WOODLOT LICENCE W1877

WOODLOT LICENCE PLAN

First Term **2008 to 2018**

Ka:'yu:'k't'h'/Che:k:tles7et'h' First Nations General Delivery Kyuquot, BC V0P 1J0

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2008/06/03

DISCLAIMER

- Recognizing the special nature of management on a woodlot licence, this disclaimer forms part of the Woodlot Licence Plan (WLP) for Woodlot Licence Number W1877 (W1877) and advises that:
 - the decision to operate under one or more of the Default Performance Requirements provided in the Woodlot Licence Planning and Practices Regulation (WLPPR) is the sole responsibility of the woodlot licence holder, and involved no detailed oversight or advice from the prescribing registered professional forester. This disclaimer is signed on the explicit understanding and information provided by government that, the use and achievement of a Default Performance Requirement, meets the expectations of government with respect to the management of woodlot licences;
 - the undersigned Registered Professional Forester has been retained to
 provide advice on the practice of professional forestry with regard to items
 such as alternative performance requirements, applicable results and
 strategies and other required measures that do not have a default
 performance requirement provided in the WLPPR

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1. CONTENT FOR A WOODLOT LICENCE PLAN (WLP)

1.1 PLAN AREA

This plan covers the entire Woodlot Licence area.

This plan covers a portion of the Woodlot Licence area.

Granite Island (IR #4) is currently excluded from this plan. It is subject to the Maanulth Treaty Settlement, and will become fee simple land held by

Ka:'yu:'k't'h'/Che:k:tles7et'h' First Nations in the near future. Harvesting is not anticipated on Granite Island within the next 10 years.

1.2 MAP AND INFORMATION

Information Item	Мар	Text	N/A
Forest cover	Х		
Topography; (unless exempted by DM)	Х		
Location of streams, wetlands and lakes as shown on forest cover maps,			
terrain resource inventory maps and fish and fish habitat inventory maps.	Х		
Riparian classification of streams, wetlands and lakes if shown on maps	Х		
Identification of fish streams	Х		
Biogeoclimatic zones and subzones (unless exempted by DM)	Х		
Public utilities (transmission lines, gas & oil pipelines, and railways)	Х		
Existing roads	Х		
Special Situations that may not Apply to the WL area			
Resource Management Zones, Landscape Units or Sensitive Areas		Х	
Wildlife Habitat Areas (unless exempted by DM) (none within woodlot)			Х
Scenic Areas	Х		
Ungulate Winter Ranges (none within woodlot)			Х
Community Watersheds			Х
Fisheries Sensitive Watersheds			Х
Community and domestic water supply intakes that are licensed under	Х		
the Water Act and any related water supply infrastructures			
Contiguous areas of sensitive soils	Х		
Temporary or permanent barricades to restrict vehicle access		Х	
Private property within or adjacent to the woodlot licence area	Х		
Resource features other than wildlife habitat features and archaeological			Х
sites (unless the location of the resource feature is not to be disclosed)			

The Ka:'yu:'k't'h'/Che:k:tles7et'h' First Nation (KCFN) is located on the west coast of Vancouver Island near the village of Kyuquot. The Schedule A lands of the woodlot include IR#4 (Granite Island) located northwest of the village of Kyuquot, and IR #7 (Chamiss) located at the north end of Chamiss Bay. The Schedule B or Crown Lands are north and west of Chamiss Bay near International Forest Products Ltd. (Interfor) Chamiss Bay Logging Camp.

Woodlot Licence 1877 is located entirely within the traditional territory of the KCFN and no other First Nation traditional territories overlap the woodlot licence area.

Biogeoclimatic zones and subzones:

The majority of the woodlot licence area is in the CWH vh 1 biogeoclimatic subzone. A small portion of the woodlot lies within the CWH vm1 biogeoclimatic subzone.

Resource Management Zones, Landscape Units or Sensitive Areas:

The area covered by the woodlot licence plan encompasses two Resource Management Zones, SMZ 5 and RMZ 14, as identified in the Vancouver Island Land Use Plan (VILUP).

Most Schedule A lands of the woodlot fall within the South Brooks-Bunsby Special Management Zone (SMZ 5), but as Reserve lands they are excluded from the VILUP and objectives. The primary values within SMZ 5 are: coastal recreation values and opportunities, marine species populations, and habitat (sea otter, eagles) and archaeological values.

The Schedule B lands fall within the Kashutl General Management Zone (RMZ 14). This woodlot licence plan is consistent with the applicable government objectives specified for this General Management Zone, which include the integration of timber values with scenic values along the coast, as well as cultural values.

Wildlife Habitat Areas:

No wildlife habitat areas have been established within the woodlot licence area.

