclimatic Zone

					Regen	eration Gui	de				Free Grow	ng Guide
	BGC			Species				tocking		Regen	Min. H	eight
Classi	ification	RESULTS	Conifer	Climate Change	Broadleaf	Target	MIN	MIN Inter-	Tree HT	Delay	Species	Ht
Zone/SZ	Series	Standards ID		ble and Ecologically Su	itable Species	(well-spac	ed/ha)	tree (m)	> brush (min%)	(Max yrs)		(m)
ESSFmw	01	1052125	Sx Ba Bl Hw <sup>13</sup>			1200	700	2.0	125	4	Hw, Plc	2.00
			Fdc <sup>2</sup> Plc <sup>4</sup>								Fdc,Sw/Se/Sx	1.00
											BI	0.75
											Ва	0.60
	01 Colluvial	1052126	Sx Ba Bl Hw <sup>13</sup>			1000	400	1.5	125	4	Hw, Plc	2.00
			Fdc <sup>2</sup> Plc <sup>4</sup>								Sw/Se/Sx	1.00
											BI	0.75
											Ва	0.60
											Fdc	1.00
ESSFmw	03	1052127	Sx Fdc Plc			1000	500	2.0	125	7	Plc	1.25
											Fdc	1.00
											Sw/Se/Sx	0.75
	03 Colluvial	1052128	Sx Fdc Plc			1000	400	1.5	125	7	Plc	1.25
			Bl <sup>2</sup>								Fdc	1.00
											Sw/Se/Sx	0.75
											BI	0.60
ESSFmw	04	1052129	Sx Plc Fdc Ba <sup>13</sup>			1200	700	2.0	125	7	Plc	1.25
			BI <sup>13</sup>								Fdc	1.00
											Sw/Se/Sx	0.75
											Ba, Bl	0.60
	04 Colluvial	1052130	Sx Plc Fdc Ba <sup>13</sup>			1000	400	1.5	125	7	Plc	1.25
			Bl <sup>13</sup>								Fdc	1.00
											Sw/Se/Sx	0.75
											Ba, Bl	0.60
ESSFmw	05	1052131	Sx Ba Bl			1200	700	2.0	125	4	Plc	2.00
			Hm <sup>2</sup> Plc <sup>4</sup>								Hm, Sw/Se/Sx	1.00
											BI	0.75
											Ва	0.60

## ESSFmw Biogeoclimatic Zone

					Regen	eration Gui	de				Free Grow	ing Guide
	BGC			Species			St	ocking		Regen	Min. H	eight
Classifi	ication	RESULTS	Conifer	Climate Change	Broadleaf	Target	MIN	MIN Inter-	Tree HT	Delay	Species	Ht
Zone/SZ	Series	Standards ID	Commercially Valu	able and Ecologically Su	itable Species	(well-spac	ed/ha)	tree (m)	> brush (min%)	(Max yrs)		(m)
ESSFmw	06	1052132	Sx Ba Bl			1200	700	2.0	125	4	Plc	2.00
			Hm <sup>2</sup> Plc <sup>4</sup>								Hm, Sw/Se/Sx	1.00
											BI	0.75
											Ва	0.60
ESSFmw	07	1052133	Sx Ba Bl			1000	500	2.0	125	4	Plc	1.25
			Cw Plc <sup>, 4</sup>								Cw, Sw/Se/Sx	0.75
											Ba, Bl	0.60

#### IDFww Biogeoclimatic Zone

					Regen	eration Gui	de				Free Growi	ng Guide
	BGC			Species			Sto	ocking		Regen	Min. He	eight
Classi	ification	RESULTS	Conifer	Climate Change	Broadleaf	Target	MIN	MIN Inter-	Tree HT	Delay	Species	Ht
Zone/SZ	Series	Standards ID	Commercially Valua	able and Ecologically Sui	itable Species	(well-space	ed/ha)	tree (m)	> brush (min%)	(Max yrs)		(m)
DFww	01	1052134	Fdc Plc <sup>4</sup> Py Cw <sup>7</sup>			600	400	2.0	150	4	Cw, Fdc, Lw, Py	1.50
			Bg <sup>2</sup>								Plc	2.00
			Lw8**								Bg	2.50
	01 Colluvial	1052135	Fdc Plc Py			600	300	1.5	150	4	Fdc, Py, Lw	1.50
			Lw8**					<u>.</u>			Plc	2.00
DFww	03	1052136	Fdc Plc <sup>4</sup> Py			600	400	2.0	150	3	Plc	2.00
			Lw8**								Fdc, Py, Lw	1.50
	03 Colluvial	1052137	Fdc Plc Py			600	300	1.5	150	3	Plc	2.00
			Lw8**								Fdc, Py, Lw	1.50
DFww	04	1052138	Fdc Py Plc <sup>4</sup> Cw <sup>7</sup>			600	400	2.0	150	4	Plc	2.00
			Lw8**								Cw, Fdc, Lw, Py	1.50
	04 Colluvial	1052139	Fdc Py Plc Cw <sup>7</sup>			600	300	1.5	150	4	Plc	2.00
			Lw8**								Cw, Fdc, Lw, Py	1.50
DFww	05	1052140	Cw Fdc Hw <sup>4</sup>			1000	500	2.0	150	4	Bg, Cw, Fdc	2.00
			Bg⁴								Hw	1.50
	06	1052141	Fdc Cw			1000	500	2.0	150	4	Bg, Cw, Fdc	2.00
			Hw <sup>4</sup> Bg								Hw	1.50

