

WOODLOT LICENCE # W0144

WOODLOT LICENCE PLAN

2020 to 2030

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Authorized Licensee Signature:

Final Copy will be signed

Kitselas First Nation Representative

Signature

Date

DISCLAIMER

This disclaimer forms part of the Woodlot Licence Plan (WLP) for Woodlot Licence # 144 and advises that:

- The decision to operate under one or more of the Practice Requirements provided in the Woodlot Licence Planning and Practices Regulation (WLPPR) is the sole responsibility of the woodlot licence holder.
- This disclaimer is signed on the explicit understanding that abiding by the Practice Requirements stated in Parts 3 and 4 of the WLPPR meets the expectations of government with respect to the management of woodlot licences;
- The undersigned Registered Professional Forester has been retained with respect to the practice of professional forestry as it pertains to alternative performance requirements, results, strategies, standards and measures presented in this WLP.

Signed: _____

Name: RPF #

Contact phone number: Email:

Seal: *Final Copy will be signed and sealed.*

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I. WOODLOT LICENCE PLAN (WLP) REQUIRED CONTENT

PLAN AREA

- This plan covers the entire Woodlot Licence area.
- This plan covers a portion of the Woodlot Licence area.
[Enter Details]

MAP AND INFORMATION

Information Item	Map	Text	N/A
Forest cover	X		
Topography (unless exempted by DM)	X		
Location and riparian class of streams, wetlands and lakes as shown on gov't endorsed forest cover maps, terrain resource inventory maps, & fish & fish habitat inventory maps	X		
Identification of fish streams on gov't endorsed maps	X		
Biogeoclimatic zones and subzones (unless exempted by DM)	X	X	
Public utilities (transmission lines, gas & oil pipelines, and railways)	X		
Special Situations that may not Apply to the WL area			
Resource Management Zones, Landscape Units or Sensitive Areas	X	X	
Wildlife Habitat Areas (unless exempted by DM)	X	X	
Scenic Areas	X	X	
Ungulate Winter Ranges	X	X	
Community Watersheds	X	X	
Fisheries Sensitive Watersheds		X	
Community and domestic water supply intakes that are licensed under the <i>Water Act</i> and any related water supply infrastructures	X	X	
Contiguous areas of sensitive soils		X	
Existing roads	X		
Temporary or permanent barricades to restrict vehicle access			X
Private property within or adjacent to the woodlot licence area	X		
Resource features other than wildlife habitat features and archaeological sites (unless the location of the resource feature is not to be disclosed)			X

BIOGEOCLIMATIC ZONES AND SUBZONES

- The entire woodlot licence area is in the CWH ws1 biogeoclimatic subzone, except for approximately one hectare in the northwest corner of the Woodlot which is found in the CWH ws2 biogeoclimatic subzone. Because the vast majority of the potential harvest area is found in the CWH ws1 biogeoclimatic zone, stocking standards described in the plan will be comprised of requirements for the CWH ws1 zone.
- The woodlot licence area is comprised of the following biogeoclimatic subzones.
[Enter Details]

RESOURCE MANAGEMENT ZONES, LANDSCAPE UNITS OR SENSITIVE AREAS

The

- entire woodlot licence area
- portion of the woodlot licence area identified on the map in Appendix 3
- Crown land portion of the woodlot licence area

is within the:

Skeena River-Kalum Landscape Unit

The woodlot licence area does not overlap with any Resource Management Zones or Sensitive Areas.

This WLP is consistent with the following objectives set by government:

See below sections for details.

WILDLIFE HABITAT AREAS

- There are no WHAs located in whole or in part within the WLP area.
- The following Wildlife Habitat Area(s) are located in whole or in part within the WLP area. Their location(s) are identified on the map in Appendix 3.

An exemption has been granted: Yes No

[Enter Details]

The woodlot licence area also falls within the Little Oliver Skeena River East Grizzly Bear Identified Watershed as set by the Kalum Sustainable Resource Management Plan. The objective is to maintain natural levels of forage on wet and/or richer sites by:

- Providing an adequate supply of berry feeding
- Maintaining natural levels of forage supply as present in old growth forests
- On rich and wetter sites, implement regeneration and free growing standards consistent with the following table:

Site Association	Subzone Variants	Free Growing Stocking Standards		
		Target	Minimum	Maximum*
BaCw-Devil’s Club	CWH ws1 and ws2	600	400	660
CwSs-Skunk Cabbage	CWH vm1, vm2, ws1, and ws2	400	200	440
Ss-Salmonberry and Act-Red-Osier Dogwood	CWH vm1, vm2, ws1, and ws2	500	200	550

* If a stand exceeds the maximum density set in the prescription at free growing but does not exceed 4000 stems per hectare (sph), the stand will be assessed to ensure there are sufficient gaps to provide forage for grizzly bears or moose. Sufficient forage gaps will be considered to be greater than 20% gaps across the standards unit. To test if adequate gap creation exists, a minimum of 20% (per standards unit) of the randomly systematic established plots (50 m2) must contain less than or equal to one conifer (> 50 cm height), or the equivalent of 200 sph. If the results of the Free Growing survey show maximum density is exceeded without sufficient forage gaps or that total sph exceeds 4000 sph a spacing treatment to meet the forage objective will be implemented.