Scenic Areas:

A scenic area has been established within the woodlot licence area as identified on the map in Appendix III.

Ungulate Winter Ranges:

No ungulate winter range has been established within the woodlot licence area.

Community Watersheds:

The woodlot licence area does not lie within a Community Watershed.

Fisheries Sensitive Watersheds:

The woodlot licence area is not within a Fisheries Sensitive Watershed.

Community and domestic water supply intakes that are licensed under the Water Act and any related water supply infrastructures:

There are no community and domestic water supply intakes licensed under the Water Act within the woodlot licence area. However, the Interfor Chamis Bay camp and adjacent homes draw their water from an unnamed stream approximately 500 m upstream from the camp, as identified on the map in Appendix III.

Contiguous areas of sensitive soils:

Contiguous areas of sensitive soils that the woodlot licence holder is aware of are indicated on the map in Appendix III.

Temporary or permanent barricades that restrict vehicle access:

At the time of preparing this woodlot licence plan there are no permanent or temporary barricades on the woodlot licence area to restrict vehicle access. Vehicle access to roads other than the Chamiss mainline and W300, is currently restricted by overgrown vegetation.

Private property within or adjacent to the woodlot licence area:

IR #7 lies entirely within the woodlot boundary and is included as part of the woodlot licence area.

District Lot 2341 lies outside and adjacent to the northern Schedule B woodlot licence boundary. This lot was a logging camp, but is now home to the Comeback Inn, which provides accommodation to sports fishers and other customers staying in Kyuquot Sound.

Resource features other than wildlife habitat features and other features where the location must not be disclosed

At the time of preparing this woodlot licence plan, no resource features had been established within the woodlot licence area under the Government Actions Regulation.

1.3 AREAS WHERE TIMBER HARVESTING WILL BE AVOIDED

At the time of writing this woodlot licence plan, there are no portions of the woodlot licence area where the woodlot licence holder plans to completely avoid harvesting.

1.4 AREAS WHERE TIMBER HARVESTING WILL BE MODIFIED

Modified harvesting where practice requirements in the WLPPR apply:

1. Harvesting will be modified in the scenic area established within the woodlot licence area to achieve the Visual Quality Objectives.

Retention of trees in riparian management zones:

Unless exempted by the district manager, or the harvesting of a road clearing width is required, the woodlot licence holder is committed to retaining the following post harvest stand structure in riparian management zones:

Column 1 Riparian Class	Column 2 Basal Area to be Retained Within Riparian Management Zone (%)
S1-A or S1-B stream	<u>≥</u> 20
S2 stream	<u>≥</u> 20
S3 stream	<u>≥</u> 20
S4 stream	<u>></u> 10
S5 stream	<u>></u> 10
S6 stream	≥5
All classes of wetlands or lakes	<u>≥</u> 10

The percentage of the total basal area within the riparian management zone specified in Column 2 will be left as standing trees at the completion of harvesting:

The woodlot licence holder will ensure that the trees required to be left standing are reasonably representative of the spatial distribution and various sizes of trees in the riparian management zone, as it was before harvesting.

1.5 CONSERVING AND PROTECTING CULTURAL HERITAGE RESOURCES

The woodlot licence plan area falls entirely within the traditional territory of the Ka:'yu:'k't'h'/Che:k:tles7et'h' First Nation (KCFN).

The following strategies are proposed to conserve and protect cultural heritage resources that are the focus of a traditional use by the KCFN and of continuing importance to us. The strategies in the table below apply to cultural heritage resources that are not protected under the *Heritage Conservation Act*. In addition, the woodlot licence holder is committed to:

- Identify available information on cultural heritage resources through discussions with the KCFN;
- Examine proposed harvest areas for cultural heritage resources, and notify the District Manager if anything is found;
- Carrying out forest practices at a time and in a manner that is unlikely to damage or harmfully alter cultural heritage resources.

Cultural Heritage Value	Results and Strategies						
Cedar Trees	 Result: To provide reasonable opportunities for KCFN members to obtain or access cedar bark or carving trees if they request the opportunity. 						
	 Strategies: The licensee will continue to plant a component of western red cedar, where ecologically suited, in accordance with the stocking standards specified in this Woodlot Licence Plan; The licensee will field review proposed harvest areas with designates from KCFN to determine if CMTs are present. The licensee will work with KCFN to make the operational decisions to retain or harvest CMTs A minor component of pole sized cedar will be retained in cutblocks where it is currently evident; Where possible some cedar will be left within wildlife tree patches; The licensee will notify the KCFN members once a Cutting Permit or road permit is approved in an area where cedar is to be felled to facilitate bark stripping pre-harvest 						
	 Result: To enable access to monumental cedar logs recognizing that Woodlot W1877 is only a small part of the traditional territory of the KCFN and the woodlot may only have a limited number of such logs. 						
	 Strategy: The licensee will upon request, assist KCFN members in identifying monumental cedar logs should they wish to utilise them for traditional uses. 						
Traditionally Used Plants	 Result: To provide reasonable opportunities for KCFN members to obtain or access medicinal plants if they request the opportunity. 						
	 Strategies: Through information sharing with the KCFN members, the licensee will avoid proposing cutblocks in areas of rare or scarce plants where these rare or scarce plants have been identified by the First Nation; 						