#### IDF ww Biogeoclimatic Zone Single Entry Dispersed Retention Stocking Standard (SEDRSS)

					Regen	eration Guid	le					
		Species			Site O	ccupancy			Regen Delay (max yrs)	MITD	Free Grow	ving Guide
				All BA co	mbinations are	e applicable to	survey plots	•				
BGCU	Layer		Only used during plots			ations are appli EDRSS obligat		Only used during plots			Species	Height (m)
	Residual Layer (L1) (≥12.5dbh) (BA m <sup>2</sup> /ha)	Fdc, Plc,Py, Cw, Bg	0-4 m² /ha	5-10 m <sup>2</sup> /ha	11-16 m <sup>2</sup> /ha	17-23 m² /ha	24-39 m <sup>2</sup> /ha	≥ 40 m² /ha	4	N/A	N	/A
WW 01,03,04	Regen Layer (L2-L4) (WS / ha. TSS – Target <mark>MSS</mark> - Minimum)	Fdc, Cw Hw, Bg	600 TSS 400 MSS	500 TSS 300 MSS	400 TSS 200 MSS		200 TSS 50 MSS	0 0	4	Drip	Fd Cw Py Plc Bg	1.50 2.00 2.50
				All BA co	mbinations are	e applicable to	survey plots					
BGCU	Layer		Only used during plots			ations are appli EDRSS obligat		Only used during plots			Species	Height (m)
	Residual Layer (L1) (≥12.5dbh) ( <mark>BA</mark> m <sup>2</sup> /ha)	Fdc, Cw, Hw, Bg	0-4 m <sup>2</sup> /ha	5-10 m <sup>2</sup> /ha	11-16 m <sup>2</sup> /ha	17-23 m <sup>2</sup> /ha	24-39 m <sup>2</sup> /ha	≥ 40 m² /ha	4	N/A	N	/A
IDF ww 05,06	Regen Layer (L2-L4) (WS / ha. TSS – Target <mark>MSS</mark> - Minimum)	Fdc, Cw Hw, Bg	1000 TSS 500 MSS	900 TSS 400 MSS	800 TSS 300 MSS		600 TSS 100 MSS	0 0	4	Drip	Fd, Cw, Bg Hw	2.00 1.50

## MHmm1 Biogeoclimatic Zone

					Regen	eration Gui	de				Free Growi	ng Guid <u>e</u>
	BGC			Species			Sto	ocking		Regen	Min. H	eight
Classif	ication	RESULTS	Conifer	Climate Change	Broadleaf	Target	MIN	MIN Inter-	Tree HT	Delay	Species	Ht
Zone/SZ	Series	Standards ID	Commercially Valua	able and Ecologically Sui	itable Species	(well-space	ed/ha)	tree (m)	> brush (min%)	(Max yrs)		(m)
MHmm1	01	1052142	Ba Hm Yc			900	500	2.0	125	7	Hm, Hw, Yc	1.00
			Cw <sup>14</sup> Sx <sup>2</sup> Hw <sup>13</sup>								Cw, Sw/Se/Sx	1.00
											Ва	0.60
MHmm1	02	1052143	Hm Yc			800	400	2.0	125	4	Hm, Yc	0.75
			Cw <sup>14</sup> Sx <sup>2</sup> Ba								Sw/Se/Sx	0.75
											Ва	0.60
											Cw	1.00
MHmm1	03	1052144	Ba Hm Yc			900	500	2.0	125	4	Hm, Hw, Yc, Cw	1.00
			Hw <sup>2</sup> Cw <sup>14</sup> Sx <sup>2</sup>								Sw/Se/Sx	1.00
											Ва	0.60
MHmm1	04	1052145	Ba Hm Yc			900	500	2.0	125	7	Hm, Hw, Yc, Cw	1.00
			Hw <sup>2</sup> Cw <sup>14</sup>								Ва	0.60
MHmm1	05	1052146	Ba Hm Yc			900	500	2.0	125	4	Hm, Hw, Yc, Cw	1.00
			Hw <sup>2</sup> Cw <sup>14</sup>								Ва	0.60
MHmm1	06	1052147	Ba Hm Yc			800	400	2.0	125	7	Hm, Yc	0.75
			Cw <sup>14</sup>								Cw	1.00
											Ва	0.60
MHmm1	07	1052148	Ba Yc			900	500	2.0	125	4	Hm, Yc	0.75
			Hm								Ва	0.60
MHmm1	09	1052149	Yc			800	400	2.0	125	4	Hm	0.75
			Hm								Yc	1.00

