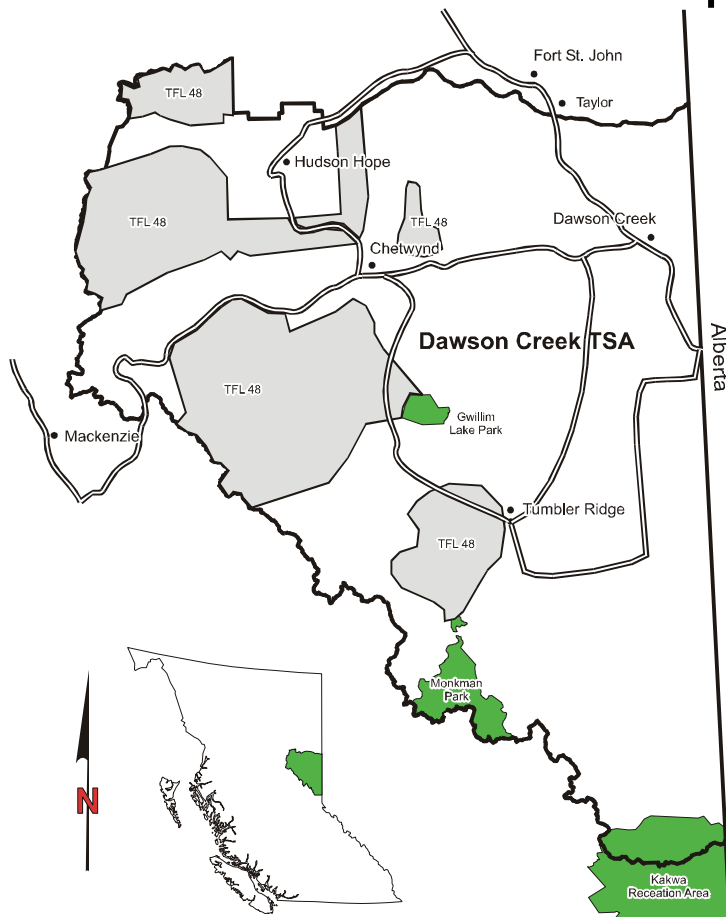


Timber Supply Review

Dawson Creek Timber Supply Area

Information Report
September 2000



Introduction

The British Columbia Forest Service is required by law to formally review the timber supply* in all timber supply areas* and tree farm license* areas in the province. A review of each of the areas is completed at least once every five years. The main objectives of the reviews are:

- to identify the economic, environmental and social information that reflects the current forest management practices—including their effects on short- and long-term timber supply
- to identify where improved information is required for future timber supply forecasts
- to provide the chief forester with information to make any necessary adjustments to the allowable annual cuts* for the next five years

* Throughout this document, an asterisk at the end of a phrase or word indicates that a definition can be found in the margin.

Objective of this document

The objective of this document is to provide an opportunity for public review of the draft data and management assumptions that will be applied in reviewing the timber supply for the Dawson Creek timber supply area. This document represents the early stages of the timber supply review process and is intended to provide a non-technical overview of the data and management assumptions that will be used in the upcoming *Dawson Creek Timber Supply Area Analysis Report*.

The *Dawson Creek Timber Supply Area Analysis Report* will be one of the documents that the chief forester will consider in making the allowable annual cut determination under Section 8 of the *Forest Act*. Public input is encouraged to ensure the best information is used in determining allowable annual cuts.

This report contains a general description of the data assumptions and current forest management practices related to timber supply for the Dawson Creek timber supply area. For the purpose of this timber supply review, current practices can be defined as the set of land-use decisions and forest management practices that are currently implemented and enforced. Future forest management objectives that may be established but are not currently implemented and enforced are not included.

Many of the draft data and management assumptions are summarized on pages 6 through 10. For a more detailed description of the information, please contact the Dawson Creek Forest District office in Dawson Creek, or the Prince George Forest Region office in Prince George and request a copy of the data package. The public will have 30 days to review and comment on the information report and data package. A response form at the end of this document will help you prepare your comments. Written comments will be accepted until October 12, 2000.

Timber Supply Review process

In British Columbia, a process for determining allowable annual cuts has been in place since the late 1940s. However, the process has changed significantly over time. Most recently, the process has had some minor revisions designed to improve efficiency and encourage earlier public review through the release of this report.

Figure 1 (next page) illustrates the five-step process that has been developed for the timber supply review of timber supply areas. The diagram indicates the current status of the timber supply review for the Dawson Creek timber supply area, and the estimated time required for each step.

Timber Supply Review

in the Dawson Creek TSA

Timber supply

A harvest level that is forecasted to be available over time, under a particular management regime.

Timber supply area

An integrated resource management unit established in accordance with Section 7 of the *Forest Act*.