	• The licensee will notify the KCFN members of cutting permit applications and road permit applications prior to submission to the MOFR in order that any CHRs can be identified and any collections of plants can be completed by members prior to harvest.
Spiritual Sites	Result:Spiritual sites identified by the KCFN will be protected to the extent possible by the woodlot licensee
	 Strategies: The licensee will share information with the KCFN and be available for field reviews upon request; Should the KCFN identify any spiritual sites, the licensee will consider excluding areas from harvest or modifying harvesting to minimize any impact to these sites, provided the spiritual sites do not unduly impact harvesting opportunity.

Note: Archaeological sites under the Heritage Conservation Act are described as – 'bounded space(s) that contain(s) physical evidence of past human use or occupation'. Although archaeological sites are not captured by the Cultural Heritage Resource Objective, the licensee is still required to comply with other relevant legislation. As such, the licensee is aware of the requirements of the Heritage Conservation Act and the need to properly manage for archaeological sites.

1.6 WILDLIFE TREE RETENTION STRATEGY

Note: the proportion of the Woodlot Licence area that is occupied by wildlife tree retention areas is specified in the "PERFORMANCE REQUIREMENTS" section of this plan.

INDIVIDUAL WILDLIFE TREES

a) Species and Characteristics:

Trees of all species occurring on the woodlot licence area may be selected as individual wildlife trees. Selection will favour trees that provide valuable wildlife tree attributes including signs of internal decay, trees with forks, large rotten branches, loose or cracked bark, recent scars, active wildlife use, existing cavities, nest trees, veteran trees and other large windfirm trees with poor form for sawlogs.

b) Conditions Under Which Individual Wildlife Trees May Be Removed:

If authorized by a cutting permit or road permit, individual wildlife trees may be removed if they become a safety hazard or they become infested with insects or diseases which threaten the health of adjacent trees.

c) Replacement of Individual Wildlife Trees:

If individual wildlife trees are removed they will be replaced with trees of comparable wildlife tree value from a nearby location within the WL area.

WILDLIFE TREE RETENTION AREAS

a) Forest Cover Attributes:

Preference will be given to locating wildlife tree retention areas in stands that contain or have a good likelihood of developing valuable wildlife tree attributes as described above. To maintain biodiversity, an attempt will be made to provide representation of all tree species found on the woodlot licence area focusing on riparian management areas, areas identified in relatively rare biogeoclimatic site series, and other areas where harvesting constraints provide the best long term potential for stands to develop wildlife tree attributes associated with advanced age.

b) Conditions Under Which Trees May Be Removed from Wildlife Tree Retention Areas:

If authorized by a cutting permit or road permit, trees may be removed if they become a safety hazard, if they become infested with insects or diseases which threaten the health of adjacent trees or there is a need to remove the trees to provide access to adjacent stands. If providing access to adjacent stands, the number of quality wildlife trees removed will be no more than reasonably needed to provide the access.

c) Replacement of Trees Removed from Wildlife Tree Retention Areas:

If trees are removed from wildlife tree retention areas they will be replaced with trees of comparable wildlife tree value from a nearby location or with trees that will develop good wildlife tree value in the near future if comparable trees are not readily available nearby. Where all or part of a wildlife tree retention area is salvaged, the salvaged area will be replaced with other suitable wildlife habitat in the nearest possible location. Suitable replacement areas will have characteristics that are consistent with the wildlife tree retention strategy. If a wildlife tree retention area suffers blowdown or is otherwise killed, but is not salvaged, it will not be replaced.

