



**Tsq'escnem'c**

**Canim Lake Band  
Forest Stewardship Retention Plan  
for Snine Forest**

**Version 1.0 2013  
Natural Resources Office: 250-397-2253.**

# Table of Contents

Executive Summary and BCR .....	3
Introduction.....	6
Stewardship Rights .....	6
Objectives and Principles.....	6
NStQ–Land Use Principles and Consultation Guidelines .....	6
The CCLUP Paradox .....	7
Duty of Consultation.....	8
FSPs and Cultural Heritage Resource Objectives.....	8
Annual Allowable Cuts.....	10
Forest Stewardship Retention Plan for Snine Forest .....	10
Audience and Application.....	11
Organization, Structure and Process .....	11
TUS Themes .....	12
Aboriginal Interests.....	13
Sustainability.....	13
Harmonization and Joint Planning.....	13
Higher Level Planning Initiatives .....	13
NStQ LandUse Zones .....	14
Economics.....	14
Cultural Heritage.....	16
Archaeology Concern and TUS .....	16
Non-timber Forest Products.....	17
Watersheds, Riparian Areas and Fish .....	18
Cumulative Impacts .....	18
Watershed EDA .....	18
Food Fisheries.....	22
Biodiversity, Wildlife Abundance, Habitat and Connectivity .....	23
Parks.....	23
Deciduous .....	23
Increased Utilization and Reduced Stand Rotations.....	24
Dash Distance .....	24
Access Management .....	25
Connectivity Corridors.....	26
Appendix 1 Maps.....	27
Appendix 2 Forestry Consultation Form .....	28
Appendix 3 Discussion of Forest Retention Strategies for Snine Forest.....	29
Appendix 4 Non-Timber Forest Products.....	30
Appendix 5 Watershed EDAs.....	31
Appendix 6 Example Dash Distance and Access Management Plan .....	32

## **Executive Summary and BCR**

*“Our forests are not just for fiber.”* – Don Dixon, Natural Resources Co-Coordinator for the Canim Lake Band.





# Introduction

## Stewardship Rights

We, the Tsq'escnem'c, have stewardship rights and responsibilities over our Traditional Territory based upon our prior and continuing use of the land and resources for our sustenance and way of life. Our people, our language, our culture and our land are one. Our stewardship responsibilities are supported by our Aboriginal rights and title which are protected by section 35(1) of the *Constitution Act*, 1982. Section 35(1) requires the Crown to recognize and affirm existing Aboriginal rights and title, and substantially address our concerns on the potential impacts of forestry activities on our way of life.

## Objectives and Principles

It is an objective of the Tsq'escnem'c to maintain and protect traditional forest resources in a manner that supports the food, social, ceremonial and commercial use of the forest by members of the Tsq'escnem'c and the Canim Lake Band.

The guiding principles for forestry land management include:

- 1) ensuring conservation of natural resources, ecologically sensitive areas and cultural resources; and
- 2) ensuring Tsq'escnem'c priority access to resources for cultural, sustenance, community and commercial use.

The current forest management regime and strategic direction is not meeting our objectives and principles.

## NStQ–Land Use Principles and Consultation Guidelines

The Canim Lake Band is member of the Northern Secwepemc te Qelmucw (NStQ). This Plan is consistent with the *Northern Shuswap Land Use Principles and Guidelines* and with the *NStQ Consultation Guidelines*. See the link below for both of these documents.

[http://northernshuswaptribalcouncil.com/index.php?option=com\\_content&view=article&id=27&Itemid=45](http://northernshuswaptribalcouncil.com/index.php?option=com_content&view=article&id=27&Itemid=45)

## **The CCLUP Paradox**

In 1996, the Crown created the Cariboo-Chilcotin Land Use Plan (CCLUP) without proper consideration of the existing Aboriginal rights and title of the Tsq'escnem'c. The Canim Lake Band had no significant participation in the CCLUP, and our values were not incorporated in a significant way. On this basis, the CCLUP is not binding on the Canim Lake Band.

However, the CCLUP has legal status and it is binding on both the Crown and the forest industry. It also represents the views and values of a large number of residents in the Cariboo. In order to participate in forestry ventures, the Canim Lake Band has voluntarily subscribed to the CCLUP, such participation does not prevent the Band from taking steps to protect its Aboriginal interests.

The Crown now wants to undertake a “science based review” of the CCLUP. The motive is clear, to make more mature timber available for harvest on what many people feel is an already shattered forest landscape.

The CCLUP never anticipated the beetle epidemic, and it has never been significantly updated or revised. There are parts of the CCLUP that are not monitored or tracked, such as backcountry and modified harvest. Simply put the CCLUP has not been maintained.

A science based review might well expose problems and weaknesses in the CCLUP that could be exploited. However, the CCLUP is primarily a social and not a scientific plan. Science should not be used to circumvent the social values expressed by this plan.

In its current format, the CCLUP and other associated landscape level elements, protect some of the remaining mature timber from harvesting. This mature forest cover links directly to Canim's Aboriginal rights in terms of food fisheries, water quality, habitat for animals, hunting, gathering etc. Due to accelerated harvest, protecting the remaining mature forest cover is critical.