SCENIC AREAS

- There are no scenic areas located in whole or in part within the WLP area.
- There is one or more scenic areas located in whole or in part within the WLP area. It/they are identified on the map in Appendix 3.

An exemption has been granted: Yes No

Portions of the woodlot licence area fall with polygons with established Visual Quality Objectives (VQO) of Retention and Partial Retention. Forest harvesting will be conducted in a manner that is consistent with these VQOs.

UNGULATE WINTER RANGES

- There are no Ungulate Winter Ranges located in whole or in part within the WLP area.
- To manage for the winter survival of Moose, the GAR Order #6-009 Ungulate Winter Range has been established over the
 - entire WLP area.
 - portion of the WLP area identified on the map in Appendix 3.
 - Crown land portion of the WLP area.

An exemption has been granted: Yes No

The woodlot licence area overlaps partially with Moose Ungulate Winter Range (UWR) polygons as per GAR Order # 6-009. Forest harvesting will be consistent with the requirements found in the Order. Measures found in the Order that will be applied to the Woodlot licence area within moose UWR polygons includes, but is not limited to, reducing stocking standards in order to promote moose forage as presented below.

Site Association	Subzone Variants	Free Growing Stocking Standards		
		Target	Minimum	Maximum*

BaCw-Devil's Club	CWH ws1 and ws2	600	400	660
CwSs-Skunk Cabbage	CWH vm1, vm2, ws1, and ws2	400	200	440
Ss-Salmonberry and Act-Red-Osier Dogwood	CWH vm1, vm2, ws1, and ws2	500	200	550

* If a stand exceeds the maximum density set in the prescription at free growing but does not exceed 4000 stems per hectare (sph), the stand will be assessed to ensure there are sufficient gaps to provide forage for grizzly bears or moose. Sufficient forage gaps will be considered to be greater than 20% gaps across the standards unit. To test if adequate gap creation exists, a minimum of 20% (per standards unit) of the randomly systematic established plots (50 m²) must contain less than or equal to one conifer (> 50 cm height), or the equivalent of 200 sph. If the results of the Free Growing survey show maximum density is exceeded without sufficient forage gaps or that total sph exceeds 4000 sph a spacing treatment to meet the forage objective will be implemented.

COMMUNITY WATERSHEDS

- There are no Community Watersheds located in whole or in part within the WLP area.
- The [Enter Details] Community Watershed has been established over the
- entire WLP area.
 - portion of the WLP area identified on the map in Appendix 3.
 - Crown land portion of the WLP area.

An exemption has been granted: Yes No

[Enter Details]

FISHERIES SENSITIVE WATERSHEDS

- There are no Fisheries Sensitive Watersheds located in whole or in part within the WLP area.
- The [Enter Details] Fisheries Sensitive Watershed has been established over the
- entire WLP area.
 - portion of the WLP area identified on the map in Appendix 3.
 - Crown land portion of the WLP area.

An exemption has been granted: Yes No

[Enter Details]

COMMUNITY AND DOMESTIC WATER SUPPLY INTAKES THAT ARE LICENSED UNDER THE WATER SUSTAINABILITY ACT AND ANY RELATED WATER SUPPLY INFRASTRUCTURES

- There are no community or domestic water supply intakes or related water supply infrastructures within the WLP area or nearby that could be affected by operations carried out under this plan.
- There is/are community or domestic water supply intake(s) or related water supply infrastructure(s) within the WLP area or nearby (i.e. within 100m) that could be affected by operations carried out under this plan. The location(s) is/are identified on the map in Appendix 3 or are described as follows:
[Enter Details]

CONTIGUOUS AREAS OF SENSITIVE SOILS

- The WL holder is not aware of any contiguous areas of sensitive soils within the WLP area.
- The location(s) of contiguous areas of sensitive soils are identified on the map in Appendix 3.

Areas of contiguous sensitive soils within the woodlot licence areas are defined as areas where slopes exceed 60 percent.

TEMPORARY OR PERMANENT BARRICADES THAT RESTRICT VEHICLE ACCESS

- At the time of preparing this woodlot licence plan there were no permanent or temporary barricades on the WLP area to restrict vehicle access.
- Temporary or permanent barriers to restrict vehicle access are identified on the map in Appendix 3 and are associated with private land.

PRIVATE PROPERTY WITHIN OR ADJACENT TO THE WLP AREA

The location and boundaries of private land within or adjacent to the WLP area are identified on the map in Appendix 3.
[Enter Details]

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, there were no resource features within the WLP that were established under

- the Government Actions Regulation.
 - Forest *Practices Code of BC Act* regulation and made known by the district manager.
- Or
- The following resource features are found within the woodlot license area:
Moose Ungulate Winter Range polygons as per GAR Order # 6-009.