1.7 MEASURES TO PREVENT INTRODUCTION OR SPREAD OF INVASIVE PLANTS

The woodlot licence holder commits to carry out the following measure to prevent the introduction and spread of invasive plants that is likely the result of the woodlot licence holder's forest practices:

- Areas of new disturbance created by the woodlot licence holder (i.e. newly constructed roads, trails, landings, pits, quarries, any roadside work areas or area where there is significant mineral soil exposure resulting from timber harvesting), will be seeded as soon as practicable, at an acceptable rate, with an appropriate mix of fast, growing grasses and legumes (using seed of the grade Canada Common #1 or better);
- Any access structures that are deactivated or rehabilitated by the WL holder will also be seeded as soon as practicable and at an acceptable rate with an appropriate mix of fast, growing grasses and legumes (using seed of the grade Canada Common #1 or better);
- Minimize the transport of invasive plant seed by removing invasive plant seeds or vegetative material (e.g.,burrs) from the woodlot licence holder's clothing and equipment, and by checking the undercarriage of the woodlot licence holder's vehicles and removing invasive plant material before leaving an infested area;
- Other activities that may be good practice, **<u>but are not required</u>**, are:
 - Learning to identify invasive plant species
 - Reporting the location of invasive plants to an appropriate agency
 - Controlling infestations while they are small.

Note: Some species of invasive plants are evident along the industrial and public roads and in the private land adjacent to the woodlot licence area and are expected to encroach onto the woodlot over time. Control of existing invasive plants along these roads bordering the woodlot is not anticipated.

1.8 MEASURES TO MITIGATE EFFECT OF REMOVING NATURAL RANGE BARRIERS

There are no range barriers.

1.9 PERFORMANCE REQUIREMENTS

1.9.1 STOCKING INFORMATION FOR SPECIFIED AREAS

Unless exempted by the district manager, the stocking standards indicated below apply to areas where the establishment of a free growing stand is not required and harvesting is limited to commercial thinning, removal of individual trees, or a similar type of intermediate cutting, and for harvesting special forest products.

 \boxtimes For the purposes of section 12 and 34(3) of the WLPPR the Uneven-aged Stocking standards for single-tree selection, as found in the MFR publication "Reference Guide for FDP Stocking Standards", are adopted. A copy of these stocking standards is included in Appendix I. Note that the preferred and acceptable species for each site series is the same as in Appendix IIA and that the same footnotes apply. The inclusion of Fd and Ss in these stocking standards is as per Section 1.9.4.

1.9.2 SOIL DISTURBANCE LIMITS

 \square Default WLPPR s.24(1)(b):

• 8% of Net Area to be Reforested

1.9.3 PERMANENT ACCESS STRUCTURES

Default: WLPPR s.25:

The maximum area occupied by permanent access structures is as follows:

- 1. For Cutblocks \geq 5 ha 7% of the total cutblock area
- 2. For Cutblocks < 5 ha 10% of the total cutblock area
- 3. For the Total Woodlot Licence Area 7% of the total Woodlot Licence area

1.9.4 STOCKING STANDARDS

Alternative WLPPR s. 35(1)(a): The stocking standards, regeneration dates and free growing dates are indicated in Appendix IIA.

Rationale:

The stocking standards have been developed from the MoF publication "Reference Guide for Forest Development Plan Stocking Standards", dated December 11, 2002 and the standards established in the Woodlot Licence Forest Management Regulations (January 31, 2004) Division 2 of Part 6, Schedule A, Table A.

The addition of Fd and Ss in these stocking standards is based on the approved stocking standards used by other licensees¹ operating in the CWHvh1 and CWHvm1 biogeoclimatic subzones in the area (Nootka Forest Stewardship Plan, 2006) as well as their presence in the existing forest cover. Specific sites where these species will be preferred or acceptable are footnoted in Appendix IIA.

1.9.5 WIDTH OF STREAM RIPARIAN AREAS

\square Default WLPPR s.36(4)(b):

The minimum width of the riparian reserve zone, riparian management zone and riparian management area are as described in WLPPR s.36(4)(b).

¹ Western Forest Products Inc., Nootka Sound Economic Development Corp., International Forest Products Limited.

1.9.6 WIDTH OF WETLAND RIPARIAN AREAS

 \bigcirc Default: WLPPR s.37(3)(b) The minimum width of the riparian reserve zone, riparian management zone and riparian management area are as described in WLPPR s.37(3)(b).

1.9.7 WIDTH OF LAKE RIPARIAN AREAS

 \bigcirc Default: WLPPR s.38(2)(b) The minimum width of the riparian reserve zone, riparian management zone and riparian management area are as described in WLPPR s.38(2)(b).

1.9.8 <u>RESTRICTIONS IN A RIPARIAN RESERVE ZONE</u>

Default: WLPPR s.39(1) Cutting, modifying or removing trees in a riparian reserve zone is limited to the purposes described in Section 39(1) of the WLPPR except as follows:.