## MHmm2 Biogeoclimatic Zone

Regeneration Guide										Free Growing Guide		
BGC			Species			Stocking				Regen	Min. Height	
		RESULTS	onifer	Climate Change	Broadleaf	Target	MIN	MIN Inter-	Tree HT	Delay	Species	Ht
Zone/SZ	Series	Standards ID	Commercially Valua	ble and Ecologically Sui	itable Species	(well-space	ed/ha)	tree (m)	> brush (min%)	(Max yrs)		(m)
MHmm2	01	1052150	Ba Hm Yc Sx Bl Fdc <sup>2</sup> Cw <sup>13</sup> Hw			900	500	2.0	125	7	Bl, Hm, Hw, Yc Fdc, Cw,Sx Ba	1.00 1.00 0.60
MHmm2	02	1052151	Ba Hm Sx Yc Bl Hw <sup>13</sup>			800	400	2.0	125	4	Bl, Hm, Hw, Yc Sw/Se/Sx Ba	0.75 0.75 0.60
MHmm2	03	1052152	Ba Hm Sx Yc Bl Hw <sup>13</sup>			900	500	2.0	125	4	Bl, Hm, Hw, Yc Sw/Se/Sx Ba	1.00 1.00 0.60
MHmm2	04	10582153	Ba Hm Yc Bl Sx Hw <sup>13</sup>			900	500	2.0	125	7	Bl, Hm, Hw, Yc Sw/Se/Sx Ba	1.00 1.00 0.60
MHmm2	05	1052154	Ba Hm Sx Yc Bl Hw <sup>13</sup>			900	500	2.0	125	4	Bl, Hm, Hw, Yc Sw/Se/Sx Ba	1.00 1.00 0.60
/IHmm2	06	1052155	Hm Yc Sx Ba			800	400	2.0	125	7	Hm, Yc Sw/Se/Sx Ba	0.75 0.75 0.60
MHmm2	07	1052156	Ba Sx Yc Hm Hw <sup>13</sup>			900	500	2.0	125	4	Hm, Hw, Yc Sw/Se/Sx Ba	0.75 0.75 0.60
MHmm2	09	1052157	Hm Yc Sx			800	400	2.0	125	4	Hm, Yc Sw/Se/Sx	0.75 0.75

#### Footnote #

1

#### Footnote

#### Conifer Tree Species

- "Ba" means amabilis fir; "Bg" means grand fir;
- "BI" means subalpine fir; "Bp" means noble fir:
- "Cw" means western red cedar;
- "Fdc" means coastal Douglas-fir;
- "Hm" means mountain hemlock:
- "Hw" means western hemlock:
- "Lt" means tamarack:
- "Lw" means western larch;
- "Pa" means whitebark pine;
- "PI" and "PIc"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.

#### 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;

- restricted to 20% of the MSS unless the standards unit has a stocking reduction below the MSS due to Swiss Needle Cast disease whereby the restriction becomes 60% of the MSS restricted to 50% of the MSS
- 2 If stock is from seed sources selected for high resistance to white 3 pine blister rust (Cronartium ribicola)
- 4 restricted to 30% of the MSS
- 5
- Hardwood stocking standard. Limited to edatope 3-4/C-D 6
- If stock is from seed sources selected for high resistance to spruce weevil (Pissodes strobi), the use of Ss or Se to meet the MSS is limited to 40% in all areas of use.
- 7 restricted to submesic or wetter sites within the standards unit
- 8 restricted to trial use. Limited to 20% of the MSS
- 9 Hardwood stocking standard. Limited to edatope 4/D-E.
- 10 Hardwood stocking standard. Limited to edatope 5-6/C.
- 11 Hardwood stocking standard. All edatopes.
- 12 restricted to mesic or wetter sites within the standards unit
- 13 restricted to 40% of the MSS
- 14 restricted to 40% of the MSS unless the standards unit is transtional to the CWHvm2 whereby it becomes unrestricted at MSS
- 15 reduce spacing to 1.5m on sites with less than 400 plantable spots/ha
- 16 restricted to 20% of the MSS

#### **Climate Change Considerations\***

- 8 restricted to trial use
- Increase use at lower elevations 17
- Where CWHvm1 is adjacent to geographically or above CWHdm: expand use 18
- reference documents: 2014 FSP SS MoFLNRO draft V 3.3
- \*\* Chief Foresters Standards for Seed Use June 2010 amendment to the standard

"MIN or "Min" means minimum. **MSS** means minimum stocking standard

"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 identiication and interpretation of ecosystems, as applicable to a harvested area.