AREAS WHERE TIMBER HARVESTING WILL BE AVOIDED OR MODIFIED
Areas where timber harvesting will be AVOIDED:

- There are no areas where timber harvesting will be avoided.
- Timber harvesting will be avoided on the following areas:

- 1) Timber harvesting will be avoided in the areas where slope stability may be an issue (slopes exceeding 60 percent) until a site specific harvesting plan is developed and approved through a Terrain Stability Field Assessment.
- 2) Riparian Reserve Zone and Wildlife Tree Retention Areas will not be harvested unless it is necessary to control the spread of an insect or disease outbreak that may affect the rest of the woodlot licence area.

Areas where timber harvesting will be MODIFIED:

- There are no areas where timber harvesting will be modified.
- The following areas will be subject to modified timber harvesting as described below.

The licensee intends to retain trees in Riparian Management Zones as described in the section below.

RETENTION OF TREES IN A RIPARIAN MANAGEMENT ZONE

- Unless exempted or as provided for under WLPPR section 40, the woodlot licence holder will retain the following post-harvest stand structure in riparian management zones:

Description of Post-Harvest Stand Structure to be Retained in Riparian Management Zones				
Mature deciduous tree species greater than 20cm DBH and non-merchantable hemlock, western redcedar, spruce, and balsam trees, when available and where it is operationally feasible to leave.				
Trees to be Retained	Species: All deciduous tree species, hemlock, western redcedar, spruce, and Amabilis fir.			
	Characteristics: Mature deciduous trees greater than 20cm DBH, spruce, hemlock, western red cedar and Amabilis fir smaller than 15cm DBH which exhibit good form and vigour. Hemlock with evidence of mistletoe is not considered to exhibit good form and vigour.			
Range of Residual Basal Area: (m ² /ha)	N/A	OR	Range of Residual Trees/ha:	50-600

- Unless exempted or as provided for under WLPPR section 40, the percentage of the total basal area within the riparian management zone specified in the following table 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.

Riparian Class	Basal Area to be Retained Within RMZ (%)
S1-A or S1-B stream	≥20
S2 stream	≥20
S3 stream	≥20
S4 stream	≥10
S5 stream	≥10
S6 stream	≥ 5
All classes of wetlands or lakes	≥10

- Unless exempted or as provided for under WLPPR section 40, the following describes the retention of trees in a riparian management zone following timber harvesting.

N/A (see above under Retention of Trees in a Riparian Management Area).

CONSERVING AND PROTECTING CULTURAL HERITAGE RESOURCES

The result or strategy applicable to the WLP area is as follows:

- Result:**
Should a CHR be made known the woodlot licence holder will, after due consideration of the factors listed in WLPPR, Schedule 1, Section 5, only carry out forest practices at a time and in a manner that will conserve and protect cultural heritage resources that are the focus of a traditional use by the Kitselas people and that is of continuing importance to the Kitselas people.
- Strategy:**
The following strategy is proposed to conserve and protect cultural heritage resources that are the focus of a traditional use by the Kitselas people and of continuing importance to them. This strategy applies to cultural heritage resources that are not protected under the *Heritage Conservation Act*. The woodlot licence holder is committed to carrying out forest practices at a time and in a manner that is unlikely to damage or harmfully alter cultural heritage resources.

Portions of the woodlot licence area overlap with areas of “high” archaeological potential. The report: “Archaeological Impact Assessment of Existing Woodlots 143 and 144 and Proposed Woodlots Hells Gate and Rosswood in the Kalum Forest District” (1997) identified 15 sites containing Culturally Modified Trees (CMTs) with 2 sites containing other features such as cultural depressions and a historic cabin. This report also identified zones of high and moderate archaeological significance within the woodlot. Strategies to protect the Cultural Heritage Resources of the woodlot include the following:

- A field review of proposed harvest areas will be conducted by a person trained and qualified to recognize Culturally Modified Trees and areas with significant

potential for subsurface archaeological sites. The person conducting the field review must also be able to recognize evidence of ongoing Traditional Use or areas with high potential for Traditional Use. Based on the results of the field review actions could include conducting a Preliminary Field Reconnaissance or Archaeological Impact Assessment or modifying the proposed harvesting/construction so that it does not impact potential Cultural Heritage Resources.

- Cooperation between the Kitselas First Nation, the BC Ministry of Forests, Lands, and Natural Resource Operations and Rural Development (MFLNRORD), and the Archaeology Branch in identifying and protecting cultural features
- Adherence to the *Heritage Conservation Act* (HCA) including avoiding pre-1846 features where practicable.
- Development of a strategy to protect features that are not protected under the HCA, and
- Carrying out forest practices at a time and in a manner that is unlikely to damage or harmfully alter cultural heritage resources.

WILDLIFE TREE RETENTION STRATEGY

The proportion of the woodlot licence area occupied for wildlife tree retention purposes is defined in the Performance Requirements section of this WLP.

