

April 24, 2023

RE: Introduction of the Quesnel Landscape Level Plan Summary of Current Forest Management

The Province of British Columbia, through the Ministry of Forests, and Indigenous Nations have started working on a Quesnel Forest Landscape Plan (FLP) pilot for the Quesnel timber supply area. The Quesnel pilot is one of four that are taking place in the province and are designed to test the creation of a FLP and to help inform the development of related regulations and ministerial policy. This plan will also inform the determination of an allowable annual cut (AAC) for the Quesnel timber supply area (TSA) based on the value's Indigenous peoples and local communities place on the ecosystems.

Who is involved in developing the Quesnel FLP?

The development of the FLP is a collaboration between government and Indigenous Nations, supported by forest and range licensees with input from stakeholders, local communities, and the public.

What has been done so far?

The pilot was initiated in late 2020 and work has been underway to bring information together to create a collective understanding of the plan area. To this end, a summary for current forest management for the Quesnel Timber Supply Area have been assessed and a summary is available for review and input.

What input is being requested?

By reading the summary of current forest management, attending open houses, and completing the questionnaire that will be provided, the planning team hope that you will tell us:

1. What is important to you about the forest ecosystems in the Quesnel TSA area?
2. Do you feel that current forest management is working?
3. Are there areas for improvement with forest management?
4. What direction you would like to see forest management take in the future?

A summary What We Heard Report will be made public after the engagement process has closed.

How will your contribution make a difference?

Your contribution will give the Quesnel FLP planning team a better understanding of the forest ecosystem values found in the planning area and of the ways they could be managed. This will be used to build a future vision for the management of forest ecosystem values within the Quesnel TSA.

Thank you very much for your time and contribution to the Quesnel TSA Forest Landscape Plan.

Acknowledgment

The Planning Team wish to acknowledge the many Indigenous Peoples, licensees, local governments, and the various stakeholders and technical experts that have been part of the journey so far. Their knowledge and expertise have been essential to the process so far.

Partnerships and Collaborations

The FLP is a collaboration between the provincial government and Indigenous Peoples, with input from forest and range licensees, stakeholders, local communities, and the public. For the Quesnel FLP, the following Nations have been active participants at the planning table: Nazko First Nation, ?Esdilagh First Nation, Lhtako Dene Nation, Lhoosk'uz Dene Nation and Ulkatcho First Nation. Additional engagement between Xatśúll First Nation and other neighboring nations is ongoing with the Province to determine their role in the Quesnel pilot. Tolko Industries, BC Timber Sales, and West Fraser Ltd. are also participating at the planning table, along with the City of Quesnel.

Introduction

As part of the FLP process, one of the initial steps is to explore and understand the current forest management of the plan area, including issues, opportunities, and expectations for forest management. This assessment is an integral part of the FLP development process, as it informs the current practices and identifies knowledge gaps in forest management. It is based on current databases, inventories and information from the BC government, Indigenous Peoples, licensees, and stakeholders. The results will be used to build a vision for the desired future landscape conditions and this vision will drive the development of management regimes across the planning area.

Objective/Purpose of this Document

This document provides a summary of the information contained in the Quesnel FLP Summary of Current Forest Management. It provides an outline of the context for the plan, describes the values that are being managed as well as how and where this management takes place. It also provides an overview of the current state of the forest, including existing regeneration standards and practices, forest health challenges and potential wildfire risks. Finally, this summary provides an outline of the next steps in preparing the Quesnel FLP, including how further input can be provided. Further details presented in this summary can be found in Quesnel FLP Summary of Current Forest management available here: <https://www2.gov.bc.ca/assets/download/17E96001DE4047C8BBC7CD2FDC0A9013>

Quesnel FLP Planning Context

The Quesnel FLP is one of four forest landscape planning pilots in British Columbia. FLPs are an emerging forest management tool in British Columbia that are intended to replace the current Forest Stewardship Plans (FSP) as part of changes to provincial forest management planning. Forest landscape planning is the process of establishing clear objectives and outcomes for the management of forest resource values over a defined area. The new forest landscape planning will enable a consolidated approach to forest planning and management at the landscape level (e.g., timber supply area, tree farm licence, or large area-based forest tenure). It will also help to facilitate upfront collaboration between

provincial government and Indigenous Nations, with input from licensees, stakeholders, communities, and the public.

The Planning Area

The planning area for the Quesnel FLP generally corresponds to the boundary of the Quesnel Timber Supply Area (TSA), including portions of the Cascadia TSA that are fully within the outer boundary of the Quesnel TSA. In total, the planning area covers approximately 1.7 million hectares of land in the central interior of British Columbia. Private lands, Indian Reserves, woodlots, Tree Farm license 52, and the Wells-Barker Community Forest are not part of the planning area. The current practices described are those that have been approved for the Quesnel TSA and will be referred to as such for the rest of this summary.

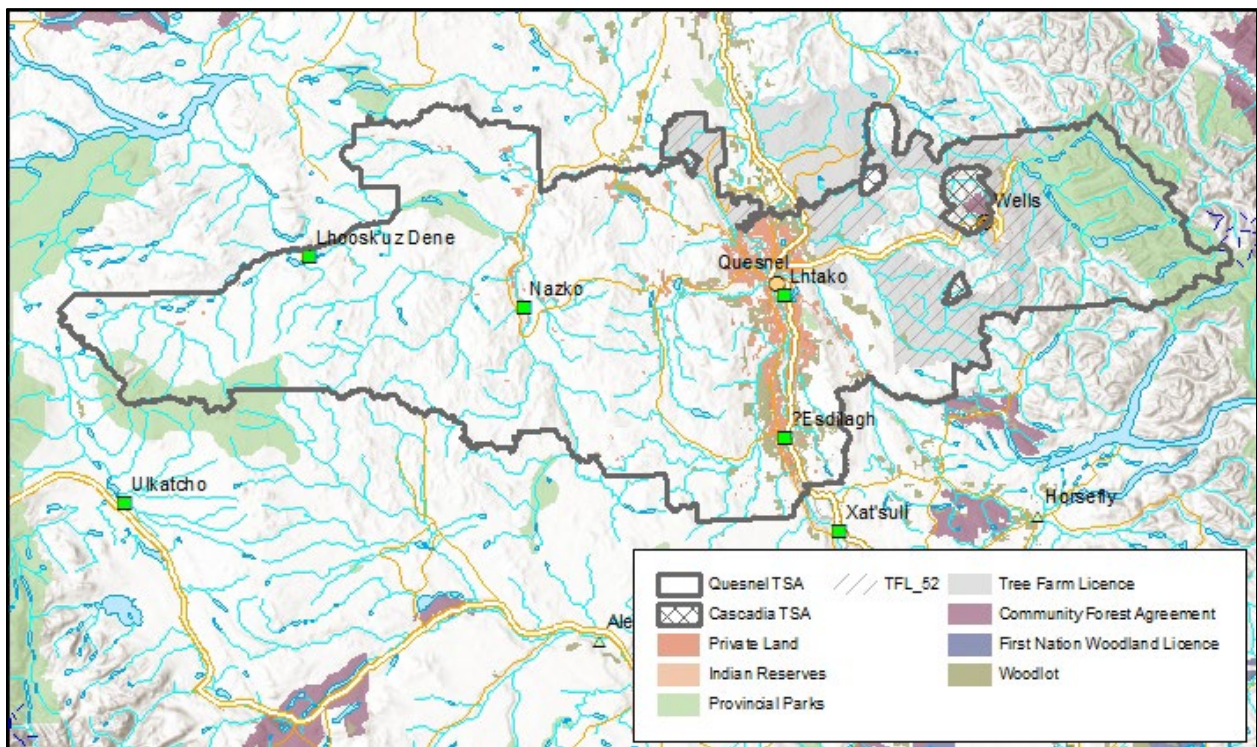


Figure 1. An overview map of the Quesnel TSA and specific land designations.

First Nations with Territory Overlapping the Planning Area

The following First Nation communities have identified territories within the Quesnel TSA:

- ?Esdilagh First Nation
- Lheidli T'enneh First Nations
- Lhoosk'uz Dene Nation
- Lhtako Dene Nation
- Nazko First Nation
- Neskonlith Indian Band

- Saik'uz First Nation
- Skin Tye First Nation
- T'exelc (Williams Lake First Nation)
- Tl'etinqox (Anaham First Nation)
- Tsi Del Del
- Ulkatcho First Nation
- Whispering Pines/Clinton Indian Band
- Xat'sull First Nation

Nazko First Nation, Lhoosk'uz Dene Nation, Lhtako Dene Nation, Ulkatcho First Nation, ?Esdilagh First Nation and Xats'ull First Nation are actively engaged in building the FLP and participating in different capacities.

Overview of the Current State of the Forest

The Quesnel TSA landscape is made up of 7 broad zones of uniform climate (biogeoclimatic zones), and 26 subzones where combinations of moisture and temperature go from very wet cold, moist cold, moist hot, dry warm, dry cool to very dry very cold. The landscape is also made up of all five natural disturbance regimes under which the ecosystems have evolved (NDT 1 to 5), with NDT 3 (ecosystems with frequent stand-initiating events) taking up 74% of the forested area. Historically, these forest ecosystems experience frequent wildfires that ranged in size from small spot fires to ones covering tens of thousands of hectares.

