

KENKKNEM FOREST TENURES LTD.



First Nations Woodlands Licence N11 Forest Stewardship Plan

Version 4.0

100 Mile House Forest District, 100 Mile House TSA

Authorized and Acknowledging Signature of Licence Holder:

Chief Helen Henderson
President of Keneknem Forest Tenures Ltd.

Date

Submitting Forester: John Kalmokoff, RPF
Manager of Keneknem Forest Tenures Ltd.

Date

TABLE OF CONTENTS

1	Introduction from the Canim Lake Band.....	3
2	Definitions.....	4
3	Administration	8
	3.1 Commencement date	8
	3.2 Term of Plan	8
	3.3 Ownership, Agreement Holder, Tenure and Declared Areas.....	8
	3.4 Forest Development Unit (FDU 1)	8
	3.5 Identification of Required Values.....	10
	3.6 Content of this FSP.....	10
4	Objectives.....	11
	4.1 Cultural Heritage Resources	11
	4.2 Soils.....	13
	4.3 Timber.....	13
	4.4 Wildlife.....	14
	4.4.1 Wildlife-Mountain Caribou	14
	4.4.2 Wildlife-Mule Deer	15
	4.4.3 Wildlife-Moose-High Value Wetlands.....	15
	4.4.4 Wildlife-Grizzly Bear.....	18
	4.4.5 Wildlife-Species at Risk (SAR).....	20
	4.4.6 Wildlife-Furbearers	23
	4.5 Water, Fish, Wildlife and Biodiversity within Riparian Areas	24
	4.5.1 Fish Habitat in Fisheries Sensitive Watersheds.....	24
	4.5.2 Water in Community Watersheds	24
	4.5.3 Riparian–Critical Fish Habitat.....	25
	4.5.4 Riparian-Salmon.....	25
	4.5.5 Riparian-Lakes Management.....	26
	4.5.6 Riparian-Reserve and Management Zones.....	28
	4.5.7 Riparian-Watershed Hydrologic Stability	30
	4.6 Wildlife and Biodiversity at the Landscape Level-Seral, Patch and Connectivity	32
	4.7 Wildlife and Biodiversity at the Landscape Level-Old Growth Management Areas (OGMA).....	36
	4.8 Wildlife and Biodiversity at the Stand Level.....	38
	4.9 Visual Quality.....	40
	4.10 Wildcraft, Backcountry and Roaded Access.....	42
	4.11 Tourism.....	43
	4.12 Recreation Sites, Trails, Interpretive Forests and Buffered and Non- Buffered Trails	44
	4.13 Grasslands Benchmark	45
	4.14 Range-Grazing.....	46
5	Measures	45
	5.1 To Mitigate Effects of Removing or Rendering Ineffective Natural Range Barriers	45
	5.2 To Prevent the Introduction or Spread of Invasive Plants	46
6	Silviculture.....	47
	6.1 Free Growing Stands.....	47
7	Appendices.....	53

1 Introduction from the Canim Lake Band

This Forest Stewardship Plan (FSP) was written for the Canim Lake Band's forest tenure, First Nations Woodland Licence (FNWL) N11 which is held on behalf of the Canim Lake Band by Keneknem Forest Tenures Ltd. (Keneknem). The Canim Lake Band has approved this FSP. As a right of self-government, the Canim Lake Band has authority to engage with the District in respect to any matters arising from the application and interpretation of this FSP.

The tenure management goals are:

- Fully meet or exceed legislated tenure requirements.
- Manage the forest tenure as an island, use adaptive management to express and explore unique community First Nations values, goals and aspirations.
- Meet the ongoing challenges presented by climate change.
- Provide direct benefits to the Canim Lake Band: jobs, earnings and the maintenance of traditional cultural heritage values and uses over the tenure.

An FSP is not a land use plan, it is the link between land use planning and operational forestry. In general the purpose of an FSP is to meet the requirements of legislation and of the Crown's 1996 land use plan, the CCLUP. However, under this specific FSP elements of the Canim Lake Band's community land use plan have also been incorporated.

Results and Strategies are the way in which FSP objectives are achieved or implemented. These terms are legally defined under FRPA. In layman's terms a Strategy usually involves some degree of professional judgement and consists of measurable or verifiable steps or practices. Such as, was a Species at Risk Assessment done for a block, or was an appropriate road closure installed after harvesting? Strategies can be evaluated with a qualified yes or no answer. A result has measurable and verifiable on the ground outcomes that are not subject to professional judgement. Results are evaluated through direct on-site measurement or counting. For example, were the correct number of trees reserved from harvest or was a legally required 20 meter riparian reserve zone on a stream created and reserved during harvesting?

2 Definitions

Terms used in this FSP have the definition given them, as on the date of FSP submission in the Forest and Range Practices Act (FRPA), the Forest Act and their associated regulations. The FSP holder also adopts the definitions as provided in the old Forest Practices Code Guidebooks. Definitions specific to this FSP are included in this section. For ease of use some definitions are listed with the appropriate FSP sections. To help with readability, the first use of any definition starting below, is **bold and underlined**. Subsequent uses are in **bold**. *Italics* are used to highlight important data, documents or legislation outside of forest legislation that are directly referenced in the FSP.

Access Control – means a barrier located on a road running surface which is designed to make the road beyond the **access control** point impassable with a motor vehicle as defined under the Motor Vehicle Act. Types of **access control** include, but are not limited to: gates, cement blocks, deep trenches, ripping the road surface for greater than 100 meters, the piling of debris on the road, or a combination of these methods.

Agreement with the Canim Lake Band – the **Canim Lake Band** claims aboriginal title of, and is the steward of the forested lands within FDU 1. **Agreement with the Canim Lake Band** is a process whereby third party tenure holders may seek a negotiated compromise agreement, utilizing the Chief and Council of the **Canim Lake Band** as a mediator, when third party tenure holders are unable to make a satisfactory agreement with Keneknem Forest Tenures Ltd. on **mitigations**. It involves meetings, negotiation, compromise and agreement between the parties to produce measures or **mitigations** for the **FSP** holder to implement regarding the application of this **FSP**. If mediation is not successful, **Canim Lake Band** will act as an arbitrator and the **FSP** holder will implement the **mitigations** as determined by **Canim Lake Band**.

Assessment – A judgment, decision advice or opinion undertaken by a **QRP** on behalf of the **FSP** holder. An **assessment** under this **FSP** is consistent with and maintains compliance with **FSP** approved Results and Strategies. An **assessment** develops a professional judgement, decision, advice or opinion to address **FSP** approved Results or Strategies. An **assessment** may also consider input from a **referral and or notification**. An **assessment** is a professional document kept as a record by the **FSP** holder.

Blocks – are areas proposed for commercial timber harvesting. **Blocks** are proposed during **timber development**.

Canim Lake Band (Canim) – The Tsq’escenemc are a distinct aboriginal people, many of whom occupy a community on IR#1 under the governance of the **Canim Lake Band**. The main village and administration buildings of the Band is situated in the South Cariboo area, approximately 30 kilometers east of 100 Mile House on the Canim Hendrix Road.

Crown – means Minister or a representative of Forests, Lands, Natural Resource Operations and Rural Development or its equivalent if the name changes.

Cutblock – means a specific area with well-defined boundaries on which the **FSP** holder has been authorized to harvest timber by the **Crown**. Spatially, it consists of **block** plus any associated **WTRAs**. A **cutblock** is proposed during **timber development** and comes into existence when the **Crown** grants a cutting authority over it.

Essential for insect control – means where harvest is essential to curtail severe damage to forest values at the landscape level in a beetle management unit classified as suppression in the most recent District forest health strategy for that insect pest, and;

- a) there are >75 trees in an infestation site(s) and careful sanitation harvest practices are conducted only within the infestation site, or
- b) there are 15-75 trees in an infestation site(s) and careful sanitation harvesting practices are conducted only within the infestation site(s), after trap trees have first been used to the extent possible and where effective, and
- c) in the case of an OGMA, all identified infestation sites within 500m of an infested OGMA will be addressed prior to or in conjunction with insect control activities in the OGMA.

Within **essential for insect control**, the following are defined:

- Beetle management unit means a management area within which a landscape level beetle management strategy defined by the **Crown** is implemented
- Suppression means a bark beetle control strategy as identified in the most recent district forest health strategy that is designed to reduce or keep the outbreak to a size and distribution that can be handled by treating 80% or more of the infestations found on the most current aerial overview inventory.
- Infestation site means a contiguous bark beetle infestation of trees which includes all currently infested trees that are separated by no more than 50m from any other currently infested trees or tree
- Careful sanitation harvest practices means harvesting with the following requirements;
 - a) mark to cut after a detailed ground-based survey before harvesting targeting infested trees only for harvest, using existing skid trails or new ones <5m wide to the extent practicable, the harvest or damage of non-infested trees is limited to 10% of total volume of currently infested stems to be removed, and
 - b) harvesting and removal must be completed before April 1, the harvest stumps are to be <30cm and on the uphill side, and
 - c) all large fresh debris (>2m long and >20cm in diameter) that could attract or harbour bark beetles must be removed, de-barked or burned before April 1.
 - d) Additional requirements in OGMAs are as follows;
 - no new landings are to be constructed within an OGMA
 - **roads** are only to be constructed in an OGMA where no other practicable location exists, and
 - old attack (grey or red non-infested trees) must be left on site when they are required to be felled due to safety concerns.

Fuel mitigation – are treatments in an approved community or regional wildfire plan that occur within Primary Fuel Breaks or Interface Fuel Breaks and that achieve:

- a) the reduction of fine surface debris, ladder fuels and small diameter trees in intermediate and overtopped crown classes and,
- b) the separation of tree crowns among individual trees or clumps within the dominant and co-dominant layers sufficient to mitigate the spread of a passive crown fire, to a maximum spacing of 6 meters between crowns
- c) minimal practicable impacts to Primary Old Seral Forest Characteristics in OGMAs, Riparian Reserve Zones, and Lakeshore Management Zones

Within **Fuel Mitigation** the following are defined:

- Primary Old Seral Characteristics are **Crown** forest within an Interface or Primary Fuel Break, large (>37.5 cm dbh) and very large (>57.5 cm dbh) trees, large coarse woody debris, and dead and declining trees where they do not represent a significant safety hazard.
- Primary Fuel Break-means a strategic landscape level fuel break outside interface fuel breaks, where treatments are authorized by the District Manager for the purpose of influencing wildfire behavior and facilitating fire-fighting activities.
- Interface Fuel Break-means fuel breaks where treatments are authorized by the District Manager to address protection of property and public safety by reducing the risk of ignition and spread of wildfire in key areas adjacent to the community.

Forest Stewardship Plan – (**FSP**) outlines the Results, Strategies, and Measures the licensee will follow to meet objectives for the landbase. Forest agreement holders must prepare, and have approved by government, a **forest stewardship plan** before harvesting or **road** building activities can begin. The **FSP** applies over a specific area of land, a forest development unit (FDU).

Mitigations/mitigative – actions and strategies to meet, manage or ameliorate concerns or issues related to **FSP** results and strategies. Concerns or issues can result from the **referral and notification** process, from Results and Strategies in this **FSP**, or from an **assessment**.

Mitigations address what actions are to be undertaken, by who, where they will be undertaken and when they will be completed.

Participating First Nations – are those Bands or First Nations that have a well-established and culturally or politically recognized Traditional Territory (supported by a verifiable strength of claim) that spatially overlaps with proposed **blocks** and or **roads** on FDU 1.

Qualified Registered Professional (ORP) - An agrologist, professional biologist, professional engineer or geoscientist, or forest professional, who has the appropriate certification or right to practice, education, experience and training to carry out the activity as per a regulatory body overseen by the Office of the Superintendent of Professional Governance.

Referral and or notification – A strategy employed by the **FSP** holder to inform and work with interested or affected parties who respond to proposed **blocks** and or **roads**, within the referral period. Its scope includes the general public, stakeholders, the **Crown**, First Nations and other parties. **Referral and notification** will be achieved by any two or more of the following means: direct letters, handouts, emails, phone calls, face to face conversation, notifications published in the local paper, posted on a community bulletin board, posted on the **Canim Lake Band** webpage or posted on the Cariboo Region Mapping Tool. The **referral and notification** process includes ongoing discussions and any eventual outcomes or **mitigations**. This process will be documented and records will be kept by the **FSP** holder.

Within **referral and or notification** referral period is defined as; a minimum of 60 calendar days during **referral and or notification** before the **FSP** holder may submit a cutting or road permit developed under this **FSP** to the **Crown** for legal issue. However, a **QRP** may determine that a shorter referral period is appropriate when harvesting is **essential for insect control**.

Road – is a road as per the definition in FPPR s.1(1). This definition is further refined to specify the clearing width of roads proposed for construction, upgrade or use.

SFSP (Snine Forest Stewardship Plan) – a land use plan covering Snine Forest, created and maintained by the **Canim Lake Band**, on behalf of the Tsq’escneme people, in accordance with management rights under Aboriginal Title. Among other things, this plan identifies Tsq’escneme known cultural heritage resources (as per FPPR s.10). A full copy of this plan is readily available on the **Canim Lake Band** webpage.

Timber Development - is a process of preparing to commercially harvest timber on **blocks** and or **roads** under the FNWL N11 licence. It includes the application of the approved Results and Strategies in this **FSP** during planning, **referral and or notification**, layout, mapping and all other activities required to secure a legal cutting authority, plus the completion of appropriate signed and sealed site plans.

Wildlife Tree Retention Area (WTRA) – means a Wildlife Tree Retention Area as defined by FPPR Sec 1(1).

3 Administration

3.1 Commencement date

This **FSP** commences on the date on which written approval of this plan by the minister or his delegate is made as per FRPA s.6(1)(b).

3.2 Term of Plan

The term of this **FSP** is five (5) years from the commencement date as per FRPA s.6(1)(a).

3.3 Ownership, Agreement Holder, Tenure and Declared Areas

Keneknem Forest Tenures Ltd. owns this **FSP** and is responsible for its creation, implementation and ongoing maintenance. Keneknem is also responsible for all Results, Strategies and associated outcomes under this **FSP**.

Keneknem Forest Tenures Ltd. is the agreement holder under this **FSP**.

This **FSP** applies to forest tenure FNWL N11. All Results and Strategies apply in Forest Development Unit 1 (FDU 1) and to all new **cutblocks** and to **blocks** and or **roads** that undergo **timber development** under this **FSP**. This **FSP**, consistent with FRPA s.21(2) and to facilitate ongoing forest management on Canim's historical site plan (FRPA) **cutblocks** and roads legally held by Keneknem but not approved under this **FSP** (version 4.0), may be applied to the historical **cutblock** or road by a site plan amendment, to replace specific Results, Strategies or other provisions.

