

Timber
Supply
Review

Fraser Timber Supply Area

Public Discussion Paper

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BRITISH
COLUMBIA

Ministry of Forests

Introduction

The British Columbia Forest Service is reviewing the timber supply for all timber supply areas* (TSAs) and tree farm licence (TFLs) areas in the province. This review examines the impacts of current forest management practices on the timber supply, economy, environment and social conditions of the local area and the province. Based on this review, if necessary, the chief forester may adjust the allowable annual cut (AAC) for the Fraser TSA.

By law, the chief forester must review and set new AACs for all TSAs and TFLs every five years. The objectives of the Timber Supply Review are to:

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

Timber Supply Review in the Fraser TSA

The Fraser TSA *Data Package* and *Information Report* were released in May 1997. Following this, the documents were reviewed by licensees, the public and government agencies. The B.C. Forest Service has now completed the *Fraser Timber Supply Area Analysis Report* which is summarized in this discussion paper. The objectives of this document are to provide British Columbians with an overview of the timber supply review and forecasts for the Fraser TSA and to encourage them to provide comments during the 60-day public review period. Public comments will be accepted until August 18, 1998.

Before setting a new AAC, the chief forester will review all relevant reports and public input. The chief forester's determination will be outlined in a rationale statement which will be available, along with the *Summary of Public Input*, to the public. Following the release of the AAC determination by the chief forester, the minister of forests will apportion the AAC to the various licences and programs.

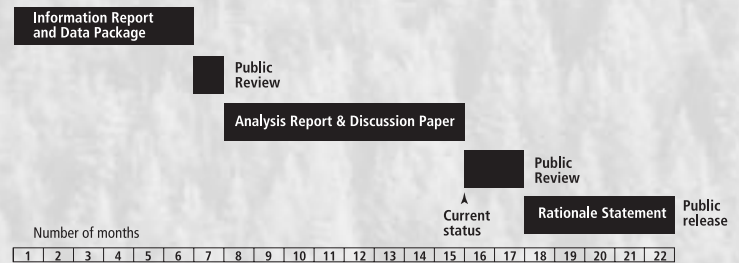


Figure 1.
Review process for the Fraser TSA

Description of the timber supply area



The Fraser TSA is situated in the southwest portion of B.C. and is administered by the Chilliwack Forest District office in Rosedale. The TSA covers approximately 1.11 million hectares, encompassing the major population centres of the lower mainland and Fraser Valley. In 1996, the population was approximately 2.05 million, a 15 per cent increase since the 1991 census.

First Nations

There are 34 individual bands and five tribal organizations who have traditional territory in the Fraser TSA. To date, eight statements of intent to negotiate land claims—that include most of the Fraser TSA—have been filed with the Treaty Commission.

*** A timber supply area is an integrated resource management unit established in accordance with section 7 of the Forest Act.**

Forest Resources

The forest industry provides an important source of revenue and employment in the Fraser TSA. Other significant resources include tourism, recreation and commercial harvesting of botanical forest products such as wild mushrooms and salal. Despite urban and rural development, the Fraser TSA still has one of the richest and most diverse arrays of wildlife in Canada. Important wildlife species include the mule and blacktail deer, black bear, grizzly bear and pine marten. The lower Fraser River and its tributaries are spawning and migration corridors for chinook, chum, coho, sockeye and pink salmon, as well as a number of other valuable fish species.

The Northern spotted owl is designated as an endangered species in Canada. There are currently an estimated 100 pairs in southern B.C., most of which are in the Fraser TSA. The decision by government for the management of the Northern spotted owl was released in May 1997. As a result of the decision, new spotted owl management guidelines have been developed and have been reflected in the timber supply review of the Fraser TSA.

Socio-economic profile

Regional economy

The region's economy is well diversified with business and consumer services, manufacturing and the public sector predominate.

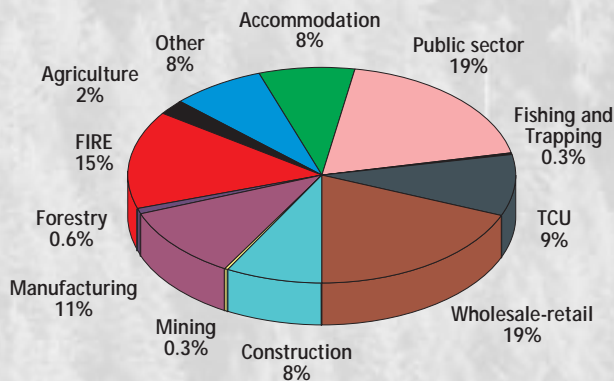


Figure 2.
Fraser employment by sector, 1991

FIRE consists of finance, insurance and real estate, and other business services. TCU consists of transportation, communications and utilities.

Summary of Local and Provincial Economic Impacts

(figures based on the current AAC of 1.55 million cubic metres)

	TSA	Provincial
Direct employment (person years)	1,659	1,953
Total employment (person years)	3,105	4,253
Employment income (\$1996 millions per year)	124.9	166.4
Provincial government revenues (\$1996 millions per year)	na	53.2

Figure 3.
Economic Summary

Figure 3 illustrates the potential contribution of the forest industry associated with the Fraser TSA to both the regional and provincial economies.