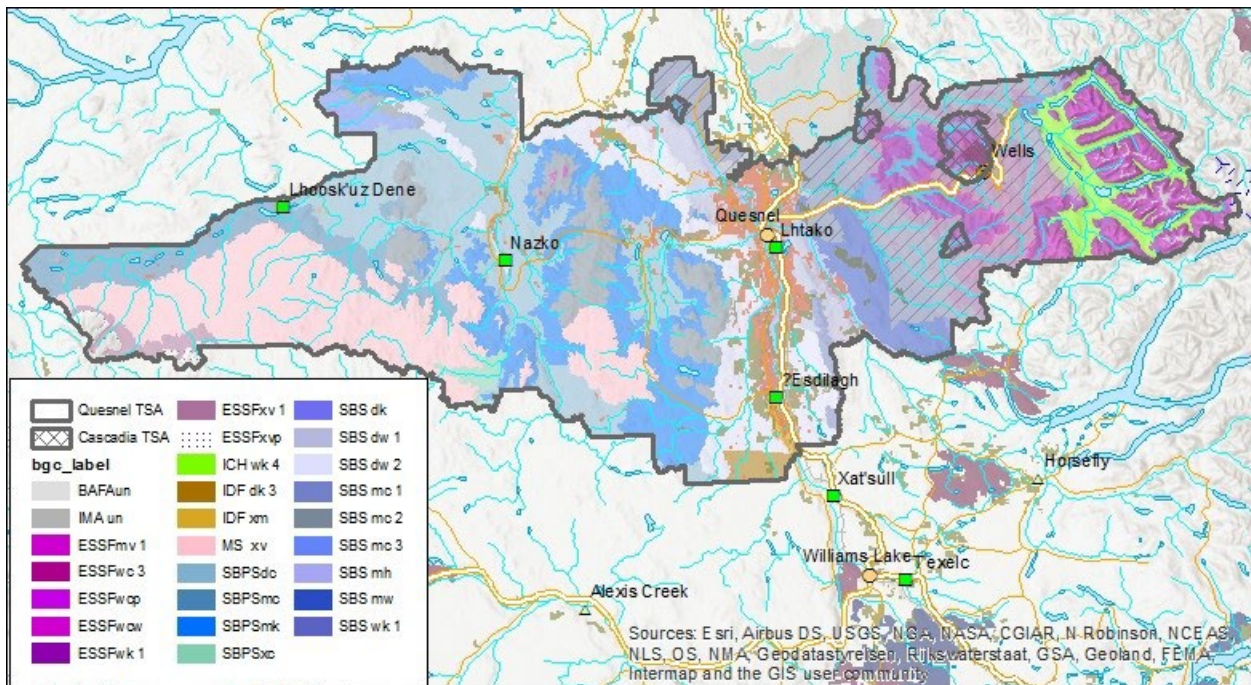


Figure 2. Biogeoclimatic zones and subzones found in the Quesnel TSA.

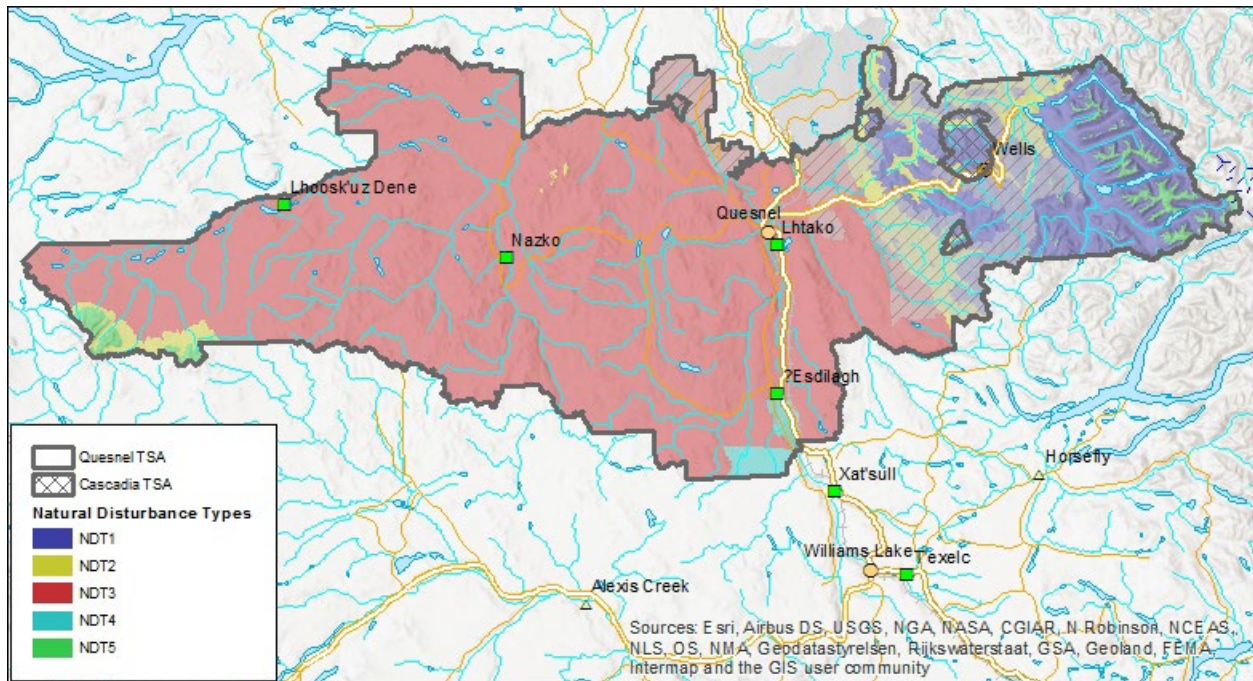


Figure 3. Map of the Natural Disturbance Types and their location within the Quesnel TSA.

The forested area within the FLP planning area covers 1,458,288 hectares, or approximately 88% of the planning area. This forested area does not include non-vegetated areas, treed wetlands, roads, and areas not capable of growing trees. Within the FLP area, about 20 percent of the forested area is less than 20 years of age, mostly as a result of recent wildfires and the mountain pine beetle outbreak and associated timber harvesting. An additional 30 percent of the area is occupied by stands between 81 and 140 years of age and approximately 20 percent of the area is occupied by stands older than 140 years of age. The rest of the area is occupied by stands 41 to 80 years of age.

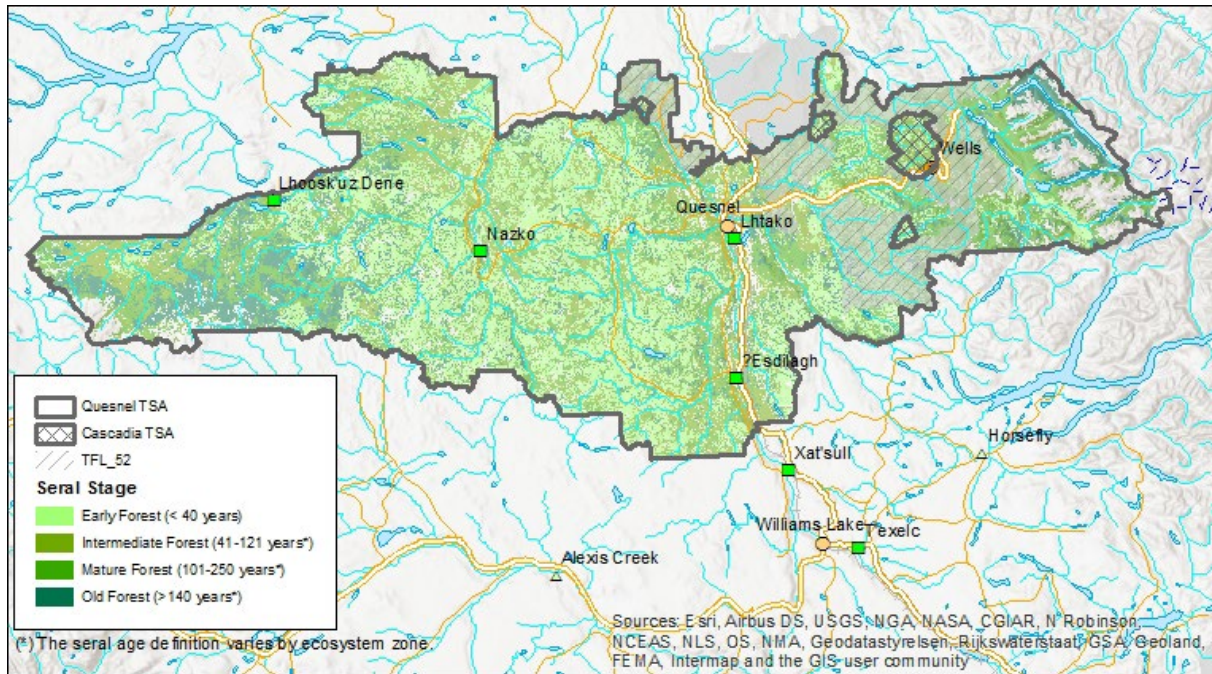


Figure 4. Map of seral stages within the Quesnel TSA.

Most of these forested areas (approximately 47%) are dominated by pine growing mainly in the western part of the planning area. Spruce and balsam-leading stands occupy about 30%, and, although they can be found throughout the planning area, there is a significant concentration growing west of Wells and around Bowron Provincial Park. Douglas-fir leading stands occupy about 6% of the forested area and can be found mostly growing along the Fraser and Nazko Rivers. Small portions of both deciduous (mainly aspen) and cedar-and hemlock-leading stands are present, with the cedar/hemlock stands growing along the southeastern and eastern boundaries of the Quesnel FLP area. Tree species information for about 12% of the forested area is not yet available as it has recently been harvested or disturbed by wildfires and has yet to be inventoried or reforested.