The proportion of the woodlot licence area occupied by wildlife trees will be achieved through:

- Dispersed retention (Individual wildlife trees or small clumps of trees within a cutblock area)
- Patch retention (intact areas of forest)
- Areas where harvesting will be avoided
- Areas where harvesting will be modified

Trees that pose a safety hazard or are damaged by insects or disease and pose a forest health risk to adjacent trees or forests may not be retained either as an individual wildlife tree, in a patch or in an area where harvesting will be avoided or modified.

DISPERSED RETENTION

- Not applicable (dispersed retention of individual wildlife trees **will not** be used)
- Applicable (dispersed retention of individual wildlife trees **will** be used)

Each individual wildlife tree will be considered to occupy 10m².

(a) Species and Characteristics:

Species:

All coniferous and deciduous species found within the license area will be eligible for retention as wildlife trees.

Characteristics:

To the extent practicable, trees that exhibit one or more of the following attributes will be retained.

- internal decay, heart rot or cavities;
- crevices, cracks or loose bark that is suitable for wildlife;
- large brooms;
- active or recent wildlife use;
- suitable for wildlife use including a large nest, a hunting perch or a bear den;
- a veteran tree; i.e. one of the largest trees on site as determined by height or diameter;
- important as habitat for species at risk and/or local wildlife

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

Individual wildlife trees may, subject to the proper authorization being in place, be removed if they are:

- a safety hazard;
- a fire hazard,
- diseased or infested with insects which threaten the health of adjacent trees, or
- obstructing access or operations.

(c) Replacement of Individual Wildlife Trees:

An individual wildlife tree that is removed will be replaced with another tree with acceptable attributes as described in section (a) "Species and Characteristics".

Replacement will occur within 12 months after the removal and will be recorded and tracked within the Site Plan or a suitable wildlife tree tracking summary.

PATCH RETENTION

Not applicable (patch retention of wildlife trees **will not** be used)

Applicable (patch retention of wildlife **will** be used)

(a) Forest Cover Attributes:

Wildlife tree patches will consist of forests comprised of hemlock, spruce, balsam, pine, western red cedar, alder, birch or cottonwood that are predominantly greater than 80 years and a significant proportion of the trees will exhibit one or more of the individual wildlife tree attributes listed in the previous section. Patches will also consist of a minimum 30% crown closure. Trees that pose a safety hazard, or are infested with insects or infected with a pathogen that could threaten adjacent trees or forests, will not be retained.

Areas where harvesting will be avoided or modified will contribute to the WTR performance requirement regardless of forest cover attributes.

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

Wildlife trees patches and/or individual wildlife trees in WTR areas may be removed if they are:

- A safety hazard;

- Infested with insects or pathogens which threaten the health of adjacent trees; and/or
- Wind thrown or damaged to the extent that the identified wildlife objectives cannot be met.
- If they become an obstacle or impediment to access or operations.

(c) Replacement of Trees Removed from Wildlife Tree Retention Patches:

The woodlot owner will ensure that the proportion of the woodlot licence area occupied for wildlife tree retention that is defined in the Performance Requirements section of this WLP will be maintained over time. Replacement of WTR areas will be designated prior to harvest of the original patches and will be recorded in the Site plan, RESULTS or other supporting documents. The woodlot owner will replace the portion of the WTR area from which the timber is being harvested with one or more WTR areas that provide an equivalent area, number of trees or habitat.

The practice requirements for the retention of trees in areas where harvesting will be avoided or modified apply.

MEASURES TO PREVENT THE INTRODUCTION OR SPREAD OF INVASIVE PLANTS

Exempted

The woodlot licence holder commits to carrying out the following measures to prevent the introduction or spread of invasive plants listed in the Invasive Plant Regulation that is likely the result of the woodlot licence holder's forest practices:

- To the extent possible, not park or stage equipment or vehicles, or sort logs on large concentrations or infestations of invasive plants;
- To the extent practicable, begin work in un-infested areas before moving to infested areas;
- Inspect and remove invasive plant parts or propagules from clothing and vehicle/equipment undercarriages if working in an area known to contain prescribed invasive plants; and/or
- As soon as practicable or within one year following the completion of operations, all newly constructed roads, landings, pits, and quarries that are greater than 0.25 hectare and have exposed mineral soil that will support vegetation will be seeded at an industry acceptable rate using Canada Common #1 Forage Mixture as defined by the *Seed Act*.
- Road construction, harvesting and silviculture machinery that is to be transported from more than 200 km away from the Coast Mountains Natural Resource District, and that is to do work under the authority of this Woodlot Licence Plan must be washed before entering the Woodlot.

MEASURES REGARDING NATURAL RANGE BARRIERS

Exempted

The woodlot licence holder is committed to carrying out the following measures if the woodlot licence holder's forest practices remove or render ineffective a natural range barrier that was identified by a range tenure holder who is authorized to graze livestock on the woodlot licence area or by the ministry Agrologist:

- erecting short drift fences or other appropriate barriers,
- installing cattle guards or replacement barriers on newly constructed roads, or
- carrying out other activities that will limit the movement of cattle.