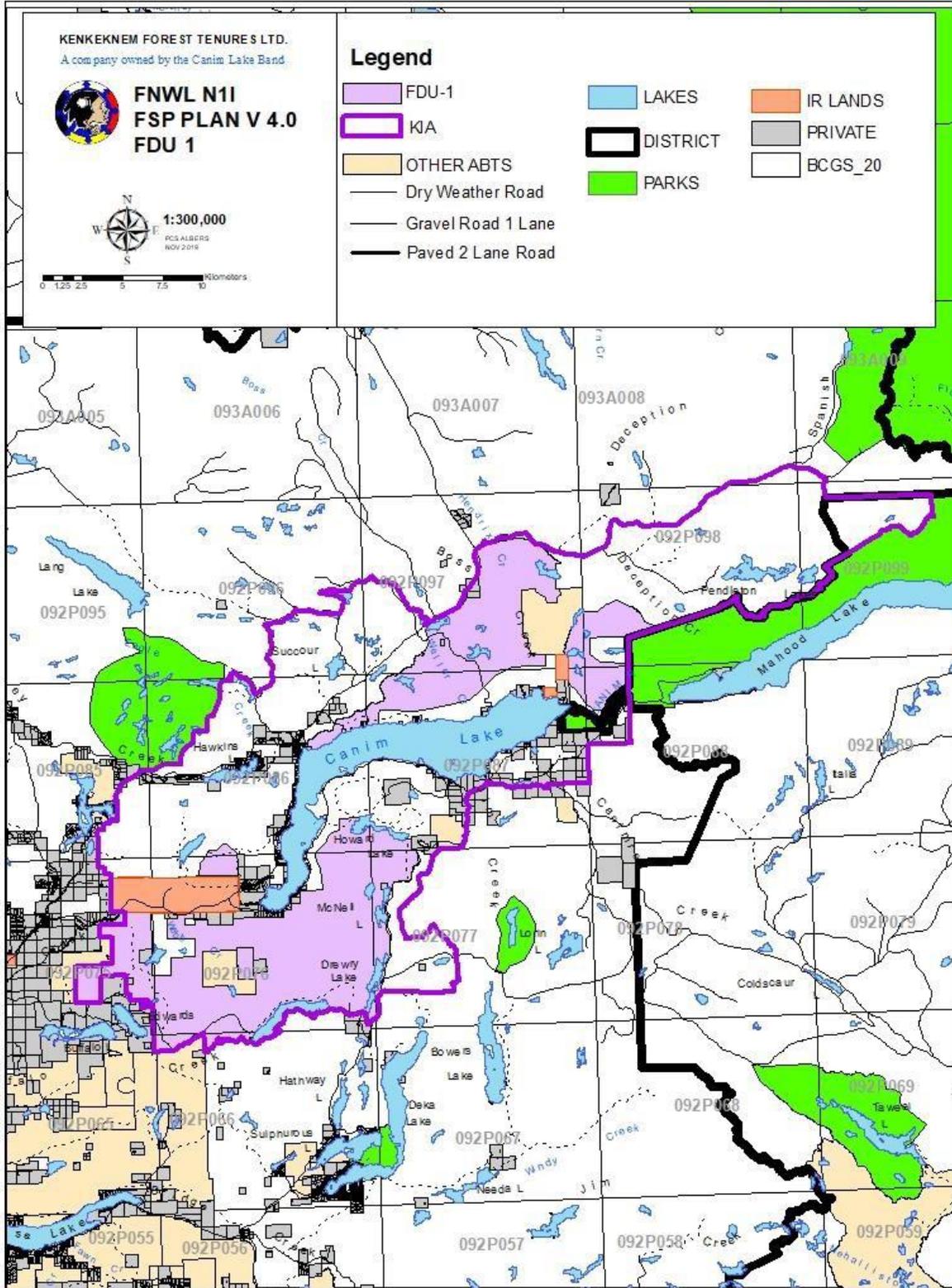
Since Keneknem's last **FSP** expired, there are no newly declared areas pursuant to Forest Planning and Practices Regulation (FPPR) s.14(4).

3.4 Forest Development Unit (FDU 1)

For the purposes of FRPA Section 5(1)(a)(ii) a map of FDU 1 is included on the following page (purple area). For the purposes of FPPR Section 14(1)(a) the agreement holder is Keneknem Forest Tenures Ltd. and the forest development unit is FDU 1.

FDU 1 excludes all existing private land, Indian reserves, federal land, woodlot licences, community forest licences, parks, ecological reserves and all other areas where harvesting under the authority of FNWL N11 is forbidden.

- FDU 1 consists of the current shape and area of First Nations Woodlands Licence N11.
- FDU 1 intersects with the following CCLUP zones: Canim ERDZ, Rail ERDZ and Interlakes SRDZ.
- FDU 1 contains the following biogeoclimatic ecosystem zones and subzones: IDFmw2, ICHdk, ICHmk3, ICHmw3, SBSdw1, SBSmm, ESSFwk1, SBPS
- FDU 1 is located within lands over which the **Canim Lake Band** asserts aboriginal title and is fully within the area covered by **Canim's** community Land Use Plan, the **SFSP**.



3.5 Identification of Required Values

In accordance with FPPR s.14(3)(j), the **FSP** holder has, at the time of **FSP** submission, the following active cutting permits:

- CP-002, CP-003 and CP-07H

In accordance with FPPR s.14(3), the **FSP** holder has, at the time of **FSP** submission, the following active road permits:

- RP-R18734

3.6 Content of this FSP

The content of this **FSP** is determined from a variety of sources including; FRPA, FPPR, the 2018 LUO, **Crown** policy/direction, and by Canim's **SFSP**. This **FSP** includes:

- 1) One Forest Development Unit (FDU) where timber harvesting and **road** construction activities may occur during the term of the plan.
- 2) A Result or Strategy for each forest management objective included in this **FSP**. These objectives address the conservation of soils, timber, wildlife habitat, riparian areas, biodiversity, cultural heritage resources, visual quality, and recreation sites. Each result must be achieved, and each strategy carried out in accordance with this **FSP**.
- 3) Requirements for growing new forests for areas harvested under this **FSP**.
- 4) Measures that must be taken to prevent the introduction and spread of invasive plants, and to mitigate the effects of breaching natural range barriers.
- 5) Appendices that support 1-4 above, and which are legally part of this **FSP**.

This **FSP** does not contain maps depicting the precise location of proposed **cutblocks** or **roads**. In addition, this **FSP** does not address all forest management concerns, nor does it address values in an exhaustive or comprehensive manner. Readers are reminded that the **FSP** holder must adhere to or may be affected by legislation, plans, policies and agreements including but not limited to those listed below. This **FSP** is only one document amongst many that regulate forest management activities in the province and should be read within that context.

First Nation Governance	
• Snine Forest Stewardship Plan	• G2G
Provincial Statutes	
• Ecological Reserve Act	• Park Act
• Environment and Land Use Act	• Protected Areas of British Columbia Act
• Environmental Management Act	• Range Act
• Forest Act	• Resort Timber Administration Act
• Forest and Range Practices Act (FRPA)	• Riparian Areas Protection Act
• FPC of BC Act	• Transport of Dangerous Goods Act
• Foresters Act	• Transportation Act
• Heritage Conservation Act	• Water Protection Act
• Land Act	• Water Sustainability Act
• Ministry of Environment Act	• Weed Control Act
• Ministry of Forests and Range Act	• Wildfire Act
• Motor Vehicle Act	• Wildlife Act
Federal Statutes	
• Canada Water Act	• Navigation Protection Act
• Canada Wildlife Act	• Pest Control Products Act
• Canadian Environmental Protection Act	• Species at Risk Act
• Transportation of Dangerous Goods Act	• Fisheries Act
• Migratory Bird Convention Act	

4 Objectives

4.1 Cultural Heritage Resources

Objective 1	Source of Objective
<p>The objective set by government for cultural heritage resources is to conserve, or, if necessary, protect cultural heritage resources that are</p> <p>(a) the focus of a traditional use by an aboriginal people that is of historic orcontinuing importance to that people, and</p> <p>(b) not regulated under the Heritage Conservation Act.</p>	<p>FPPR s.10.</p>
<p>Definitions</p>	
<p>Consent- FDU 1 covers FNWL N11, an exclusive area-based tenure of the Canim Lake Band. FDU 1 is in an area to which the Tsq’escenemc people (as represented by the Canim Lake Band) claim Aboriginal Title. Consent under this FSP is achieved by a letter of consent, issued by the Chief and Council of the Canim Lake Band, or from the Canim Lake Band Natural Resources Department that specifically consents to the proposed blocks and or roads.</p>	
<p>Cultural Heritage Resource (CHR) – a known resource within FDU 1 identified by a Participating First Nation’s land use plan, or a resource identified by a Participating First Nation during referral and or notification, or by a Traditional Use Study, or by a CHRE, on or near blocks and or roads. CHRs are the focus of a traditional use or are of historic or continuing importance.</p>	
<p>Cultural Heritage Resource Evaluation (CHRE) is an evaluation on blocks and or roads that is conducted by or under the supervision of an Archaeologist. The main purpose of the CHRE is to identify CHRs managed under the <i>Heritage Conservation Act</i>, however a CHRE may also identify CHRs that are not managed under the <i>Heritage Conservation Act</i>, such as more recent culturally modified trees. A CHRE may be any of: preliminary field reconnaissance (PFR), archaeological overview assessment (AOA) or an archaeological impact assessment (AIA).</p>	
<p>Key Interest Area (KIA)</p> <p>The Canim Lake Band’s Key Interest Area (“KIA”) is a 728 square kilometer area that includes Canim Lake and the main Tsq’escenemc community. It represents approximately 3.5% of the Traditional Territory of the Tsq’escenemc people. It is part of an area over which they assert Aboriginal Title. The Tsq’escenemc people, have occupied and used the KIA from time immemorial. They have deep roots in this land and the KIA is critical to their well-being and to their future as a distinct Indigenous people. The Canim Lake Band has put the Crown on notice that the KIA must be managed by the Band and that the Band has the right to solely benefit from the KIA in accordance with the United Nations Declaration on the Rights of Indigenous Peoples.</p>	

Result or Strategy**TO IDENTIFY AND MANAGE UNKNOWN CULTURAL HERITAGE RESOURCES:**

1. As a strategy (verifiable step), the **FSP** holder will, during **timber development** on proposed **blocks** and or **roads**, check with the **Crown** on which First Nations have expressed territorial interests in the area of proposed **blocks** and or **roads**.
2. As a strategy (verifiable step), the **FSP** holder will, during **referral and or notification**, share details concerning **proposed blocks** and or **roads** with **Participating First Nations**.
3. As a strategy (verifiable steps), the **FSP** holder will, during **referral and or notification** on proposed **blocks** and or **roads**, to identify **CHRs**:
 - a) if requested, participate in a fee for service Traditional Use Study with **Participating First Nations**, and or
 - b) undertake a **CHRE**
4. As a strategy (verifiable steps and practices), the **FSP** holder will, to manage **CHRs** identified by **Participating First Nations** under 3 above, that may be directly impacted by proposed **blocks** and or **roads** will, post-3 above, and during **referral and or notification** reach an agreement with **Participating First Nations** on **mitigations** and then implement the agreed upon **mitigations** to the extent practicable.
5. As a strategy (verifiable steps and practices), the **FSP** holder will, if during primary forest activities on **blocks** and or **roads**, a **CHR** is encountered or reasonably suspected, halt primary forest activities in the immediate area and advise **Participating First Nations**. 3a) and or 3b) and 4 above will be re-initiated as appropriate.

TO MANAGE KNOWN CULTURAL HERITAGE RESOURCES

6. As a strategy (verifiable steps and practices), the **FSP** holder acknowledges that the **Canim Lake Band** has, through its **SFSP**, identified known cultural heritage resources that are of historical and cultural importance and are the focus of ongoing traditional use by the Tsq'escenemc people. Therefore, the **FSP** holder will consider the content of the **SFSP** Version 3.1, during **timber development** and the **referral and or notification** period. This consideration will be documented in the **referral and or notification** process. Furthermore the **FSP** holder will, prior to commencing harvesting and or road construction on **blocks** and or **roads**, and to complete the **referral and or notification** process, obtain a letter of **consent** from the **Canim Lake Band** regarding the harvesting and or **road** construction.

4.2 Soils

Objective 2	Source of Objective
The objective set by government for soils is, without unduly reducing the supply of timber from British Columbia's forests, to conserve the productivity and the hydrologic function of soils.	FPPR s.5.
Result or Strategy	
<ol style="list-style-type: none"> 1. As a strategy (verifiable step) and a result (measurable outcome) the FSP holder adopts and will comply with FPPR s.35 (Soil Disturbance Limits) and s.36 (Permanent Access Structure Limits) on cutblocks during timber development, primary forest activities and during the implementation of 3 below. 2. As a strategy (verifiable step), the FSP holder will consider the content of <i>FREP Extension Note #28, Temporary Access Structures: Considerations for Site Plans and Post-Harvest Assessments</i> during timber development on proposed blocks. 3. As a strategy (verifiable step), the FSP holder will, during timber development and primary forest activities on proposed cutblocks and or roads, implement the SAR specific results of any Identify SAR Assessment completed under FSP Section 4.4.5 Wildlife-Species at Risk (SAR) when designing and maintaining road systems. 	

4.3 Timber

Objective 3	Source of Objective
<p>The objectives set by government for timber are to</p> <ol style="list-style-type: none"> a) maintain or enhance an economically valuable supply of commercial timber from British Columbia's forests, b) ensure that delivered wood costs, generally, after taking into account the effect on them of the relevant provision of this regulation and of the Act, are competitive in relation to equivalent costs in relation to regulated primary forest activities in other jurisdictions, and c) ensure that the provision of this regulation and of the Act that pertain to primary forest activities do not unduly constrain the ability of a holder of an agreement under the Forest Act to exercise the holder's rights under the agreement. 	FPPR s.6.
Result or Strategy	
No Result or Strategy. Under FPPR s.12(8) A person who is required to prepare a forest stewardship plan is exempt from the requirement to prepare results and strategies for an objective set by government for timber.	

4.4 Wildlife

Objective 4	Source of Objective
<p>The objective set by government for wildlife is, without unduly reducing the supply of timber from British Columbia's forests, to conserve sufficient wildlife habitat in terms of amount of area, distribution of areas and attributes of those areas, for</p> <p>(a) the survival of species at risk, (b) the survival of regionally important wildlife, and (c) the winter survival of specified ungulate species.</p>	FPPR s.7.
Result or Strategy	
No Result or Strategy as no notices under FPPR s.7(2) have been provided within the area of FDU 1.	
<p>Comment: Despite no FPPR s. 7(2) notices the FSP holder employs FSP Sections 4.4.1 to 4.5.7, 4.5 Water, Fish, Wildlife and Biodiversity within Riparian Areas (inclusive of FSP Sections 4.5.1 to 4.5.7), 4.6 Wildlife and Biodiversity at the Landscape Level-Seral, Patch and Connectivity and 4.7 Wildlife and Biodiversity at the Landscape Level-Old Growth Management Areas (OGMA) and 4.8 Wildlife and Biodiversity at the Stand Level. These all support wildlife populations and their habitat as per the FPPR s.7 Objective.</p>	

4.4.1 Wildlife-Mountain Caribou

Objective 5	Source of Objective
<p>1. Boss/Deception SRDZ: To maintain <i>caribou</i> habitat as per the Eastern Caribou strategy (estimated to preclude harvest from 29% of the forest polygon and require modified harvest over an additional 15%)</p> <p>2. GAR orders 5-115, 5-116 and 5-117</p>	CCLUP 90-Day report p.61, 121, 156, 157.
Result or Strategy	
<p>1. As a strategy (verifiable steps), the FSP holder will, to support and maintain general caribou habitat within FDU 1 during the term of this FSP, employs FSP Sections 4.4 Wildlife (inclusive of FSP Sections 4.4.2 to 4.5.7), 4.5 Water, Fish, Wildlife and Biodiversity within Riparian Areas (inclusive of FSP Sections 4.5.1 to 4.5.7) , 4.6 Wildlife and Biodiversity at the Landscape Level-Seral, Patch and Connectivity and 4.7 Wildlife and Biodiversity at the Landscape Level-Old Growth Management Areas (OGMA) and 4.8 Wildlife and Biodiversity at the Stand Level.</p> <p>2. As a strategy (verifiable steps), to manage for Mountain Caribou at the operational level (during timber development and primary forest activities on blocks and or roads), the FSP holder employs FSP Section 4.4.5 Wildlife-Species at Risk (SAR).</p>	
<p>Comment: FDU 1 does not overlap with Boss/Deception SRDZ or with GAR Orders 5-115, 5-116, 5-117.</p>	

4.4.2 Wildlife-Mule Deer

Objective 6	Source of Objective
<ol style="list-style-type: none"> 1. Maintain mule deer winter range values through modified harvest regimes over the appropriate percentage of the forest polygon by CCLUP subzone. 2. Maintain mule deer winter range values in a condition that will support the regional population during critical winter conditions. 3. GAR order U-5-003. 	<p>CCLUP 90-Day Report p.60-133 CCLUP 90-Day Report p.155.</p>
Result or Strategy	
<ol style="list-style-type: none"> 1. As a strategy (verifiable steps), the FSP holder will, to support modified harvest regimes within FDU 1 during the term of this FSP, employs FSP Sections 4.4 Wildlife (inclusive of FSP Sections 4.4.1, 4.4.3 to 4.5.7), 4.5 Water, Fish, Wildlife and Biodiversity within Riparian Areas (inclusive of FSP Sections 4.5.1 to 4.5.7) , 4.6 Wildlife and Biodiversity at the Landscape Level-Seral, Patch and Connectivity and 4.7 Wildlife and Biodiversity at the Landscape Level-Old Growth Management Areas (OGMA) and 4.8 Wildlife and Biodiversity at the Stand Level. 2. As a strategy (verifiable step) and a result (measurable outcome), the FSP holder adopts and will comply with the general wildlife measures specified in GAR Order U-5-003 during timber development and primary forest activities on blocks and or roads that overlap with Mule Deer Winter Range. 	