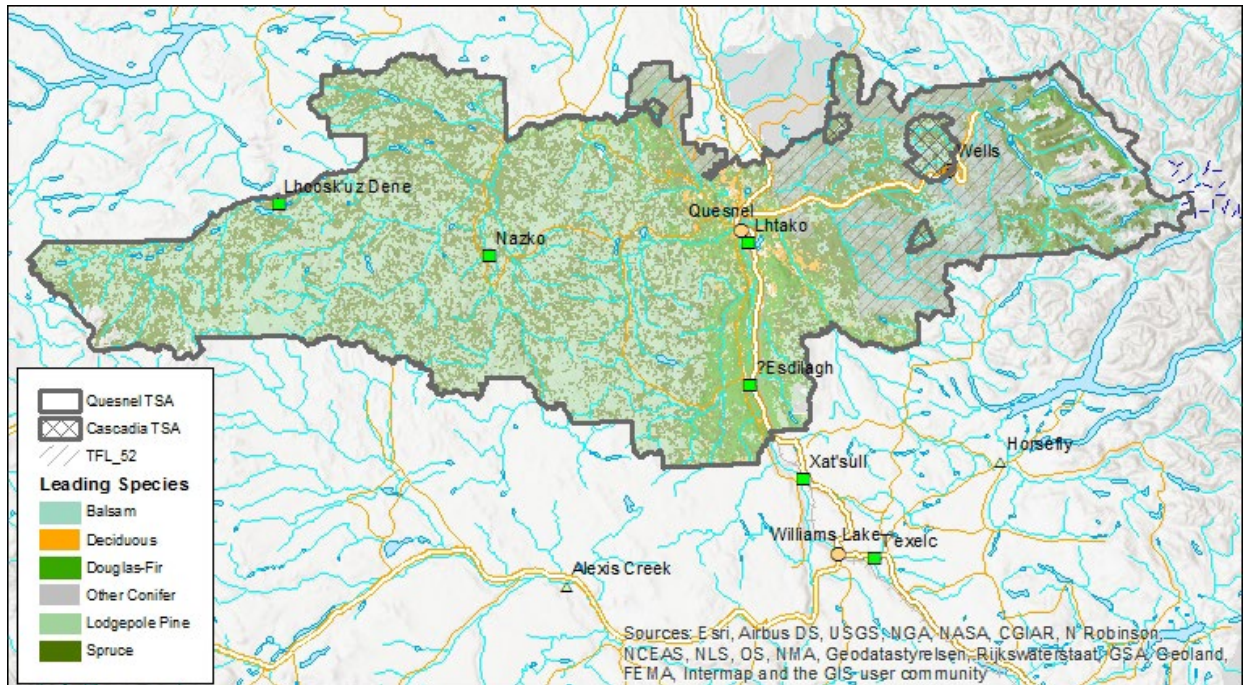


Figure 5. Map of tree species composition within the Quesnel TSA.

FSP holders are required by law to replant every area that is harvested, except for special circumstances such as wildfire fuel breaks. Direction on how and when reforestation will take place comes from stocking standards that were developed by a regional team made of Ministry staff from the three Cariboo Districts, BC Timber Sales, representatives from the Cariboo Region, major licensees, and representation from the community forests. These stocking standards have been endorsed by the three District Managers prior to being adopted into the current FSPs.

Typically, an FSP holder conducts a site assessment and identification to determine the most appropriate stocking standards to follow as there are differences based on location, ecology, and climate of the site. The standards include information such as preferred species to plant (or let come in naturally), acceptable species to plant (or come in naturally), target stocking density, minimum stocking density, etc. The stocking standards also outline specific direction for specific situations, such as mule deer winter ranges, grizzly bear areas, wildfire management, and others.

The Provincial Timber Management Goals, Objectives & Targets provides a coordinated provincial vision and a set of detailed timber management goals, objectives, and targets for each management area to assist forest managers in sustainably managing BC's forests¹. This document is being used as guidance within the Quesnel FLP to regularly revisit and refine, where necessary, timber management targets and strategies to address changing forest conditions, climate change, evolving public priorities and improvements in scientific knowledge. For example, planting results from 2009 to 2020 have shown that most trees planted are still Lodgepole Pine, followed by Spruce and Douglas-fir. However, since 2016, the percentage of Douglas-fir being planted has increased. This increase can be attributed to sites becoming more available to support the growth and development of this species. Results show

¹ https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/forestry/silviculture/provincial_timber_targets_2019-20_status_report_2021jan18.pdf

that planting is still the predominant regeneration method, although some areas are still being left to naturally regenerate.

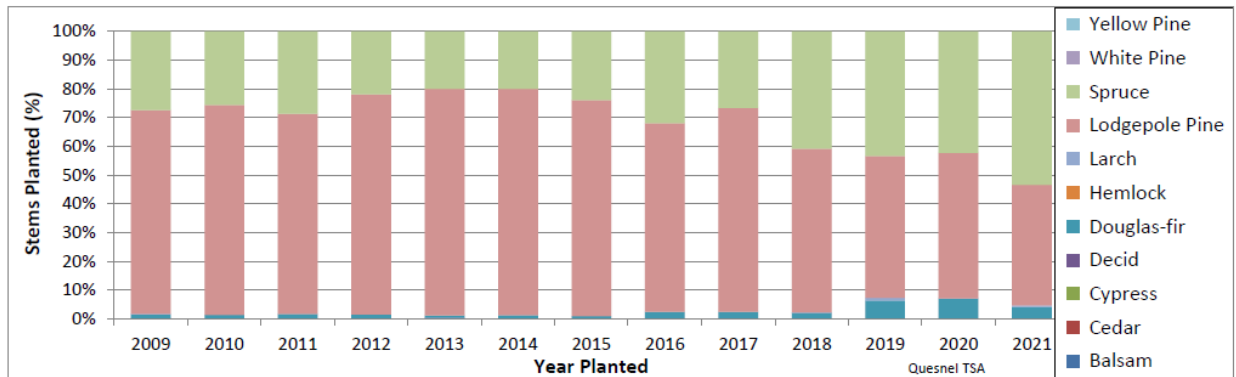


Figure 6. Planted species composition by year (2009-2021).

Although the MPB infestation has declined significantly, changes in climate can contribute to increased losses from other forest health damage agents which can again result in disruption to rural economies and critical wildlife habitat. The Quesnel FLP intends to address future forest biotic and abiotic damage agents by proactively having treatment and mitigation plans in place to be able to address issues quickly and efficiently when they arise.

The Quesnel Natural Resource District Forest Health Strategy 2019/2020² outlines the status of forest health and key tactics and forest management actions that can help address forest health issues. The strategy also provides information on how to reduce the impacts of climate change through the adaptation of current forest and range management practices. This information will be used to help develop future management strategies within the Quesnel FLP.

Fire is one of the major abiotic damaging agents that exist within the Quesnel TSA. Over the past 10 years an estimated 387,226 hectares have burned within the planning area. Of that, approximately 2% (8,409 hectares) have been burned within the established wildland urban interface. This interface area accounts for 218,102 hectares with 38% of this area categorized as high or extreme based on the provincial strategic threat analysis. British Columbia FireSmart³ is one of the programs that is working to better inform those that live in interface areas in the province on ways to prepare for wildfire. Within the broader TSA area, information related to fuel treatment options, cultural burning, and prescribed fire will be used to develop future fire management strategies within the Quesnel FLP to further wildfire resiliency.

Overview of Legal Requirements

There are several legal requirements that provide the key direction and location of values that are currently being managed within the Quesnel TSA. The following table provides an outline of these various requirements, their date of implementation and the direction they have provided. Current

²

https://www.for.gov.bc.ca/ftp/HFP/external/!publish/Forest_Health/TSA_FH_Strategies/Quesnel_Forest%20Health%20Strategy%202020.pdf

³ <https://firesmartbc.ca/>

results and strategies within Forest Stewardship Plans are written in such a way as to demonstrate how they are achieving the specific objectives.

Table 1: Legal Requirements and their Key Direction for the Forest Values and Conditions within the Quesnel TSA.

Date	Title of Direction Provided	Key Direction for Forest Values & Conditions
1994	Cariboo-Chilcotin Land Use Plan (CCLUP) & CCLUP 90-Day Report	<ol style="list-style-type: none"> 1. Provides legal direction 2. Guided the creation of new parks and protected areas 3. Established resource management objectives, targets and strategies 4. CCLUP 90-day report provided legal direction & guidance regarding forest management
1994	Quesnel Sustainable Resource Management Plan (SRMP)	<ol style="list-style-type: none"> 1. Provides non-legal direction 2. Addressed CCLUP strategies & targets on an area specific basis through detailed objectives & strategies
2010	Land Act Order (LAO)	<ol style="list-style-type: none"> 1. Provided legal direction for forestry activities 2. Objectives and maps set for 13 key resource values 3. Outcomes & management strategies described
2004	Forest and Range Practices Act (FRPA)	<ol style="list-style-type: none"> 1. Provides legal direction for forest & range activities on all public land in BC & to anyone who holds an agreement under the Forest Act or Range Act 2. Relates to forest planning, road building, timber harvesting, reforestation, and livestock grazing
2004	Forest Planning & Practices Regulation (FPPR)	<ol style="list-style-type: none"> 1. Legal direction on practice requirements related to forest management activities
2004	Government Action Regulations (GAR)	<ol style="list-style-type: none"> 1. Legal direction that directs how the B.C government establishes land designations or stewardship measures for forest and range values. 2. Orders have also created wildlife habitat areas (WHA) for specific species.
2004 and updated every 5-10 years	Forest Stewardship Plans	<ol style="list-style-type: none"> 1. Legal descriptions provided by Forest Licensees on the results and strategies that will be used to guide their forest activities