Tree farm licence

Provides rights to harvest timber, and outlines responsibilities for forest management, in a particular area.

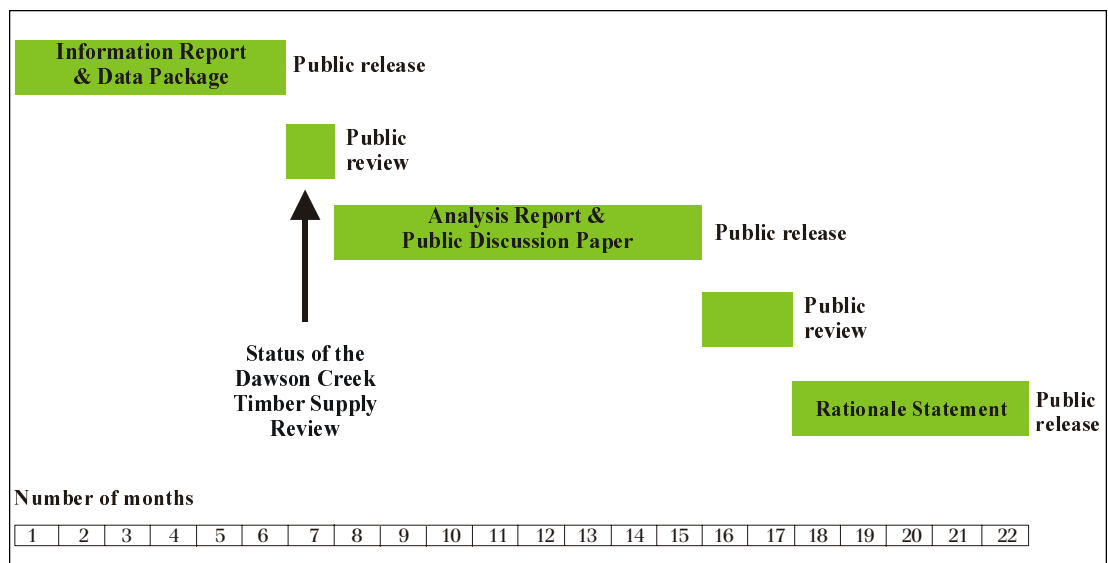
Allowable annual cut (AAC)

The rate of timber harvest permitted each year from a specified area of land, usually expressed as cubic metres of wood per year.

Timber Supply Review

in the Dawson Creek TSA

Figure 1.
Status of the timber supply review process for the Dawson Creek TSA



The process for reviewing the timber supply and establishing the allowable annual cut for tree farm licence areas is based on similar principles; however, the process takes 30 months from start to completion. By the end of 2001, a new review process for all tree farm licences will only require 20 months for completion.

The chief forester's responsibility

Determining the allowable annual cuts for Crown forest lands in British Columbia is the responsibility of the province's chief forester. It is one of the chief forester's most important responsibilities since it affects the local and provincial economies and environment—now and in the future. Section 8 of the *Forest Act* requires the chief forester to consider the following factors to determine allowable annual cuts for timber supply areas and tree farm license areas:

- a) the rate of timber production that may be sustained from the area, taking into account:
 - the composition of the forest and its expected rate of growth
 - the time in which the forest will become re-established
 - silvicultural treatments, including reforestation

- standards of timber utilization
 - constraints on the amount of timber produced from the area due to use of the forest for purposes other than timber production
 - any other information which relates to the capability of the area to produce timber
- b) the short- and long-term implications to the province of alternative rates of timber harvesting from the area
 - c) the nature, production capabilities and timber requirements of established and proposed processing facilities
 - d) the economic and social objectives of the Crown for the area, the region and the province, as expressed by the minister of forests
 - e) abnormal insect or disease infestations and major salvage programs planned for the timber on the area

Some of these factors can be measured and analyzed—others cannot. Ultimately, the chief forester's determination is an independent, professional judgement based on the best available information. Information that is relevant to the factors listed above is provided to the chief forester by government agencies, the minister of forests and the public.

One of the objectives of the Timber Supply Review is to incorporate changes arising from new information, new practices and new government initiatives

that may have an impact on timber supply. In the event of significant change, the allowable annual cut may be reviewed in less than the required five years.

Following the release of the allowable annual cut determination by the chief forester, the minister of forests apportions the cut to various licenses and programs.

Principles of the Timber Supply Review

In determining allowable annual cuts—in addition to the requirements outlined in Section 8 of the *Forest Act*—the following principles have been developed.

The Timber Supply Review:

- is a decision-making process for establishing allowable annual cuts for timber supply areas and tree farm licence areas by the chief forester on a maximum five-year cycle, as required under Section 8 of the *Forest Act*; **it is not a process for making land-use or management decisions**
- incorporates the best information available, including all relevant current practices, and identifies where new information is needed
- reflects the results of implemented plans and land-use decisions, and provides a benchmark for future planning processes
- involves other agencies, affected groups and the public.