The beetle epidemic is effectively over, and it is time for the AAC to drop back. Continuing with an elevated cut is viewed as a serious threat to our Aboriginal interests.

The Canim Lake Band may now find itself in the position of defending a plan which excluded and ignored our people and values, simply because it is the best way to protect some of the remaining mature forest from harvest.

Deep consultation and accommodation on any changes to the current landuse planning framework will be required.

## **Duty of Consultation**

Canadian courts have instructed that the Crown must consult with Aboriginal people before making decisions that could affect existing Aboriginal rights or title. Our Aboriginal rights and title may be severely impacted by the provincial Crown's contemplated conduct regarding land use planning and forestry in Tsq'escnem'c Traditional Territory. The Crown has an oversight duty to ensure operators do not infringe on the aboriginal rights of the Canim Lake Indian Band and to accommodate the interests of the Band.

There are already agreements in place regarding Tsq'escnem'c Traditional Territory that are binding on the Crown, including the *Canim Lake Band Forestry Consultation and Revenue Sharing Agreement*, which is in effect until 2015. The purposes of the Agreement is "to facilitate the Parties in meeting their respective legal consultation obligations by establishing a consultation process which results in appropriate accommodation measures being implemented." (Section 2.1).

Consultation standards are detailed in Appendix B of the Agreement. Point 1.10 indicates the range of potential consultation levels, from "information sharing" at the low end, to "deep consultation" at the high end. Deep consultation will occur where preliminary assessments may indicate a significant Aboriginal interest and a significant impact to that interest.

In line with the Agreement, this plan confirms Tsq'escnem'c expectations regarding consultation and accommodation, and indicates minimum standards for land use planning and decision-making affecting Tsq'escnem'c Traditional Territory. This plan is without prejudice to Aboriginal rights and title and treaty negotiations.

## **FSPs and Cultural Heritage Resource Objectives**

This plan defines and clarifies cultural heritage resources and objectives of the Canim Lake Band. The resources and objectives presented in this plan are the focus of traditional uses and are of continuing importance to the Canim Lake Band.

Statutory decision makers and staff must ensure the cultural heritage resource objectives of the Canim Lake Band are adhered to based upon provincial forestry legislation. "Cultural heritage resources" are one of the eleven objectives included under the *Forest and Range Practices Act ("FRPA")*. Under the results-based *FRPA* framework, forestry operators must develop forest stewardship plans that consist primarily of management results and strategies for each *FRPA* resource value, including cultural heritage resources.

### ***Forest Planning and Practices Regulation***

In accordance with section 4.1 of the *Forest Planning and Practices Regulation*, the following cultural heritage objectives apply to forest stewardship plans:

#### **Objectives set by government for cultural heritage resources**

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

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

### ***Forest Planning and Practices Regulation Schedule 1, Section 4***

Factors relating to objective set by government for cultural heritage resources include those set out in section 4:

- 4. The following factors apply to a result or strategy for the objective set out in section 10 [objectives set by government for *cultural heritage resources*]:
  - a) the relative value or importance of a particular cultural heritage resource to a traditional use by an aboriginal people;
  - b) the relative abundance or scarcity of a cultural heritage resource that is the focus of a traditional use by an aboriginal people;
  - c) the historical extent of a traditional use by an aboriginal people of a cultural heritage resource;
  - d) the impact on government granted timber harvesting rights of conserving or protecting a cultural heritage resource that is the focus of a traditional use by an aboriginal people;
  - e) options for mitigating the impact that a forest practice might have on a cultural heritage resource that is the focus of a traditional use by an aboriginal people.

Any FSP that overlaps with the area under this plan must therefore be amended.

## **Annual Allowable Cuts**

The Canim Lake Band believes that the current timber supply methodology is flawed and routinely produces inflated AAC's. The method also ignores the fact that we are at the end of the pine-beetle wood supply. The remaining pine has likely been looked at, and rejected as un-harvestable many times. It mainly exists in small patches, on difficult terrain, and is of significantly lower quality than the pine harvested so far.

The Crown must demonstrate that the AAC is being appropriately dispersed over the District, and that Canim's core area is not being asked to carry the whole cut. This would result in unacceptable cumulative impacts.

The introduction of a green-wood/dead-wood partition for the upcoming AAC is critical. It will help to protect Canim's Aboriginal interests and ensure that the mid-term timber supply is not compromised.

In the absence of a timber supply analysis that is acceptable to the Canim Lake Band, a separate timber supply analysis for our core area will be created and applied under this plan in 2013-2014.

## **Forest Stewardship Retention Plan for Snine Forest**

In direct response to concerns raised by band-members, we have embarked on a landuse planning exercise over the core of our Traditional Territory. This area is known as Snine Forest (Sneenah, translates to Owl). See Appendix 1, Map 1-Snine Forest.

Land use planning is an ongoing community process that can take several years, however Band-members have expressed deep concern with the amount of clear-cutting in places such as Coffee Lake, Murphy Lake and the Bonaparte Plateau. There is great concern that the areas immediately north of Canim Lake will receive the same treatment.