Current allowable annual cut

On April 1, 1995 the chief forester reduced the AAC by 12 per cent to 1,550,000 cubic metres from 1,765,000 cubic metres. This includes a component of up to 57,000 cubic metres per year for deciduous (broad-leafed) tree species. At that time, the Spotted Owl Management Strategy and the Protected Areas Strategy were not complete and only preliminary results of an inventory audit were available. The current timber supply review incorporates the finalized information on all three of these issues.

Timber supply forecasts and areas of uncertainty

A timber supply computer model is used to project several possible timber supply forecasts for the next 250 years. One of these forecasts is the base case forecast which illustrates the effect of current forest management on timber supply. It is not an AAC recommendation, but rather, it is one of many sources of information that the chief forester will consider when setting the AAC. Due to areas of uncertainty, the AAC determined by the chief forester may be greater or less than the base case forecast.

The base case timber supply forecast for the Fraser TSA indicates the current AAC may have to be reduced immediately by 15 per cent to 1.32 million cubic metres in order to avoid larger reductions in the future. Over the following two decades, the rate of harvest is projected to decline by about 25 per cent to 1.02 million cubic metres. In about 100 years from now, when harvesting will occur in more productive managed stands, the rate of harvest increases to 1.2 million cubic metres per year.

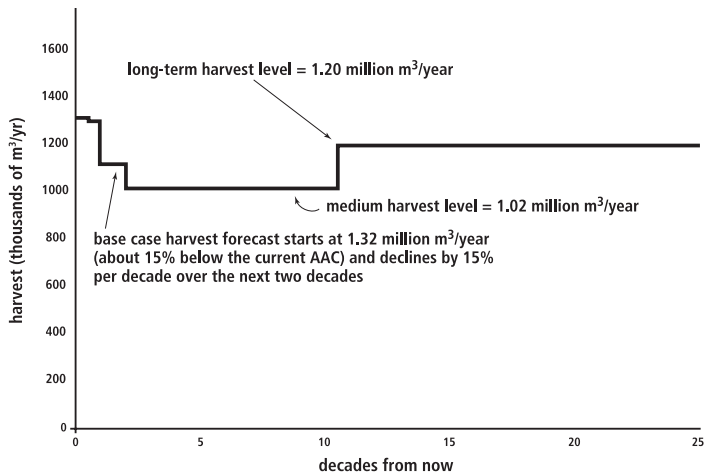


Figure 4.
Base case timber supply forecast

Old-Growth Site Index Study

The results of a recent study—Old-Growth Site Index—suggest that the estimated future productivity of old-growth stands may be underestimated. This research compares the measured productivity of existing regenerated stands with the measured productivity of old-growth stands growing on ecologically identical sites. The measured productivity of the regenerated stands is generally higher than the productivity of the old-growth stands. These results are based on the maximum potential site productivity that might be achieved under ideal conditions. However, in the field, regeneration and subsequent growth does not always occur under ideal conditions due to factors such as competition from brush or overstocking. Therefore, many stands may not reach the maximum potential productivity suggested by research.

While the results of the Old-Growth Site Index study suggest that the future productivity of current old-growth stands is underestimated, there is no evidence to suggest that the productivity of existing second-growth stands, which make up the majority of the stands in the Fraser TSA, is underestimated.

This means, that there would be a minimal impact on the short-term timber supply, but the long-term harvest level (which will be reached 100 years from now) could be up to 15 per cent higher than indicated in the base case forecast. This new information is examined in a sensitivity analysis in the Fraser *Timber Supply Area Analysis Report* and will be reviewed by the chief forester when he determines a new AAC for the Fraser TSA.

Sensitivity Analyses

Since forests are complex and constantly changing, timber supply analysts evaluate the impacts on timber supply due to uncertainty about variables in the inventory information and management practices. These variables are examined in sensitivity analyses which the chief forester will consider in determining an AAC. The results of the sensitivity analyses may indicate that the timber supply may be less or more than projected in the base case forecast. One of the key sensitivity analyses conducted in the timber supply analysis is listed below. For a complete listing, please refer to the *Fraser Timber Supply Area Analysis Report*.

Alternative Harvest Flows

There are many possible harvest flows, with different decline rates, starting harvest levels, and potential trade-offs between short- and medium-term rates of harvest. Figure 5 illustrates the highest attainable timber supply if the harvest level is not allowed to decline at any time.