WLPPR s.39(2.1): The following road construction is proposed in a riparian reserve zone:

The junction of Chamiss 25 at the Chamiss Mainline must be revised so that it turns towards the Chamiss dump not the old Jensen Bay Camp. Within the existing road right of way, at the junction the corner is within the RRZ of an S3 stream and must be reconstructed.

If the road is not built in this location, additional road and fish stream crossings will be required to connect the roads and create a corner so that trucks may turn back to the south.

1.9.9 <u>RESTRICTIONS IN A RIPARIAN MANAGEMENT ZONE</u>

 \square Default: WLPPR s.40(1)(b)(c) or (d) Construction of a road in a riparian management zone is limited to the conditions described is Section 40(1) of the WLPPR without additional conditions to allow road construction being provided in the woodlot licence plan.

1.9.10 WILDLIFE TREE RETENTION

Unless exempted by the district manager, the proportion of the Woodlot Licence area that will be occupied by wildlife tree retention is:

 \boxtimes Default WLPPR s.52(1)(c): 8 % of the woodlot licence area

1.9.11 COARSE WOODY DEBRIS

Unless exempted by the district manager or the WLPPR, the minimum amount of coarse woody debris to be left on areas where there is a requirement to establish a free growing stand is:

- \square Default: WLPPR s.54(1)(b)
 - Area on <u>Coast</u> minimum retention of 4 logs per ha \ge 5 m in length and \ge 30 cm in diameter at one end.

1.9.12 **RESOURCE FEATURES**

Unless exempted by the district manager, the woodlot licence holder will

 \square Default WLPPR s.56(1)(b): Ensure that forest practices do not damage or render ineffective a resource feature.

<u>Note:</u> Only the performance requirements in Part 3 (Practice Requirements) of the WLPPR for which an alternative can be proposed are shown in this Woodlot Licence Plan. The remaining performance requirements in Part 3 are not shown, nor are the performance requirements in Part 4 (Roads).

APPENDICES

- <u>Stocking Standards for Specified Areas</u> that apply to commercial thinning, removal of individual trees, intermediate cuttings, and harvesting special forest products (WLPPR sections 12 and 34(3)).
- <u>Stocking Standards</u> for Free Growing Stands that apply to this WLP
- The WLP Map

Appendix I: Stocking Standards for Specified Areas

These layered stocking standards apply for the purposes of sections 12 and 34(3) of the Woodlot Licence Planning and Practices Regulation to areas where the establishment of a free growing stand is not required and harvesting is limited to commercial thinning, removal of individual trees, or a similar type of intermediate cutting, or the harvesting of special forest products. For salvage of scattered windthrow or root rot mortality, openings of up to 0.1 ha in size are acceptable, not requiring pre-harvest mapping, associated regeneration and requirements to establish a Free Growing stand. No long-term impact on timber yield is expected as the subject areas are likely to regenerate naturally or will be planted concurrent with harvest in adjacent areas.

ID #	Biogeocli	matic Ecosys	tem Classification	Preferred	Acceptable	Layer	TSS	MSSpa	MSSp
	Zone	Subzone	zone Variant Site Series Species Species				(sph)	(sph)	(sph)
1	CWH	vh1	01	Cw Hw Yc	Fd Ss Pl	1	400	200	200
2			04	Ba Hw Cw	Ss	-	400	200	200
3			05/06	Ba Cw Yc	Hw Ss	2	500	300	250
4			07	Ba Cw	Hw Ss	4	300	500	230
5			08/09	Cw Ss	Ba	2	700	400	200
6			15	Ss	Cw Hw	3	/00	400	500
7			17	Ss Cw	Hw	4	900	500	400
9			03/11	Cw Hw Pl		1	300	150	150
				Yc					
10			13 Cw Yc		Hw	2	400	200	200
						3	600	300	300
						4	800	400	400
11			02/12	Pl Cw Yc		1	200	100	100
12		14/16		Ss Cw Pl		2	300	125	125
13	3		18	Cw Ss		3	300	150	150
14	14		19	Ss		4	400	200	200

ID#	Biogeocli	matic Ecosys	tem Classification	Preferred	Acceptable	Layer	TSS	MSSpa	MSSp
	Zone	Subzone	Variant Site Series	Species	Species		(sph)	(sph)	(sph)
15	CWH	vm1	01	Cw Hw Fd		1	400	200	200
				Ba		1	400	200	200
16			04	Cw Hw Fd					
17			05	Ba Cw Hw	Ss	2	500	300	250
				Fd		4	500	500	250
18			06/09	Ba Cw Hw					
19			07	Ba Cw Fd	Ss	3	700	400	300
				Hw	_	5	700	400	500
20			08	Ba Cw Hw	Ss				
21			10	Cw	Ba Ss	4	900	500	400
22			03	Cw Hw Fd		1	300	150	150
23			12	Cw Hw Yc	Hw Yc Pl		400	200	200
24			14	Cw	Hw Ss	3	600	300	300
						4	800	400	400
25		02		Pl Cw Fd		1	200	100	100
26	13		13	Pl Cw		2	300	125	125
						3	300	150	150
						4	400	200	200