Therefore, the need for a short-term retention plan is urgent. It must deal with the forest industry's immediate threats to our Aboriginal rights and title, while longer term land use planning processes continue.

We have created this Forest Stewardship Retention Plan ("FSRP") over the Snine Forest, designed to protect and manage key Aboriginal interests. The anticipated lifespan of this FSRP is 2-3 years. However, it must be clear that this FSRP sets the foundation for the Canim Lake Band's long term LandUse Plan, and that this FSRP is Version 1.0 of the Canim Lake Band LandUse Plan.

## **Audience and Application**

This FSRP has been written for provincial statutory decision makers and their supporting staff. It may also be utilized by the forest industry, if the Crown wants them to undertake part of the consultation process on the Crown's behalf.

The FSRP is to be implemented immediately. Only proposals that have completed consultation with the Canim Lake Band, and have an approval letter from the Canim Lake Band are exempt.

By using the FSRP, decision makers will be minimizing the risk of an infringement on Canim's Aboriginal interests. If statutory decision makers fail to meet the minimum standards provided in this FSRP, then the Canim Lake Band may oppose proposed forestry activity and pursue alternative approaches to protecting and managing Aboriginal interests.

## **Organization, Structure and Process**

This FSRP is organized around Aboriginal interests. Any forest stewardship requirements relevant to each Aboriginal interest are measureable and easily understood.

The Canim Lake Band has created a series of standards that proposals within Snine Forest must meet to complete consultation. An approval letter from the Natural Resources Department of the Canim Lake Band, which confirms that the Band has been fully consulted and accommodated and that the FSRP has been applied, will provide the statutory decision maker with the assurance that approval can proceed.

Staff of the Canim Lake Band will utilize a form to control the consultation process and apply the FSRP. This form also details the requirements for a consultation package. See Appendix 2-Forestry Consultation Form.

Staff of the Canim Lake Band's Natural Resources Department will work proactively with the Crown to deal with any unintended consequences of the FSRP or standards, special circumstances, suggested changes, or improvements.

Staff of the Canim Lake Band may grant exemptions from specific FSRP content, when the Canim Lake Band's Natural Resources Department deems it appropriate to do so.

The Canim Lake Band also intends to create a Natural Resources Advisory Group that will participate in consultation, and in the application of the FSRP.

## TUS Themes

The Traditional Use Study (TUS) information contained in this FSRP represents only a slice of the total potential TUS information. It was mainly collated via an FRBC project in 1998 and 1999. Additional TUS details will be added as further studies are completed.

The publication of sensitive TUS information, even in a somewhat masked format, is a major departure from normal practices. However, it was felt that publication was required in order to move the Canim Lake Band from a reactive cutting permit to cutting permit level, to a proactive landscape stewardship level.

Numerous themes were built upon TUS data of the Canim Lake Band. Within a theme, the polygons identified by the interview process are shown, but the exact contents are not. For example, hunting polygons generated by TUS interviews are shown, but what was hunted, when and by who is not available under this FSRP.

For Traditional Use themes, the concept of Relative Intensity (RI) was developed. This simply applies a value of 1 to each polygon identified by an interview, for a subject theme. Multiple interviews that identify the same area as important for a specific purpose result in higher RI's. If one interview identifies an area as important for hunting, it will have an RI of 1. If five interviews have identified an area as important for hunting, the RI will be 5. This provides a rough measure to the relative intensity of that areas use, by theme. RI provides a visual representation of strength of claim, and it can be used to guide the nature and depth of consultation. RI is not intended for any other purpose. RI values are not necessarily equivalent in weight or importance between, or even within themes.

For a visual presentation of strength of claim, a single combined Relative Intensity map was also produced.

RI visually demonstrates the Canim Lake Band's authority to apply stewardship over Snine Forest, effectively eliminating any potential burden of proof challenge.

# Aboriginal Interests

## Sustainability

The Tsq'escnem'c are committed to the preservation and stewardship of the land. The Tsq'escnem'c concept of sustainability encompasses elements of inclusion, moderation, fairness, respect for all life, recognition of the interconnectedness of all life and the practice of long term stewardship. Sustainability is a defining principle within the construct of culture, values, time and way of life that defines us as Tsq'escnem'c. It is therefore an essential Aboriginal interest.

## Harmonization and Joint Planning

An important theme identified within the NStQ LandUse Principles and Guidelines is that the NStQ is interested in how other land use plans, Government and Third Parties can reconcile their plans to meet the NStQ's vision.

Harmonization and joint planning between the Canim Lake Band and the Provincial Crown is possible, but has never occurred. While higher level discussions and negotiations drag on, accelerated resource extraction and allocation continues.

By producing this formalized FSRP the Canim Lake Band is calling the Provincial Crown to the table for harmonization, joint planning and shared decision making. This endeavor is consistent with section 35(1) of the *Constitution Act*, 1982, the New Relationship, NStQ Land Use Principles and Guidelines, the "Canim Lake Band Interim Agreement on Forest & Range Opportunities" and the "Canim Lake Band Forestry Consultation and Revenue Sharing Agreement".