4.4.3 Wildlife-Moose-High Value Wetlands

Objective 7	Source of Objective
<ol style="list-style-type: none"> 1. Interlakes Canim and Rail ERDZs: To manage for grizzly bear, <i>moose</i>, furbearer, species at risk and other sensitive habitats within the areas identified as riparian buffers, recreation areas, mule deer winter range and lakeshore management zones and throughout the polygon under the biodiversity conservation strategy. 2. Manage access to limit permanent access and road crossings of wetlands. <i>Moose</i>: the overall objective is to maintain habitat through maintenance of: <ul style="list-style-type: none"> • Forested buffers around wetlands and riparian areas • Cover and early seral(shrubby) upland winter habitats • Other aspects of moose habitat needed on a site-specific basis, including calving areas and summer habitat protection • Careful access management, including limitation on permanent access, deactivation of temporary roads..... 3. Objective 32 Retain sufficient vegetation to provide security and thermal cover for wintering moose adjacent to high value wetlands shown on <u>map 11</u> and defined by the spatial dataset, <u>Cariboo-Chilcotin High Value Wetlands for Moose</u>, and adjacent to W1, W3 or W5 wetlands, including shrub-carrs. 	<p>CCLUP 90-Day Report p.61, 67, 69, 121, 125, 127, 129.</p> <p>CCLUP 90-Day Report p.155-156</p> <p>Sept, 2018 ILMB LUO</p>

Definitions

Security Cover - means sufficiently stocked live conifers averaging greater than 3 meters in height.

Thermal Cover - means sufficiently stocked conifers greater than or equal to 15 meters tall with greater than 40% crown closure. For the SBPS, IDF, or MS BEC zones, if 15 meter stands are not available then greater than or equal to 8 meters tall with greater than 40% crown closure conifer stands will be acceptable as **thermal cover**. **Thermal cover** may also serve as **security cover**.

Visual screen - means vegetation, topography, or woody debris piles that obscure 50% of the view from a **road** surface directly towards a High Value Wetland for Moose.

Shrub-carr means a wetland > 1 ha in size that is shrub dominated and comprised of scrub birch and willows up to 2m tall, developed on mineral soils that are periodically saturated, but rarely inundated

Result or Strategy

1. As a strategy (verifiable steps), the **FSP** holder will, to support general habitat for moose calving and summer use within FDU 1 during the term of this **FSP**, employs **FSP** Sections 4.4 Wildlife (inclusive of **FSP** Sections 4.4.1 to 4.4.2, 4.4.4 to 4.5.7), 4.5 Water, Fish, Wildlife and Biodiversity within Riparian Areas (inclusive of **FSP** Sections 4.5.1 to 4.5.7) , 4.6 Wildlife and Biodiversity at the Landscape Level-Seral, Patch and Connectivity and 4.7 Wildlife and Biodiversity at the Landscape Level-Old Growth Management Areas (OGMA) and 4.8 Wildlife and Biodiversity at the Stand Level.
2. As a strategy (verifiable step), the **FSP** holder will use the high value wetlands (i.e. High Value Wetlands for Moose) shown on the *map 11* and defined by the spatial dataset, *Cariboo-Chilcotin High Value Wetlands for Moose*, during **timber development** on proposed **blocks** and or **roads**.
3. As a strategy (verifiable practice), the **FSP** holder will, during **timber development**, to manage access and to limit permanent access and **road** crossing of wetlands, not place new **roads** across a FPPR classifiable wetland or within a FPPR classifiable lake or wetlands riparian management zone.
4. As a strategy (verifiable practices), the **FSP** holder may be inconsistent with 3 above for **road** or fence construction, where there is no other practicable location, and in the case of a **road**, it is necessary to provide access for further **timber development**.
5. As a strategy (verifiable step and practice), the **FSP** holder will, on any **block** that is within 1000 meters (GIS buffer) of a High Value Wetlands for Moose, complete an **assessment** to determine if 4x4 road densities exceed 0.6 km/km² within the 1000 meters (GIS buffer). If yes, then, deactivate or establish **access control**(s) to eliminate vehicular access on new **road** systems within the 1000 meter buffer. This will be achieved within 60 snow free days (with no road bans in effect) from the last timber-marked load of logs leaving the block.
6. As a strategy (verifiable practice), any **access control** established by the **FSP** holder under 5 above, will be maintained as practicable until the **road** is permanently deactivated.
7. As a strategy (verifiable practice), where the **FSP** holder harvests a **block** within 500 meters (GIS buffer) of a High Value Wetlands for Moose, the **FSP** Holder will ensure that a **visual screen** is retained for **roads** on that portion of the **block** within the 500 meters. This will be achieved within 60 snow free days (with no road bans in effect) from the last timber-marked load of logs leaving the block.

8. As a result (measurable outcomes), the **FSP** holder will, on **blocks** and or **roads** within 100 meters (GIS buffer) of a W1, W3, W5 or **shrub-carr** or within 200 meters (GIS buffer) distance of a High Value Wetlands for Moose, not fall below the following biogeoclimatic zone(s) specific minimum targets for **security** and **thermal cover** in those buffers to the extent practicable;
- SBPS, IDF and MS 30% **thermal cover**, 40% **security cover**
 - SBS 33% **thermal cover**, 33% **security cover**
 - ICH and ESSF 60% **thermal cover**, 20% **security cover**
- This condition will be achieved within 60 snow free days (with no road bans in effect) from the last timber-marked load of logs leaving the block.
9. As a strategy (verifiable practices), if 8 above applies to the **FSP** holder's **timber development** and the combined area in hectares of a buffer from 8 above plus its associated feature is greater than 6 hectares in size then for all **security and thermal cover** retained under 8 above, patches will be greater than or equal to 200 meters wide and greater than 4 hectares in size and not greater than 400 meters apart (where more than one patch is established). This condition will be achieved within 60 snow free days (with no road bans in effect) from the last timber-marked load of logs leaving the block.
10. As a strategy (verifiable practice), the **FSP** holder may be inconsistent with 7 and 8 above when harvesting is **essential for insect control** or for **fuel mitigation**.
11. As a strategy (verifiable step and practices), the **FSP** holder will, during **road** construction, not construct a **road** within 200 meters (GIS buffer) of a High Value Wetlands for Moose, or within 100 meters (GIS buffer) of a W1, W3, W5 or **shrub-carr**, unless there is no other practicable **road** location and the **road** is necessary to provide access for further **timber development**.

4.4.4 Wildlife-Grizzly Bear

Objective 8	Source of Objective
<ol style="list-style-type: none"> 1. Interlakes SRDZ, Canim and Rail ERDZs: To manage for <i>grizzly bear</i>, moose, furbearer, species at risk and other sensitive habitats within the areas identified as riparian buffers, recreation areas, mule deer winter range and lakeshore management zones and throughout the polygon under the biodiversity conservation strategy. 2. Objective 33 Apart from existing WHA's, retain security cover adjacent to critical grizzly bear foraging habitats which include salmon and trout spawning reaches or shoals, and herb-dominated avalanche tracks and run out zones on southerly and westerly aspects, in very high, high and moderate capability grizzly bear units shown on <i>map12</i> and defined by the spatial dataset, <i>Cariboo-Chilcotin Grizzly Bear Capability</i>. 3. Objective 34 In very high, high or moderate capability grizzly bear units shown on <i>map12</i> and defined by the spatial dataset, <i>Cariboo-Chilcotin Grizzly Bear Capability</i>, conduct silviculture treatments on cutblocks that retain as much existing natural berry production as practicable. 	<p>CCLUP 90-Day Report p.61, 67, 69, 121, 125, 127, 129</p> <p>Sept, 2018 ILMB LUO.</p>
Result or Strategy	
<ol style="list-style-type: none"> 1. As a strategy (verifiable steps), the FSP holder will, to support general Grizzly bear habitat within FDU 1, employs FSP Sections 4.4 Wildlife (inclusive of FSP Sections 4.4.1 to 4.4.3, 4.4.5 to 4.5.7), 4.5 Water, Fish, Wildlife and Biodiversity within Riparian Areas (inclusive of FSP Sections 4.5.1 to 4.5.7) , 4.6 Wildlife and Biodiversity at the Landscape Level-Seral, Patch and Connectivity and 4.7 Wildlife and Biodiversity at the Landscape Level-Old Growth Management Areas (OGMA) and 4.8 Wildlife and Biodiversity at the Stand Level. 2. As a strategy (verifiable steps), to manage for Grizzly Bear at the operational level (during timber development and primary forest activities on blocks and or roads), the FSP holder employs FSP Section 4.4.5 Wildlife-Species at Risk (SAR). 3. As a strategy (verifiable practice), the FSP holder will, during timber development on proposed blocks and or roads, to retain security cover adjacent to critical grizzly bear foraging habitats which include salmon and trout spawning reaches or shoals in very high, high and moderate capability grizzly bear units shown on <i>map12</i> and defined by the spatial dataset, <i>Cariboo-Chilcotin Grizzly Bear Capability</i>, not place blocks and or roads within a FPPR riparian management zone, on any fish bearing system that is within high, very high and moderate capability grizzly bear units. 4. As a strategy (verifiable step and practice), the FSP holder may be inconsistent with 2 above if a road is necessary to provide access for further timber development and there is no other practicable location. 	

5. As a strategy (verifiable step and practice), the **FSP** holder will, during **timber development** on proposed **blocks** and or **roads**, to retain security cover adjacent to critical grizzly bear foraging habitats which include herb-dominated avalanche tracks and run out zones on southerly and westerly aspects (as determined by a **QRP**), in very high, high and moderate capability grizzly bear units shown on map12 and defined by the spatial dataset, Cariboo-Chilcotin Grizzly Bear Capability, not place **blocks** and or **roads** within 100 meters of such a feature, unless it is for **road** or fence construction, where there is no other practicable location.
6. As a strategy (verifiable practices and steps), the **FSP** holder will, on site plan **blocks** under this **FSP**, in very high, high or moderate capability grizzly bear units shown on map12 and defined by the spatial dataset, Cariboo-Chilcotin Grizzly Bear Capability, in order to retain as much existing natural berry production as is practicable during silviculture treatments required to achieve free growing plantation conditions:
 - a) NOT apply aerial herbicides to control brush
 - b) utilize site plan data collection (or equivalent) on **blocks** to identify and quantify (via estimated % cover) existing natural berry production
 - c) subject to the requirements of **FSP** Section 6.1 Free Growing Stands, conduct an **assessment(s)** when prescribing silviculture treatments on **blocks** with the goal of retaining existing natural berry production levels identified under b) above until free to grow is achieved.

4.4.5 Wildlife-Species at Risk (SAR)

Objective 9	Source of Objective
1. The objective set by government for wildlife is, without unduly.... from British Columbia's forests, to conserve sufficient <i>wildlife habitat</i> in terms of amount of area, distribution of areas and attributes of those areas, for the survival of <i>species at risk</i> 2. Interlakes SRDZ; and Canim, Rail ERDZs: to manage for grizzly bear, moose, furbearer, <i>species at risk</i> and other <i>sensitive habitats</i> within the areas identified as riparian buffers, recreation areas, mule deer winter range and lakeshore management zones and throughout	FPPR s.7. CCLUP 90-Day Report p.61, 67, 69, 73, 121, 123, 125, 127, 129.

Definitions (listed non-alphabetically to aid in understanding the SAR process)

Identify SAR Assessment-is two part proactive **assessment** (office/field) that looks for **SAR Signs** and **SAR Key Habitat Features** during **timber development** on or near **blocks** and or **roads**. The process is as follows:

- a) Office-utilize known information and the **SAR Table** to generate a list of **Likely SAR**.
- b) Field-complete and document a field review to look for **SAR Signs** and **SAR Key Habitat Features** for **Likely SAR** within **SAR Search Buffers** as appropriate.
- c) Field-document and GPS any **SAR Signs** and **SAR Key Habitat Features** identified within **SAR Search Buffers**

Likely SAR-are those SAR which could reasonably occur, based on an office review of **SAR Habitats** within **SAR Search Buffers**.

To identify **Likely SAR**, the **Identify SAR Assessment** utilizes the **SAR Table**, plus mapping software and available GIS data which may include: BEC zones, grasslands benchmarks, applicable mapped wildlife habitat zones, forest cover data (seral/tree species/etc.), trim data (slope, aspect, elevation, riparian features), ortho-photos, fish-wizard or more focussed CDC queries. It may also include other information such as local knowledge, or Traditional First Nations knowledge.

This is a coarse filter process which determines where (within the **SAR Search Buffers**) and what (SAR and their **SAR Key Habitat Features**) to look for in the field. For example, some species are known to occur only in certain BEC zones, or below certain elevations, or only in riparian areas. Species that do not have potential **SAR Habitats** within **SAR Search Buffers** are not **Likely SAR** and do not move forward to the field portion of the **Identify SAR Assessment**. For example, if the **blocks** and or **roads** are in the ICH, and badger is not known to occur in the ICH (based on the **SAR Table**), then badger may be dropped from the list of **Likely SAR** for those **blocks** and or **roads**.

Likely SAR move forward to the field portion of that particular **Identify SAR Assessment**. In addition to a list of **Likely SAR** the office portion of the **Identify SAR Assessment** also produces maps which show where to go and look for those SAR and or **SAR Key Habitat Features**, within the **SAR Search Buffers**. For example, a **QRP** may look for badgers, in the IDF, where the **SAR Search Buffer** overlaps

the grasslands benchmark.

SAR Table-Is utilized by the **Identify SAR Assessment**. A list of potential SAR was derived from a CDC spatial query on FDU 1 for SAR. This was further refined based on **Crown** requirements. Readily known information was used to populate the SAR table, including the **Crown's** 2004 IWMS. The **SAR Table** contains the following defined fields and was populated by a **QRP(RP BIO)**:

SAR TABLE FIELD	DEFINITION
SAR SEARCH BUFFER	Spatial buffers (GIS) around and including proposed blocks and or roads . These buffers are used in the office in a GIS to help determine Likely SAR . They are then loaded into a GPS to support field checking of lands within the buffers for SAR Signs and or SAR Key Habitat Features . Each SAR has its own SAR Search Buffer .
SAR HABITATS	Support the office portion of the Identify SAR Assessment . Describe habitats used by a SAR based on life requisites. The purpose of the SAR HABITAT field is to focus the field search for SAR Key Habitat Features within SAR Search Buffers .
SAR SIGNS	Field evidence that indicates a SAR has been present. These can include a direct SAR sighting, sheds, fur or tracks. These are used to help find and identify SAR Key Habitat Features within SAR Search Buffers .
SAR KEY HABITAT FEATURES	Habitat features or very specific habitat types that are looked for in the field that indicate active use of a feature or specific area by SAR for breeding, denning, nesting, roosting or spawning.
NO PRIMARY FOREST ACTIVITY AREAS	A spatial buffer (GIS) around a SAR Key Habitat Feature from which all primary forest activities associated with the blocks and or roads under the Identify SAR Assessment are excluded.
NWZ-LOGGING	A spatial buffer (GIS) around an active SAR Key Habitat Feature that sets a no work zone distance for logging associated with the blocks and or roads under the Identify SAR Assessment (a no work zone does not preclude primary forest activities).
NWZ-MACHINERY	A spatial buffer around an active SAR Key Habitat Feature , that sets a no work zone distance associated with the blocks and or roads under the Identify SAR Assessment , for off-block logging trucks, and heavy machinery used for site preparation, road building, road deactivation, etc. (a no work zone does not preclude primary forest activities).
TIMING-WINDOW	A period of time that is critical for SAR when utilizing SAR Key Habitat Features . For example, a nesting/incubating and fledging period for an active SAR bird. Timing Windows are applicable to NWZ's (no work zones).