Current Values Being Managed within the Quesnel TSA

Based on the legal requirements outlined above (Table 1), forest practices within the Quesnel TSA are expected to follow the objectives and directions they provide to manage for values on the landscape. Table 2 provides only a brief overview of the specific objective for each value. More information related to these specific objectives, including their legal language can be found in the Quesnel TSA Summary of Forest Management Report

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Table 2: Value, Legal Order and Key Objectives for those Identified Values by Legal Order

Value	Legal Order	Key Objectives for Identified Values by Legal Order
Soil	FRPA/FPPR	<ol style="list-style-type: none"> 1. Objective set by Government through FPPR 2. FPPR covers 6 practice requirements related to soil and soil management
Timber	FRPA, CCLUP 90-Day Report	<ol style="list-style-type: none"> 1. Objective set by FRPA

Value	Legal Order	Key Objectives for Identified Values by Legal Order
		<ol style="list-style-type: none"> 2. FPPR covers practices related to various aspects of timber and forest health management including use of livestock, use of seed and free growing requirements. 3. CCLUP 90-day report commits to specific timber targets based on Special Resource Development Zones, Integrated Resource Management Zones, and Enhance Resource Management Zones. 4. CCLUP 90-day report recommends targets for 3 levels of timber harvesting across the three zones
Wildlife	FRPA, CCLUP 90-Day Report, LAO, GAR	<ol style="list-style-type: none"> 1. Objectives set by Government through FRPA 2. FPPR set objectives related to the survival of species at risk, regionally important wildlife, and the winter survival of specified ungulate species. 3. CCLUP 90-day Report targets grizzly bear, moose, furbearers, species at risk and other sensitive habitats within identified areas. 4. GAR orders set up specific management objectives for Ungulate Winter Ranges (UWR) or Wildlife Habitat Areas (WHAs) for identified species.
Riparian Areas & Hydrology	FRPA, LAO, CCLUP 90-Day Report	<ol style="list-style-type: none"> 1. Objective set by Government through FPPR 2. FPPR covers practices related to water, fish, wildlife, and biodiversity within riparian areas with the objective to conserve at the landscape level, the water quality, fish habitat, wildlife habitat and biodiversity associated with these riparian areas 3. LAO provides direction related to the management of riparian reserve zones on streams, wetlands, and lakes, as well as on fish sensitive watersheds, critical fish habitat and community watersheds 4. CCLUP 90-day report provides direction on forest management practices with riparian management zones
Biodiversity	FRPA, LAO, CCLUP 90-Day Report	<ol style="list-style-type: none"> 1. Objective set by government through FPPR –to design areas on which timber harvesting is to be carried out that resembles, both spatially and temporally, the patterns of natural disturbance that occur within the landscape. 2. LAO – biodiversity maintained through defined spatial datasets and targets within the Cariboo-Chilcotin Landscape Units (CCLU) 3. CCLUP 90-Day Report – mature + old seral stage targets and seral stage definitions as per the Biodiversity Conservation Strategy (1996) for the CCLUP
Biodiversity – Stand Level	FRPA, LAO	<ol style="list-style-type: none"> 1. Objective set by government through FPPR – focus on retaining wildlife trees 2. LAO sets Wildlife Tree Retention (WTR) targets 3. Non-legal Cariboo-Chilcotin Grasslands Strategy
Visual Quality	FRPA, CCLUP-LAO	<ol style="list-style-type: none"> 1. Objective set by government through FPPR – refers to scenic areas established through other legal frameworks or if none set, provides direction based on visual sensitive classes. 2. LAO – maintain the visual quality objectives for scenic areas as defined by the spatial dataset – Cariboo-Chilcotin Scenic Areas
Recreation	FRPA, CCLUP 90-Day Report, LAO	<ol style="list-style-type: none"> 1. Objective set by government through FRPA Forest Recreation Regulation – focus on Recreation Sites and Trails 2. CCLUP 90 Day Report sets legal objectives for the maintenance of backcountry recreation opportunities and conditions. 3. LAO – sets legal forest management requirement related to specific trails
Cultural Heritage	Cultural Heritage Act (CHA), FRPA, CCLUP 90-Day Report	<ol style="list-style-type: none"> 1. CHA sets up the legal requirements associated with protecting and preserving heritage sites and heritage objects. 2. Objectives set by government through FPPR – conservation and protection of Cultural Heritage Resources (CHR) 3. CCLUP 90-Day Report – sets objectives around specific cultural resources such as Pine Mushrooms and Wildcraft resource.
Grazing	CCLUP 90-Day Report	<ol style="list-style-type: none"> 1. CCLUP 90-Day Report – sets objectives related to the maintenance of Animal Unit Months within specified polygons as listed in the CCLUP.
Natural Range Barrier Measures	FRPA	<ol style="list-style-type: none"> 1. Under FPPR, measures must be specified to mitigate the effect of removing or rendering ineffective natural range barriers.

Value	Legal Order	Key Objectives for Identified Values by Legal Order
Invasive Plants	FRPA	1. Under FPPR, measures must be specified to prevent the introduction or spread of species of invasive plants under the Invasive Plant Regulation

Managing for Environmental Change

The Quesnel TSA landscape has seen significant changes in recent years from the effects of the Mountain Pine Beetle (MPB) and wildfires, along with the resulting salvage operations that have tried to mitigate the losses from both. With climate change projections expected to bring increases in temperature, and changes in how the area will experience precipitation, further reshaping of the landscape can be expected. Developing management approaches that support climate change adaptation and ecosystem resiliency is an important component of the FLP planning process. To help support the adaptation of forest management practices, within the context of a changing environment, the Quesnel FLP process will create a monitoring plan based on measurable outcomes and planning guidelines. It is hoped that through this undertaking, the information generated by the indicator sets will signal when management practice changes need to take place, or be adjusted, to ensure the resiliency of the various key values.

As a result of the significant changes that have taken place in the TSA, about one-third of the forested area is young (i.e., under 40 years of age), mostly in the central portion of the area. Approximately 47 percent of the forested area is considered mature and old, and this area is mostly concentrated in the western and eastern portions of the TSA.

For more information on the climate change projections for the area please refer to the Quesnel Summary of Current Forest Management Report

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Current Management of Existing Suite of Values

As described in Table 2, the current management of values within the Quesnel TSA is guided by specific objectives and targets. This section describes how and where these objectives and targets are being applied. It is important to note that the summary of current practices presented comes from existing Forest Stewardship Plans for the area. However, the information does not cover the full suite of key requirements, or sections of those requirements, nor does it represent the legal language found in the specific objectives or in the FSPs.

Value – Soils

Soil management requires limits be placed on the amount of disturbance that can take place, as well as the amount of permanent access structures, such as roads. Within existing planning framework, the following management is undertaken to manage soil disturbance and permanent access:

1. Maximum soil disturbance of 5% for sensitive soils and 10% for non-sensitive soils based on net area. No more than 25% of the area covered by a roadside work area can be disturbed, or 25% over the entire area.

2. Soil disturbance may exceed the limit if removing infected stumps, salvaging windthrow, or constructing a temporary access structure that meets specific requirements.
3. The minister may require an agreement holder to rehabilitate an area of compacted soil based on set criteria.
4. Permanent access structures cannot exceed 7% of the cutblock unless there is no other practicable option, there are safety issues, or the roads are required for selection harvesting systems, and they limit any additional disturbance.

Information from the MOF's Reporting Silviculture Updates and Lands Status Tracking System (RESULTS) application suggests that the amount of soil disturbance and permanent access structure resulting from forestry activities is well within the maximum amount specified by the FPPR.

Value - Timber

The importance of forestry to the local economy within the Quesnel TSA area is reflected by the large number of timber processing facilities. There are currently 4 sawmills, 2 pulp and paper mills, and 3 facilities producing plywood, veneer, or paneling. Wood for these facilities comes from a variety of forest tenures and agreements, including forest licenses, community forest agreements, or tree farm licenses.

The Quesnel TSA has a current allowable annual cut (AAC) of 2,607,000 cubic metres. This AAC is partitioned as follows:

- Live coniferous trees – 1,250,000 cubic metres
- Dead trees – 1,230,000 cubic metres
- Deciduous leading stands – 127,000 cubic metres

By law, the AAC must be determined at least once every 10 years. The current AAC was determined by the chief forester on June 16, 2017.

Based on the amount of volume scaled, harvest levels have been below the AAC since 2013.