SU = Standards Unit =	Minimum Distance	MSSpa = Minimum Stocking	Layer 1 = Mature trees \geq 12.5 cm dbh
a harvested area with	Between Well Spaced	Standard of well spaced trees of	Layer 2 = Pole trees > 7.5 to < 12.5 cm
the same stocking	Trees = 2.0 meters	preferred and acceptable	dbh
standards	except all healthy trees	species	
TSS = Target Stocking	in the mature layer are	MSSp = Minimum Stocking	Layer 3 = Sapling Trees >1.3 m tall & <
Standard (sph) =	considered well spaced	Standard of well spaced trees of	7.5 dbh
healthy well spaced		preferred species	Layer 4 = Regeneration trees < 1.3 m tall.
trees / ha			

Appendix IIA: Stocking Standards, Regeneration Dates and Free Growing Dates for Free Growing Stands

These stocking standards are proposed as an alternative performance requirement for the purposes of section 35(1) (a) of the Woodlot Licence Planning and Practices Regulation to areas harvested under this woodlot licence plan where the establishment of a free growing stand is required under section 29(3) of the *Forest and Range Practices Act*.

Regen date = Regeneration	MITD = Minimum distance between	Crop Tree to Brush % = the height of free growing trees relative
Date	well spaced trees of the preferred and	to the competing vegetation within a 1 m radius cylinder around
FG Date = Free Growing	acceptable species	the tree.
Date		
TSS = Target Stocking	MSSpa = Minimum Stocking Standard	MSSp = Minimum Stocking Standard of well spaced trees of
Standard (sph = healthy	of well spaced trees of preferred and	preferred species
well spaced trees / ha)	acceptable species	

				Regenerat	ion Guide				Free Growing Guide				
	BGC			Species		Stoc	king		Regen	Assessment	Min. Hei	ght	Comments
ID	Classifica	ition	Con	ifer	Broadleaf	Target	MIN pa	MIN p	Delay	Date	Species	Ht	Comments
#	Zone/SZ	Series	Pref (p)	Accep (a)		(well-spa	ced/ha)		(Max yrs)	(yrs)		(m)	
Α	CWH vh1	01	Cw Hw Yc	Fd ⁹ Ss ³⁵ Pl ⁶	Dr ^b Mb ^b	900	500	400	6	14	Ss	3.00	Zonal site
		•							Ū		Fd. Hw	2.00	
											Ba	1.75	
											Cw, PI, Yc	1.50	
В	CWH vh1	02*	PI Cw Yc		Dr ^b	400	200	200	3	12	Ss	2.00	Avoid logging -
											Hw, Pl	1.25	marginal timber
											Cw, Yc	1.00	production
С	CWH vh1	03	Cw Hw PI Yc		Dr ^b Mb ^b	800	400	400	6	14	Ss	2.00	None
											Hw, Pl	1.25	
											Cw, Yc	1.00	
D	CWH vh1	04	Ba Hw Cw	Ss ³⁵	Dr ^b Mb ^b	900	500	400	6	14	Cw, Yc	1.00	Steep Slopes
											Ss	4.00	
											Ba	2.25	
											Cw	2.00	
				0 95	20 o b						Hw	1.75	
Е	CWH vh1	05/06	Ba Cw Yc	Hw ² Ss ³³	Dr ^{39,a} Mb ^b	900	500	400	3	12	Ss	4.00	None
											Ba	2.25	
											Cw, Yc	2.00	
_			5.0	LL 2 0 35	5 39.41.a a a b		=	100		10	Hw	1.75	
F	CWH vh1	07	Ba Cw	HW- SS-	Dr ^{ad, M} , MD	900	500	400	3	12	Ss	4.00	None
											Ва	2.25	
												2.00	
											⊓w	1.75	
G	CWH vb1	08	Cw Se ³⁵	Ba	Dr ^{39,41,a} Mb ^b	900	500	400	3	12		4.00	High bench
0		00	010 03	Da		300	500	400	5	12	Ba	4.00 2.25	floodplain
											Cw	2.20	noouplain
											Hw	1 75	
н	CWH vh1	09	Ss ^{1,35} Cw ¹	Ba ¹	Dr ^{39,41,a} Mb ^b	900	500	400	3	12	Ss	4.00	Medium bench
ľ					2				2	· -	Ba	2.25	floodplain
											Cw	2.00	
											Hw	1.75	