We realize that true sustainability cannot be defined by the Tsq'escnem'c in isolation. Sustainability can only be defined and maintained by a living landuse plan. The Canim Lake Band believes that now is a good time to do a multi-stakeholder review and revision to the existing land use planning framework for three reasons. First, the existing framework has not incorporated the values or interests of the Tsq'escnem'c. The Tsq'escnem'c have not been fully consulted in the development or implementation of the current framework. Second, the Mountain Pine Beetle epidemic has had a profound impact on the land. Finally (and due to the Pine Beetle), we are rapidly transitioning from unmanaged to managed forests.

## Higher Level Planning Initiatives

The Crown cannot unilaterally impose decisions that could interfere with Aboriginal rights and title. The Canim Lake Band rejects any and all future plans, amendments or analysis produced by the Crown without our full participation. A cursory review at the end of the planning process is not participation. We require full and meaningful consultation and proactive participation at all stages of decision making that could impact Tsq'escnem'c interests, including strategic level planning.

## **NStQ LandUse Zones**

The NStQ created three distinct land use zones for use in this FSRP. These are Stewardship Areas, Sensitive Areas and Wilderness Areas. See Appendix 1, Map 2-NStQ LandUse Zones.

### **Wilderness Area**

Wilderness Areas were identified to protect and conserve areas that are culturally and environmentally significant. The NStQ has called for no clearcut logging in wilderness areas. Consistent with this directive, this FSRP defines and applies a short-term alternative stewardship model for the Wilderness Area within Snine Forest, as described below:

- The forest rotation age will be set at 100 years. See Appendix 3, Discussion of Forest Retention Strategies for Snine Forest.
- Only partial cutting to be employed, defined at the block level as having a cutting specification that removes less than 90% of the existing stand volume over the net merchantable area, meaning minimum 10% green stems reserved, in addition to area based wildlife tree patches.
- Adoption of the CCLUP mature and old seral targets for timber availability. Use of the latest Seral Stage numbers produced by ILMB, 2013. Despite any existing or future Regional Biodiversity Conservation Strategies, the Canim Lake Band does not support any further mature and old draw downs below these targets. However, deep consultation may be utilized for possible beetle salvage or management.
- Adopt and support the amount and distribution of the CCLUP OGMA's.
- In addition to **Deciduous Types** as outlined in this FSRP, no harvest of deciduous stems under any cutting permit authority, full deciduous reserve with 10% allowed for development and safety.
- The alternative model includes all other management practices as outlined in this FSRP, for example **Watershed EDA**.

### **Sensitive and Stewardship Areas**

Full and meaningful consultation and the incorporation of NStQ values and interests are to be used to manage these lands. Apply this FSRP.

### **Economics**

Inclusion is a core value for the people of Canim Lake. Resources are fairly shared and no-one is excluded.

The goal of the Tsq'escnem'c is to prosper by the sustainable use and stewardship of the land and resources within the Traditional Territory. Therefore a significant component of the Canim Lake Band's aboriginal interest is present and future economic opportunities.

### **Forestry**

The Canim Lake Band must be included fairly in any re-allocation of wood into area-based tenures. Negotiation is required. The Canim Lake Band rejects the head-count method of sizing tenures. Tenure size must be function of the size and productive capacity of our Traditional Territory. Significance of Tsq'escnem'c rights and title, and potential impacts on these interests should also factor into tenure allocation.

Areas over which the Canim Lake Band is interested in potentially securing area based forest tenure are shown on Appendix 1, Map 3-Potential Forest Tenure Areas.

Any utility infrastructure, mine or other project that removes productive forest land from one of the Canim Lake Band's forest tenures must replace that productive forest land.

### **Recreation and Tourism**

Recreation and Tourism opportunities are of great economic interest to the Canim Lake Band. There are several initiatives underway within the community to develop opportunities.

The area over which Canim Lake Band intends to pursue Recreation and Tourism opportunities is shown on Appendix 1, Map 4-Potential Recreation and Tourism Development.

Adjacent parks are also areas over which recreation and tourism opportunities are sought.

In the short term, and until further work is done, standard park and FSRP management will be utilized on these areas.

There are a number of key lakes that have been identified as critical for potential tourism opportunities, these are; Bobb's Lake, Howard Lake, Deception Lake and Pendelton Lakes. Any developments near these lakes will require deep consultation, with both the staff of the Canim Lake Band, and with band-members involved with recreation and tourism.

## **Cultural Heritage**

Cultural heritage is core to the Tsq'escnem'c culture, values, way of life and future. It is therefore an essential aboriginal interest. The concept of "cultural heritage" extends well beyond specific historical sites, it covers the entire Tsq'escnem'c Traditional Territory.

## **Archaeology Concern and TUS**

The Canim Lake Band has created a theme for high archaeology concern. Features such as burial sites, habitations etc were buffered in order to generate areas of high concern, and to partially mask these sensitive features. See Appendix 1, Map 5-Archaeology Concern.

The Canim archaeology concern theme has only one purpose, to inform the Crown when a proposal overlaps or is close to a sensitive archaeology feature.