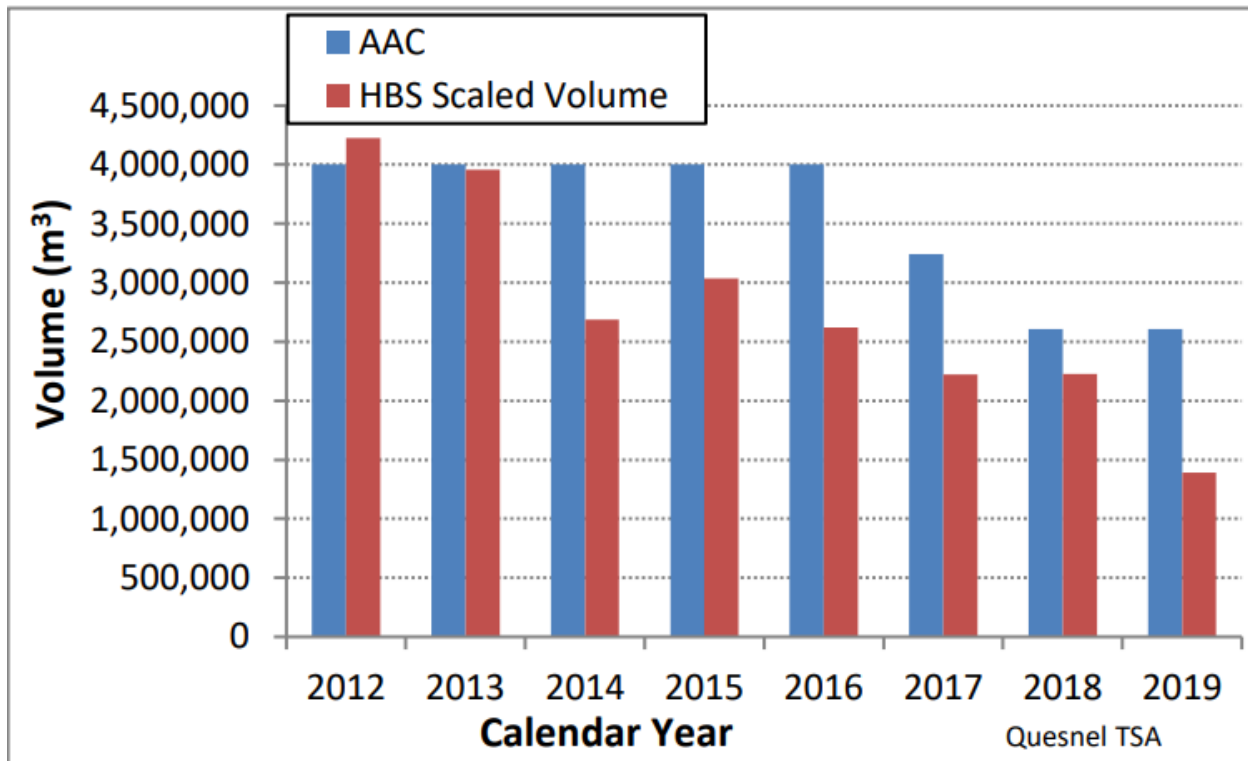


Figure 7. Volume of timber scaled versus Allowable Annual Cut 2012-2019.

About 39 percent of the total volume harvested is Lodgepole Pine, followed by Spruce (32 percent), Douglas-fir (15 percent), and Balsam (13 percent).

Timber targets have been set through the CCLUP to provide the following levels of access:

1. Special Resource Development Zone – access to 70% of the timber from the productive forest landbase, with a maximum of 30% netdown for other values,
2. Integrated Resource Management Zone – access to 81% of the timber from the productive forest landbase, with a maximum of 19% net down for other values, and
3. Enhance Resource Management Zones – access to 83% of the timber from the productive forest landbase, with a maximum of 17% netdown for other values.

The CCLUP 90-Day Report also recommends targets for three (3) levels of timber harvest across these three (3) zones broken down into conventional, modified (harvesting using modified practices) and no harvest. Although some FSPs mention the 3 levels of timber harvesting, the CCLUP definition for conventional and modified are no longer relevant and, therefore, the sub-unit targets are used only as guidance.

There are no specific timber practices that are outlined in FSPs. The current management for the timber objective is achieved through multiple other results and strategies found in the FSPs.

Value - Wildlife

The management of wildlife within the Quesnel TSA falls within the following categories, the survival of Species at Risk (SAR), the survival of regionally important wildlife, the winter survival of identified

ungulate species, and furbearers. Due to the value of these various species and their status, results and strategies must consider many sources of information with the goal of conserving sufficient habitat in term of amount of area, distributions of area, and attributes of those areas.

There are 19 SAR identified within the Quesnel TSA. For these species, as well as for sensitive habitats, and in addition to the general objective set by government, the following practices are part of existing management practices:

1. Incorporating the general wildlife measure⁴ that applies to the area,
2. Conduct a general assessment consisting of a GIS data analysis of the area around the proposed cutblock and road to determine if there are any noted occurrences in the vicinity of the development (e.g., within 1000 m buffer).
3. If a SAR is observed during the actual road construction or harvesting, and the activity could impact the SAR, a Qualified Professional will assess the risk and develop a strategy that mitigates the impact to the SAR. This strategy will then be implemented by the FSP holder.

There are also regionally important species that are protected under the Government Action Regulations (GAR). These GAR establish Wildlife Habitat Areas (WHA), or Ungulate Winter Ranges (UWR) for the species at risk or identified ungulate species. In the Quesnel TSA, species protected under GAR include the American White Pelican (WHA), the Eastern and Western Mountain Caribou herds (WHA), Blue Heron (WHA), and Mule Deer (UWR). Within each of these areas, additional forest management directions (e.g., access management, timing of activities, etc.) and restrictions must be met by FSP holders.

Moose and Grizzly Bear are also species that require additional attention in the Quesnel TSA. For moose, the current management strategy is designed around managing thermal and security cover around key wetland and riparian areas, along with winter habitat, while also managing road construction and densities. Special Moose Management Zones (MMZ) have been set up through a combination of Land Act Orders (LAO) and CCLUP direction with associated prescriptions that are demonstrated within FSPs results and strategies. Like moose, grizzly bear has specific habitat requirements established through LAOs where specified prescriptions to protect critical habitat and food sources. These requirements are outlined in FSPs operating within these areas.

⁴ General Wildlife Measures are specific management practices that are assigned to a specific wildlife habitat area under GAR.

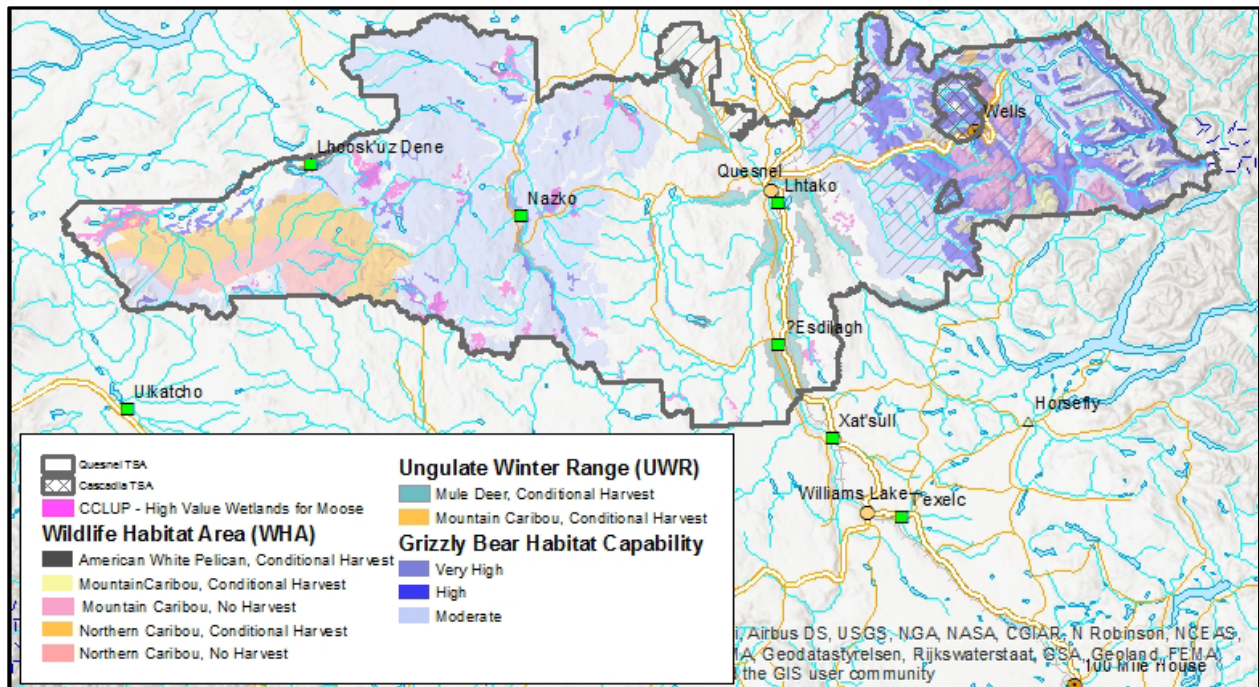


Figure 8. Map of wildlife habitat areas, ungulate winter ranges and grizzly bear habitat capability in the Quesnel TSA.

The final wildlife species addressed through FSP are furbearers. The current general management practice when managing furbearers is as follows. Where harvesting removes greater than 50% of the basal area in contiguous areas greater than 5 hectares, a minimum of 1 unburned debris pile per hectare will remain at the end of harvesting. For fisher and wolverine, the practices implemented by FSP holders are to follow the direction listed for SAR (as above). They must also accommodate specific habitat structures that each species may need during their life history components⁵. Information related to a new recovery strategy for Fisher is expected to be made available shortly and, where possible, integrated into the Quesnel FLP.

For more information related to the current practices related to wildlife species please refer to the Quesnel FLP Summary of Current Forest Management Report

<https://www2.gov.bc.ca/assets/download/17E96001DE4047C8BBC7CD2FDC0A9013>

Value - Riparian Areas and Hydrology

Stream, wetlands and lakes

Riparian areas associated with streams, wetlands and lakes support many important values. Current forestry practices typically revolve around 3 riparian zones – the Riparian Reserve Zone (RRZ), the Riparian Management Zone (RMZ) and the Riparian Management Area (RMA). The RMA is the combined area of the RRZ and the RMZ. The width and management practices allowed within these three zones are specified by the FPPR and the LAO. Typically, there is no harvest, or road development, within the RRZ, and trees must be retained within the RMZ. Based on the requirements from the LAO

⁵ see <https://www.bcfisherhabitat.ca>).

and the FPPR and on related FSP commitments, it is estimated that 127,778 hectares are currently reserved from harvest to manage for riparian values.