								Free Growing Guide					
	BGC Species				Stoc	king		Regen	Assessment	Min. Hei	ght	Comments	
ID	Classifica	tion	Conif	er	Broadleaf	Target	MIN pa	MIN p	Delay	Date	Species	Ht	Comments
#	Zone/SZ	Series	Pref (p)	Accep (a)		(well-spa	ced/ha)		(Max yrs)	(yrs)		(m)	
ı	CWH vh1	10	no conifers		Dr ^b Mb ^b								Avoid logging
J	CWH vh1	11	Cw ¹ Hw ¹ Pl ⁶ Yc ¹		Dr⁵	800	400	400	3	12	Ss Hw, Pl Cw, Yc	2.00 1.25 1.00	None
К	CWH vh1	12*	Pl ¹ Cw Yc			400	200	200	3	12	Ss Hw, Pl Cw, Yc	2.00 1.25 1.00	Avoid logging - marginal timber production
L	CWH vh1	13	Cw ¹ Yc	Hw ¹	Dr ^b Mb ^b	800	400	400	3	12	Ss Hw, Pl Cw, Yc	2.00 1.25 1.00	Wet soils - avoid ground based equipment
М	CWH vh1	14*	Ss ³⁵	Cw Pl	Dr ^b	400	200	200	3	12	Ss Hw, Pl Cw, Yc	2.00 1.25 1.00	Avoid logging - marginal timber production
N	CWH vh1	15	Ss ³⁵	Cw Hw	Dr ^b	900	500	400	3	12	Ss Hw Ba	3.00 2.00 1.75	Shoreline/ocean- spray site - old beachplain
0	CWH vh1	16*	Ss ³⁵	Cw Pl	Dr ^b	400	200	200	3	12	Cw, Pl Ss Hw Ba	1.50 3.00 2.00 1.75	Avoid logging - marginal timber production
Ρ	CWH vh1	17	Ss ³⁵ Cw	Hw	Dr ^b	900	500	400	3	12	Ss Hw, Pl Cw, Yc	2.00 1.25 1.00	Shoreline/ocean- spray site - Marine terrace, scarp
Q	CWH vh1	18*	Cw ¹ Ss ^{1,35}			400	200	200	3	12	Cw, Yc Ss	1.00 2.00	Fluctuating brackish water
R	CWH vh1	19*	Ss ^{1,35}			400	200	200	3	12	Ss	2.00	Avoid logging

Notes:

Minimum Inter-tree Distance (MITD) =1.5 meters for planting on hygric, sub-hydric or mechanically site prepared areas and in areas of frequent bedrock, large blocky colluvium and disturbed roadside areas amongst slash accumulations (up to 10 m from road edge); and 2.0 meters on all other areas.

The Crop Tree to Brush % = 125% for the BG, ESSF, IDF, MH, MS, PP biogeoclimatic zones and 150 % for all other areas.

Footnote

Footnote

- 1 elevated microsites are preferred
- 2 suitable on thick forest floors
- 6 restricted to nutrient-very-poor sites
- 7 restricted to nutrient-medium sites
- 9 restricted to southerly aspects or where there is local evidence of its natural occurrence.
- 35 Ss is to be from seed sources selected for high resistance to *Pissodes strobi*. Nutrient medium or better sites only.

Conifer Tree Species

"Ba" means amabilis fir: "Bg" means grand fir: "BI" means subalpine fir; "Bp" means noble fir; "Cw" means western red cedar; "Fd" means Douglas-fir; "Hm" means mountain hemlock; "Hw" means western hemlock: "Lt" means tamarack: "Lw" means western larch; "Pa" means whitebark pine; "PI" 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; "Qg" means garry oak; "Ra" means arbutus; "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.

"MIN or "Min" means minimum.

Footnote

- # Broadleaf Management Constraints
- a productive, reliable, and feasible regeneration option
- b limited in productivity, reliability and/or feasibility

