

## **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 Cranberry 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 Cranberry TSA**

The Cranberry 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 Cranberry 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 Cranberry TSA and to assist them

in providing comments during the 60-day public review period. Public comments will be accepted until January 26, 1998. A response form is included in this discussion paper to help you provide input. 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.

The Cranberry TSA is situated in the northwest portion of B.C. It is located approximately 60 kilometres north of Kitwanga village. The Cranberry TSA is administered by the Kispiox Forest District office located in the village of Hazelton. The Cranberry is the smallest provincial TSA, covering approximately 77,000 hectares.

There are no settlements located in the Cranberry TSA. Rural communities in the immediate vicinity include Kitwanga, Gitwangak and Gitanyow. According to the 1991 Statistics Canada Census, the population of these communities and the surrounding area is approximately 1,400.

## **First Nations**

The Cranberry TSA is located within overlapping traditional territories of both the Nisga'á Tribal Council and the Gitanyow Nation. The Nisga'á Tribal Council, the Government of Canada and the Province of British Columbia have signed the Nisga'á Treaty Negotiations Agreement-in-Principle and are currently finalizing a treaty. The Gitanyow Nation is currently negotiating an agreement-in-principle which will lead to a treaty.

C-Ged Forest Products, owned by the Kitwanga Band, is the largest licensee operating in the Cranberry TSA. The band owns and operates the C-Ged Forest Products sawmill in Kitwanga.

## **Forest Resources**

The forest industry provides an important source of revenue and employment to the communities surrounding the TSA. Other significant resources include recreation, tourism, and commercial harvesting of pine mushrooms. The TSA contains distinct ecological features and high biodiversity values within both coastal and interior biogeoclimatic ecosystems. Important wildlife species include the grizzly, kermode and black bears, moose, northern Goshawk, fisher and owls. The Nass River and its tributaries support spawning and migration habitat for chinook, coho, sockeye and pink salmon, as well as steelhead.

## **Socio-economic profile**

### **Local economy**

The village of Hazelton and the New Hazelton district municipality, located about 40 kilometres east of Kitwanga, are the closest commercial, administrative and retail centres for the region. Apart from resource industries and a fishing-based tourism sector, employment opportunities are very limited.

### **Current allowable annual cut**

The Cranberry TSA was established in 1993 and the AAC was set at 110,000 cubic metres. Since that time, little harvesting has occurred. In 1996, approximately 40,000 cubic metres of timber were harvested.

## **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.

The base case timber supply forecast for the Cranberry TSA indicates the current AAC can be maintained for 9 decades, before declining at a rate of eight per cent per for three decades, when the long-term harvest level of 87,000 cubic metres is reached.

## **Sensitivity Analyses**

Since forests are complex and constantly changing, timber supply analysts evaluate the impacts on timber supply as a result of the 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. Some of the key sensitivity analyses conducted in the timber supply analysis are listed below. For a complete listing, please refer to the Cranberry Timber Supply Area Analysis Report.

### **Site Productivity**

Site productivity (measured as site index by tree heights at 50 years) refers to the rate at which trees may grow. In some cases, particularly where the existing forests are mostly very old or very young, these estimates may not be accurate for use in regenerated forests. Currently, about 86 per cent of the Cranberry TSA timber harvesting land base has forests older than 150 years and younger than 30 years, therefore the site index of regenerated forests may be underestimated. Figure 5 illustrates the impact on timber supply if site index is over or underestimated by five metres.

Figure 5.  
Impacts of five metre changes in site index.

### **Accuracy of the land base**

The size of the timber harvesting land base is uncertain mostly due to uncertainty about both the amount of riparian reserves in the TSA and the amount of area excluded from timber harvesting due to low timber productivity. Figure 6 illustrates the impact of changes in the timber harvesting land base.

Figure 6.

Impact of changes in the in the timber harvesting land base.