Measures will be implemented to a standard that will reduce the likelihood of livestock movement across what was identified as the natural range barrier. The woodlot licence holder is not responsible for on-going maintenance of the replacement barrier.

STOCKING INFORMATION FOR SPECIFIED AREAS

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; i.e. for the purposes of WLPPR sections 12 & 34(3).

- The Uneven-aged Stocking standards for single-tree selection as found in the ministry publication "Reference Guide for FDP Stocking Standards" are adopted.

A copy of these stocking standards are included in Appendix 1A.

- The stocking standards for the purposes of WLPPR sections 12 and 34(3) are found in Appendix 1.
[Enter Details]

PRACTICE REQUIREMENTS

EXEMPTIONS

Not applicable. No exemptions have been made for the woodlot licence plan.

ALTERNATIVE PERFORMANCE REQUIREMENTS

Soil Disturbance Limits

- Default: WLPPR section 24(1)(b)
8% of net area to be reforested.
- Alternative: WLPPR section 24(1)(a): The amount of soil disturbance on the net area to be reforested will not exceed [Enter Details].

Permanent Access Structures

- Default: WLPPR section 25
The maximum area occupied by permanent access structures is:

- For Cutblocks ≥ 5 ha: 7% of the total cutblock area.
- For Cutblocks < 5 ha: 10% of the total cutblock area.
- For the WL Area: 7% of the total Woodlot Licence area.

- Alternative: WLPPR section 25:
- For cutblocks ≥ 5 ha, the maximum amount of the total area within a cutblock that will be occupied by permanent access structures will not exceed [Enter Details].
 - For cutblocks < 5 ha, the maximum amount of the total area within a cutblock that will be occupied by permanent access structures will not exceed [Enter Details].
 - For the WL area, the maximum amount of the total area within the woodlot licence area that will be occupied area by permanent access structures will not exceed [Enter Details].

Stocking Standards

- Default: WLPPR section 35(1)(b)
The stocking standards, regeneration dates and free growing dates described in the ministry publication “Reference Guide for Forest Development Plan Stocking Standards,” as amended from time to time, that are in place on the commencement date for the area.

- Alternative #1: WLPPR section 35(1)(a)
The current stocking standards, regeneration dates and free growing dates described in the ministry publication “Reference Guide for Forest Development Plan Stocking Standards.” The pertinent sections (including footnotes) are shown in Appendix 2A.
[Enter Details]

- Alternative #2: WLPPR section 35(1)(a)
The stocking standards, regeneration dates and free growing dates are indicated in Appendix 2B.

Stocking standards consistent with the approved Kalum Ventures, Kitselas Forestry LP and Kitselas First Nations Forest Stewardship Plan (approved on August 28, 2018) are adapted for this Woodlot Licence Plan. This includes Stocking Standards for the CWHws1 as shown in Table A1: Regeneration and Free Growing Guide. It also includes Fire Management Stocking Standards as described in the Kalum Ventures, Kitselas Forestry LP and Kitselas First Nations Forest Stewardship Plan, and Table A2: Stocking Standards for Sites Heavily Infected with Annosus. Table A1 and A2 are attached within Appendix 2B.

Width of Stream Riparian Areas

- Default: WLPPR section 36(4)(b)
The minimum widths of the RRZ, RMZ and RMA are as described in WLPPR section 36(4)(b).

- Alternative: WLPPR section 36(4)(a)

The minimum widths of the RRZ, RMZ and RMA are as follows:
[Enter Details]

Width of Wetland Riparian Areas

- Default: WLPPR section 37(3)(b)
The minimum widths of the RRZ, RMZ and RMA are as described in WLPPR section 37(3)(b).
- Alternative: WLPPR section 37(3)(a)
The minimum widths of the RRZ, RMZ and RMA are as follows:
[Enter Details]

Width of Lake Riparian Areas

- Default: WLPPR section 38(2)(b)
The minimum widths of the RRZ, RMZ and RMA are as described in WLPPR section 38(2)(b).
- Alternative: WLPPR section 38(2)(a)
The minimum widths of the RRZ, RMZ and RMA are as follows:
[Enter Details]

Restrictions in a Riparian Reserve Zone

- WLPPR section 39(2.1)
The following road construction is proposed in a riparian reserve zone.
[Enter Details]
- Default: WLPPR section 39(1)
Cutting, modifying or removing trees in a RRZ is limited to the purposes described in WLPPR section 39(1).
- Alternative: WLPPR section 39(1)
Additional purposes for cutting, modifying or removing trees in a RRZ are as follows:
[Enter Details]

Restrictions in a Riparian Management Zone

- Default: WLPPR section 40(1)(b)(c) or (d)
The construction of a roads in a riparian management zones will be limited to the conditions described in WLPPR sections 40(1)(b), (c) and (d).
- Alternative: WLPPR section 40(1)(a)
In addition to the conditions described in WLPPR sections 40(1)(b), (c) and (d), roads will be constructed in riparian management zones as follows:
[Enter Details]

Wildlife Tree Retention

Exempted

If not exempted, the proportion of the Woodlot Licence area that will be occupied by wildlife trees will be:

- Default: 8% of the woodlot licence area (WLPPR section 52(1)(c))
- Default: ___ % specified for the area in a land use objective (WLPPR section 52(1)(a))
- Alternative: 5% of the total Woodlot Licence area (WLPPR section 52(1)(b))

As per the Kalum Sustainable Resource Management Plan, 5% WTRA is required in the Skeena River Kalum LU, in the CWHws biogeoclimatic zone.