Critical Fish Habitat

The LAO identifies critical fish habitat and specifies that these areas must be maintained as no harvest areas, except for situations such as fuel management, insect control, road or fence construction. These requirements are reflected in approved FSPs. There are currently 7,607 hectares of critical fish habitat no harvest zones within the Quesnel TSA. There has been no harvesting within the critical fish habitat areas since they were created.

Watershed Hydrology

The CCLUP provides legal direction to portions of the Cariboo, Cottonwood and Quesnel rivers watersheds that are critical to fish and wildlife habitat and hydrological stability. When equivalent clearcut level (removal of trees) exceed, or have the potential to exceed, 25%, a watershed assessment is conducted by a Qualified Professional and a plan is developed to follow those recommendations. FSP holders also ensure all newly constructed roads (<1 year old), or fish stream crossings, or roads under their responsibility that show signs of terrain instability, are inspected. These inspections are conducted post freshet for erosion, slope failures, stream crossings and any signs of instability, and for permanent roads, inspections are based on risk.

Salmon Watersheds

The LAO provides legal direction for salmon stocks along the following rivers: Baezaeko, Cariboo, Cottonwood, Fraser, Nazko and Quesnel. In these watersheds, results and strategies that have been developed to support other values (e.g., Biodiversity, Critical Fish Habitat, Fisheries Sensitive Watersheds, etc.) are applied. As well, new roads are not constructed and existing roads are not upgraded on unstable terrain located within 500 metres of the main stem of the Fraser River, unless a terrain stability assessment is completed and recommendations implemented.

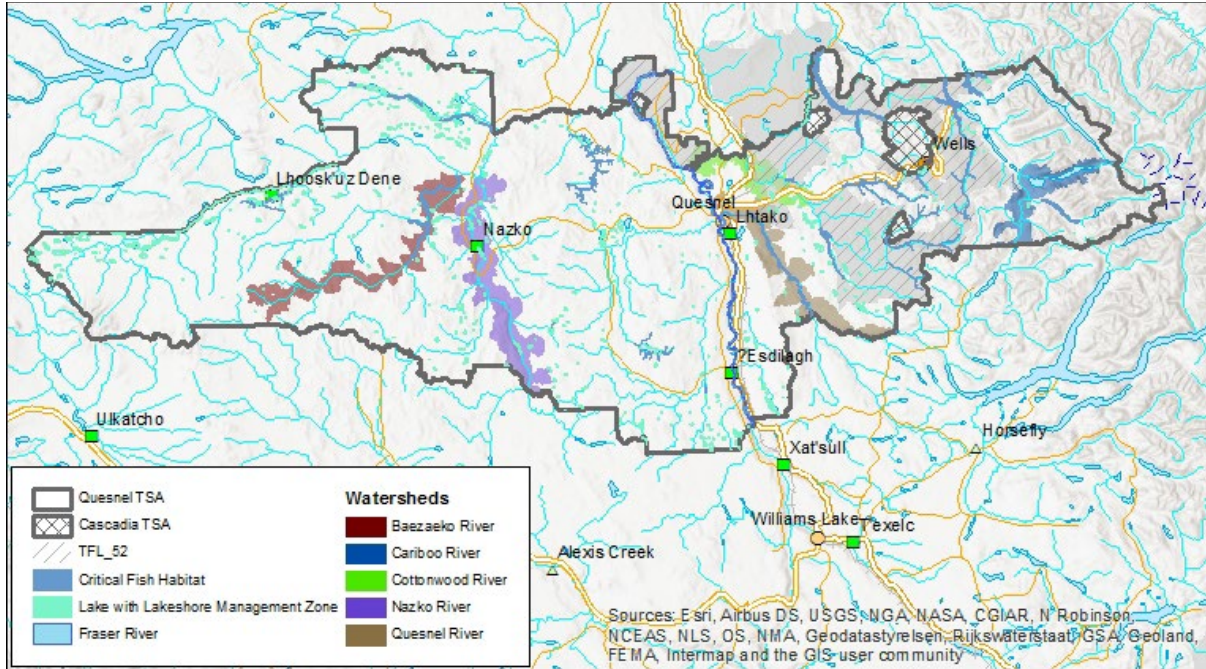


Figure 9. Map of Key watersheds within the Quesnel TSA.

This summary does not cover all of the current practices undertaken to manage riparian areas and hydrology. For more information, please review the relevant section in the Quesnel FLP SCFM report <https://www2.gov.bc.ca/assets/download/17E96001DE4047C8BBC7CD2FDC0A9013>

Value – Biodiversity: Landscape & Stand

Biodiversity at the landscape scale is managed through objectives and targets set for mature and old seral stage forest types. These are based on the natural disturbance that occurs within the landscape. FSP holders do not harvest more than these targets unless directed for specific salvage harvest, partial cut systems, primary and interface fuel breaks, or harvesting that is essential for insect control.

The map below shows the status of each seral stage assessment units regarding the target amount for mature and old forests. Seral stage assessment units are a combination of ecosystem variant and natural disturbances within a landscape unit.

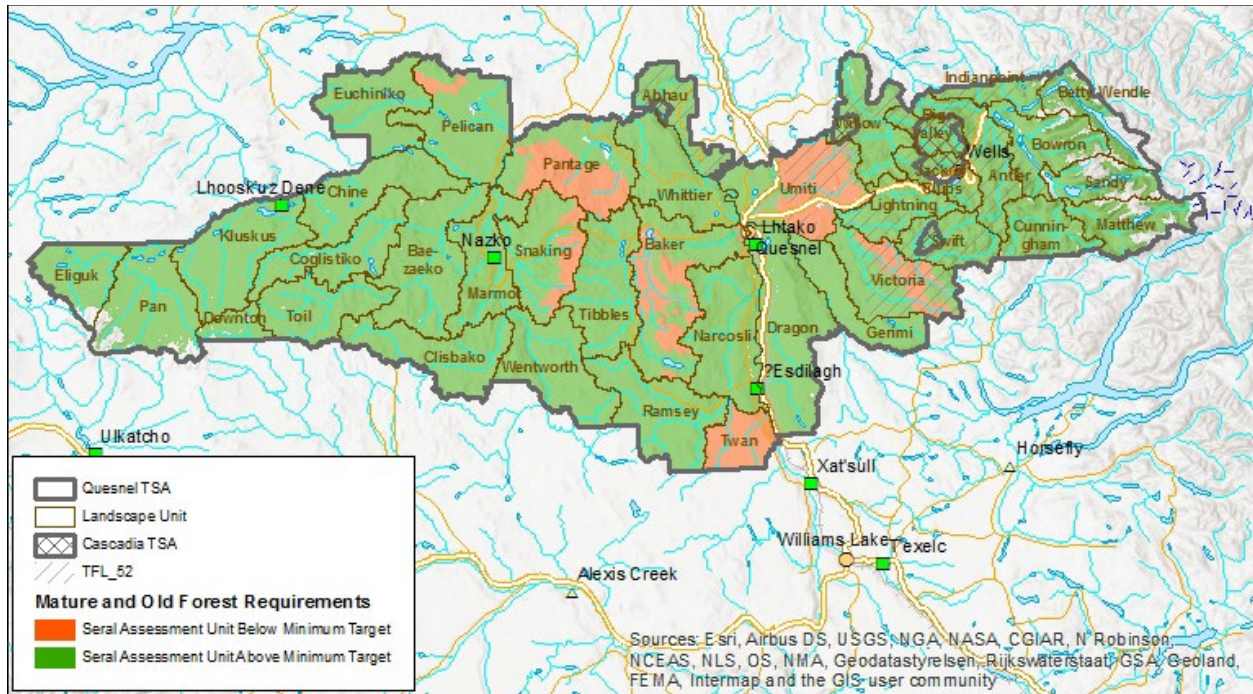


Figure 10. Map of forested areas above and below the seral stage targets for mature and old forest.

To support wildlife and biodiversity, targets are also set to ensure that the spatial/temporal distribution of cutblocks, landscape connectivity, and species composition targets are met. To achieve these legal targets, the FSP holder must conduct a patch assessment that demonstrates how their proposed harvest will either maintain, or trend towards, the patch size distribution consistent with the patch size target range that has been set. This assessment will also show how the design of stand level retention has maintained the natural connectivity characteristics of mature and old forests. The FSP holder design harvest proposals that include areas of key leading spruce, deciduous or aspen stands. They also demonstrate in the site plan how these stands were considered in the design of Wildlife Tree Retention Areas.

For Old Growth Management Areas (OGMA), the LAO specifically dictate that these are no-harvest areas. The current practice is to follow this direction unless reasons outlined in the LAO are present⁶. Old forest and OGMA are shown below.