Dawson Creek Land and Resource Management Plan

The Dawson Creek Land and Resource Management Plan was approved by Cabinet in March 1999. The objective of the plan is to guide resource management activities, reduce land and resource use conflicts, and to provide economic security for resource development. The plan includes recommendations regarding new protected areas*. Although the new

protected areas have received government's final approval, they are not expected to be formally designated by an order-in-council until 2001.

Currently, no higher level plans* have been established for the timber supply area. Therefore, only land-use planning decisions affecting forest practices that have final approval from government will be reflected in the timber supply review.

Description of the timber supply area

The Dawson Creek timber supply area is situated in the northeastern interior of the province and covers a total area of approximately 2,278,000 hectares. The timber supply area is bounded to the north by the Peace River and to the east by the Alberta border. To the west is the Hart Ranges and to the far south lies the Front Ranges, which are characterized by mountainous terrain and steep valleys of the Rocky Mountains. The area also encompasses the rolling terrain of the Peace and Hart Foothills, and the relatively flat Kiskatinaw Plateau. Major tributaries of the Peace River in the area include the Pine, Moberly, Sukunka, Murray, and Kiskatinaw Rivers.

The timber supply area is administered from the Dawson Creek Forest District office located in Dawson Creek. The Forest District boundary covers a larger area that includes Tree Farm Licence 48.

The communities

The major communities in the timber supply area include the City of Dawson Creek, the Districts of Tumbler Ridge, Chetwynd, and Hudson's Hope, and the Village of Pouce Coupe. Three aboriginal communities in the timber supply area include West Moberly First Nations, Saulteau First Nations, and the Kelly Lake Community.

Timber Supply Review

in the Dawson Creek TSA

Protected area

A designation for areas of land and water set aside to protect natural heritage, cultural heritage or recreational values (may include national park, provincial park, or ecological reserve designations).

Higher level plans

Higher level plans establish the broader, strategic context for operational plans, providing objectives that determine the mix of forest resources to be managed in a given area.

In 1999, the population of the Dawson Creek TSA was an estimated 29,144, reflecting a slight decline of 1.3 per cent since 1996. This decline is mostly due to a 17.6-per cent reduction in the population of Tumbler Ridge. The population in the remaining municipalities was relatively stable, except for Chetwynd, which had an increase of 3.6 per cent from 1996 to 1999. In 1999, the estimated population of Dawson Creek was 11,812; Chetwynd was 3,059; Hudson's Hope was 1,152; Pouce Coupe was 928, and Tumbler Ridge was 2,858. From 1999 to 2005, the population of the Dawson Creek TSA is expected to decrease by approximately 8 per cent.

and McLeod Lake Indian Band) have traditional land-use interests within the timber supply area. The McLeod Lake Indian Band recently signed agreements adhering to Treaty 8; and has indicated that their traditional land use area encompasses the Dawson Creek Forest District.

In addition, a significant number of Metis and other aboriginal peoples reside within the timber supply area including those located at Kelly Lake.

The economy

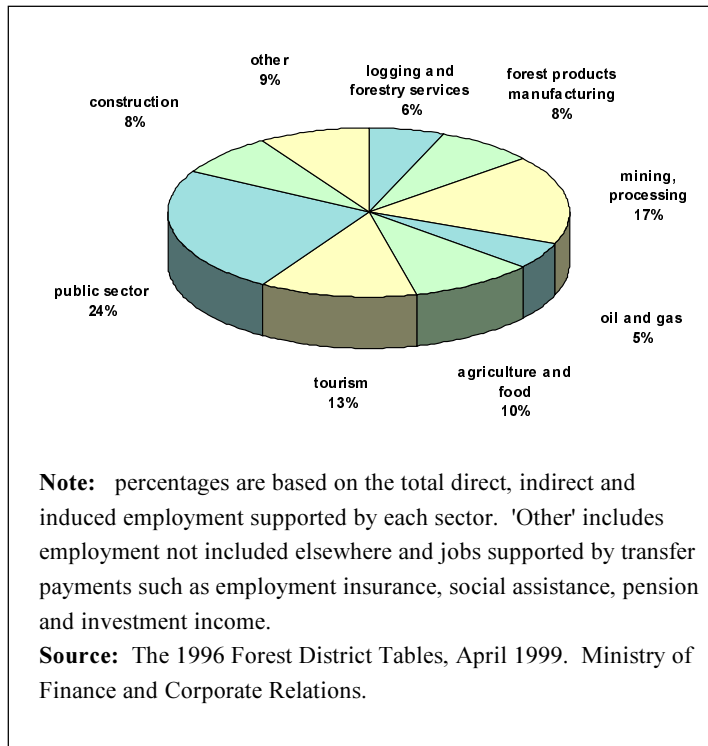
The economy of the Dawson Creek timber supply area is largely resource-based with the mining, oil and gas, and forestry sectors supporting approximately 36 per cent of the timber supply area's total employment. Local logging and processing activity not only relies on the timber supply area for its supply of timber, it is also supported by other timber harvested from Tree Farm Licence 48, other adjacent timber supply areas, and private sources.