Result or Strategy

1. As a strategy (verifiable steps), the **FSP** holder will, to support landscape level wildlife and sensitive habitats for SAR within FDU 1 during the term of this **FSP**, employs **FSP** Sections 4.4 Wildlife (inclusive of FSP Sections 4.4.1 to 4.4.4, 4.4.6 to 4.5.7), 4.5 Water, Fish, Wildlife and Biodiversity within Riparian Areas (inclusive of FSP Sections 4.5.1 to 4.5.7), 4.6 Wildlife and Biodiversity at the Landscape Level-Seral, Patch and Connectivity and 4.7 Wildlife and Biodiversity at the Landscape Level-Old Growth Management Areas (OGMA) and 4.8 Wildlife and Biodiversity at the Stand Level.
2. As a strategy (verifiable step) the **FSP** holder has and will use a **QRP** (RPBIO) to create and to adaptively maintain a **SAR Table** for use during **timber development** and primary forest activities on **blocks** and or **roads** within FDU 1 during the life of this **FSP**. In order to maintain the elements of measurable and verifiable for **blocks** and or **roads**, the **SAR Table** will be controlled with dated versions.
3. As a strategy (of verifiable steps) the **FSP** holder will, during **timber development** on proposed **blocks** and or **roads**, complete an **Identify SAR Assessment**.
4. As a strategy (verifiable steps), the **FSP** holder will also check the CDC for known occurrence information within 500 meters of proposed **blocks** and or **roads** during **timber development**. If that CDC occurrence is masked, the **FSP** holder will contact the CDC cdcdata@gov.bc.ca for further information. Once the CDC has provided details on the SAR, it will be included as a **Likely SAR** in the **Identify SAR Assessment** under 3 above if the known occurrence is within the **SAR Search Buffer** for that SAR.
5. As a strategy (verifiable steps and practices) the **FSP** holder will, when the **Identify SAR Assessment** identifies **SAR Signs** or a **SAR Key Habitat Feature**:
 - a) For a **SAR Key Habitat Feature**, implement the **SAR Table No Primary Forest Activity Area, NWZ-Logging, NWZ-Machinery and Timing Windows**, or
 - b) Initiate a further **assessment** for SAR management, using a **QRP**(RPBIO) and then implement the recommendations fully.
6. As a strategy (verifiable practice), during primary forest activities, the **FSP** holder may be inconsistent with the No Work Zones from 5a) or timing related **mitigations** from 5b) above if a **QRP** has determined that the **SAR Key Habitat Feature** is unoccupied and inactive and use of the feature by SAR is unlikely based on:
 - a) SAR life requisites, and
 - b) the **Timing-Window** 5a) or timing related **mitigations** 5b), and
 - c) the timing of planned primary forest activities
7. As a strategy (verifiable practices), the **FSP** holder will, during **timber development**, have a **QRP** establish a **WTRA** on any **SAR Key Habitat Feature** that is within a proposed **cutblock**.
8. As a strategy (verifiable step) the **FSP** holder will ensure that any **block** or **road** permit site plan created during **timber development** contains content relevant to implementing primary forest activities regarding associated SAR or **SAR Key Habitat Features**.
9. As a strategy (verifiable steps), the **FSP** holder will, if during primary forest activities on **blocks** and or **roads**, a **SAR Key Habitat Feature** or **SAR Signs** are encountered, halt primary forest activities in the immediate vicinity and undertake an **assessment** and then implement the recommendations. This **assessment** will consider the content of the **Crown's** 2004 Identified Wildlife Management Strategy.
10. As a strategy (verifiable step), the **FSP** holder will report any **SAR Key Habitat Feature** confirmed (**Key Habitat Feature** identified plus an associated SAR sighting) by an **Assessment** under this FSP on FDU 1 to the CDC as per current procedures.

Comment: There are no Wildlife Habitat Areas in FDU 1.

Under the **SFSP, Canim Lake Band** requires a proactive SAR assessment process.

4.4.6 Wildlife-Furbearers

Objective 10	Source of Objective
<ol style="list-style-type: none"> 1. An agreement holder who carries out timber harvesting must retain at least the following logs on a cutblock b) if the area is in the Interior, a minimum of 4 logs per hectare, each being a minimum of 2 m in length and 7.5 cm in diameter at one end 2. Interlakes SRDZ; and Canim, Rail ERDZs: to manage for grizzly bear, moose, <i>furbearer</i>, species at risk and other sensitive habitats within the areas identified as riparian buffers, recreation areas, mule deer winter range and lakeshore management zones and throughout the polygon under the biodiversity conservation strategy. Conserve biological diversity through..... <i>retention of coarse woody debris</i>... 	<p>FPPR s.68</p> <p>CCLUP 90-Day Report p.61, 67, 69, 73, 121, 123, 125, 127, 129, 158.</p>
Result or Strategy	
<ol style="list-style-type: none"> 1. As a strategy (verifiable steps), the FSP holder will, to support general habitat for furbearers within FDU 1 during the term of this FSP, employs FSP Sections 4.4 Wildlife (inclusive of FSP Sections 4.4.1 to 4.4.5), 4.5 Water, Fish, Wildlife and Biodiversity within Riparian Areas (inclusive of FSP Sections 4.5.1 to 4.5.7) , 4.6 Wildlife and Biodiversity at the Landscape Level-Seral, Patch and Connectivity and 4.7 Wildlife and Biodiversity at the Landscape Level-Old Growth Management Areas (OGMA) and 4.8 Wildlife and Biodiversity at the Stand Level. 2. As a strategy (verifiable steps), to manage for furbearers that are species at risk, at the operational level (during timber development and primary forest activities on blocks and or roads), the FSP holder employs FSP Section 4.4.5 Wildlife-Species at Risk (SAR). 3. As a strategy (verifiable step) and a result (measurable outcome), the FSP holder will, to manage for coarse woody debris, adopt and comply with FPPR s.68 on all blocks following the completion of harvesting. 4. As a strategy (verifiable steps), the FSP holder will, within 18 months of the completion of harvesting on blocks and subject to the results and requirements of any Fire Hazard Assessment as per s.11(3), (3.1) of the Wildfire Regulation and FSP Section 6 Silviculture; with the objective of conserving biological diversity and promoting furbearers through the retention of coarse woody debris, have a QRP consider the retention of unburned or partially burned debris piles, slash and or windrows on blocks (habitat, connectivity, riparian connectivity, dash distance and visual screening). This consideration will be documented in any associated Fire Hazard Assessment. 	

4.5 Water, Fish, Wildlife and Biodiversity within Riparian Areas

Objective 11	Source of Objective
The objective set by government for water, fish, wildlife and biodiversity within riparian areas is, without unduly reducing the supply of timber from British Columbia's forests, to conserve, at the landscape level, the water quality, fish habitat, wildlife habitat and biodiversity associated with those riparian areas.	FPPR s.8.
Result or Strategy	
1. As a strategy (verifiable steps) the FSP holder will, to conserve water quality, fish habitat, wildlife habitat and biodiversity associated with riparian areas within FDU 1 during the term of this FSP , employ sections 4.4.3 Wildlife-Moose High Value Wetlands, 4.5.3 Riparian Critical Fish Habitat, 4.5.5 Riparian Lakes Management, 4.5.6 Riparian Reserve and Management Zones and 4.5.7 Riparian Watershed Hydrologic Stability of this FSP .	

4.5.1 Fish Habitat in Fisheries Sensitive Watersheds

Objective 12	Source of Objective
1. Until December 31, 2005 the objective set by government for fish habitat in fisheries sensitive watersheds is to prevent to the extent described in subsection (3) the cumulative.....	FPPR s.8.1.
2. GAR orders were established for Deadman and Horsefly watersheds.	GAR F-3-013, 5-001
Result or Strategy	
No Result or Strategy. FDU 1 does not contain or overlap with any fisheries sensitive watersheds with established GAR orders.	

4.5.2 Water in Community Watersheds

Objective 13	Source of Objective
The objective set by government for water being diverted for human consumption through a licensed waterworks in a community watershed is to prevent to the extent described in [FPPR s. 8.2] subsection (3) the cumulative hydrological effects of primary forest activities within the community watershed.	FPPR s.8.2.
Result or Strategy	
No Result or Strategy. FDU 1 does not contain or overlap with any areas designated as a Community Watershed.	

4.5.3 Riparian–Critical Fish Habitat

Objective 14	Source of Objective
<ol style="list-style-type: none"> 1. Objective 12 Maintain critical fish habitat for fish as shown on <i>map4</i> and defined by the spatial dataset, <i>Cariboo-Chilcotin Critical Fish Habitat</i> as no-harvest areas. 2. Objective 13 Despite objective 12, primary forest activities are permitted in classified as critical habitat for fish for the following reasons <ol style="list-style-type: none"> a) Where harvesting is essential for insect control to curtail severe damage to forest values at the landscape level in a beetle management unit (BMU) classified as suppression for that insect pest, b) road and fence construction where there is no other practicable location available 	Sept, 2018 ILMB LUO
Result or Strategy	
<ol style="list-style-type: none"> 1. As a strategy (verifiable practices and steps), the FSP Holder will, during primary forest activities on blocks and roads, maintain critical fish habitat as shown on <i>map4</i> and defined by the spatial dataset, <i>Cariboo-Chilcotin Critical Fish Habitat</i> as no harvest areas except for road or fence construction, where there is no other practicable location, and in the case of a road, it is necessary to provide access for further timber development. 	
<p>Comment: These zones are so narrow that essential for insect control and fuel mitigation are not appropriate.</p>	

4.5.4 Riparian-Salmon

Objective 15	Source of Objective
<ol style="list-style-type: none"> 1. Interlakes SRDZ: To manage the Bonaparte River watershed for salmon stocks (approximately 10 % of the polygon), through riparian area protection and controls on the rate of harvest. 2. Canim ERDZ: To manage the Horsefly River watershed for salmon stocks (approximately 35 % of the polygon), through riparian area protection and controls on the rate of harvest. 	CCLUP 90-Day Report p.60, 66, 68, 120, 124, 126, 128 and 168.
No Result or Strategy as FDU 1 does not overlap with the Bonaparte or Horsefly watersheds.	

4.5.5 Riparian-Lakes Management

Objective 16	Source of Objective
<ol style="list-style-type: none"> 1. Objective 16 For the lakeshore management zones shown on the map 6a defined by the spatial dataset, Cariboo-Chilcotin Lakeshore Classes, maintain the lakeshore management zones in accordance with schedule 2. 2. Objective 17 For the lakes shown on map 6b and defined by the spatial dataset, Cariboo-Chilcotin Lake Management Classes, manage the lakes in accordance with schedule 3. 3. Objective 18 Despite objectives 16 and 17, variance from the VQO's and the maximum disturbance limits in schedule 2 and the lake management intent in schedule 3 is permitted in lakeshore management zones for any of the following reasons: <ol style="list-style-type: none"> a) Where harvesting is essential for insect control to curtail severe damage to forest values at the landscape level in a beetle management unit classified as suppression for that insect pest. b) Road and fence construction in Class A lakeshore management classes where there is no other practicable location available c) Reduction of fine surface debris, ladder fuels and small diameter trees in intermediate and overtopped crown classes within interface fire management plan areas, where that does not diminish old growth characteristics. 4. Objective 19 For refugia and wilderness fisheries lakes, locate new roads away from the lakeshore, sufficient to protect the existing character of the lake, unless no other practicable route exists. 5. Objective 23 For L3 and selected L1 lakes shown in <i>map6c</i> and defined by the spatial dataset, <i>Cariboo-Chilcotin L3/L1 Lakes</i>, maintain a 10 meter riparian reserve zone. 	<p>Sept, 2018 ILMB LUO.</p>
<p>Definitions</p>	
<p><u>Area around the lake</u> For any lake that has no spatial lakeshore management zone (LUO Objective 16, map 6a) but does still have an assigned Lakeshore Management Class (LUO Objective 17, map 6b), the area around the lake is defined as the FPPR riparian reserve zone plus the FPPR riparian management zone on that lake. If a lake has a lakeshore management zone (LUO Objective 16) and also has a Lakeshore Management Class (LUO Objective 17) then the area around the lake is the same as the lakeshore management zone.</p> <p><u>Visual Quality Objectives in the Lakeshore Management Zones</u>-means the applicable category of Visual Quality described in FPPR s.1.1 Categories of Visually Altered Forest Landscapes.</p>	

Result or Strategy

1. As a strategy (verifiable step), the **FSP** holder will, during **timber development** on proposed **blocks** and or **roads**, use the Lakeshore management zones as shown on the *map 6a* defined by the spatial dataset, *Cariboo-Chilcotin Lakeshore Classes*, and the associated lakeshore management zone table as shown in schedule 2 of the April 2018 LUO.
2. As a result (verifiable outcome), the **FSP** holder will, upon the completion of harvesting on **blocks** and or **roads** that overlap with Lakeshore Management Zones, be consistent with **Visual Quality Objectives in the Lakeshore Management Zones**.
3. As a result (verifiable outcome), the **FSP** holder will, upon the completion of harvesting on **blocks and or roads** that overlap with the Lakeshore Management Zones meet Forest Disturbance and Retention targets in the Lakeshore Management Zones as per Schedule 2 of the April 2018 LUO.
4. As a strategy (verifiable practices and steps), despite 2 and 3 above, the **FSP** holder may, upon the completion of harvesting on **blocks** and or **roads**, be inconsistent with the **Visual Quality Objectives in the Lakeshore Management Zones** and or the Forest Disturbance and Retention targets in a Lakeshore Management zone when it is necessary as follows:
 - a) harvesting is **essential for insect control**.
 - b) for **fuel mitigation**
 - c) For **road** or fence construction, where there is no other practicable location, and in the case of a **road**, it is necessary to provide access for further **timber development**.
5. As a strategy (verifiable step), the **FSP** holder will, during **timber development** on proposed **blocks** and or **roads**, use the Lake Management Classes are shown on *map 6b* and defined by the spatial dataset, *Cariboo-Chilcotin Lake Management Classes*, and the associated lake management class table as shown in schedule 3 of the April 2018 LUO.
6. As a result (measurable outcome), the **FSP** holder will, for General Lakes (5 above) apply 2, 3 and 4 above.
7. As a strategy (verifiable steps and practices), the **FSP** holder will, for Quality and Wilderness Fisheries Lakes (5 above) not put **blocks or roads** in the **area around the lake**.
8. As a strategy (verifiable steps and practices), the **FSP** holder may be inconsistent with 6 or 7 above when it is necessary as follows:
 - a) harvesting is **essential for insect control**
 - b) for **fuel mitigation**
 - c) for **road** or fence construction, where there is no other practicable location, and in the case of a **road**, it is necessary to provide access for further **timber development**.
9. As a result (measurable outcome), during primary forest activities, the **FSP** holder will, for L3 and selected L1 lakes shown in map 6c and defined by the spatial dataset, *Cariboo-Chilcotin L3/L1 Lakes* as per LUO Objective 23, not place proposed **blocks or roads** within 10 meters of these features.

Comment: There are no refugium lakes in FDU 1.

4.5.6 Riparian-Reserve and Management Zones

Objective 17	Source of Objective
<p>1. Stream Wetland and Lake Riparian Areas</p> <p>Objective 20 (a) Maintain riparian reserve zones as no harvest areas except where harvesting is essential for insect control to curtail severe damage to forest values at the landscape level in a beetle management unit (BMU) classified as suppression for that insect pest.</p> <p>Objective 20 (b) Despite objective 20(a), primary forest activities may be carried out in riparian reserve zones for the following purposes:</p> <ul style="list-style-type: none"> a) Where harvesting is essential for insect control to curtail severe damage to forest values at the landscape level in a beetle management unit (BMU) classified as suppression for that insect pest, b) Felling or modifying a tree that is a safety hazard, if there is no other practicable option for addressing the safety hazard c) Constructing a stream crossing d) Creating a corridor for full suspension yarding e) Creating guyline tiebacks f) Felling or modifying a tree under an occupant licence to cut, mast licence to cut or free use permit issued in respect of an area that is subject to a licence permit, or other form of tenure issued under the Land Act, Geothermal Resources, Act, Mines Act, Mineral Tenure Act, Mining Right of Way Act, Ministry of Lands, Parks and Housing Act or Petroleum and Natural Gas Act, if the felling or modification is for a purpose expressly authorized under that licence, permit, or tenure, g) Felling or modifying a tree for the purpose of establishing or maintaining an interpretive forest site, recreation site, recreation facility or recreation trail. <p>2. Objective 21 Except at road crossings, retain windfirm trees and other vegetation in riparian management zones on all S4 streams sufficient to:</p> <ul style="list-style-type: none"> a) Maintain streambank stability and channel processes and b) Minimize adverse changes to stream shade and organic input to the stream. <p>3. Objective 22 In riparian management zones on W3 and W4 wetlands and L3 and L4 lakes retain deciduous patches, significant wildlife trees and major wildlife features.</p>	<p>Sept, 2018 ILMB LUO</p>

Definitions

Deciduous patches – are stands > 0.5 ha in size with aspen, birch and/or cottonwood comprising >80% of the total stand basal area, as determined by a **QRP** (prism sweep estimate).