Canim's Archaeology Concerns dataset in no way replaces the existing archaeology potential model that is in place in the 100 Mile House Forest District.

Professional archaeologists, working on behalf of the Crown or other proponents, will be able to gain access to this sensitive information during the course of their assessments.

Both for archaeology concern and for general TUS studies, fee for service on the ground fieldwork will be required, unless Canim's Natural Resources staff specifically indicates otherwise.

Despite any artificial timelines, fieldwork must be scheduled for snow-free conditions. The Crown and proponents must also realistically consider Canim's capacity to schedule and complete field studies.

Many of Canim's TUS themes extend beyond the boundaries of Snine Forest, these must still be considered in the consultation process.

## Non-timber Forest Products

The number and diversity of non-timber forest products (NTFP) utilized by the Tsq'escnem'c is significant. See Appendix 4-Non Timber Forest Products, for a partial listing.

Certain ecosystems and terrains at specific seral stages produce unique and important products. These elements make it extremely difficult to map, quantify or otherwise manage these products in detail. Dealing with this is well beyond the scope of this FSRP. NTFP themes are simply presented as polygons showing our interests and the relative intensity of use.

However, many of these values are strongly associated with old forest attributes, with deciduous types, riparian features and with non-forest vegetation complexes on rich sites (rich site NSR). Other components of this FSRP have been specifically tailored to support the non-timber forest products component of our aboriginal interests.

Otherwise, case-by-case consultation will be utilized to manage non-timber forest products.

At this time, the Canim Lake Band does not support the granting of tenures, licences or permits for Non-Timber Forest Products within Snine Forest.

### Non-timber Forest Products

<b>NTFP</b>	<b>DESCRIPTION AND MAP REFERENCE APPENDIX 1</b>
Hunting	TUS hunting areas, presented using relative intensity. Map 6-TUS Hunting RI
Trapping	TUS trapping areas, presented using relative intensity. Includes an overlay of traplines currently held by band-members. Map 7-TUS Trapping RI
Food Gathering and Agriculture	TUS food gathering and agriculture areas, presented using relative intensity. Map 8-TUS Food Gathering and Agriculture RI
Other Gathering	TUS other gathering areas, presented using relative intensity. Map 9-TUS Other Gathering RI
Placenames	TUS placenames, presented using relative intensity. Map 10-TUS Placenames RI
Food Fishery	TUS and contemporary food fishery, presented using relative intensity. Map 11-TUS Food Fishery RI
Consolidated RI	Consolidated Relative Intensity to give a perspective on strength of claim. Map 12-TUS Consolidated RI
Trails	TUS trail locations. Map 13-TUS Trails

## **Watersheds, Riparian Areas and Fish**

Fish and fish habitat, healthy watersheds, and clean water are core to the Tsq'escnem'c culture, values, way of life and future. They are therefore an essential Aboriginal interest.

The Tsq'escnem'c believe that all fish streams are sensitive and should be treated accordingly. Specific concerns include sedimentation, diverted drainage, unnatural drainage patterns, disturbed stream temperature regimes and habitat loss or degradation due to high or low peak flows.

In terms of our Aboriginal right to fish, the management of cumulative impacts has been identified by the Tsq'escnem'c as the single most important issue.

### **Cumulative Impacts**

Band-members believe that cumulative impacts may have significantly damaged and compromised aboriginal rights and interests, particularly those associated with fisheries.

Major licences are for-profit business ventures, many of which are controlled by shareholders who do not reside in the Cariboo. They have demonstrated that they cannot effectively manage cumulative impacts. Additionally there appears to be no Crown system for monitoring cumulative impacts. From a cumulative impacts perspective, the provincial FRPA/Forest Stewardship Plan model is a failed experiment.

The Provincial Crown, by making itself the sole steward of forest tenure revenues, rights, and legislation, is ultimately responsible for managing and monitoring cumulative impacts from forestry activities. They cannot delegate this responsibility.

A system to manage cumulative impacts must be created and maintained by the Crown. The Canim Lake Band, by the nature and scope of its Aboriginal rights and title, must be a full partner in this process.

In relation to watersheds, riparian areas and fish, EDA management is a good starting point for such a system.

### **Watershed EDA**

Equivalent Disturbed Area (EDA) management provides a basic stewardship safety net by limiting the gross amount of harvesting that can occur in a watershed over a given time period. This FSRP will use EDA to manage the cumulative impacts of logging over Sine Forest.

There is only one watershed study/tool in which the Canim Lake Band participated. That study, titled *Peak Flow Risk Assessment for the 71 Watersheds in the 100 Mile House Forest District*, is part of the 2008 100 Mile House Forest District Enhanced Retention Strategy.

The *Peak Flow Risk Assessment* study calculates peak flow risk ratings based off hazard and sensitivity as shown below where;

- Sensitivity-is defined by variables inherent to the watershed such as topography, morphology and stability, and
- Hazard-is defined by forest harvesting and pine beetle infestation-EDA.