The public service is the leading employment sector in the timber supply area supporting approximately 24 per cent of the total labour force. Other important sectors that provide the area with a relatively diversified economy include the agriculture and food sector (10 per cent), tourism (13 per cent), and construction (8 per cent).

Figure 2 illustrates total employment by sector for the area.

The resource sectors have the greatest impact on the local economy through the purchases made by resource companies (indirect impacts) and by the spending of resource company employees (induced impacts). For example, for each 100 direct jobs in the forestry sector, a further 33 to 69 indirect and induced* jobs are supported in the community, and the mining and oil and gas sectors support a

Figure 2.
Total employment
by sector for the
Dawson Creek
timber supply area,
1996.



First Nations

The Dawson Creek timber supply area lies completely within the area outlined as Treaty 8 Territory. Both the West Moberly and the Sauleau First Nations are signatories of Treaty 8 and have reserves and traditional territories within the Dawson Creek timber supply area. Three other First Nations communities (Halfway River First Nations, Lheidli T'enneh Band,

Indirect and induced jobs
Indirect jobs are supported by direct business purchases of goods and services. Induced jobs are supported by employee purchases of goods and services; for example, at retail outlets.

Biogeoclimatic zones
A large geographic area with broadly homogeneous climate and similar dominant tree species.

further 60 jobs in the community. In contrast, the public sector supports a further 14 jobs, the agriculture and food sector supports a further 18 jobs and the tourism industry supports seven additional jobs for each 100 direct tourism jobs.

The forest land resources

Numerous natural resources are associated with the forest land base. Forest products, recreation, ranching, oil and gas exploration and development, mining and tourism, and a variety of wildlife habitats highlight the wide range of resource uses in the Dawson Creek timber supply area. The diverse terrain results in distinct climates and vegetation across the timber supply area. These include mountains and river valleys in the west supporting predominantly Engelmann spruce – subalpine fir forests, and the plateau in the east dominated by boreal spruce and trembling aspen forests. Parks, recreation sites and trails, and roaded and non-roaded areas provide opportunities for numerous outdoor activities. The parks within the timber supply area include Monkman, Gwillim, and Kakwa Provincial Parks. Recreation areas within the timber supply area include Kinuseo Falls, Moberly Lake, Stewart Lake, Wapiti-Onion Lake, One Island Lake, and Williston Lake. The mountainous terrain and lakes in the timber supply area provide a wide range of opportunities for recreation activities including mountain-biking, all-terrain-vehicle use, horseback riding, hiking, spelunking, hunting, camping, boating, cross-country skiing and snowmobiling.

The environment

There are four biogeoclimatic zones* in the Dawson Creek timber supply area. The distinct ecological features and the unique nature of the area contribute to high biodiversity* values. The low elevation areas within the timber supply area are characterized by boreal forests of black and white spruce and trembling

aspen. Riparian* areas along the foothills support sub-boreal forests of white spruce, lodgepole pine, and subalpine fir stands. High elevation forests include stands of Engelmann spruce and subalpine fir. Alpine areas support shrubs, herbs and lichens adapted to a high elevation environment.

The diverse forests host a range of wildlife species, some of which are considered rare and potentially threatened by human activities and natural events. Examples of wildlife that have been identified as requiring special management in the Dawson Creek timber supply area are the northern goshawk, bull trout, fisher, and grizzly bear.

History of the allowable annual cut

In December 1996, the chief forester set the allowable annual cut (AAC) for the Dawson Creek timber supply area at 1,733,033 cubic metres (effective December 30, 1996). This AAC is currently partitioned as follows:

- 846,533 cubic metres are attributable to coniferous*-leading stands, of which at least 100,000 cubic metres must be from small-diameter pine stands; and
- 886,500 cubic metres are attributable to deciduous*-leading stands.

As part of the 1996 determination, the chief forester gave direction to resolve uncertainties with respect to the timber supply in the Dawson Creek timber supply area. In preparation for the upcoming allowable annual cut determination, the following issues were examined:

- **mixed-wood* stands** - in the last determination, the chief forester noted the importance of defining a management strategy and objectives for mixed-wood stands.