⁶ https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/natural-resource-use/land-water-use/crown-land/land-use-plans-and-objectives/cariboo-region/cariboochilcotin-rlup/legal-direction/cariboochilcotin_rlup_luor_6sep2018consolidated.pdf

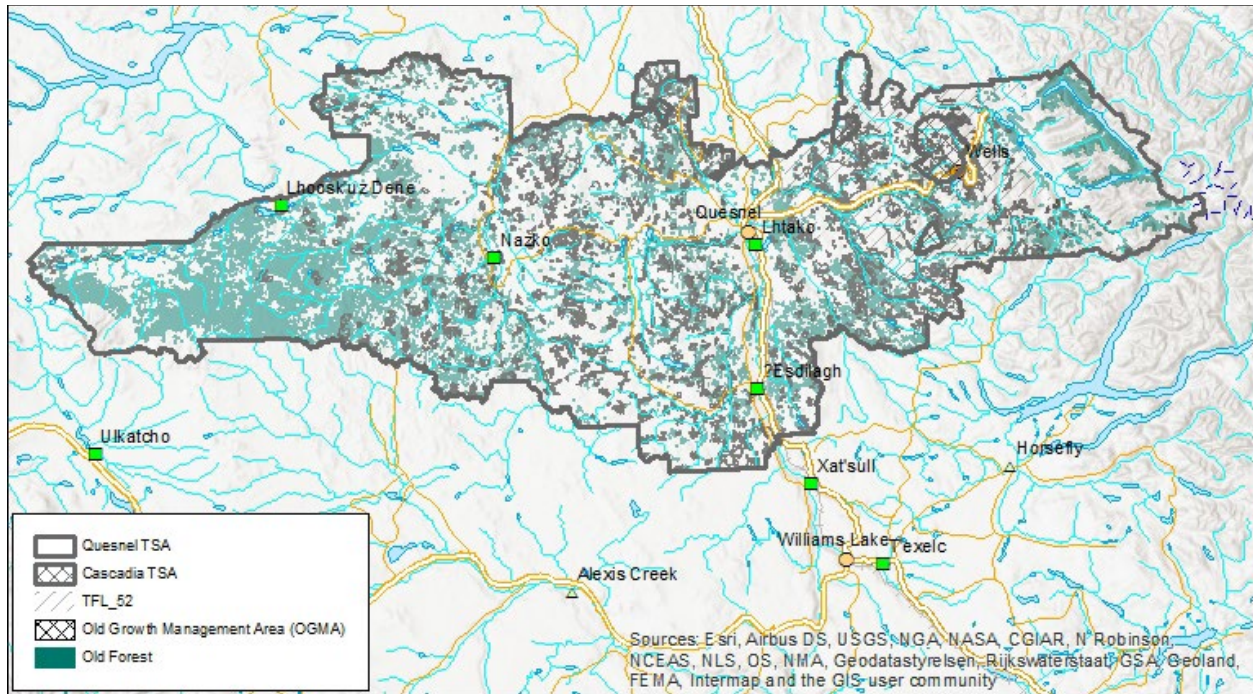


Figure 11. Map of the distribution of OGMA and old forest in the Quesnel TSA.

Biodiversity at the stand level is managed through objectives under the LAO that establish Wildlife Tree Patch (WTP) and Wildlife Tree Retention Areas (WTRA) targets, and requirements. The current practice is to locate WTRA's within WHA, UWR, riparian areas, scenic areas, and areas required for meeting natural connectivity. When timber harvesting removes less than 50 % of pre-harvest basal area, the focus is on retaining high value wildlife trees up to the targets specified by BEC unit. These high value trees can be reserved as individual stems, contributing to the Wildlife Tree Retention Area (WTRA) targets on a basal area or volume equivalency basis. In specified areas within the TSA, wildlife tree retention minimum targets are increased by 20%, or greater, to ensure that adequate coverage is retained. These WTRA are to remain in place until several guidelines are met.

On average, 12% of the forested area within each cutblock is retained to address stand-level biodiversity requirements.

Management of the Cariboo-Chilcotin Grassland Benchmark Areas is also required by the LAO. Current practices follow those closely outlined in the Cariboo-Chilcotin Grassland Strategy⁷. For example, the FSP holder will not authorize or conduct the construction of roads, secondary roads, trails, or landings unless no other practicable alternative exists for accessing and/or extracting timber. Also, all primary forest activities are limited to frozen conditions, etc. For more information on the current practices within the Grassland Benchmark Area please refer to the larger Quesnel FLP SCFM

<https://www2.gov.bc.ca/assets/download/17E96001DE4047C8BBC7CD2FDC0A9013>

⁷ https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/natural-resource-use/land-water-use/crown-land/land-use-plans-and-objectives/cariboo-region/cariboochilcotin-rlup/best_management_practice_guidelines_for_harvesting_treatments_grassland_benchmark_sites.pdf

Value - Visual Quality

Visual quality is tied to many other Quesnel FLP values such as lakes, tourism facilities and areas, recreational sites, trails, and viewsheds (various specific locations identified). All visual quality objectives are derived from the CCLUP through Land Use Order Objectives and are part of an available spatial data set. Current practices within visual quality areas usually ensure that harvesting, and road patterns, are consistent with defined visual management objectives such as preservation, retention, partial retention, and modification. Harvesting practices within scenic corridors are to mimic existing natural openings, vegetation patterns, and natural features. Deviation from any of these alterations can take place for insect control or for primary and interface fuel breaks within approved community or regional plans. If the scenic area is burnt, a Qualified Professional will conduct a visual impact assessment, which includes a description of the visual design measures to be taken to mitigate the visual impact.

There is a total of 99,075 hectares where visual quality objectives apply.

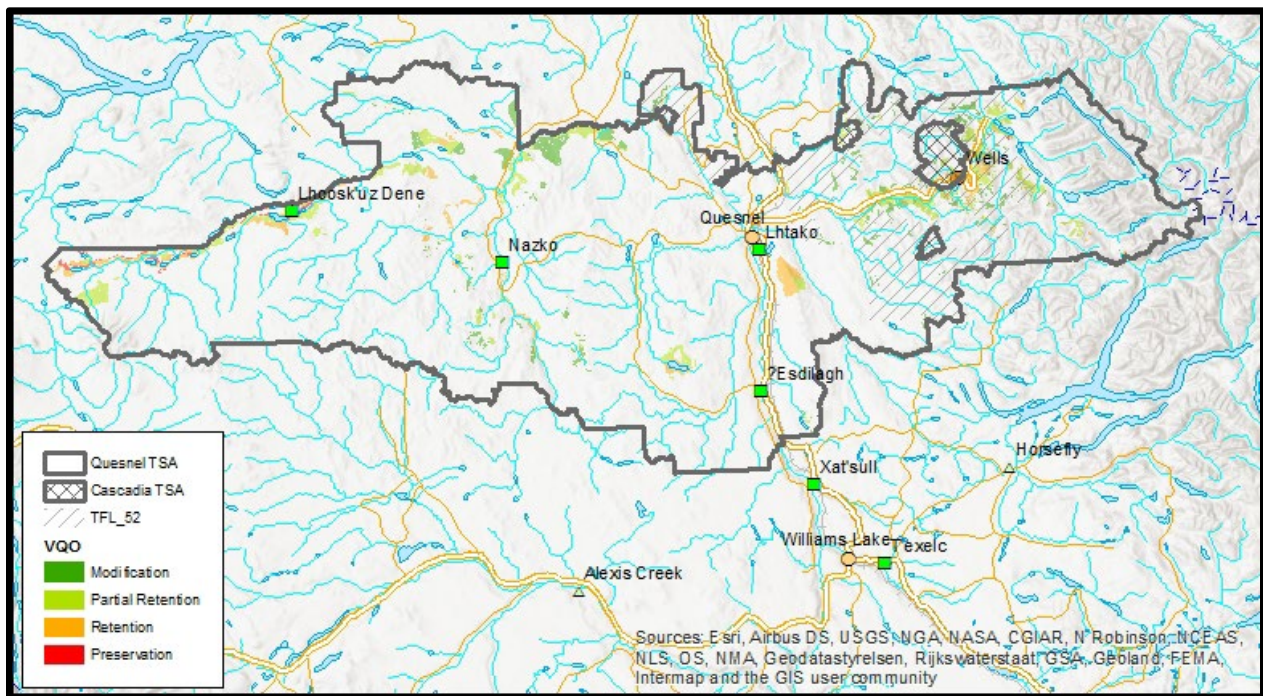


Figure 12. Map of the VQOs in the Quesnel TSA.

Value - Recreation

Tourism is one of the areas managed under the recreation value. The current practice is that FSP holders will notify overlapping applicable licensed commercial recreation tenure holders, and private tourism operations, within 2 kms of the planned cutblock or road. Each party will have a minimum of 60 days, or less, to identify any issues or concerns and a mitigation strategy created for issues brought forward.

For recreational sites and trails, the current practice is that prior to implementing the primary harvest activity within 100 m of a legally designated site or trail with an established objective, the FSP holder will

refer to the District Recreation Officer. A mitigation strategy will then be developed that addresses the District Recreation Officers comments. For buffered LAO trails, the current practice is to maintain a 50 m management zone on both sides of the trail's centre line and maintain a minimum of 85% of the pre-harvest basal area as retention in the treed portion, except where roads cross the trail. Harvesting activities that remove more than 15% of the basal area are permitted to address insect control, prevent blowdown, or to create interface fuel breaks.