Coarse Woody Debris

Exempted

If not exempted, the minimum amount of coarse woody debris that will be left on areas where there is a requirement to establish a free growing stand will be:

- Coastal Default: WLPPR section 54(1)(b)
A minimum retention of 4 logs per ha ≥ 5 m in length and ≥ 30 cm in diameter at one end.
- Interior Default: WLPPR section 54(1)(b)
A minimum retention of 4 logs per ha ≥ 2 m in length and ≥ 7.5 cm in diameter at one end.
- Alternative: WLPPR section 54(1)(a)
The quantity of logs to be retained will be [Enter Details]

Resource Features

Exempted

If not exempted, the woodlot licensee will:

- Default: WLPPR section 56(1)(b)
Ensure that forest practices do not damage or render ineffective a resource feature.
- Alternative: WLPPR section 56(1)(a)
Carry out the following measures to ensure that forest practices do not damage or render ineffective a resource feature:
[Enter Details]

II. APPENDICES

APPENDIX 1A: 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.

SU	Biogeoclimatic Ecosystem Classification			Preferred Species	Acceptable Species	Layer	TSS (sph)	MSSpa (sph)	MSSp (sph)
	Zone	Subzone	Variant Site Series						
1					Act	1	600	300	250
	CWH	ws	1	Cw, Hw, Ba, Sxs	Pl	2	800	400	300
					Dr	3	1000	500	400
					Ep	4	1200	700	600
2									1
						2	600	300	250
						3	800	400	300
						4	1000	500	400
3						1	400	200	200
						2	500	300	250
						3	700	400	300
						4	900	500	400
4						1	300	150	150
						2	400	200	200
						3	600	300	300
						4	800	400	400

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

Table A1: Regeneration and Free Growing Guide

I.D. #	BEC Classification		Regeneration Guide							Free Growing Guide		
			Species			Stocking (well-spaced/ha)			Regen Delay Guide	Latest assessment	Min. Height	
	Zone/SZ	Series	Preferred (p)	Acceptable (a)	Broadleaf (p) or (a), as per footnotes	Target	MIN pa	MIN p	(Suggest Max yrs)	(yrs)	Species	Ht (m)
1054833	CWHws1	01	Hw ³⁰ Ba Cw	Pl Sxs ^{30,35,56}	Ep ^c , Act ^c , At ^c , Dr ^{a,c}	900	500	400	6	20	Hw, Pl, Act Sxs Others	2.00 2.00 1.40
1054834	CWHws1	02*	Pl Hw ³⁰	Cw		600	400	400	6	20	Hw, Pl Others	1.40 1.00
1054835	CWHws1	03	Hw Pl	Cw	Ep ^c , At ^c	900	500	400	6	20	Hw, Pl Others	2.00 1.40
1054836	CWHws1	04	Hw ^{2,30} Ba Cw	Sxs ^{30,35,56}	Ep ^c , At ^c Act ^{a,c} Dr ^{a,c}	900	500	400	3	20	Hw, Act Sxs Others	2.00 2.00 1.40
1054837	CWHws1	05	Hw ³⁰ Ba Cw	Sxs ^{7,30,35,56}	Ep ^c , At ^c , Dr ^{a,c}	900	500	400	6	20	Hw,Sxs Others	2.00 1.40
1054838	CWHws1	06	Hw ^{2,30} Ba Cw	Sxs ^{30,35,56}	Ep ^c , At ^c Act ^a Dr ^b	900	500	400	3	20	Hw,Sxs, Act Others	2.00 1.40
1054839	CWHws1	07	Hw ³⁰ Ba Cw	Sxs ^{30,35,56}	Act ^b	900	500	400	3	20	Hw,Sxs, Act Others	2.00 1.40
1054840	CWHws1	08	Ba ¹ Cw ¹	Hw ³⁰ Sxs ^{1,30,35,56}	Act ^b Dr ^b	900	500	400	3	20	Sxs, Act Others	2.00 1.40
n/a	CWHws1	09*	no	conifers	Act ^b Dr ^b	-	-	-	-	-	All	1.40
1054841	CWHws1	10*	Pl ¹	Cw ¹ Hw ³⁰		400	200	200	3	20	Hw, Pl Cw	1.40 1.00
1054843	CWHws1	11	Cw ¹ Sxs ^{1,30,56}	Ba ¹ Hw ^{1,30}	Act ^{b,c} Dr ^{b,c}	800	400	400	3	20	Act Hw, Sxs Others	2.00 1.40 1.00
n/a	CWHws1	31	non-	forested		-	-	-	-	-	-	-
n/a	CWHws1	32	non-	forested		-	-	-	-	-	-	-