Significant wildlife trees – are conifer trees with a dbh >80cm and >30 cm dbh for deciduous species, exhibiting wildlife use such as a cavity nest, stick nest (limited to SAR bird, osprey or eagle) or a den.

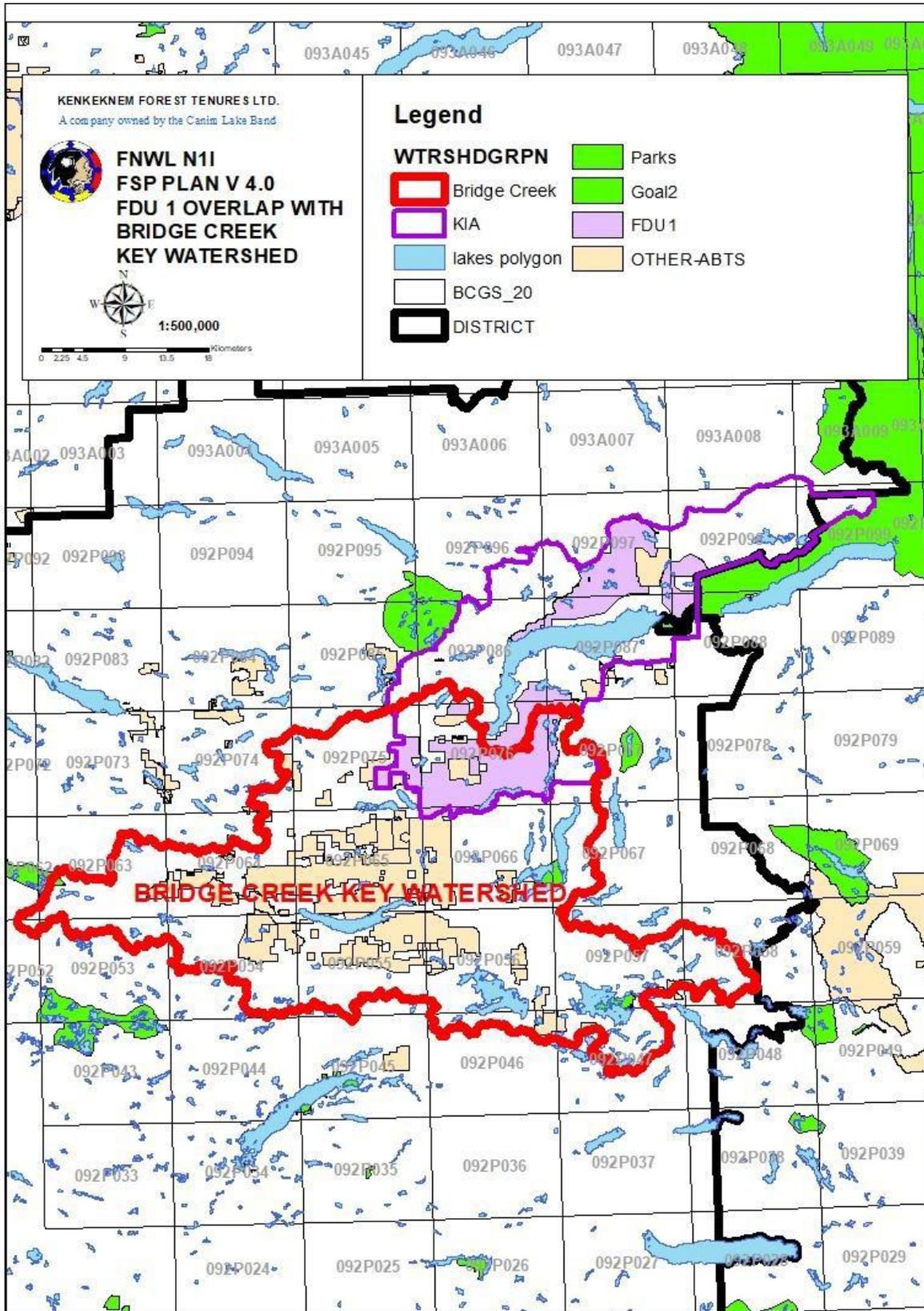
Major wildlife features – means a den, stick nest (limited to SAR bird, osprey or eagle), cavity nest, hibernaculum, mineral lick or wallow or a fisheries sensitive feature.

Result or Strategy-

1. As a strategy (verifiable step) and a result (measurable outcome), the **FSP** holder will, during **timber development** and primary forest activities, adopt and comply with FPPR Sections 47 to 51, 52(1)(2), 53 and 55 to 57 on riparian features that intersect or are adjacent to **blocks** and or **roads**.
2. As a strategy (verifiable steps), the **FSP** holder will, to classify riparian features from 1 above, undertake an **assessment**.
3. As a result (measurable outcome), the **FSP** holder will, during **timber development**, to retain windfirm trees within riparian management zones on all S1, S2, S3 or S4 streams that spatially intersect with **cutblocks**, reserve/retain from harvest a minimum of 20% of the riparian management zone spatial area with **WTRA**.
4. As a strategy (verifiable steps and practices), the **FSP** holder may be inconsistent with 3 above when and where it is necessary as follows:
 - a) Where harvesting is **essential for insect control**
 - b) Felling or modifying a tree that is a safety hazard, if there is no other practicable option for addressing the safety hazard
 - c) Constructing a stream crossing
 - d) Creating a corridor for full suspension yarding
 - e) Creating guyline tiebacks
 - f) Felling or modifying a tree under an occupant licence to cut, mast licence to cut or free use permit issued in respect of an area that is subject to a licence permit, or other form of tenure issued under the Land Act, Geothermal Resources, Act, Mines Act, Mineral Tenure Act, Mining Right of Way Act, Ministry of Lands, Parks and Housing Act or Petroleum and Natural Gas Act, if the felling or modification is for a purpose expressly authorized under that licence, permit, or tenure,
 - g) Felling or modifying a tree for the purpose of establishing or maintaining an interpretive forest site, recreation site, recreation facility or recreation trail.
 - h) For **road** or fence construction, where there is no other practicable location, and in the case of a **road**, it is necessary to provide access for further **timber development**.
5. As a strategy (verifiable practice), the **FSP** holder will, to retain other vegetation during **timber development** on **blocks**, within riparian management zones on all S1, S2, S3 or S4 streams, that intersect with proposed **blocks**, and to maintain streambank stability and channel processes, and to help minimize adverse changes to stream shade and organic input to the stream:
 - a) install a machine free zone of 4-12 meters, slope distance on each applicable side as practicable.
 - b) If the stream under a) above has an associated **WTRA** and that **WTRA** is within the **block** and the riparian management zone on the stream, install a machine free zone of 4-12 meters (slope distance) on that **WTRA** boundary to the extent practicable.
6. As a strategy (verifiable practice), the **FSP** holder will, through the placement of **WTRA** within (but not limited to) riparian management zones on **cutblocks** during **timber development**, retain **deciduous patches**, **significant wildlife trees** and **major wildlife features** in all lake and wetland riparian management zones on W3 and W4 wetlands and L3 and L4 lakes if and as these features occur.

4.5.7 Riparian-Watershed Hydrologic Stability

Objective 18	Source of Objective
<ol style="list-style-type: none"> 1. Interlakes SRDZ: To manage the Bridge Creek watershed for hydrologic stability through watershed assessment and monitoring programs. 2. Watershed Assessment: As required under the FPC when disturbance levels exceed 25% and in key watersheds, a watershed assessment should be undertaken to ensure the maintenance of critical fish and wildlife habitats and hydrological stability. 3. Development within watersheds or portions of watersheds in the SRDZ should be consistent with the Watershed Assessment prescriptions of the Forest Practices Code designed to avoid detrimental cumulative impacts. 4. Consistent with the Forest Practices Code, complete Watershed Assessments commencing with high-priority fisheries watersheds in the SRDZ. 	<p>CCLUP 90-Day Report p.61,69,127-9 CCLUP 90-Day Report p.160.</p> <p>CCLUP 90-Day Report p.179, 180.</p>
<p>Definitions</p>	
<p>Watershed Assessment – is an assessment undertaken when the disturbance level in a key watershed that overlaps with FDU 1 exceeds 25%. Minimum elements that must be considered are: water quality and timing of flows, sediment production and delivery, riparian function and fish habitat.</p>	
<p>Bridge Creek Key Watershed - is spatially identified on the map on the following page. The intersection with Canim’s Key Interest Area and FDU 1 is also shown.</p>	
<p>Result or Strategy</p>	
<ol style="list-style-type: none"> 1. As a strategy (verifiable steps), for general hydrologic stability throughout FDU 1 during the term of this FSP, the FSP holder employs FSP Sections 4.4 Wildlife (inclusive of FSP Sections 4.4.1 to 4.4.6), 4.5 Water, Fish, Wildlife and Biodiversity within Riparian Areas (inclusive of FSP Sections 4.5.1 to 4.5.6) , 4.6 Wildlife and Biodiversity at the Landscape Level-Seral, Patch and Connectivity and 4.7 Wildlife and Biodiversity at the Landscape Level-Old Growth Management Areas (OGMA) and 4.8 Wildlife and Biodiversity at the Stand Level. 2. As a strategy (verifiable step and practices), the FSP holder will complete a Watershed Assessment on the Bridge Creek Key Watershed. This will be done once for the term of this FSP before any timber development commences in the Bridge Creek Key Watershed. 3. As a strategy (verifiable step and practices), the FSP holder will ensure that proposed blocks and or roads are consistent with the recommendations of the Watershed Assessment, 2 above. 4. As a strategy (verifiable steps and practices) for the maintenance of ongoing hydrological stability in the Bridge Creek Key Watershed during the term of this FSP, the FSP holder will monitor roads with scheduled road inspections. For any significant hydrological concerns (as identified by a QRP) a remediation plan will be created and then implemented. 	
<p>Comment: FDU 1 has no overlaps with the Crown’s fisheries sensitive watersheds. FDU 1 has 1800 ha overlapped with the Interlakes SRDZ. All of this land is in the Bridge Creek Key Watershed.</p>	



4.6 Wildlife and Biodiversity at the Landscape Level-Seral, Patch and Connectivity

Objective 19	Source of Objective
<ol style="list-style-type: none"> 1. The objective set by government for wildlife and biodiversity at the landscape level is, without unduly reducing the supply of timber from British Columbia's forests and to the extent practicable, to design areas on which timber harvesting is to be carried out that resemble, both spatially and temporally, the patterns of natural disturbance that occur within the landscape 2. All ZONES-Conserve biological diversity through the establishment of Landscape Units and objectives for retention of old growth, seral stage distribution, landscape connectivity, stand structure, species composition, temporal distribution of cutblocks, retention of coarse wood debris and retention of wildlife trees. 3. To manage for the biodiversity targets stated within the Biodiversity Conservation Strategy for the Cariboo-Chilcotin Land Use Plan, Biodiversity Strategy Committee, July 1996 and consistent with the Short-Term Timber Availability Plan. 4. Objective 5 Maintain Biodiversity in accordance with the landscape units and biodiversity emphasis shown on map 2 and defined by the spatial dataset, Cariboo-Chilcotin Landscape Units. 	<p>FPPR s.9</p> <p>CCLUP 90-Day Report Page 153</p> <p>CCLUP 90 Day Report</p> <p>Sept, 2018 ILMB LUO</p>

Definitions

Connectivity Corridors- The Canim Lake Band believes that connectivity implies that there is adequate cover and retention to facilitate the unimpeded movement of all animals across and through the landscape in a manner that is natural, safe and comfortable to those animals. **The Canim Lake Band** has defined spatial **Connectivity Corridors** under its **SFSP** Version 3.1. named Map 5 that is available on **Canim Lake Band**'s website.

High Value Deciduous Types-these types are extremely important for biodiversity. These types are strongly linked to a variety of Aboriginal Rights including wildlife habitat, hunting and gathering. Under the **SFSP**, **High Value Deciduous Types** are reserved from harvesting. These types are defined in the table below.

Stand Age (years)	Deciduous Component
0-80	>70%
80-120	>50%
>120	>25%

Mature recruitment area – means a less than mature seral aged stand in a mature plus old deficit unit that is designated and tracked by the **FSP** holder as being reserved from harvest to allow sufficient recruitment into mature seral age, until the **Seral Assessment Unit** is no longer in mature plus old seral deficit. The sufficient amount of mature recruitment area is calculated after first accounting for all forest less than mature plus old seral age in No-harvest areas in the **Seral Assessment Unit**. Mature recruitment areas are selected from stands:

1. in order of priority from oldest to youngest available, and
2. displaying **stand attributes** most conducive to regaining mature seral condition as soon as possible, and
3. that contribute to achieving or trending towards patch size target ranges under this **FSP**, and
4. when designated by the **FSP** holder as being reserved from harvest to allow sufficient recruitment into the mature seral stage, **mature recruitment areas** will be spatially submitted to the FLNRORD at the time of the submission of a cutting permit for **Crown** approval.
5. when the **Seral Assessment Unit** is no longer in mature plus old seral deficit the **FSP** holder will notify the FLNRORD of the removal of the **mature recruitment areas** via a map and letter.

Modified Harvest - occurs within **Connectivity Corridors**. It is site specific and its exact attributes are developed through the consultation process. However it must consider and incorporate the following elements:

1. Prioritize the active management of insects and the salvage of timber.
2. Full application of green-up and adjacency rules.
3. Maximum **cutblock** size of 30 ha on any block that removes >75% of the basal area on NAR.
4. Respect Canim's Food Fishery and maintain localized riparian connectivity corridors
5. Maintenance of landscape level connectivity.
6. Use of partial cutting, seed trees, trail logging, regen protection and **WTRA** dash distances less than 400 meters.
7. Windrows, weasel-huts and coarse woody debris.
8. Use of temporary **roads**, aggressive deactivation and visual screening from **roads**.
9. Rapid tree planting and the maintenance of a deciduous component.
10. Other site-specific issues as identified during consultation.

Patch Size Analysis- is a GIS analysis undertaken by a **QRP** to model forest patch distributions within **Patch Assessment Units** in a manner that it fully consistent with Update Note #4 on Approach to Patch Size Assessments to the Regional Biodiversity Conservation Strategy. This **Patch Size Analysis** will be run once for the term of this **FSP** and will be completed before the submission of the first cutting authority under this **FSP**.

Patch Size Assessment- is an **assessment** that utilizes a **Patch Size Analysis** on **Patch Assessment Units** to manage for or trend towards the desired distribution of patches on the landscape. Minimum elements that must be considered are the current distribution of patches within a **Patch Assessment Unit**, the desired distribution of patches within a **Patch Assessment Unit** and the impact of proposed **blocks** on this distribution, plus the impact of any **block(s)** previously harvested (as displayed on the most recent **Crown's** forest cover dataset) in the **Patch Assessment Unit** since the **Patch Size Analysis** was run.

Patch Assessment Unit is a unit of land over which the size and distribution of patches is calculated by a **Patch Size Analysis**. These units are an overlay of Natural Disturbance Types (as defined by Update Note #4 on Approach to Patch Size Assessments to the Regional Biodiversity Conservation Strategy) and Landscape Units (as defined by the ILMB, 2018 LUO, Objective 5), and the government's Biogeoclimatic Classification data coverage.

Seral Analysis- is a GIS analysis undertaken by a **QRP** to model available mature plus old timber within **Seral Assessment Units** (this is shown as *mature plus old surplus hectares*). This **Seral Analysis** will be run once for the term of this **FSP** and is included as Appendix 1- Seral Targets. For this small area based tenure (FNWL N11) and as per FRPA 9, the **FSP** holder has created Proportional Seral Targets.

Seral Assessment - is an **assessment** that utilizes the **Seral Analysis**, Appendix 1-Seral Targets. Minimum elements that must be considered are *mature plus old surplus hectares* within **Seral Assessment Units**, the impact of proposed **blocks**, and the impact of any **block** harvested within **FDU 1** since the analysis was last run, upon the *mature plus old surplus hectares* within each impacted **Seral Assessment Unit**.

Seral Assessment Unit is a unit of land on which available *mature plus old surplus hectares* are calculated by a **Seral Analysis**.