Timber Supply Review

in the Dawson Creek TSA

Biodiversity (biological diversity)

The diversity of plants, animals and other living organisms in all their forms and levels of organization, and includes the diversity of genes, species and ecosystems, as well as the evolutionary and functional processes that link them.

Riparian habitat

The stream bank and flood plain area adjacent to streams or water bodies.

Coniferous

Coniferous trees have needles or scale-like leaves and are usually 'evergreen'.

Deciduous

Deciduous trees commonly have broad-leaves and usually shed their leaves annually.

Mixed-wood

Forests that have a mix of coniferous and deciduous trees.

Timber Supply Review

in the Dawson Creek TSA

Environmentally sensitive areas

Areas identified as requiring special management to protect important recreation and scenic values, fisheries resources, sensitive soils and unstable slopes.

Integrated resource management

The identification and consideration of all resource values, including social, economic and environmental needs, in resource planning and decision-making.

Forest Practices Code

Legislation, standards and guidebooks that govern forest practices and standards, with heavy penalties for violators.

Sensitivity analysis

Examines how uncertainty in data and management assumptions affect timber supply.

Since then, the Prince George Forest Region has undertaken a study to assist in the development of guidelines for managing boreal mixed-wood stands. As well, the district is working on a strategy specific for the TSA. This information will be considered in the upcoming determination.

- **use of herbicides** - the chief forester noted in the last rationale that he encouraged the district to resolve the issues associated with use of herbicides in regenerating stands, and explore alternatives to herbicides. Since then, the BC Forest Service has developed a pesticide management plan that BC Environment is implementing. The plan will provide additional information for examining timber supply.
- **reinventory** - in the last determination, the chief forester noted that the timber supply was based on older forest inventory information and should be reinventoried. New inventory data for the timber supply area have been gathered, and environmentally sensitive areas* have been updated. This information will be used for the upcoming timber supply analysis.
- **volume partition for small-diameter lodgepole pine stands** - monitoring of the amount of harvesting in small-diameter lodgepole pine stands was to be undertaken, however licence agreements have not yet been finalized.
- **unsalvaged losses** - in the previous determination it was noted that an estimate of unsalvaged loss for deciduous stands should be developed. The district staff and industry are currently working on developing an estimate of unsalvaged losses for deciduous stands.

Note: For more information on these points, please refer to the Dawson Creek Timber Supply Area Rationale for Allowable Annual Cut Determination, December 1996.

Current timber supply review

Public forest lands in British Columbia provide recreational enjoyment, fish and wildlife habitat, water supplies, timber resources and many other benefits. The Ministry of Forests manages the timber, range and recreation resources on public lands, and the Ministry of Environment, Lands and Parks manages fish, wildlife, water resources and parks. Both agencies subscribe to the principle of integrated resource management*, where all resources are considered when making forest management decisions.

The Forest Practices Code* is now law and has been fully implemented in the timber supply area since June 15, 1997. The new practices may influence both the short- and long-term timber supply.

The data and management assumptions that will be used in the timber supply analysis will be based on the existing land-use designations and resource management practices that are currently approved and implemented in the Dawson Creek timber supply area. Uncertainties about some of the data regarding current practices, and their potential effects on timber supply will be examined through sensitivity analyses*. The chief forester will also consider any new information, based on implemented changes, at the time of the allowable annual cut determination.

Draft data and management assumptions for public review

The public is encouraged to review the data and management assumptions for completeness and accuracy. In determining an allowable annual cut, the chief forester will consider these assumptions as required by Section 8 of the *Forest Act*. The following general outline contains a brief description of the more pertinent information that will be

used in the timber supply analysis and, subsequently, in the chief forester's allowable annual cut determination for the Dawson Creek timber supply area. More detailed information can be found in *Appendix A: Data Package*. This appendix is available upon request from the Ministry of Forests offices listed at the end of this report.

Land base factors

- **operable area** - the forested area in the Dawson Creek timber supply area has been assessed for operability* based on soil and slope types. For example, areas with fine-textured soils on slopes greater than 80 per cent are considered sensitive and unavailable for harvesting. Forest Service staff have defined areas of operability in consultation with the local forest industry. Only those areas that are considered operable will contribute to the timber harvesting land base.
- **forest types not currently being harvested** - these are forest types that are currently not utilized in the Dawson Creek timber supply area due to terrain or economic limitations. Generally these are forest types with a low volume per hectare, and therefore have low merchantability (sometimes called problem forest types). These types of stands will not be included in the timber harvesting land base.
- **protected areas** – recommendations of the *Dawson Creek Land and Resource Management Plan* resulted in the implementation of 12 new parks and 4 protected areas including Bocock Peak, Butler Ridge, Hole-in-the-Wall, Pine LeMoray, Pine River Breaks, Wapiti Lake and Gwillim Lake and Kakwa. In the timber supply analysis these new parks and protected areas will be excluded from the timber harvesting land base.
- **forest roads** – the amount of productive forest land base occupied by forestry-related roads, as well as oil and gas exploration and development will be

estimated. Averaged widths of each disturbance type, such as roads, trails and seismic lines, have been determined from field surveys. Next, the area of existing roads and trails will be estimated by multiplying these widths by the corresponding mapped length of each type. To account for future roads, trails and landings, a five-per cent reduction will be applied to the timber harvesting land base currently covered with mature forests.