Table A2: Stocking Standards for Sites Heavily Infected with Annosus

I.D. #	BEC Classification		Regeneration Guide							Free Growing Guide		
			Species			Stocking (well-spaced/ha)			Regen Delay Guide	Latest Assessment	Min. Height	
	Zone/SZ	Series	Preferred (p)	Acceptable (a)	Broadleaf	Target	MIN pa	MIN p	(Suggest max yrs)	(yrs)	Species	Ht (m)
1054897	CWHws1	01	Cw Hw ^{30,57}	Ba Pl Sxs ^{30,35,56}	Ep ^{a,c} , Act ^c , At ^c , Dr ^{a,c}	900	500	400	6	20	Plc, Cw Others	2.00 3.00
1054898	CWHws1	02*	Pl Cw Hw ^{30,57}			600	400	400	6	20	Plc, Cw Others	1.40 2.00
1054899	CWHws1	03	Pl Cw Hw ^{30,57}		Ep ^{a,c} , At ^c	900	500	400	6	20	Plc, Cw Others	2.00 3.00
1054900	CWHws1	04	Cw Hw ^{30,57}	Ba Sxs ^{30,35,56}	Act ^{a,c} Dr ^{b,c} , Ep ^{b,c} , At ^c	900	500	400	3	20	Cw Others	2.00 3.00
1054901	CWHws1	05	Cw Hw ^{30,57}	Ba Pl Sxs ^{30,35,56}	Dr ^{a,c} , Ep ^{a,c} , At ^c	900	500	400	6	20	Cw Others	2.00 3.00
1054902	CWHws1	06	Cw Hw ^{2,30,57}	Ba Sxs ^{30,35,56}	Act ^b Dr ^b Ep ^{b,c} , At ^c	900	500	400	3	20	Cw Others	2.00 3.00

I.D. #	BEC Classification		Regeneration Guide							Free Growing Guide		
			Species			Stocking (well-spaced/ha)			Regen Delay Guide	Latest Assessment	Min. Height	
			Zone/SZ	Series	Preferred (p)	Acceptable (a)	Broadleaf	Target	MIN pa	MIN p	(Suggest max yrs)	(yrs)
1054903	CWHws1	07	Cw Hw ^{30,57}	Ba Sxs ^{30,35,56}	Act ^b	900	500	400	3	20	Cw Others	2.00 3.00
1054904	CWHws1	08	Cw ¹	Ba ¹ Hw ^{1,30} Sxs ^{1,30,35,56}	Act ^b Dr ^a	900	500	400	3	20	Cw Others	2.00 3.00
n/a	CWHws1	09*	no	conifers	Act ^b Dr ^b	-	-	-	-	-	All	1.40
1054905	CWHws1	10*	Pl ¹	Cw ¹ Hw ^{1,30}		400	200	200	3	20	Plc, Cw Others	1.40 2.00
1054906	CWHws1	11	Cw ¹ Sxs ^{1,30,56}	Ba ¹ Hw ^{1,30}	Act ^{b,c} Dr ^{b,c}	800	400	400	3	20	Cw Others	1.40 2.00
n/a	CWHws1	31	non-	forested		-	-	-	-	-	-	-
n/a	CWHws1	32	non-	forested		-	-	-	-	-	-	-

* These site series are sensitive to harvesting – avoid targeting them for harvest

Table A3: Spruce Leader Weevil Hazard Ratings by BEC

Hazard Rating	BEC Classification	Modifier
	Zone/SZ	
Low	ICHmc1	>350 m elevation
	ICHmc1a	n/a
	ICHmc2	>350 m elevation
	CWHvm1 South*	n/a
	CWHvm2 South*	n/a
Moderate	ICHmc1	0-350 m elevation
	ICHmc2	0-350 m elevation
	CWHws1	>400 m elevation
	CWHws2	n/a
	CWHvm1 North*	n/a
	CWHvm2 North*	n/a
High	CWHws1	0-400 m elevation

*The boundary between CWHvm1, CWHvm2 North and South is defined at Latitude 53°43'32" N (equivalent to the north end of Maitland Island).

Table A4: Maximum % of spruce by Hazard

Hazard Rating	Natural or non-resistant stock type planted	Resistant stock type planted***	
		"A"* Class Stock	B+*, Sxs or identified provenances
Low	50% 40%**	No restriction <600m	No restriction
Moderate	30%	No restriction <600m	50%
High	20%	50% <600m	30%

* "A" is A class orchard seed and B+ is naturally genetic improved seed

**Ss

***Generally beyond current transfer guidelines but due to high performance in the IUFRO and EP 1072 Hybrid Transition Trials^{iv} it is anticipated the Seed Transfer Guidelines will be amended at a future date.