			Regeneration Guide							Free Growing Guide			
	BGC		Species			Stocking			Regen	Assessment Min		eight Comments	
ID	Classificat	ion	Conife	er	Broadleaf	Target	MIN pa	MIN p	Delay	Date	Species	Ht	Commente
#	Zone/SZ	Series	Pref (p)	Accep (a)		(well-spa	ced/ha)		(Max yrs)	(yrs)		(m)	
AA	CWH vm1	01	Cw Hw Fd ^{9,16}		Act ^b Dr ^{7,25,a} Mb ^b	900	500	400	6	14	Fd, Hw, Ss	3.00	Zonal site
			Ba ²⁶								Ba	1.75	Cw and Hw are
											Cw	1.50	preferred in 01s
BB	CWH vm1	02*	PI Cw Fd ^{9,16}	Hw		400	200	200	3	12	Fd, Hw	2.00	Avoid logging -
											PI	1.25	marginal timber
											Cw	1.00	production
СС	CWH vm1	03	Cw Hw Fd ^{9,16}	PI ⁵³	Act ^b Dr ^b Mb ^b	800	400	400	6	14	Fd, Hw	2.00	None
											PI	1.25	
											Cw	1.00	
DD	CWH vm1	04	Cw Hw Fd ^{9,16}		Act ^b Dr ^b M ^{b16,a}	900	500	400	3	12	Fd, Hw, Ss	3.00	None
											Ba	1.75	
											Cw	1.50	
EE	CWH vm1	05	Ba Cw Hw	Ss ³⁵	Act ^b Dr ^b M ^{b16,a}	900	500	400	3	12	Fd, Hw, Ss	3.00	None
			Fd ^{1,9,16}								Ba	1.75	
											Cw	1.50	
FF	CWH vm1	06	Ba ²⁶ Cw Hw		Act ^b Dr ^{7,25,41,a} Mb ^b	900	500	400	6	14	Fd, Hw, Ss	3.00	Cw and Hw are
											Ba	1.75	preferred in 06s
											Cw	1.50	
GG	CWH vm1	07	Ba Cw Fd ^{1,9,23}	Ss ³⁵	Act ^{41,a} Dr ^{41,a}	900	500	400	3	12	Fd, Hw, Ss	4.00	None
			Hw ²		M ^{b16,41,a}						Ba	2.25	
											Cw	2.00	
нн	CWH vh1	09	Ba Cw Hw		Act ^{41,a} Dr ^{41,a}	900	500	400	3	12	Hw, Ss	4.00	High Bench
					M ^{b16,41,a}						Ba	2.25	Floodplain
											Cw	2.00	

			Regeneration Guide							Free Gro			
	BGC		Species			Stocking			Regen	Assessment	Min. He	ight	Comments
ID	ID Classification		Conif	er	Broadleaf	Target	MIN pa	MIN p	Delay	Date	Species Ht	Commonito	
#	Zone/SZ	Series	Pref (p)	Accep (a)		(well-spa	ced/ha)		(Max yrs)	(yrs)		(m)	
п	CWH vm1	10	Cw ¹	Ba ¹ Ss ^{1,35}	Act ^{41,a} Dr ^{41,a}	900	500	400	3	12	Hw, Ss	4.00	Medium Bench
					M ^{b16,41,a}						Ba	2.25	Floodplain
											Cw	2.00	
JJ	CWH vm1	11	no conifers		Act ^b Dr ^b Mb ^b								Avoid logging
													Low Bench
													Floodplain
KK	CWH vm1	12	Cw ¹ Hw ¹ Yc ¹	Pl^1	Dr ^b	800	400	400	3	12	Hw	2.00	Rare in Region
											PI	1.25	
											Cw, Yc	1.00	
LL	CWH vm1	13*	PI ¹	Cw ¹		400	200	200	3	12	PI	1.25	Marginal timber
											Cw	1.00	production; prefer
													elevated microsites
ММ	CWH vm1	14	Cw ¹	Hw ¹ Ss ^{1,35}	Act ^b Dr ^b Mb ^b	800	400	400	3	12	Hw, Ss	3.00	Elevated microsites
											PI	200.00	are preferred
											Cw	1.50	

Notes:

Minimum Inter-tree Distance (MITD) =1.5 meters for planting on hygric, sub-hydric or mechanically site prepared areas and in areas of frequent bedrock, large blocky colluvium and disturbed roadside areas amongst slash accumulations (up to 10 m from road edge); and 2.0 meters on all other areas.

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Footnote

Footnote

- 1 elevated microsites are preferred
- 2 suitable on thick forest floors
- 6 restricted to nutrient-very-poor sites
- 7 restricted to nutrient-medium sites
- 9 restricted to southerly aspects or where there is local evidence of its natural occurrence.
- 16 restricted to southern portion of biogeoclimatic unit in region (south of Brooks Peninsula)
- 23 restricted to trial use
- 25 suitable on sites lacking salal
- 26 suitable minor species on salal-dominated sites
- 35 Ss is to be from seed sources selected for high resistance to *Pissodes strobi*. Nutrient medium or better sites only.

Footnote

#

- 41 limited by poorly drained soils
- 53 minor component

Conifer Tree Species

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- Broadleaf Management Constraints
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Appendix III: The Woodlot Licence Plan Map