- **cultural heritage resources** - an archaeological site inventory was updated in 1999 based on information from the Ministry of Small Business, Tourism, and Culture. Known archaeological sites will be deducted from the timber harvesting land base by using the inventory information and an averaged area for the sites.

Forest inventory and growth factors

- **forest inventory** - the current forest inventory has been updated to December 1999 to take into account recent harvesting and silviculture activities. As well, the upcoming analysis will use inventory adjustment factors developed from a new Vegetation Resources Inventory (VRI). As a result of the VRI, the tree heights, ages and volumes have been adjusted to improve inventory estimates.

The principal coniferous tree species of commercial significance are lodgepole pine, white spruce, and subalpine fir. The major deciduous tree species are trembling aspen and cottonwood.

- **mixed-woods** – mixed-wood stands comprise a large proportion of the productive forest within the timber supply area. Currently there is limited information available on the growth and yield of these stands. In the timber supply analysis, the BC Forest Service's Variable Density Yield Projection model* will be used to estimate existing and future volumes for these stands.

Timber Supply Review

in the Dawson Creek TSA

Operability

Classification of an area considered available for timber harvesting. Operability is determined using the terrain characteristics of the area as well as the quality and quantity of timber on the area.

Variable Density Yield Projection model

BC Forest Service computer program that generates natural stand yields.

Timber Supply Review

in the Dawson Creek TSA

Clearcut harvesting

A harvesting method whereby all trees that meet utilization standards are harvested. The harvested site is then regenerated to acceptable standards by appropriate means including planting and natural seeding.

Cutblock

A specific area, with defined boundaries, authorized for harvest.

Green-up

The time needed after harvesting for a stand of trees to reach a desired condition (usually a specific height) — to ensure maintenance of water quality, wildlife habitat, soil stability or aesthetics — before harvesting is permitted in adjacent areas.

Ungulate

Hoofed-herbivore, such as deer.

- **minimum harvestable ages** - the minimum harvestable age is the earliest age at which a forest stand is estimated to reach a merchantable size to be considered available for harvest. For the timber supply analysis, the ages are based on the time to achieve a minimum volume of 120 cubic metres per hectare and to meet regional priority harvest ages that range from 80 to 120 years.

Forest re-establishment factors

- **basic silviculture** - British Columbia laws require that harvested areas that are expected to produce timber in the future must be reforested with ecologically acceptable species within a specified time frame. The most common silvicultural practice is to harvest; then if necessary prepare the site for reforestation; reforest by planting a mix of species or by relying on natural regeneration; and finally, if necessary, control competing vegetation.

In the Dawson Creek timber supply area, the most common silvicultural system involves clearcut* harvesting, with reforestation achieved predominantly by planting well-spaced trees of ecologically acceptable coniferous species or by natural regeneration of acceptable deciduous species. On less productive sites, a combination of planting and natural regeneration is used. In the timber supply analysis, it is assumed that all coniferous-leading areas are planted and reforested within four years after harvest. For deciduous-leading areas, it is assumed that reforestation is natural regeneration and adequate stocking will be achieved in two years following harvest.

Timber utilization factors

- **timber utilization** - estimates of merchantable volume will be based on the utilization of all trees (with some exceptions as noted below) which meet or exceed the following standards: a minimum 10-centimetre top diameter (inside the bark); a minimum 17.5-centimetre diameter measured at 1.3 metres above the ground, and a maximum 30-centimetre high stump.

The exceptions include: lodgepole pine and deciduous stands have a minimum 12.5-centimetre diameter measured at 1.3 metres above the ground; small-diameter pine stands have a minimum 7.5-centimetre top diameter (inside the bark) and a minimum 9.0-centimetre diameter measured at 1.3 metres above the ground.

Infestations, devastations and salvage of timber

Each year, natural agents such as fire, wind, insects and disease (such as spruce beetle and *Tomentosus* root rot) damage portions of the forests in the Dawson Creek timber supply area. It is anticipated that some of the damaged timber will not be salvaged due to access and economic limitations or other environmental considerations. The annual unsalvaged volume is estimated to be 54,185 cubic metres.

Factors to be considered for purposes other than timber production

Forest management guidelines used to manage forest resources such as biodiversity, scenic values, wildlife habitat and water quality will be included in the timber supply analysis through the use of forest cover requirements, and volume and land-base reductions.