Table 1. Risk assessment matrix for watershed planning for 100 Mile House Forest District

Watershed Peak Flow Risk Ratings		Hydrologically Equivalent Disturbed Areas in the Watershed (% of Watershed)						
		<15% (None)	15 to 25% (Very Low)	25 to 35% (Low)	35 to 45% (Moderate)	45 to 55% (High)	55 to 65% (Very High)	>65% (Extreme)
Sensitivity of watershed and stream channel to peak flow increases	None	None	None	None	None	None	None	None
	Very Low	None	Very Low	Very Low	Very Low	Low	Moderate	High
	Low	None	Very Low	Very Low	Low	Moderate	High	Very High
	Moderate	None	Low	Low	Moderate	High	Very High	Very High
	High	None	Low	Moderate	High	Very High	Very High	Extreme
	Very High	None	Moderate	High	Very High	Very High	Extreme	Extreme
	Extreme	None	Moderate	High	Extreme	Extreme	Extreme	Extreme

Key hydrological implications of different risk levels, as presented within the 100 Mile House Retention Strategy are summarized as follows:

**Low Risk:**

*The combination of the extent of disturbances and the sensitivity of this particular watershed is very unlikely to generate any kind of fish habitat degradation caused by the increases in peak flows.*

**Moderate Risk:**

*The combination of the extent of disturbances (i.e. the hazard) and the sensitivity of this particular watershed is likely to generate localized, but not extensive, fish habitat degradation caused by the increases in peak flows.*

**High Risk:**

*The combination of the extent of disturbances (i.e. the hazard) and the sensitivity of this particular watershed is likely to generate extensive fish habitat degradation caused by the increases in peak flows*

**Very High Risk:**

*The combination of the extent of disturbances (i.e. the hazard) and the sensitivity of this particular watershed is very likely to generate extensive fish habitat degradation caused by the increases in peak flows.*

**Third Party Watershed Risk Management**

The original intent of the *Peak Flow Risk Assessment* was to serve as a risk management tool. It was to guide foresters and companies in terms of when it might be time to go to a higher level of assessment, or possibly even stop.

Given the risks outlined in the District's watershed study, it would be reasonable to anticipate that as watersheds moved into the top half of High, or Very High that a higher level of assessment would include physically monitoring fish habitat condition, peak flows, turbidity and temperature changes. To our knowledge this has not occurred. Instead the model applied appears to involve finding a new hydrologist and making a new report, supported by a few field days, using larger watersheds and different assumptions. The resulting signed and sealed report is all that is required to get approval. Again, this represents the Crown delegation of forest stewardship to for-profit companies, with no associated monitoring.

FRPA is a results based system. Proponents must fail to be held accountable, without monitoring there is no accountability.

A results based system without monitoring is irresponsible, and is in direct conflict with the Northern Shuswap Land Use Principles and Guidelines document, which calls for a precautionary approach, to be used "*where there are threats of serious or irreversible environmental damage.*" Stewardship failure at the watershed level before some corrective action is taken is unacceptable.

The Canim Lake Band asserts that the Crown has no idea if there have been or could be negative impacts on Canim's Aboriginal food fishery. For example, what impact will a major weather event, such as a Q200 have on fish habitat in high EDA watersheds?

The Canim Lake Band intends to undertake a study to assess potential impacts on our food fishery at Coffee and Murphy lakes in 2013-2014.

### Canim Lake Band Precautionary Watershed Management

For this FSRP, a select group of watersheds had their EDA's recalculated. This process simply updated the *Peak Flow Risk Assessment for the 71 Watersheds in the 100 Mile House Forest District* for harvesting that has occurred since the report's original publication. See Map 14-Retention Strategy Watersheds and Appendix 5-Watershed EDAs.

Based on the risk tolerances expressed by Band-members the Canim Lake Band cannot accept any further harvesting in watersheds rated as **Very High** or **High**. These lands must be given time to recover. In watersheds with a risk rating of **Moderate**, deep consultation can be utilized for possible salvage logging. Industrial forestry operations should keep risk ratings at **Low**.

The following watersheds have reached EDA limits:

WATERSHED	EDA	RISK RATING	REGIME
Boss Creek	36	Moderate	Closed(deep)
Coffee Lake	45	Very High	Closed
Eagle-Murphy Lake	47	High	Closed
Unnamed A	50	Moderate	Closed(deep)
Unnamed B	61	High	Closed
Unnamed D	37	High	Closed

The remaining watersheds have the following % available to reach EDA limits:

WATERSHED	CURRENT EDA ESTIMATE	RISK RATING	AVAILABLE EDA% TO REACH MOD RISK
Bradley Creek	32	Very Low	23
Buffalo Creek	32	Low	3
Bridge Creek	22	Low	13
Canim Lake	21	Very Low	24
Christmas Creek	18	Very Low	27
Deka Creek	26	Very Low	19
Deception Creek	13	None	32
Eagle Creek	22	Very Low	23
Hendrix Creek	28	Very Low	17
Jim Creek	33	Low	2
McKinley Creek	16	Low	19
Pendelton Lakes	8	None	37
Succour Creek	31	Very Low	14
Spanish Creek	21	Very Low	24

The Canim Lake Band will undertake watershed recovery modeling in 2013-2014.