Standards* footnotes to "Preferred", "Acceptable" or "Broadleaf" species within Tables A1, A2 and A3	
a	Species is limited in productivity, reliability and/or feasibility, and subject to Section 3.2.8 of this FSP , may only be considered as "acceptable"
b	Species constitutes a productive, reliable, and feasible regeneration option, and subject to Section 3.2.8 of this FSP , may be considered as "preferred"
c	Will be considered preferred and contributing to minimum stocking when Fire Management Stocking Standards (FMSS) are applied. FMSS remove minimum coniferous stocking and replace it with minimum deciduous stocking.
16	Restrict to maximum of 20% of preferred well-spaced stocking
19	Restrict to maximum of 50% of preferred well-spaced stocking
56	Spruce content restricted based on leader weevil hazard and stock susceptibility. Limits on the amount of well-spaced and free growing spruce (Ss, Sxs, Sx and Se) on a standards unit due to leader weevil are calculated in Tables A3 Spruce Weevil Hazard Ratings by BEC and Table A4 Maximum % Spruce by Hazard
57	Hemlock is considered preferred but is limited to a maximum of 30% of well-spaced and free growing trees

*These footnotes are to be interpreted as a measurable, verifiable, and enforceable part of the Stocking Standards.

Advisory** footnotes to "Preferred" or "Acceptable" species within Tables A1, A2 and A3	
1	Elevated microsites are preferred
2	Suitable on thick forest floors
7	Restricted to nutrient-medium sites
12	Suitable on cold air drainage sites
13	Restricted to upper elevations of biogeoclimatic unit
14	Restricted to lower elevations of biogeoclimatic unit
17	Restricted to western portion of biogeoclimatic unit in region
18	Suitable as a minor species (e.g. less than 30%) in salal-dominated sites
22	Restricted to southern Gardner Canal – Kitlope area (i.e. where Fd could occur naturally)

- 28 Limited by moisture deficit
- 29 Risk of heavy browsing by moose
- 30 Risk of porcupine damage
- 32 Limited by growing-season frosts
- 34 Risk of snow damage
- 35 Risk of weevil damage
- 50 Restricted to sites where the species occurs as a major species in a pre-harvest, natural stand

Note: The following do not exist as footnotes in this FSP: 3-6, 8-11, 15-16, 19-21, 23-27, 31, 33, 36-49

***These footnotes are provided as advice to a prescribing Forest Professional, and are not to be interpreted as a measurable, verifiable, or enforceable part of the Stocking Standards.*

BEC - Biogeoclimatic Ecosystem Classification	
CWH Coastal Western Hemlock zone vm1 very wet maritime subzone, submontane variant vm2 very wet maritime subzone, montane variant wm wet maritime subzone ws1 wet subarctic subzone, submontane variant ws2 wet subarctic subzone, montane variant	ICH Interior Cedar-Hemlock zone mc1 moist cold subzone, Nass variant m1a moist cold subzone, Nass variant, Amabilis fir phase mc2 moist cold subzone, Hazelton variant MH Mountain Hemlock zone mm1 moist maritime subzone, windward variant mm2 moist maritime subzone, leeward variant
ESSF Engelmann Spruce Subalpine Fir zone mk moist cool subzone ww wet very cold subzone	

Conifer Tree Species		Broadleaf Tree Species
"Ba" means amabilis fir "Bl" means subalpine fir; "Cw" means western red cedar; "Fd" means Douglas-fir; "Hm" means mountain hemlock; "Hw" means western hemlock; "Lw" means western larch;	"Pl" means Lodgepole pine; "Sb" means black spruce; "Sw" means white spruce; "Se" means Engelmann spruce; "Sx" means hybrid or interior spruce; "Yc" means yellow cedar.	"Act" means black cottonwood; "At" means trembling aspen; "Dr" means alder "Ep" means common paper birch;
In all BEC zones except the ESSF, the terms Ss, Sx and Sxs are used interchangeably; in the ESSF BEC zone, the terms Se, Sx and Sxs are used interchangeably. The terms are a reflection of the seed registration and are not indicative of the genetic material.		

APPENDIX 3: THE WOODLOT LICENCE PLAN MAP

APPENDIX 4: REVIEW AND COMMENT

A) ADVERTISING

[Enter Details]

B) REFERRALS

[Enter Details]

C) COPY OF WRITTEN COMMENTS RECEIVED

[Enter Details]

D) REVISIONS MADE BECAUSE OF WRITTEN COMMENTS RECEIVED

[Enter Details]

E) EFFORTS MADE TO MEET WITH FIRST NATIONS

[Enter Details]

III. SUPPLEMENTAL INFORMATION

EXEMPTIONS

Not applicable. No exemptions have been made in this woodlot licence plan.

RATIONALE IN SUPPORT OF PROPOSED ALTERNATIVE PERFORMANCE REQUIREMENTS

Regarding PRACTICE REQUIREMENTS – Wildlife Tree Retention, as per the Kalum Sustainable Resource Management Plan, 5% WTRA is required in the Skeena River Kalum LU in the CWHws biogeoclimatic zone.