- **general forest cover requirements** - under current forest management practices, cutblocks* must achieve green-up* before adjacent areas are permitted to be harvested. The objective of this practice is to avoid over-concentration of harvesting in an area. To account for this practice in the analysis, no more than 33 per cent of the timber harvesting land base in the integrated resource management zone will be permitted to have forests less than three metres tall at any time. As well, forest cover requirements will be applied in the timber supply analysis to account for maintaining areas of old-growth forests for biodiversity.
- **visually sensitive areas** - the maintenance of scenic landscapes is a priority for recreation and tourism management. In the Dawson Creek timber supply area, visually sensitive areas are often located along major highways, primary access corridors and recreational waterways. Road construction and logging within these areas are planned and implemented to minimize visual impacts. In the analysis to reflect current management practices in visually sensitive areas, the amount of harvested areas (with trees less than five metres tall) will be limited to a maximum of between 5 and 20 per cent at any time.
- **recreation areas** – a recreation features inventory was completed in 1993. Recreation features that are classified as very sensitive will not contribute to the timber harvesting land base. In addition, 20 per cent of areas classified as sensitive and with a high or very high recreation significance are considered unavailable for timber harvesting.
- **riparian habitat** - to account for riparian reserves and management areas along waterways and around lakes, a percentage of the timber harvesting land base will be considered unavailable for timber harvesting.

- **sensitive wildlife habitat zone**- ungulate* winter range and wildlife habitat-burn areas that occur outside of riparian reserves represent the sensitive wildlife habitat zone. In this zone, 90 per cent of the area will not contribute to timber supply. There is some overlap of the sensitive wildlife habitat zone with riparian reserves, wildlife tree patches, and the caribou habitat zone, and adjustments will be made to ensure there that forest cover constraints are not additive.
- **caribou habitat zone** – low elevation caribou habitat is managed to enhance or maintain forest conditions for terrestrial lichen growth and to reduce fragmentation. In these areas, a minimum of 44 per cent of the forested area must be retained in mature plus old-seral* condition, of which at least 11 per cent must be old-seral forest. As well, a maximum of 33 per cent of the area can have forests less than 3 metres tall at any time.
- **grizzly bear management zone** – grizzly bear habitat will be accounted for by applying the intermediate biodiversity emphasis requirements to this zone as specified in the *Landscape Unit Planning Guide*. As well, a maximum of 33 per cent of the area can have forests less than 3 metres tall at any time.
- **biological diversity** - the *Forest Practices Code* requires that biodiversity be managed at both the stand and landscape level.
 - Leaving wildlife trees* and tree patches to provide stand-level biodiversity is current practice in the Dawson Creek timber supply area. Generally, coarse woody debris* objectives are met by the contributions of non-merchantable timber left on the ground after harvest. The timber supply analysis will apply wildlife tree retention requirements described in the *Landscape Unit Planning Guide* to account for stand-level biodiversity within the timber harvesting land base.

Timber Supply Review

in the Dawson Creek TSA

Seral stages

Sequential stages in the development of plant communities that successively occupy a site and replace each other over time.

Wildlife tree

A standing live or dead tree with special characteristics that provide valuable habitat for conservation or enhancement of wildlife.

Coarse woody debris

Logs and stumps that provide habitat for plants, animals and insects, and a source of nutrients for soil development.

Timber Supply Review

in the Dawson Creek TSA

Landscape unit

A planning area based on topographic or geographic features, that is appropriately sized (up to 100 000 hectares), and designed for application of landscape-level biodiversity objectives.

Sensitivity analysis

A process that examines how uncertainty in data and management assumptions affect timber supply.

Natural disturbance type (NDT)

An area that is characterized by a natural disturbance regime, such as wildfires, which affects the natural distribution of seral stages. For example areas with less stand-initiating disturbance have more older forests, and generally a greater abundance of species.

Person-year(s)

One person working the equivalent of one full year, defined as at least 180 days of work. If someone works full-time for 90 days, he or she accounts for 0.5 person years.

Management of landscape-level biodiversity will be accounted for in the timber supply analysis by applying averaged seral stage constraints to each draft landscape unit* and natural disturbance type*. This approach is being taken because at this time landscape units and biodiversity objectives are still in draft form and have not been formally established.

As part of the timber supply analysis, sensitivity analyses* will be undertaken to examine the potential impacts on timber supply of applying the draft biodiversity emphasis objectives developed for the Dawson Creek timber supply area.