Any watershed that overlaps with the Canim Lake Band's Key Interest Area must have its available EDA (hectares to reach Moderate risk) divided between the KIA and third parties, based on gross watershed area. This preserves Canim's forestry opportunities.

For watersheds that cross Canim’s KIA, the following table shows the area split as a %.

<b>Watershed</b>	<b>% in KIA</b>	<b>% Outside of KIA</b>
Bradley Creek	22	78
Buffalo Creek	42	58
Boss Creek	16	84
Bridge Creek	11	89
Canim Lake	49	51
Deception Creek	15	85
Eagle Creek	10	90
Hendrix Creek	4	96
Jim Creek	2	98
Pendelton Lakes	91	9
Succour Creek	37	63
Spanish Creek	21	79

## **Food Fisheries**

Food fisheries are a key Aboriginal right and an essential Aboriginal interest.

Canim’s TUS data records specific fishing spots (the mouth of the Canim River) and more general fishing areas (for example Ruth Lake). Any and all riparian systems that connect to fishing spots or areas are part of Canim’s food fishery.

A dataset to approximate Canim’s food fishery has been created. The dataset started collecting TUS identified riparian systems at the level at which the Canim Lake Band will apply a no-harvest reserve zone. Buffer distances of 300 m, 200 m, 100 m and 50 m were applied based on the size and subjective value of the food fisheries features (buffers should be field measured using slope distance).

These zones protect the food fisheries features, their associated riparian habitats and a number of culturally and archaeologically significant sites and features. See Appendix 1, Map 15 a and b-Food Fishery.

These zones cannot fully protect Canim’s food fisheries from the negative impacts of excessive harvest levels; see **Watershed EDA** in this plan.

The Canim Lake Band’s food fishery is not to be used by any party or venture as a tailings pond, source of water in a manufacturing or extraction process, as a commercial commodity (i.e. selling water or generating power), or as a means to dispose of or dilute pollutants, including sewage and heat.

The foreshore of the Canim Lake Band’s food fishery is part of the food fishery, and is not for sale for profit or development by the provincial Crown.

The management regime for Canim’s food fishery needs further work and consideration. This will be part of a future project.

## **Biodiversity, Wildlife Abundance, Habitat and Connectivity**

Biodiversity, wildlife abundance, habitat and connectivity are essential aboriginal interests. They are inseparable from each other, and from all other Aboriginal interests. They link directly to the aboriginal right to hunt, fish, trap, gather foods and medicines and otherwise simply live on and with the land.

### **Parks**

Existing parks are major landscape features that provide for a host of values related to biodiversity, habitat and our aboriginal interests. Under this FSRP, no industrial harvesting of forests is to occur within provincial parks.

### **Deciduous**

Deciduous types are extremely important in terms of biodiversity. Due to recent accelerated cut levels, these types are even more critical and sensitive. See Appendix 3, Discussion of Forest Retention Strategies for Snine Forest, for a fuller discussion.

Deciduous types are also strongly linked to a variety of Aboriginal rights including wildlife habitat, hunting and gathering.

Under this FSRP, no harvest of deciduous types, as defined in the table below and shown in Appendix 1, Map 16-Deciduous.

#### **Reserved Deciduous Types**

<b>Stand Age</b>	<b>Deciduous Component</b>
0-80	>70%
80-120	>50%
>120	>25%

A more formal plan for creating targets and managing the amount, distribution and recruitment of deciduous types over Snine Forest is required, and will be created in the future.

## **Increased Utilization and Reduced Stand Rotations**

In order to make more out of less, and prevent the annual allowable cut from falling, some interests may propose harvesting stands at younger ages and harvesting smaller stems. This amounts to using the existing forest resources harder and on a shorter cycle.

This can have a number of negative impacts on general biodiversity, and therefore on Canim's Aboriginal Interests. See Appendix 3, Discussion of Forest Retention Strategies for the Snine Forest, for a fuller discussion. Shorter rotations may also negatively impact industries such as local log home building.

Increased utilization of waste piles associated with dead Mountain Pine Beetle wood is certainly a good idea. However, the issue of poor Mountain Pine Beetle utilization must not be used as a means to introduce increased utilization and shorter rotations in green stands across the entire landscape. These are three separate issues.

Under this FSRP, no reduced rotations or increased utilization of green trees in green stands, defined as any type having  $\geq 50\%$  live trees.

In the future, it may well be possible to designate some areas as suitable for more intensive, shorter rotation forestry. This would need to be determined in a multi-stakeholder environment.

## **Dash Distance**

Band-members have asked for more internal Wildlife Tree Patches (WTP's) and for dash distances  $< 400$  meters.

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 WTPs.

- 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 WTP or other internal feature ( $\geq 1$ ha) that provides for wildlife cover, for example NPBrush, but not an NCwetland.
- If the result of the buffer generates an internal polygon  $\geq 1$  ha (inside the block), add one or more WTP's ( $\geq 1$  ha in size) inside of this new polygon, until such time as an inside buffer of -200 meters no longer generates an internal polygon  $\geq 1$  ha.
- At this point a  $< 400$  meter FSRP dash distance has been established.