Stand Attributes-means the amounts and characteristics, consistent with the biogeoclimatic classification system, for large living trees, standing dead trees, coarse woody debris, tree species diversity, and structural diversity, as described in Appendix 5 of the Biodiversity Guidebook (1995).

Third Party Influences-The **Canim Lake Band's** forest tenure (FNWL N11) is not a wildlife tree retention area, mature and old seral reservoir etc. for any third party seeking to validate or support their forest developments on areas outside of **Canim's** forest tenures. Due to differences in goals and objectives, areas under the stewardship of **Canim** are not to be included in any broader **Crown** or industry analysis used to determine appropriate levels of activity on surrounding lands. In term of the **Crown's** CCLUP approach, lands under **Canim** stewardship should be considered as a separate and distinct landscape unit.

Result or Strategy

1. As a strategy (verifiable steps), the **FSP** holder will, to support general Landscape Level Biodiversity over the area covered by FDU 1 during the term of this **FSP**, employs **FSP** Sections 4.4 Wildlife (inclusive of FSP Sections 4.4.1 to 4.4.6), 4.5 Water, Fish, Wildlife and Biodiversity within Riparian Areas (inclusive of FSP Sections 4.5.1 to 4.5.7), 4.7 Wildlife and Biodiversity at the Landscape Level-Old Growth Management Areas (OGMA), 4.8 Wildlife and Biodiversity at the Stand Level and 6 Silviculture.
2. As a strategy (verifiable steps), to manage **Third Party Influences** on **Canim's** Forest Tenures, the **FSP** holder has created a proportional seral table for use in FDU 1 during the term of this **FSP**. See Appendix 1, Seral Targets.
3. As a strategy (verifiable steps and practices), to manage for landscape level connectivity and biodiversity, the **FSP** holder will not propose **blocks** and or **roads** in **High Value Deciduous Types** during the term of this **FSP** unless the **FSP** holder first secures an exemption from the **Canim Lake Band**.
4. As a strategy (verifiable steps) to manage landscape level connectivity, the **FSP** holder will utilize **Modified Harvest** within **Connectivity Corridors** during **timber development** and harvesting on **blocks**.
5. As a strategy (verifiable step), the **FSP** holder will, during **timber development** on proposed **blocks**, undertake a **Patch Size Assessment** to demonstrate how proposed **blocks** that undergo harvesting, will either maintain or trend towards the desired patch distribution.
6. As a strategy (verifiable practice), despite 5 above, the **FSP** holder may utilize **block** harvesting to deviate or be inconsistent with the patch trends if it is necessary as follows:
 - a) for salvage where > 50% of the proposed **block** basal area, as represented on an industry standard timber cruise, is dead, damaged or diseased
 - b) when harvesting is **essential for insect control**
 - c) for **fuel mitigation**
7. As a strategy (verifiable steps), the **FSP** holder will, during **timber development** on proposed **blocks**, conduct a **Seral Assessment**.
8. As a result (verifiable outcome), the **FSP** holder will not harvest mature or old forests in a *mature plus old surplus hectares* deficit as determined under 7 above during the term of this **FSP** within FDU 1.
9. As a strategy (verifiable practice), despite 8 above, the **FSP** holder may utilize proposed **blocks** that undergo **timber development** to facilitate the harvest of mature or old forests in a *mature plus old surplus hectares* deficit (as assessed under 7 above) if a **QRP** determines that it is necessary as follows:
 - a) for salvage where > 50% of the proposed **block** basal area, as represented on an industry standard timber cruise, is dead, damaged or diseased and sufficient **mature recruitment area** has been reserved from harvest
 - b) when harvesting is **essential for insect control**
 - c) for **fuel mitigation**

Comment: FDU 1 does not overlap with the CCLUP key leading spruce, aspen or deciduous stands. FDU 1 does not overlap with Community Areas of Special Concern, or Birch Retention Areas.

4.7 Wildlife and Biodiversity at the Landscape Level-Old Growth Management Areas (OGMA)

Objective 20	Source of Objective
<p>1. Objective 8 Retain old forest and natural successional processes by maintaining as no-harvest area the permanent OGMA-static, permanent OGMA-rotating, and transition OGMA as shown on <u>map 3</u> and defined by the spatial dataset, <u>Cariboo-Chilcotin Old Growth Management Areas</u>.</p> <p>2. Objective 9 Despite objective 8, harvesting and road-building are permitted in permanent OGMA-static or permanent OGMA-rotating for any of the following reasons:</p> <ul style="list-style-type: none"> a) Harvesting incursions of 10 hectares or less that better align OGMA boundaries with intended geographic features, b) Where harvesting is essential for insect control to curtail severe damage to forest values at the landscape level in a beetle management unit (BMU) classified as suppression for that insect, c) Road and fence construction where no other practicable location is available, d) Thinning-from-below to enhance old forest attributes in OGMA located within Mule Deer Winter Range in the shallow and moderate snowpack zones, e) Within primary and interface fuel breaks, in an approved community or regional plan, where impact to primary old seral forest characteristics are minimized: <ul style="list-style-type: none"> i) reduction of fine surface debris, ladder fuels and small diameter trees in intermediate and overtopped crown classes and, ii) separation of tree crowns among individual trees or clumps within the dominant or co-dominant layers sufficient to mitigate the spread of a passive crown fire, to a maximum spacing of 6 meters between crowns. f) Where permanent-rotating OGMA on map 3 have: <ul style="list-style-type: none"> i. Mature conifer mortality exceeding 50% by basal area > 17.5 cm DBH or, ii. Stand age exceeding 200 years for stands with 70% or greater Lodgepole Pine by basal area > 17.5 cm DBH <p>3. Objective 10 Despite objective 8, primary forest activities are permitted in transition old growth management areas for any the following reasons:</p> <ul style="list-style-type: none"> a) Harvesting incursions of 10 hectares or less that better align OGMA boundaries with intended geographic features, b) Where harvesting is essential for insect control to curtail severe damage to forest values at the landscape level in a beetle management unit (BMU) classified as suppression for that insect pest, c) Road and fence construction where no other practicable location is available, d) Thinning-from-below to enhance old forest attributes in OGMA 	<p>Sept, 2018 ILMB LUO.</p>

<p>located within Mule Deer Winter Range in the shallow and moderate snowpack zones,</p> <p>e) Within primary and interface fuel breaks, in an approved community or regional plan, where impact to primary old seral forest characteristics are minimized:</p> <p>i) reduction of fine surface debris, ladder fuels and small diameter trees in intermediate and overtopped crown classes and,</p> <p>ii) separation of tree crowns among individual trees or clumps within the dominant or co-dominant layers sufficient to mitigate the spread of a passive crown fire, to a maximum spacing of 6 meters between crowns.</p> <p>f) Equivalent old forest exists in locations contributing to the permanent OGMA target in the same LU-BEC unit,</p> <p>g) Conifer mortality exceeds 50% of stand basal area in the transition OGMA.</p> <p>4. Objective 11 Changes to OGMA's resulting from harvesting or road building under objective 9 or 10 must be reported by licensees to ILMB and MOFR upon completion.</p>	
---	--

Definitions

Thinning from below – is a harvesting stand treatment in which trees are removed from intermediate and over-topped classes, leaving the larger trees on site.

Result or Strategy

1. As a strategy (verifiable steps and practices), the **FSP** holder will not harvest during the term of this **FSP** within OGMA's as described under LUO Objective 8, shown on *map3* and defined by the spatial dataset, *Cariboo-Chilcotin Old Growth Management Areas*.
2. As a strategy (verifiable steps and practices), despite 1 above, the **FSP** holder may utilize proposed **blocks** and or **roads** that undergo **timber development** to facilitate the harvest of OGMA's as follows:
 - a) for harvesting incursions of 10 hectares or less are appropriate to better align OGMA boundaries with intended geographic features, which may include creeks and pre-existing roads.
 - b) When harvesting is **essential for insect control**
 - c) For **road** or fence construction, where there is no other practicable location, and in the case of a **road**, it is necessary to provide access for further **timber development**
 - d) for **thinning from below** to enhance old forest attributes in OGMA's located within Mule Deer Winter Ranges under GAR Order U-5-003 and FDU 1.
 - e) for **fuel mitigation**
 - f) the OGMA is a transition OGMA and conifer mortality exceeds 50% of the stand basal area (as determined by an industry standard timber cruise) in the transition OGMA and equivalent hectares of old forest exist in permanent OGMA's located in the same LU-BEC unit.
3. As a strategy (verifiable steps), the **FSP** holder will employ the cutting or road permit application in conjunction with RESULTS depletion reporting completed by the **FSP** holder to address the reporting requirements associated with changes to OGMA's resulting from harvesting or **road** building conducted under 2 above.

Comment: There are no permanent-rotating OGMA's in FDU 1.

4.8 Wildlife and Biodiversity at the Stand Level

Objective 21	Source of Objective
<ol style="list-style-type: none"> 1. The objective set by government for wildlife and biodiversity at the stand level is, without unduly reducing the supply of timber from British Columbia's forests, to retain wildlife trees. 2. Objective 6 Where harvesting removes >50 percent of the pre-harvest basal area or where the harvest is part of a shelterwood silviculture system, meet or exceed the minimum area for wildlife tree retention for each harvest area (cutblock or cutting permit) as set out in schedule 1. 3. Objective 7 Where practicable, in partially cut stands, where harvesting removes <50 percent of the pre-harvest basal area, retain high-value wildlife trees up to the limits in schedule 1. 	<p>FPPR s.9.1.</p> <p>Sept, 2018 ILMB LUO</p>
Definitions	
<p><u>Dash Distance</u>-for forest harvesting Canim Lake Band-members have asked for more internal WTRA and for dash distances < 400 meters (SFSP).</p> <p>The following methodology is to be used to determine if < 400 meter dash distances have been created. If dash distance is not met, this method will guide the placement of additional internal WTRAs:</p> <ul style="list-style-type: none"> • Using a pencil and ruler, or a GIS, do an inside buffer of -200 meters on the net merch area of the block. The buffer would apply to the outside edge of the block, and to any internal WTRA or other internal feature (>= 1ha) that provides for wildlife cover, for example NPBrush, but not an NCwetland. • If the result of the buffer generates an internal polygon >= 1 ha (inside the block), add one or more WTRA's (>=1 ha in size) inside of this new polygon, until such time as an inside buffer of -200 meters no longer generates an internal polygon >= 1 ha. • At this point a < 400 meter SFSP dash distance has been established. <p>*note, using this method NPUNN is blended with the NMA</p> <p><u>High value wildlife tree</u>- means a tree over 37.5 cm dbh class among the target residual conifer species or over the 20 cm dbh class among the target residual deciduous species on a block, that falls within one of the wildlife tree classes 2 through 8 as represented in Table 1 of the September 2018, LUO.</p> <p><u>Stand Level Biodiversity Assessment</u> - is an Assessment that considers, balances and integrates the following elements to achieve Stand Level Biodiversity objectives:</p> <ol style="list-style-type: none"> a) the results of any relevant referral and or notification b) all other relevant results and strategies of this FSP regarding the timber development on the proposed blocks and or roads, including FSP sections 4.1 Culture and Heritage, 4.2 Soils, 4.4 Wildlife, 4.5 Water, fish wildlife and biodiversity within riparian areas, 4.6 Wildlife and Biodiversity at the Landscape Level-Seral, Patch and Connectivity, 4.7 Wildlife and Biodiversity at the Landscape Level-Old Growth Management Areas (OGMA), 4.9 Visual Quality and 6 Silviculture. c) Maintenance of a 400 meter dash distance in accordance with Canim's Dash Distance methodology on blocks that remove > 50% of the pre-harvest basal area d) for WTRA the inclusion of areas that are representative of the existing block timber type e) the site specific elements of wind-firmness, forest health, fuel management, and any other elements the QRP identifies as being important on that specific site 	

Result or Strategy

1. As a result (measurable outcome), the **FSP** holder will, on all **cutblocks** that undergo **timber development** or site plan amendment using this **FSP**, comply with the % **WTRA** targets as set out in Schedule 1 of the LUO. The dominant biogeoclimatic zone by area for each **cutblock** will be used to obtain a target % **WTRA** area minimum for each **cutblock**. In addition to **WTRA** spatial hectares, the **FSP** holder may utilize retained basal area (timber cruise data) to contribute to the % **WTRA** target. This will be calculated by **cutblock** as follows:

*(Timber Cruise Estimate of retained **block** basal area/ Timber Cruise Estimate of original **block** basal area)*harvest area = area (ha) of **BA** that contributes to the **cutblock WTRA** % target (BA **WTRA**).*

To then calculate the **cutblock WTRA** % target the following formulae will be used:
Cutblock WTRA % = $((\text{ha of spatial cutblock WTRA} + \text{ha of block BA WTRA}) / \text{gross cutblock area}) * 100$

2. As a strategy (verifiable practice), the **FSP** holder will not harvest **WTRAs** within FDU 1 during the term of this **FSP** except where and when it is necessary as follows:
 - a) the **WTRA** causes a safety concern
 - b) For **road** or fence construction, where there is no other practicable location, and in the case of a **road**, it is necessary to provide access for further **timber development**
 - c) the **WTRA** is no longer functioning as its intended purpose due to mortality from fire, insect damage or blowdown
 - d) when harvesting is **essential for insect control**
 - e) for **fuel mitigation**
3. As a result (measurable outcome) and strategy (verifiable step), the **FSP** holder will, if and when any **WTRA** on FDU 1 is harvested by the **FSP** holder under 2 above (in an amount greater than 0.25 hectares) such that it becomes inconsistent with 1 above, then, by May 1 of the following year, replace the harvested **WTRA** to the extent necessary to be consistent with 1 above.
4. As a strategy (verifiable outcome) Any harvesting in any **WTRA** on FDU 1 in an amount greater than 0.25 ha will be reported by the **FSP** holder to the **Crown** by May 1 of the following year.
5. As a strategy (verifiable step and practice), the **FSP** holder will, during **timber development** and at the completion of harvesting on **cutblocks**, where harvesting plans to remove < 50% of a **cutblock's** pre-harvest basal area, develop and implement a prescription that will retain **High value wildlife trees** up to the limits in LUO Schedule 1, to the extent practicable.
6. As a strategy (verifiable step), the **FSP** Holder will, during **timber development** on proposed **blocks**, to manage for stand-level biodiversity, complete a **Stand Level Biodiversity Assessment** on proposed **blocks** to balance and integrate **FSP** results and strategies, place **WTRAs** and to prescribe stems reserved from harvest under the cutting permit.

Definitions

Visual Quality Objectives (VQOs) - means the applicable category of Visual Quality described in FPPR s.1.1 Categories of Visually Altered Forest Landscapes.

Alteration means changing or making something different as a result of harvesting and or road construction on **blocks** and or **roads**.

Severely burnt scenic areas – means a portion of ILMB LUO 26, 28 and 29 scenic areas that are visible from the applicable viewpoints that have >75% of the trees with >75% crown mortality (>75% brown needles or no needles) from scorch.