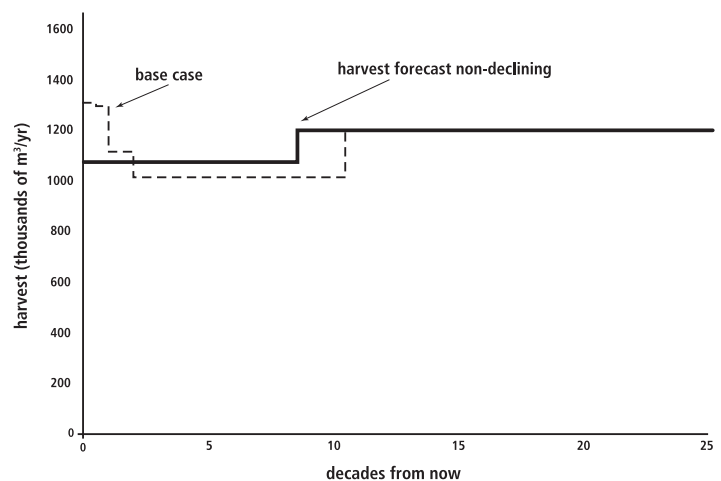


Figure 5.
Alternative harvest flow

Implications of changes in the AAC

Environmental implications

The management practices in the Fraser TSA follow the guidelines and legislation set out by the Forest Practices Code. The timber harvesting land base—the area assumed to be available for harvesting—represents 55 per cent of the forested area of the TSA. Of this amount, nearly 25 per cent is managed to address specific wildlife concerns. In addition, no harvesting will occur on the remaining 45 per cent of the forested area of the TSA because it is currently unsuitable for timber harvesting or it is required for the protection of other resource values. Therefore, where appropriate, much of this area will meet the objectives for managing wildlife, biodiversity and environmental concerns.

First Nations implications

Over 100 First Nations people are employed in harvesting and manufacturing in the TSA. Any loss of employment due to an AAC reduction would affect the First Nations community as unemployment levels are already high and they are more dependent on forestry and wood manufacturing than the overall population in this TSA.

Management for wildlife habitat, recreational values and visual quality may assist in enhancing traditional values such as hunting areas.

Community implications

The implication of changes in the AAC for local communities is an important consideration in the Timber Supply Review. The current AAC can support approximately 1,659 direct forestry person years and 1,446 indirect and induced person years of employment. If the AAC was reduced to 1.32 million cubic metres, as indicated in the timber supply analysis, then the AAC would support 250 less direct forestry and 218 less indirect and induced person years within the TSA. Provincially, an additional 172 direct, indirect and induced person years could be affected.

Recently, the actual harvest from the Fraser TSA has been slightly below the AAC at a cyclical low of 1.34 million cubic metres. This means that if the AAC were reduced to 1.32 million cubic metres, the immediate impacts on employment may be less than indicated. However, the forestry workforce consists

of individuals currently working full- and part-time, and those waiting to go back to work. In each case, the individual relies on the forest industry for all or some of his or her livelihood. Reducing the AAC will impact these forest dependent workers.

Any adjustment in the AAC would have the greatest impact in Mission, Chilliwack and the Hope-Fraser Canyon where forestry is a dominant economic sector. Overall, the lower mainland economy is well diversified and any changes in the Fraser AAC would not likely affect the timber supply area's general regional economic growth and stability.

Your input is needed

Establishing the AAC is an important decision which requires well-informed and thoughtful public input. Feedback is welcomed on any aspect of this discussion paper, the *Fraser Timber Supply Area Analysis Report* and other issues related to the timber supply in the Fraser TSA. Forest Service staff would be pleased to discuss questions or concerns you may have that would help you prepare your response. Please mail your comments to the forest district manager at the address below. Your comments will be accepted until August 18, 1998.

You may identify yourself on the 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 the responses are requested, personal identifiers will be removed before the responses are released.

A summary of public comments will be attached to the rationale and will be available from the district officer when the chief forester's AAC determination is announced.

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

District Manager, Chilliwack Forest District
9880 South McGrath Road
Rosedale, B.C. V0X 1X0

Phone: (250) 794-2100 Fax: (250) 794-2124
or electronically mail to: len.leroux@gems9.gov.bc.ca
or visit our website at <http://www.for.gov.bc.ca/tsb>

The Chief Forester's Responsibility

Determining the allowable annual cuts (AACs) for public forest lands in British Columbia is the responsibility of the province's chief forester. Section 8 of the *Forest Act* requires the chief forester to consider the following factors:

1. 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
 - silviculture treatments, including reforestation
 - standards of timber utilization
 - constraints on the amount of timber that may be produced due to use of the forest for other purposes.
2. The short- and long-term implications to the province of alternative rates of timber harvesting from the area.
3. The nature, production capabilities and timber requirements of established and proposed processing facilities.
4. The economic and social objectives of the Crown for the area, region and province—as expressed by the Minister of Forests.
5. 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 judgment based on the best available information. By law, the chief forester is independent of the political process, and is not directed by the minister of forests when determining AACs. In these determinations, the chief forester considers relevant information from any source, including interest groups. However, he cannot allow these determinations to be inappropriately influenced by the advocacy efforts of one group.

Why the current AAC may be higher than the long-term harvest level.

Some concern has been expressed that the AACs are higher than the long-term harvest level. There are two main factors which explain this difference:

- In the short term, harvesting takes place in older forests which have accumulated high timber volumes by growing for a long time. Future harvesting on the same sites will take place in second-growth forests at younger ages, yielding lower volumes per hectare.
- Where the long-term harvest level is significantly below the current AAC, the chief forester's strategy is to phase in the lower level over several determinations to allow communities which rely on the forest sector to avoid sudden economic disruptions and plan for the future—provided the long-term harvest level is not jeopardized.