\*note, using this method NPUNN is blended with the NMA

See Appendix 6 for an example dash distance analysis.

Best practices would consider any existing or proposed harvest areas that impact dash distances. These would be openings that butt up directly against the new proposals. Achievement of green up on adjacent openings is considered to re-establish wildlife cover for dash distance.

At any time an early seral opening greater than 250 hectares (combined net area to reforest, NAR) is created, best management practices are required. Staff of the Canim Lake Band’s Natural Resources Department may also request best practices during consultation, depending upon the specific proposal.

**Access Management**

Band-members believe that increased access has had a negative impact on ungulate populations, especially moose. More deactivation and road closures are required. In particular deactivation must be targeted at quads.

There is currently a backlog of newer roads that should be deactivated.

Going forward, access management is best handled through consultation on a cutting permit by cutting permit basis. The Canim Lake Band requires an access management plan as part of the regular referral. This plan should describe existing access, access changes, and any plans for deactivation. Backlog access issues may also have to be dealt with at this time. See Appendix 6 for an example access management plan.

The Canim Lake Band’s trail network is as important as the network of existing roads. It must be given full consideration under access management.

**Trail Management**

See Appendix 1, Map 13 TUS Trails for a map showing Canim’s trails.

Trails must be managed via the consultation process. Fee for service field work may be required to locate, mark and GPS trails. Trails will be managed based on their importance and use, as per the table below. Importance will be determined by consultation.

Trail Management

IMPORTANCE	MANAGEMENT
High	GPS and mark trail where it intersects CP. Apply a negotiated no-harvest zone to the trail. Minimum 100 meter buffer.
Medium	GPS and mark trail where it intersects CP. Apply a negotiated no-harvest zone to the trail. Minimum 50 meter buffer.
Low	GPS and mark trail where it intersects CP. Utilize Machine Free Zone, and stubs to preserve location. Ensure trail is clear post-harvest. Discuss re-forestation or other options.

## **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. These Corridors are not necessarily reserves, and future consideration must be given to distances and the amount of a corridor that could potentially be early seral.

Connectivity should be managed at three linked levels, watershed, intermediate and cutting authority.

Within the limited scope of this FSRP connectivity measures are simply discussed and have been deferred as a future project.

### **Watershed Connectivity**

Watershed connectivity should be built around riparian features and other habitat anchors. Current anchors include parks, permanent OGMA's, deciduous types and riparian reserves associated with food fisheries under this FSRP.

Watershed level connectivity corridors should be spatially defined through a higher level planning process. They should be in the range of 200-400 meters wide.

### **Intermediate Connectivity Corridors**

Intermediate connectivity corridors should be spatially defined by forest professionals at the time of cutting permit development. They should be part of the referral package sent to the Canim Lake Band. They should spatially connect watershed level connectivity to cutting permit level connectivity. They should be submitted to the local District who will maintain a published dataset. Numerous blocks could potentially utilize the same intermediate connectivity corridor. They should be in the range of 50-100 meters wide and may utilize features such as trails.

Corridors should remain in effect until such time as all blocks they service can provide their own connectivity, or until they are replaced by another intermediate connectivity corridor that services all openings that still require intermediate connectivity (consultation required).

Achievement of Free to Grow is suggested as the indicator that on-block connectivity has been restored over an opening, meaning that the opening no longer needs an intermediate connectivity corridor.

### **Cutting Permit Level Connectivity**

Cutting permit connectivity is created by wildlife cover, defined as vegetation that provides ungulates with a high degree of shelter and visual screening from potential hunters. Elements could include WTPs, regen protection and cutting specifications.

## Appendix 1 Maps

Map 1.....	Snine Forest
Map 2.....	NStQ Landuse Zones
Map 3.....	Potential Forest Tenure Areas
Map 4.....	Potential Recreation and Tourism Development
Map 5.....	Archaeology Concern
Map 6.....	TUS Hunting RI
Map 7.....	TUS Trapping RI and Current Traplines
Map 8.....	TUS Food Gathering and Agriculture RI
Map 9.....	TUS Other Gathering RI
Map 10.....	TUS Placenames RI
Map 11.....	TUS Food Fishery RI
Map 12.....	TUS Consolidated RI
Map 13.....	TUS Trails
Map 14.....	Retention Strategy Watersheds
Map 15, a and b.....	Food Fishery
Map 16.....	Deciduous

## **Appendix 2 Forestry Consultation Form**

## **Appendix 3 Discussion of Forest Retention Strategies for Snine Forest**

## **Appendix 4 Non-Timber Forest Products**

**a-**Plants and berries traditionally used by NStQ

**b-**Plants and Berries used by animals that the NStQ depended upon.

## **Appendix 5 Watershed EDAs**

- **a** -revised watershed EDAs
- **b** -original watershed report for District of 100 Mile House
- **c** -appendix to original watershed report for District of 100 Mile House

## **Appendix 6 Example Dash Distance and Access Management Plan**