Result or Strategy

1. As a strategy (verifiable steps), the **FSP** holder will, during **timber development** on proposed **blocks** and or **roads**, undertake an **assessment** for **VQO** to implement 2, 3 and 4 and 6 below.
2. As a result (verifiable outcome), when the **FSP** holder completes harvesting on **blocks** and or **roads** in Scenic Areas shown on *CCLUP Map 9a* and defined by the spatial dataset *Cariboo-Chilcotin Scenic Areas*, the resulting visual **alteration** will be consistent with LUO Objective 26 **VQOs**.
3. As a result (verifiable outcome), when the **FSP** holder completes harvesting and on **blocks** and or **roads** in Scenic corridors shown on *CCLUP Map 9b* and defined by the spatial dataset *Cariboo-Chilcotin Scenic Corridors*, the resulting visual **alteration** will be consistent with LUO Objective 28. This will include harvesting designed to mimic existing natural openings, vegetation patterns and natural features.
4. As a result (verifiable outcome), when the **FSP** holder completes harvesting and on **blocks** and or **roads** that are within 5 km horizontal distance (GIS measured) of High Elevation Viewpoints as shown on *CCLUP Map 9c* and defined by the spatial dataset *Cariboo-Chilcotin High Elevation Viewpoints*, the resulting visual **alteration** will be consistent with LUO Objective 29. This will include harvesting designed to mimic existing natural openings, vegetation patterns, and natural features when viewed from the high elevation viewpoints.
5. As a strategy (verifiable steps and practices), despite 2, 3 and 4 above, the extent of the **alteration** resulting from the size, shape, location and timber retention on the **FSP** holder's harvested and or constructed **blocks** and or **roads** can be exceeded if it is necessary as follows:
 - a) harvesting is for **essential for insect Control**
 - b) for **fuel mitigation**
6. As a strategy (verifiable steps and practices), despite 2, 3 and 4 above, the extent of the allowable **alteration** resulting from the size, shape, location and timber retention on the **FSP** holder's harvested and or constructed **blocks** and or **roads** can be exceeded in polygons that have the designation of partial retention, modification or maximum modification to action **severely burnt scenic areas**, with the following conditions:
 - a) the **FSP** holder will, prior to harvesting on **blocks** and or **roads** complete an **assessment** for **VQO** that includes a description of the visual design measures taken to mitigate visual impacts. These measures will include: alterations will not be rectilinear or geometric in shape, green trees will be retained and, where practicable the design will utilize multiple smaller openings versus single large openings, utilize basal area retention within **block** boundaries, and utilize the results from **referral and or notification**.
 - b) create a reforestation plan that demonstrates a net benefit to visual green-up recovery will result from exceeding the **VQO**
 - c) the **FSP** holder will, prior to harvesting **blocks** and or **roads** create a **road** deactivation plan that demonstrates expedited rehabilitation of **alteration** from **roads** visible from viewpoints

4.10 Wildcraft, Backcountry and Roaded Access

Objective 23	Source of Objective
<ol style="list-style-type: none"> 1. Maintenance of specified levels of roaded access for the purpose of wildcraft harvesting. 2. Maintenance of specified levels of backcountry condition. References to mineral exploration access. Specifically, in the Interlakes SRDZ, maintain 30% of polygon in backcountry condition. 	CCLUP 90-Day Report p.153-154 CCLUP 90 Day Report p.60-134, p.72 for Interlakes SRDZ
Definitions	
<p><u>Backcountry or Backcountry Condition</u> - means lands in and SRDZ that meet the Recreational Opportunity Spectrum (ROS) experiences of semi-primitive motorized and/or semi-primitive non-motorized and/or primitive as defined by the British Columbia Ministry of Forests Recreation Manual, Chapter 6, Figure 1: ROS Delineation Criteria on-line version of September 1, 2006.</p>	
<p><u>Semi-primitive/motorized</u> - a ROS class with remoteness characteristics equal to or greater than 1 km from a 2-wheel-drive road, and equal to or greater than 1000 hectares, and evidence of human criteria characteristics as follows:</p> <ul style="list-style-type: none"> • Moderate opportunity for solitude, closeness to nature; high degree of self-reliance and challenge in using motorized equipment • Natural or natural-appearing environment • Low interaction with other people • Some on-the-ground evidence of other people, some on-site controls • Motorized access on trails, primitive roads & cross-country may occur • Limited facilities for signing, sanitary and safety needs using natural, rustic materials wherever. 	
Result or Strategy	
<ol style="list-style-type: none"> 1. As a strategy (verifiable steps and practices), the FSP holder will, to manage for semi-primitive/motorized backcountry condition, prior to establishing access controls or deactivation that eliminates access on a road permit road that has been in place for more than 5 years and is longer than 1km in length in the Interlakes SRDZ, complete referral and or notification with: <ol style="list-style-type: none"> a) Participating First Nations b) stakeholders who have the potential to be impacted by the access control or deactivation, and who have an interest in backcountry condition including: wildcrafters, trappers, guides, tourism operators, outdoor recreation clubs and mineral exploration interests 2. As a strategy (verifiable steps and practices), the FSP holder will, with regards to concerns raised from 1, will make efforts to reach an agreement on mitigative actions, within the referral and or notification period, and then implement the mitigations to the extent practicable. 3. As a strategy (verifiable step), the FSP holder may, if after substantial efforts have been made, an agreement with a licenced tenure holder under 2 cannot be made within an additional 20 calendar days, initiate the Agreement with the Canim Lake Band process under this FSP to resolve issues. 	
<p>Comment: There are no lands in FDU 1 in a primitive or semi-primitive non-motorized condition. A Crown-led, collaborative access management plan is needed to balance the competing objectives of maintaining backcountry condition and maintaining roaded access. The FSP holder intends to fully participate in any future access management planning initiatives that cover FDU 1.</p>	

4.11 Tourism

Objective 24	Source of Objective
<ol style="list-style-type: none"> 1. Plan and manage forest development activities so as to avoid, minimize or mitigate impacts to significant commercial and non-commercial values and opportunities that occur in association with forest lands, including wildlife, fish, water, range, recreation and tourism. 2. Maintain the visual quality in the viewshed surrounding existing tourism operations. 3. Incorporate tourism needs for high quality environments, including: <ol style="list-style-type: none"> a) Tranquil Settings – Forest operations in the mid and especially the backcountry should be conducted outside of peak tourism season, to reduce the impact of noise. b) Scenic Quality – Forest operations should either avoid or minimize impacts on scenic quality. Any impacts that do occur must be rehabilitated within a specified time period. c) Air Visibility Quality – Smoke generation (through slash burning, etc.) should not impact tourism areas during the peak tourism season. d) Setting Diversity – Alternative silvicultural and harvesting systems should be employed to provide for a variety of forest settings. e) Controlled Access – access management planning should precede operations in order to incorporate tourism industry needs. 	<p>CCLUP 90-Day Report p.179.</p> <p>CCLUP 90-Day Report</p> <p>CCLUP 90-Day Report, p. 140-141</p>
Result or Strategy	
<ol style="list-style-type: none"> 1. As a strategy (verifiable steps), the FSP holder, to manage Tourism generally over FDU 1 during the term of this FSP, employs FSP Sections 4.4 Wildlife (inclusive of FSP Sections 4.4.1 to 4.4.6), 4.5 Water, Fish, Wildlife and Biodiversity within Riparian Areas (inclusive of FSP Sections 4.5.1 to 4.5.7) , 4.6 Wildlife and Biodiversity at the Landscape Level-Seral, Patch and Connectivity and 4.7 Wildlife and Biodiversity at the Landscape Level-Old Growth Management Areas (OGMA), 4.8 Wildlife and Biodiversity at the Stand Level, 4.9 Visual Quality, 4.10 Wildcraft, Backcountry and Roaded Access and 4.12 Recreation Sites, Trails, Interpretive Forests and Buffered and Non-Buffered Trails. 2. As a strategy (verifiable steps), the FSP holder, to incorporate tourism needs for high quality environments, maintain visual quality in the viewshed surrounding existing licenced tourism operators, and to minimize and mitigate impacts to significant commercial and non-commercial tourism values and opportunities, will through referral and or notification, share proposed blocks and or roads with potentially affected tourism interests (lodges, resorts, guide outfitters, clubs, etc.) that are within a 2000 meters buffer (GIS) of proposed blocks and or roads. 3. As a strategy (verifiable steps and practices), the FSP holder will, with regards to any concerns raised from 2, make efforts to reach an agreement, during the referral and or notification period, on mitigative actions and then implement the mitigations to the extent practicable. 4. As a strategy (verifiable step), the FSP holder may, if after substantial efforts have been made, an agreement under 3 cannot be made within an additional 20 calendar days, initiate the Agreement with the Canim Lake Band process under this FSP to resolve issues. 	
<p>Comment: As of Sept 15, 2019 the Crown has issued new Open Burning Smoke Control Regulations. Following the OBSCR will contribute towards R&S 2.</p>	

4.12 Recreation Sites, Trails, Interpretive Forests and Buffered and Non- Buffered Trails

Objective 25	Source of Objective
<ol style="list-style-type: none"> 1. Manage established recreation sites, trails and interpretive forests in accordance with established objectives 2. Objective 30 For the buffered trails shown on <i>map10</i>, maintain 50 meter management zones on either side, with the treed area inside the management zones managed to the combined minimum basal area retention of 85 percent, except where roads cross trails. 3. Objective 31 Despite objective 30, primary forest activities that remove more than 15 percent of the basal area with the management zones are permitted for one of the following reasons: <ol style="list-style-type: none"> a) Where harvesting is essential for insect control to curtail severe damage to forest values at the landscape level in a beetle management unit classified as suppression for that insect pest. b) Where harvesting is necessary to manage for blowdown where that helps to maintain the recreational value of the trail. 	FRPA s.181 Sept, 2018 ILMB LUO
Definitions	
<p>Recreation Sites, Recreation Trails and Interpretive Forests: are areas of Crown land within or outside of Provincial Forests that are established by the Minister under Section 56 (1) of the FRPA [or previously under Section 6(1) of the Forest Practices Code] for managing their recreation values.</p> <p>Buffered Trails: are trails that have been identified in Objective 30 of the Cariboo Chilcotin Land Use Order (map 10).</p> <p>Non-Buffered Trails – trails that are identified in a Crown tenure for a trail, or that are required for a Crown tenured activity.</p>	
Result or Strategy	
<ol style="list-style-type: none"> 1. As a strategy (verifiable step), the FSP holder will, during timber development on proposed blocks and or roads, adopt the 100 Mile House Forest District Description of Recreation Sites, Recreation Trails, Interpretive Forests, Recreation Reserves, UREPs and Buffered Trails, as they occur in FDU 1. These are listed in Appendix 2-Recreation of this FSP. 2. As a strategy (verifiable step), the FSP holder will, during timber development for proposed blocks and or roads that intersect a legally established recreation sites, trails and interpretive forests, secure written authorization under Section 16 of the Forest Recreation Regulation. 3. As a strategy (verifiable step), the FSP holder, during timber development, where proposed blocks or roads intersect, or are within 100 meters of a known Recreation Site, Recreation Trail or Interpretive Forest, or intersect or are within 50 meters of a Buffered Trail or a Non-Buffered Trail, will use referral and or notification to identify any concerns regarding the proposed blocks or roads and the associated feature(s) listed above. 4. As a strategy (verifiable step and practices), with regards to any concerns raised from 3 above, and consistent with strategy 2 above if applicable, during referral and or notification, the FSP holder will make efforts to reach an agreement during the referral and or notification period, on mitigative actions and then implement the mitigations. 5. As a strategy (verifiable step), the FSP holder may, if after substantial efforts have been made, an agreement with a licenced tenure holder under 4 cannot be made within an additional 20 calendar days, initiate the Agreement with the Canim Lake Band process under this FSP to resolve issues. 	

6. As a result (measurable outcome), the **FSP** holder will, for **blocks or roads** that intersect or encroach on the 50 meter management zone of a Buffered Trail, at the completion of harvesting have maintained a minimum of 85% basal area retention within the impacted portion of the trails' management zone, except where **roads** cross trails.
7. As a strategy (verifiable practice), despite 6 above, the **FSP** holder may, at the completion of harvesting on **blocks** and or **roads**, have removed more than 15% of the basal area within the management zone of a Buffered trail where and when it is necessary as follows:
 - a) where harvesting is **essential for insect control**
 - b) for **fuel mitigation**
 - c) for **road** or fence construction, where there is no other practicable location, and in the case of a **road**, it is necessary to provide access for further **timber development**
 - d) to address trees that are blown down (on the ground) or blown over/uprooted, to maintain the recreational value of the trail

4.13 Grasslands Benchmark

Objective 26	Source of Objective
1. Objective 25 Implement silvicultural practices that facilitate restoration of open grassland condition when harvesting forest in the grassland benchmark area shown on <i>map 8</i> and defined by the spatial dataset, <i>Cariboo-Chilcotin Grassland Benchmark Area</i> .	Sept, 2018 ILMB LUO.
Result or Strategy	
1. As a result (verifiable outcome), the FSP holder will not propose blocks and or roads within any grasslands benchmark area (as shown on <i>map 8</i> and defined by the spatial dataset, <i>Cariboo-Chilcotin Grassland Benchmark Area</i>) within FDU 1 during the term of this FSP .	
Comment: There are no significant overlaps of the Grasslands Benchmark Area with FDU 1.	

4.14 Range-Grazing

Objective 27	Source of Objective										
<p>1. To maintain the current authorized level of AUMs in the polygon.</p> <table border="0" style="width: 100%;"> <thead> <tr> <th style="text-align: left;"><u>Polygon</u></th> <th style="text-align: right;"><u>Current Authorized AUMs</u></th> </tr> </thead> <tbody> <tr> <td>1. Interlakes</td> <td style="text-align: right;">17,559</td> </tr> <tr> <td>2. Lang Lake / School House</td> <td style="text-align: right;">265</td> </tr> <tr> <td>3. Canim</td> <td style="text-align: right;">3,055</td> </tr> <tr> <td>4. Rail</td> <td style="text-align: right;">6,629</td> </tr> </tbody> </table> <p>2. To maintain the existing proportion of AUMs by Range Unit.</p> <p>3. Planning and managing forest development activities so as to avoid, minimize or mitigate impacts to significant other commercial and non-commercial values and opportunities that occur in association with forest lands, including wildlife, fish, water, range, rec and tourism.</p> <p>4. All range fences should be wildlife safe, including top rails and appropriate wire spacing</p>	<u>Polygon</u>	<u>Current Authorized AUMs</u>	1. Interlakes	17,559	2. Lang Lake / School House	265	3. Canim	3,055	4. Rail	6,629	<p>CCLUP 90-Day Report p.60, 66, 68, 72, 120, 122, 124, 126, 128, 179.</p> <p>CCLUP p.159</p>
<u>Polygon</u>	<u>Current Authorized AUMs</u>										
1. Interlakes	17,559										
2. Lang Lake / School House	265										
3. Canim	3,055										
4. Rail	6,629										
Result or Strategy											
<p>1. As a strategy (verifiable steps), the FSP holder, to manage AUMs generally over FDU 1 during the term of this FSP, employs FSP Sections 5.1 To Mitigate Effects of Removing or Rendering Ineffective Natural Range Barriers and 5.2 To Prevent the Introduction or Spread of Invasive Plants of this FSP.</p> <p>2. As a strategy (verifiable step), the FSP holder will, during timber development, through referral and or notification, share the location of proposed blocks and or roads with overlapping or adjacent Crown grazing tenure holders.</p> <p>3. As a strategy (verifiable steps and practices), the FSP holder will, when during the referral and or notification phase regarding proposed blocks and or roads, the holder of the Crown grazing tenure proves (through the use of a QRP (P.Ag)) that AUM levels from February 1995 and described in objective 28(1) above will fail to be maintained on the Range Unit as a direct result of proceeding with the blocks and or roads, make efforts to reach an agreement with that tenure holder on mitigations to maintain the existing proportion of AUMs by Range Unit, and then implement the mitigations.</p> <p>4. As a strategy (verifiable step), the FSP holder may, if after substantial efforts have been made, an agreement with a holder of a Crown grazing tenure under 3 cannot be made within an additional 20 calendar days, initiate the Agreement with the Canim Lake Band process under this FSP to resolve issues.</p>											

5 Measures

5.1 To Mitigate Effects of Removing or Rendering Ineffective Natural Range Barriers

<p>For the purpose of section 48 [<i>natural range barriers</i>] of the Act, a person who prepares a forest stewardship plan must specify measures to mitigate the effect of removing or rendering ineffective natural range barriers</p>	<p>Source of Measure FRPA s.48, FPPR s.18</p>
<p>Definitions</p>	
<p>Natural Range Barrier- a river, a rock face, dense timber or other naturally occurring feature that stops or significantly impedes livestock movement to and from an adjacent area.</p>	
<p>Measures</p>	
<ol style="list-style-type: none"> 1. The FSP holder will, through referral and or notification, share the location of blocks and or roads with potentially affected holders of Crown grazing tenures. 2. When, during the referral and or notification phase, the holder of the Crown grazing tenure indicates that a natural range barrier may be removed or made ineffective, the FSP holder will make efforts to reach an agreement with that tenure holder on measures and then implement the measures. Measures could include things, such as adjustments to blocks and or roads, gates, cattleguards, fencing or access controls. 3. The FSP holder may, if after substantial efforts have been made, an agreement with a licenced tenure holder under 2 cannot be made within an additional 20 calendar days, initiate the Agreement with the Canim Lake Band process under this FSP to resolve issues. 4. The FSP holder will ensure that all appraised range unit boundary fences constructed on Crown land by the FSP holder adhere to applicable Crown fencing standards. 5. When breaching a range unit boundary fence the FSP holder will comply with the Dec 20, 2016 letter, Authorization to Damage and Repair a Range Development on Crown Land. 	