Implications of alternative rates of harvesting

- **alternative rates of harvesting** - many alternative harvest forecasts can be produced for a given set of forest conditions and management assumptions. Each alternative usually represents a trade-off between the harvest level in the short term and the subsequent rate of decline to the long-term harvest level. For the projected base case forecast*, the initial harvest forecast will be based on trying to achieve the current rate of harvest in the short term without compromising the long-term harvest level, and if necessary, allowing for a gradual and managed transition to a lower harvest level. The implications of alternative short-term rates of harvest will be examined in the analysis.
- **implications related to community dependence** - the impact of timber supply adjustments on local communities and the province is an important consideration in the timber supply review. The 1996 *Dawson Creek Timber Supply Area Socio-Economic Analysis* reported that provincially, harvesting, silviculture and processing activities associated with the Dawson Creek timber supply area supported about 629 person-years* of direct employment, and

approximately 947 person-years of indirect and induced employment. Local residents account for approximately 41 per cent of this employment.

The socio-economic section of the upcoming timber supply analysis report will review the role of the forest sector in the Dawson Creek timber supply area. To provide this update, current information on employment and fibre flows will be gathered from licensees, processing facilities, the Forest Service and stakeholders. Indirect and other related employment at both the local and provincial levels will also be estimated using employment multipliers provided by the Ministry of Finance and Corporate Relations.

To examine the implications of alternative rates of harvest, employment co-efficients, reported in person-years per 1,000 cubic metres, will be developed and used to estimate changes to employment levels now and in the future from any potential harvest level changes.

Timber processing facilities

The socio-economic analysis will examine the implications of potential changes in the timber supply for the area's timber processing facilities. Within the timber supply area, there are two large lumber mills, two smaller mills, an oriented strandboard (OSB) mill, and a log-home building facility. In 1999, these facilities processed a total of approximately 1.9 million cubic metres of wood. In addition there is a local pulp mill that processed just over 100,000 bone-dry units of wood chips in the same year. In total, these mills support about 800 employees.

The local timber processing facilities not only rely on the timber supply area for wood, but also on the tree farm licence areas, other timber supply areas, private land and out-of-province sources.

Economic and social objectives of the Crown

In a letter and a memo to the chief forester, the minister of forests has expressed the Crown's economic and social objectives for the province. The harvest flow objectives to be used in the timber supply analysis (see previous section, "*Alternative rates of harvesting*") are consistent with the minister's stated objectives.

In addition, economic and social objectives for the area and the general region will be derived from public input.

Your input is needed

Establishing the allowable annual cut is an important decision that requires well-informed and thoughtful public input. Feedback is welcomed on any aspect of this *Information Report*, the *Data Package Appendix* and other topics related to the timber supply in the Dawson Creek timber supply area. The response form at the end of this document will assist you in preparing your comments. As well, Forest Service staff would be pleased to discuss questions or concerns that may help you prepare your response.

Please mail the completed response form and your comments to the Forest Service district manager located at the address below. Your comments will be accepted until October 12, 2000.

After receiving public input, the Forest Service will finalize the data and management assumptions that will be applied in this timber supply analysis. The timber supply analysis will be completed and available for review by spring of 2001. You may also wish to participate in the second public review period, which will follow the release of the *Dawson Creek Timber Supply Area Analysis Report*.

Following the second public review period, the chief forester will examine all the information available in order to review the timber supply for the Dawson Creek timber supply area. The chief forester will then establish the allowable annual cut based on his consideration of the factors as required under Section 8 of the *Forest Act*.

You may identify yourself on your response if you wish. If you do, you are reminded that responses will be subject to the *Freedom of Information and Protection of Privacy Act* and may be made public. If copies of the responses are requested, personal identifiers will be removed before the responses are released.

For more information contact and/or mail your comments to:

District Manager
Dawson Creek Forest District
9000 17th Street
Dawson Creek, B.C.,
V1G 4A4

Phone: (250) 784-1200
Fax: (250) 784-2356

Regional Manager
Prince George Forest Region
1011 Fourth Avenue
Prince George, B.C.
V2L 3H9

Phone: (250) 565-6100
Fax: (250) 565-6396

or electronically mail to:
Winn.HaysByl@gems4.gov.bc.ca

Timber Supply Review

in the Dawson Creek TSA

Base case forecast

The timber supply forecast which illustrates the effect of current forest management practices on the timber supply using the best available information, and which forms the reference point for sensitivity analysis.

APPENDIX A

Data Package

Description of Data Inputs and Management Assumptions

This appendix is available upon request from the
Ministry of Forests.

Offices are located at:

District Manager
Dawson Creek Forest District
9000 17th Street
Dawson Creek, B.C.,
V1G 4A4

Phone: (250) 784-1200
Fax: (250) 784-2356

Regional Manager
Prince George Forest Region
1011 Fourth Avenue
Prince George, B.C.
V2L 3H9

Phone: (250) 565-6100
Fax: (250) 565-6396