## **Factors which may impact timber supply in the future**

### **Pine Mushroom Harvesting**

Harvesting pine mushrooms in the Nass Valley, which includes the Cranberry TSA, is a three million dollar industry and provides 120 person-years of employment annually. Currently, pine mushroom harvesting is an unregulated industry and resource use conflicts between the pine mushroom industry and forestry are a concern.

### **Negotiations with First Nations**

The Ministry of Forests has entered into a consultation agreement with the Gitanyow Nation with respect to forest development activities. Through this agreement and the implementation of other initiatives such as traditional use studies, aboriginal rights in the Cranberry TSA will be addressed.

## **Implications of changes in the AAC**

### **Environmental implications**

The management practices in the Cranberry TSA must follow the guidelines and legislation set out by the Forest Practices Code and therefore the protection of wildlife and the environment will be managed through the Code. The timber harvesting land base—the area assumed to be available for harvesting—represents 43 per cent of the entire TSA. Of this amount, nearly three-quarters is managed for specific wildlife concerns. No harvesting will occur on the remaining 57 per cent of the TSA and therefore much of this area will meet the objectives for managing wildlife, biodiversity and environmental concerns.

### **First Nations implications**

First Nations people currently account for about 30 per cent of regional employment associated with harvesting in the Cranberry TSA. Any changes in the AAC would have the greatest impacts on communities with the highest concentrations of aboriginal workers such as Kitwanga, Gitwangak and Gitanyow.

## **Community implications**

The implication of changes in the AAC for local communities is an important consideration in the Timber Supply Review. For the purposes of this review, employment and community impacts were based on full-utilization of the current AAC. However, in the past few years, the actual harvest level has been significantly lower than the AAC. Therefore, if the full AAC was harvested, initially employment levels could increase.

The timber supply analysis indicates the AAC may be maintained for the next 90 years, which would provide some long-term stability for local communities. If the AAC were adjusted, the community of Kitwanga would be the most affected. However, it appears that local communities have considerable lead time in which to address any future potential timber supply reductions.

## **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 *Cranberry Timber Supply Area Analysis Report* and other issues related to the timber supply in the Cranberry TSA. Forest Service staff would be pleased to discuss questions or concerns you may have that would help you prepare your response. Please mail the completed response form and your comments to the forest district manager at the address below. Your comments will be accepted until January 26, 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 manager when the chief forester's AAC determination is announced.

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

District Manager, Kispiox Forest District  
P.O. Box 215, Hazelton, B.C.  
V0J 1Y0  
Phone: (250) 842-7600 Fax: (250) 842-7676

## **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.

## **Cranberry Timber Supply Area Timber Supply Review**

### ***Public Discussion Paper Response Form***

The *Forest Act* requires the chief forester to consider the following factors to determine the allowable annual cut for timber supply areas and tree farm licence areas in the province, as follows:

- the rate of timber production that can be sustained from the area;
- the short- and long-term implications to the province of alternative rates of timber harvesting from the area;
- the nature, production capabilities and timber requirements of established and proposed timber processing facilities;
- the economic and social objectives of the Crown for the area, the general region, and the province, as expressed by the minister of forests, and;
- abnormal insect or disease infestations and major salvage programs planned for the area.

We welcome your review to ensure the best available information is considered for the Cranberry timber supply area. Please provide your comments on this form, or in another format. Input will be accepted until January 26, 1998.

**A. Economic and social objectives**

Please use the space below to provide your comments regarding the economic and social information contained in this report or other information that you believe should be considered in determining the allowable annual cut for the Cranberry Timber Supply Area.

**B. Reviewing the technical information and timber supply forecasts**

Please use the space below to provide any information which you believe may assist the chief forester in considering the technical factors in determining the AAC for the Cranberry Timber Supply Area.

Name (optional)  
Address (optional)

Mail your comments to:  
District Manager  
Kispiox Forest District  
P.O. Box 215  
Hazelton, B.C.  
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