5.2 To Prevent the Introduction or Spread of Invasive Plants

<p>For the purpose of section 47 [<i>invasive plants</i>] of the Act, a person who prepares a forest stewardship plan must specify measures in the plan to prevent the introduction or spread of species of plants that are invasive plants under the Invasive Plants Regulation, if the introduction or spread is likely to be the result of the person's forest practices.</p>	<p>Source of Measure FRPA s.47, FPPR s.17</p>
<p>Definitions</p>	
<p><u>Invasive Plants</u>-are plant species included in the Invasive Plant Regulation.</p>	
<p><u>Invasive Plants Assessment</u>- is an assessment under this FSP. Minimum elements include:</p>	
<ol style="list-style-type: none"> a) Check the provincial Invasive Alien Plant Program (IAPP) website for the presence of known invasive plants that overlap or are within 100 meters of proposed blocks and or roads. b) Office review the full list of invasive plants and then complete and document a field review to look for the presence of invasive plants on proposed blocks and or roads. c) If invasive plants are found or confirmed on proposed blocks and or roads, prescribe site specific measures to prevent the further spread of invasive plants from proposed blocks and or roads onto other areas. Measures may include, but are not limited to, changing the season of operation, cleaning equipment before moving, and avoiding the location of landings or storage areas where invasive plants are present. 	
<p>Measures</p>	
<p>TO IDENTIFY AND REPORT INVASIVE PLANTS:</p>	
<ol style="list-style-type: none"> 1. The FSP holder will, during timber development on proposed blocks and or roads, complete an Invasive Plants Assessment. If this assessment finds or confirms invasive plants, then any prescribed measures will be included on any site plan document as appropriate. 2. The FSP holder will, within one year of discovery of new invasive plants on proposed blocks and or roads under 1 above, report any new invasive plants to the IAPP website. 	
<p>TO PREVENT THE INTRODUCTION OR SPREAD OF INVASIVE PLANTS:</p>	
<ol style="list-style-type: none"> 3. The FSP holder will, on blocks and or roads during primary forest activities: <ol style="list-style-type: none"> a) Where temporary on block roads have created exposed soil, seed the exposed soil within 1 year of the completion of harvesting (using seed that meets the Canada Common No.1 Forage Mix specification). b) Where roads, have created exposed soil, seed the exposed soil (not including the compacted road running surface) within 1 year of completion of harvesting (using seed that meets the Canada Common No.1 Forage Mix specification). c) Inspect roads from b) within 18 months of initial seed application to determine if seeding has produced adequate cover on the exposed soil. Re-seed if necessary. 	

Result or Strategy

1. As a result, the **FSP** holder will employ the **FSP** Stocking Standards as defined in Appendix 3 of this **FSP** to establish free growing stands to the extent practicable.
2. As a result, the **FSP** holder will adopt FPPR s.46.11 for stratum sizes during the establishment of free growing stands under 1 to the extent practicable.
3. As a strategy, this **FSP**'s Stocking Standards may be applied to areas harvested under a previous **FSP** or Forest Development Plan. The Stocking Standards approved under this **FSP** will apply to an area harvested under a previous plan when the Stocking Standards identification number applicable to a Standards Unit (SU) is submitted in RESULTS. FRPA s.21(2).
4. As a strategy, **Crop Tree Assessment**-Regeneration and free growing surveys will be conducted under the oversight of a Forest Professional and/or Accredited Surveyor. Survey methodologies and tree acceptability criteria are as specified in the *Resource Practices Branch, Silviculture Survey Procedures Manual* and the *FS660-Silviculture Survey Reference* field card, as amended from time to time, unless specified or varied through provisions of this **FSP**.
5. As a strategy, for defining Deciduous Crop trees under 1, the **FSP** holder will utilize the applicable forest health and free growing criteria as specified in the *FS660-Silviculture Survey Reference* field card.
6. As a strategy for **Site Identification for the Purpose of Determining Stocking Standards**, when determining the appropriate stocking standard, site identification will be completed based on the procedures and site descriptions contained in Land Management Handbook Number 39 (1997) – *A Field Guide to the Forest Site Identification and Interpretation for the Cariboo Forest Region*, as amended from time-to-time.
7. As a strategy, for **District Policies that May Apply**, unless otherwise specified in this **FSP**, where a District approves a policy that varies the standards or procedure described in the *Resource Practices Branch, Silviculture Survey Procedures Manual*, the policy may be applied at the discretion of the obligation holder.
8. As a strategy for the **Deviation from Potential (DFP) Survey Methodology to Assess Stocking Levels**
Where harvesting on a SU having even aged stocking standards has resulted in partial cutting as a result of:
 - a) forest health management
 - b) where retention of crop trees is required to achieve a result or strategy in the **FSP** to address an objective set by government,

The deviation from potential (DFP) survey methodology may be used to assess compliance with stocking standards provided:

 - a) the stratum contains between five (5) and twenty (20) m²/ha of residual basal area in stems \geq 12.5 cm dbh, of preferred and/or acceptable species; and
 - b) the stratum is greater than 1 ha in size; and
 - c) the SU is not being managed to uneven-aged standards.

Where the DFP survey methodology is used this **FSP**'s applicable stocking standards, with regard to preferred and acceptable species, minimum tree heights, minimum inter tree distance, stocking targets, regeneration period and free growing period, continue to apply with the following exceptions:

- a) minimum inter tree distance for stems ≥ 12.5 cm dbh is 0.0 m; and
- b) subject to d) trees contributing to the retained basal area must be a preferred or acceptable species in the applicable stocking standard or another commercially valuable coniferous species, and
- c) trees contributing to stocking targets must be preferred or acceptable species specified in the stocking standard; and
- d) any tree species specifically reserved to address a result or strategy in the **FSP** will contribute to the measurable basal area on the site.

9. As a strategy, for ***Intermediate Harvest***

Where a stand is harvested consistent with FPPR s.44 (4), other than harvesting for the purpose of uneven-aged management, it shall be deemed an intermediate harvest where the harvested stand complies with the conditions specified below for a minimum period of 12 months following the completion of harvesting.

- a) greater than 20 m²/ha average basal must be retained in trees ≥ 12.5 cm dbh; and
- b) no area > 2 ha or 10% of the SU area, whichever is less, has a retained basal area < 20 m²/ha; and
- c) trees contributing to the retained basal area must be the species identified as preferred and acceptable in the applicable stocking standard; and
- d) greater than 50% of the contributing retained basal area must be a preferred tree species as defined in this **FSP**'s applicable stocking standard, if it existed on site prior to harvest; and
- e) trees contributing to the retained basal area comply with the attributes defined in FS 660 –Free growing *damage criteria for multi-story conifer stands*.

If during the 12 months period following the completion of harvesting the conditions specified above are not maintained, the licensee shall hold a free growing obligation on the harvested area and this **FSP**'s appropriate stocking standards shall be applied.

10. As a strategy for ***Uneven Aged Management***

This **FSP**'s uneven-aged stocking standards will be applied in situations where:

- a) the biogeoclimatic (BEC) zone/subzone is IDF, SBSdw2 or MSxk and Douglas-fir is the leading species pre-harvest; and
- b) the silviculture system for the stand is single tree or the removal of small groups of trees resulting in openings < 0.25 ha in size and the stand is being managed for multi-aged stand structure; and
- c) following completion of harvesting:
 - i. three (3) distinct layers are present
 - ii. layers 1 and 2 combined is either
 - a. $\geq 6\%$ crown closure, or
 - b. > 5 m²/ha of basal area in layer 1, and
 - iii. layers 3 and/or 4 are present.

If upon the completion of harvesting a continuous area ≥ 1 ha within the NAR does not meet the requirements of c) above a separate standards unit will be created and this **FSP**'s even-aged stocking standards shall be applied to the area.

11. As a strategy for ***Conversion of Multi-Story Douglas-fir Stand to Even Aged Management Following a Wildfire***

Where a SU or a portion thereof is impacted by a wildfire to the extent that the conditions specified in Section 10 above, “*Uneven Aged Management*” are no longer met, the impacted portion shall be defined as a separate SU and this **FSP**’s even-aged stocking standards shall be applied to the area.

12. As a strategy for ***Brush Competition***

Where specified in the site plan as leave trees, layer one (≥ 12.5 cm dbh), black cottonwood, trembling aspen, and birch trees, retained at the time of harvest are not considered competing vegetation at the time of the free growing assessment of coniferous crop trees.

Black cottonwood, trembling aspen and birch trees, and shrubs species being managed to achieve an objective, result or strategy of the **FSP** as specified in the site plan, are not considered competing vegetation at the time of free growing assessment of coniferous crop trees.

Trembling aspen, black cottonwood, birch, willow, and alder are not considered competing brush when conducting a free growing survey within 5 m of S4, S5, and S6 streams and all wetlands greater than 0.25 ha in the ICH and ESSF BEC zones, and within 10 m of S4, S5, and S6 streams, and all wetlands greater than 0.25 ha in all other BEC zones.

Where a brushing treatment has been undertaken, and a visual buffer is required to achieve a result or strategy, aspen, cottonwood, birch, willow and alder will not be considered competing brush when conducting a free growing survey where survey plots fall within the buffer.

For the purposes of free growing assessments in the SBPS BEC zone scrub birch will be considered non-competing when assessing the free growing status of crop trees.

Where an uneven-aged stocking standard from this **FSP** applicable to a site specifies a minimum free growing height of 0.4 m for Douglas-fir, snow berry, soopalallie, common juniper, Vaccinium sp. saskatoon, birch-leafed spirea, herbaceous vegetation, and grasses are not considered competing vegetation at the time of free growing evaluation of the well-spaced Douglas-fir.

Where required to assess the free growing status of a crop tree the conifer to brush ratio shall be 125% for the ESSF, IDF, and MS biogeoclimatic zones, and 150% in the ICH, SBPS and SBS biogeoclimatic zones.

13. As a strategy for ***Variations from Stocking Standards***

The **FSP** holder may, by completing an **assessment**, vary the stocking standards under this **FSP** as defined below in the following situations and circumstances:

- a) ***Multiple Years to Harvest a Standard Unit*** - where harvesting occurs over multiple years on a SU with a 4-year regeneration delay, regeneration delay may be extended to 4 years after the start of the last harvest entry to a maximum of 7 years from the initial disturbance date. The late free growing date will be 20 years from the harvest start date of the initial harvest entry.

- b) **Seven Year Regeneration Delay** - within three (3) years following harvest commencement, and where based on a post-harvest field assessment, if a portion of a SU with a 4 year regeneration delay is planned to be regenerated by natural regeneration or direct seeding, the area being managed for natural regeneration or direct seedling may be defined as a separate standards unit with regeneration delay period of 7 years.
- c) **Changes to Milestones Due to Damage Caused By Wildfire** - where any portion of a standards unit larger than 1 ha is disturbed by wildfire such that the SU is left Not Satisfactorily Restocked (NSR) according to this **FSP**'s stocking standard then:
- i. a new disturbance shall be reported for that opening;
 - ii. the NSR portion of the original standards unit may be defined as a new standards unit; and
 - iii. this **FSP**'s appropriate stocking standards shall apply to the disturbed area with the exception that:
 - a. if the Regeneration Delay period has not elapsed, then Regeneration Delay and Late Free Growing shall be calculated from the new disturbance date, or
 - b. if the Regeneration Delay period has elapsed, then a new Regeneration Delay period will not apply and only Late Free Growing shall be calculated from the new disturbance date.
- d) **Reduced Minimum Inter-tree Distance** – the minimum inter tree-distance (MITD) for a SU may be varied from this **FSP**'s standard in the following situations and circumstances.
- i. Where mechanical site preparation, other than slash piling, has been undertaken to create microsites prior to planting the MITD can be reduced to 1.6m.
 - ii. On slopes > 20% in the ESSF BEC zone where protected microsites are critical for successful reforestation due to snow creep, MITD may be reduced to 1.0 m where the SU has been planted to target density or greater.
 - iii. Where based on a silviculture survey a SU or portion thereof which has previously been planted has failed to maintain minimum stocking densities, due to the impacts of cattle or horses, the affected area maybe designated as a separate SU. In the newly designated SU the MITD may be reduced to 1.0 m if planting will be completed.
 - iv. For areas that are identified and mapped as a root disease polygon, which may include up to a 30 m buffer, a separate SU may be created and the MITD may be reduced to 1.6 m where a stump avoidance strategy is employed to manage root disease.
 - v. Where salvage harvesting has been undertaken in the IDF BEC zone following a stand initiating wildfire, which is defined as having a level of disturbance such that the stand is NSR prior to salvage harvesting, and where the objective is to restore Douglas-fir and even-aged management is required, the MITD for Douglas-fir may be reduced to 0.5 m. The reduced MITD shall apply to the distance between natural or planted Douglas-fir stems and any other preferred or acceptable crop tree species. The MITD between non-Douglas-fir crop trees species (e.g., pine to pine) remains as specified in this **FSP**'s stocking standards.
 - vi. On rocky sites where a plantability survey has determined that the target stocking cannot be achieved due to the presence of rock when assessed at the applicable MITD, the MITD may be reduced to 1.6 m.

- e) ***GAR Consistency*** - where this **FSP**'s stocking standards included in this **FSP** conflict with the management objectives/direction of an Order under the Government Action Regulation (GAR), the stocking standards will be varied to the extent that they do not conflict with management objectives/direction of the applicable GAR Order.

Achievement of this **FSP**'s stocking standard does not supersede the obligation holder's obligation to be consistent with all requirements specified in the GAR Order.

- f) ***Standard for the Reduction of Weevil Damage*** – if
- i. there is an active white pine weevil (*Pissodes strobi*) population on the block or an adjacent managed opening as evidenced by the presence of weevil damaged trees, and
 - ii. the spruce trees being assessed are of acceptable form and vigour and meet all other acceptability criteria (i.e., preferred or acceptable species, minimum heights, MITD) then for the purpose of assessing the free growing status of spruce crop trees, all deciduous vegetation shall be assessed as non-competing brush.
- g) ***BEC Site Series Mosaics*** - where an area consists of a mosaic of two or more BEC site series, which cannot be clearly delineated or mapped, the stocking standard from this **FSP** that applies to the area is the stocking standard for the dominate site series. The applied stocking standard may be varied such that a preferred species from the applicable stocking standard for either site series may be considered a preferred species and an acceptable species from the applicable stocking standard for either site series may be considered an acceptable species.
- h) ***Douglas-fir Preferred on Mule Deer Winter Ranges***. Within all mule deer winter range units to which this **FSP** applies, Douglas-fir may be considered a preferred species for the purposes of this **FSP**'s stocking standards.
- i) ***Management of Root Disease Sites*** - for standard units that consist solely of areas that are identified and mapped as a root disease polygon, which may include up to a 30m buffer surrounding the area of infection, an alternate ecologically suitable, commercially valuable species that are moderately susceptible, tolerant, or immune may be specified as preferred and/or acceptable to maximize species diversity on site at the time of planting.

Due to the risk of increased inoculum levels, which may result from a conifer release treatment, on areas that have been identified and mapped and managed as a root disease polygon, which may include up to a 30 m buffer, for the purpose of assessing the free growing status of a conifer crop tree, all trembling aspen, paper birch, black cottonwood, willow and alder shall be assessed as non-competing brush.

- j) ***Intermediate Harvest Standards*** - where harvesting is deemed to be an intermediate harvest, as per Strategy 9 *Intermediate Harvest* of this document, the applicable stocking standard from this **FSP** may be varied such that:
- i. there shall be no regeneration objective, and
 - ii. the minimum basal area objective shall be set at 20m²/ha or greater.

k) ***Uneven Aged Management Required to Achieve a Result of Strategy in the FSP*** - where required to achieve a result or strategy in the **FSP** any Douglas-fir leading stand may be managed for uneven aged stand structure, as per the uneven-aged Stocking Standards of this **FSP**.

Comment: The **FSP** holder adopted, as Results and Strategies, all applicable content from the Cariboo Regional Stocking Standards Supporting Document, dated July 24, 2018. This content is identified in this **FSP** by using ***bold and italics*** on titles. The **FSP** holder elected to retain their own Ecological Stocking Standards as these better manage for First Nations values.

7 Appendices

- Appendix 1 – Seral Targets
- Appendix 2 – Recreation
- Appendix 3 – Silviculture Stocking Standards