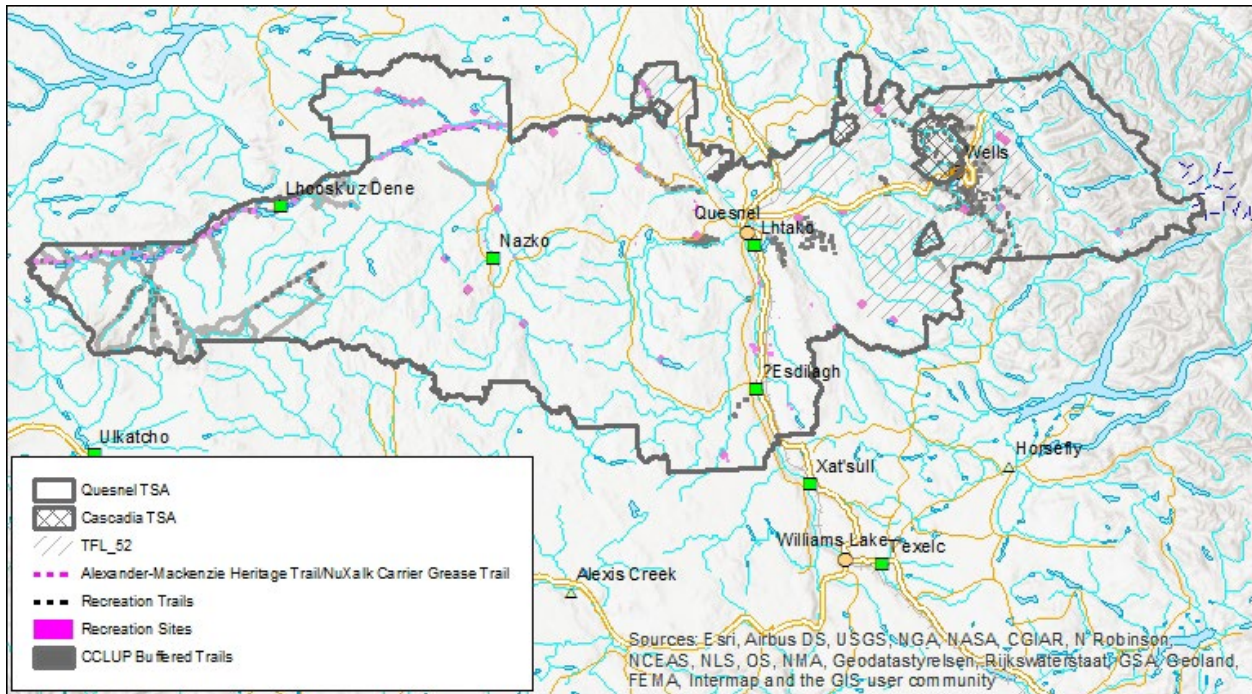


Figure 13. Map of recreation trails and CCLUP buffered trails.

For backcountry recreation, where an access management plan or sub-regional management plan addressing access management has been endorsed, the FSP holder will adhere to that plan. The FSP holder will also notify registered guide outfitters, registered trappers, known clubs and associations with overlapping tenures. These parties will have a minimum of 60 days to identify any issues or concerns. After this time, the FSP holder and tenure holder will create and follow a mitigation strategy to address these concerns, if required.

Value - Cultural Heritage

The current practices for Cultural Heritage Resources (CHR) within the TSA fall within Section 10 of the FPPR and are not regulated under the Heritage Conservation Act. The current practice is that the FSP holder shares information regarding the location of proposed cutblocks and roads with First Nations for a minimum of 60 days (or consistent with current government policy). This is done prior to the submission of the cutting or road permit for approval and with First Nations whose asserted traditional territory overlaps the area of proposed development. Where a CHR is made known, or identified through written correspondence during the referral period, the FSP holder develops a CHR mitigation strategy with the involvement of the concerned First Nation. This summary is submitted to the relevant District Manager prior to the submission of the cutting and road permits. Also prior to submission, the FSP holder provides proof of information sharing to those First Nations whose asserted traditional

territory overlaps the proposed development. This also includes any correspondence resulting from the information sharing process.

Identified areas have been set aside through LAOs within the Quesnel TSA for mature birch retention for First Nations cultural use. In these identified areas, FSP holders are expected to retain, to the extent practicable, at least 40% of the existing stems/hectare of mature birch within the gross area of each cutting permit.

The Quesnel TSA also contains heritage trails, specifically the Alexander Mackenzie Heritage Trail. Because of the significance of this trail, the District Manager must provide the FSP holder, in writing, with an agreement that the proposed activities are compatible with the management of this resource. Because this is a heritage trail, the Minister responsible for the Cultural Heritage Act also has to provide, in writing, agreement that proposed activities are compatible with the management of the trail. Once agreement has been secured, within the viewscape of the trail, results and strategies that have been developed specific to visual quality objectives, will be followed.

In areas where pine mushrooms have been identified through available spatial data, information sharing with First Nations, field identification, the FSP holder will ensure that a Qualified Resource Professional completes an assessment for the proposed primary forest activity area. This plan will include the creation of a pine mushroom management plan to mitigate the impacts on the pine mushroom plant community. The FSP holder will ensure that they follow the recommendations outlined and that the final management plan is shared with First Nations, who provided the local pine mushroom area information, prior to the submission of the cutting or road permits.

For wildcraft, roaded access will be maintained at a target percentage (%) of areas within Enhanced Resource Development, Integrated Resource Development or Special Resource Development zones. If the government has an access management plan or process within Forest Development Units, FSP holders will conduct their primary forest activities consistent with this plan. Prior to establishing an access control, or deactivation that eliminates vehicle access on an existing tenured road which has been in place for >5 years, the FSP holder will notify First Nations, whose traditional territory overlaps the location and other stakeholders which may be impacted. The FSP holder will consider comments received during the development phase of new cutblocks and roads and demonstrate a commitment to minimize or mitigate identified impacts.

Value - Grazing – Maintenance of Animal Unit Months

The current practice related to grazing and the maintenance of animal unit months (AUM) is based on the current authorized levels for polygons listed in the CCLUP, and the maintenance of the existing proportions of AUM by range unit within the polygons. If any AUM changes exist as per the February 15th, 1995, availability of AUM (e.g., AUM within a specific polygon is unsustainable, AUM availability has decreased), then the FSP holder conducting primary forest activities within the identified range unit(s) will enter into consultation with the affected range tenure holders and modify harvesting and silviculture practices to maintain the February 15th, 1995, AUM levels.

Active range tenures occupy approximately 1.0 million hectares within the planning area.

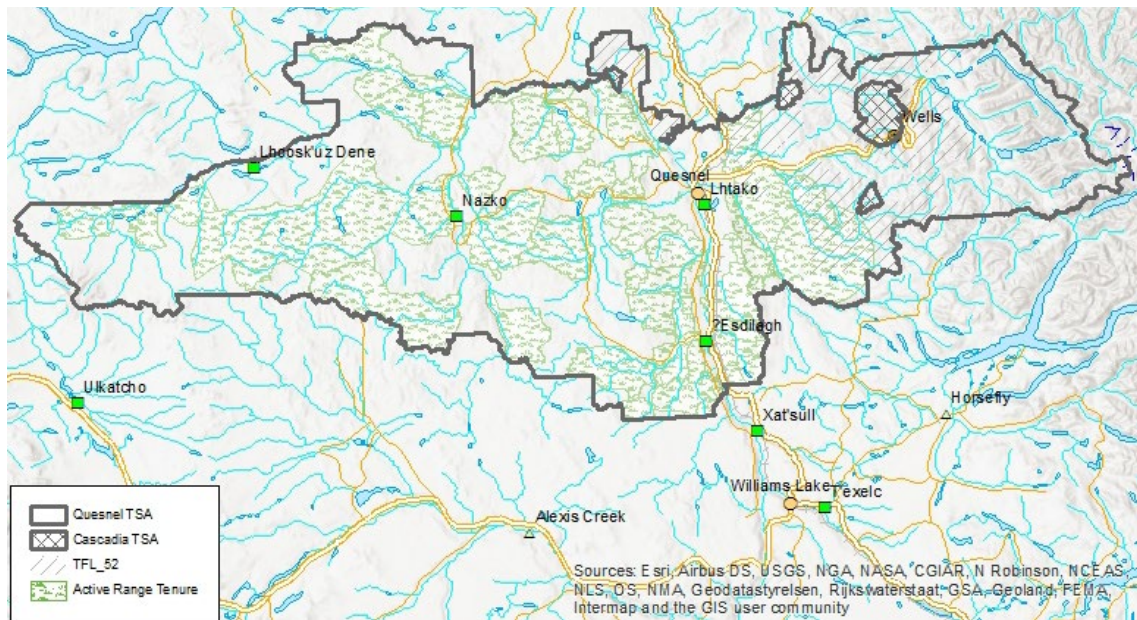


Figure 14. Map of range tenures in the Quesnel TSA.

Value - Natural Range Barrier Measures

An FSP holder is required to share information with range tenure holders, if proposed developments will potentially remove, or rendering ineffective, natural range barriers. The two parties will work together during the 60 day referral period to provide a plan to maintain the natural range barrier through measures such as constructing fences or installing cattle guard and gates. If an agreement can't be reached by both parties, the parties will meet with the District Range Officer to mediate a solution.

Value - Invasive Plant Measures

The invasive plant measures are designed to prevent the introduction or spread of invasive plants. One of the measures includes grass seeding of road cut slopes, fill slopes, ditch lines and right-of-way landings. Assessing any material that is to be transported else for invasive plants. Reporting of previously un-identified infections through the Report-A-Weed application. Removing any identified plant material, or accumulations of soil, which may contain invasive plant material from machinery, vehicles, personnel, and pets will be removed prior to moving to subsequent areas.

Where to go from here

The information presented here is an attempt to summarize the information contained in the Quesnel Forest Landscape Plan Summary of Current Forest Management report. It provided an outline of the context for the plan, what values are being managed, as well as how, and where. It also provided an overview of the current state of the forest looking at existing silviculture and stocking standards, upcoming forest health challenges and potential wildfire risks.

This document, along with the broader Quesnel FLP Summary of Current Forest Management Report will be publicly shared online as well as part of an open houses process along with a questionnaire. The document and questionnaire will help facilitate discussions and input into the values that are currently being managed, and values that need to be managed moving forward with the FLP. It will also be

accompanied by an overview of the FLP process and information on how engagement with the broader community will take place.