



June 11, 2012

Timber Supply Review

Background

- **Timber supply** (timber flow) is not the same as inventory: inventory is a measure of standing timber; whereas, timber supply is the amount of timber available from a specific area over time.
- **Allowable annual cut** is the amount of timber that is permitted to be cut annually from a particular area. It is used as the basis for regulating harvest levels to ensure a sustainable supply of timber.
- **Timber harvesting land base** is the area of productive forest land considered to be physically, environmentally and economically and socially available for timber harvesting. The amount of timber a forest produces depends on the size and productivity of the timber harvesting land base.
- **Provincial timber harvesting land base** includes about 22 million hectares of Crown (publicly owned) forest land. This represents one-quarter of the total provincial area and about 40 percent of the total forested area in the province.

Role of the Chief Forester

- Under [Section 8 of the Forest Act](#), the chief forester must determine an allowable annual cut for the Crown land in each of the province's 38 timber supply areas and 34 tree farm licence areas at least once every 10 years.
- In general, an allowable annual cut determination:
 - is an independent professional judgement, not an inventory or analysis-based calculation;
 - reflects *current practices* and may restrict the volume harvested within certain geographic areas, timber types or species;
 - minimizes and assesses risk when considering uncertain information;
 - is determined frequently to ensure it incorporates up-to-date information and knowledge; and
 - does not account for speculation on the outcome of land use decisions, treaties, etc. or the effect on timber supply of altering legally established land use objectives.
- The chief forester can initiate a timber supply review at any time if he believes there is a change in information, forest management, land use or First Nations requirements that could have a significant effect on timber supply.
- Alternatively, if conditions in the management unit are stable and there are no significant changes in information, forest management, land use or First Nations requirements, the chief forester can decide to postpone an allowable annual cut determination for up to five years.

- Section 8 of the Forest Act requires that the chief forester consider the following in determining an allowable annual cut:
 - Rate of timber production:
 - composition of the forest and expected rate of growth;
 - expected time for re-establishment;
 - silvicultural treatments;
 - utilization and decay, waste and breakage; and
 - constraints on and requirements for other uses (e.g. cultural heritage resources, scenic areas, riparian areas, wildlife habitat, biodiversity etc.);
 - Short- and long-term implications of alternative harvest rates;
 - Economic and social objectives as expressed by the Minister; and
 - Abnormal infestations, devastations and major salvage programs planned.
- The chief forester can establish a partition in the allowable annual cut that limits the harvest of a particular species, geographic area or timber type.
- Under the Allowable Annual Cut Partition Regulation, if the chief forester finds that a partition has been or is at risk of being exceeded, he can request that the Minister or his designate amend forest licences to ensure that the partition is met.
- In determining an allowable annual cut, the chief forester is an independent statutory decision maker who must not be fettered by others, including ministry staff, stakeholders or government. If it can be shown that a statutory decision maker was fettered in making his decision, the Court can overturn the decision and request that a new decision be made.
- The Court can also overturn a statutory decision if it can be shown that the process used in reaching the decision was administratively unfair or if First Nations consultation was inadequate or if the chief forester failed to accommodate First Nations interests in determining the allowable annual cut.
- The chief forester is responsible for determining the allowable annual cut; however, it is the Minister responsible for the *Forest Act* who apportions the cut to licences.

Timber Supply Review Process

- An allowable annual cut determination can have far-reaching economic, environmental and social consequences and may be subject to intense public, stakeholder, and First Nations scrutiny.
- Given the risk of legal challenge, the process used to determine an allowable annual cut must be rigorous.
- The objectives of the timber supply review program are to:
 - identify the economic, environmental and social information that reflects current forest management practices;
 - identify First Nations interests and the public's concerns that may be impacted by an allowable annual cut determination;
 - identify where improved information is required for future timber supply reviews; and,
 - provide the chief forester with the information that must be considered in determining an allowable annual cut.

- The time taken to complete a timber supply review varies from about 12 to 22 months. The length of time depends on the availability of information, complexity of the analysis, magnitude of forest management changes and the First Nations consultation process requirements.
- Generalized timber supply review process includes:
 - gathering information and data on land base, growth and yield and current forest management practices;
 - conducting and publishing a data package, timber supply analysis results and information regarding socio-economic information;
 - public review and First Nations consultation;
 - determination of the allowable annual cut by the chief forester; and
 - documenting and communicating the decision (written rationale).

Timber Supply and Land Use Planning

- Historically, British Columbia's land use planning processes were undertaken to reduce conflict and increase certainty on the land base.
- Forest planning on Crown land involves both resource professionals and the public. Land and resource management plans bring together diverse groups to identify forest values and management objectives for a specific area.
- Timber supply analysis supports the planning process by assessing the extent to which each land-use proposal or option meets specified management objectives under specified forest policies and practices. The analysis also forecasts the implication of each proposal or option for the timber supply in the area. Therefore, timber supply analysis is a tool used to support planning, but the plan itself is developed by participants through a planning process.
- Components of land use plans that have been established as legal objectives by the Crown are considered to represent current forest management requirements. In keeping with the non-speculative approach used in timber supply reviews in support of allowable annual cut determinations, analysis to assess the impact of altering legal land use objectives is not undertaken within the context of a timber supply review.

Short-, Mid- and Long-term Timber Supply

- A timber supply forecast can be divided into three time periods:
 - The short-term often reflects the current allowable annual cut or actual harvest level. During this time, the harvest comes from existing mature stands.
 - The mid-term is the time period during which the transition occurs from harvesting existing mature stands to regenerating, younger stands. The volume harvested during the mid-term comes from trees that are already growing. Activities like fertilization and thinning may help to speed growth and improve wood quality.
 - The long-term occurs once the harvest of existing stands ends and the amount of growing stock on the timber harvesting land base has stabilized and the harvest level reaches a steady, sustained level. Trees that are planted now will be available for harvest during this period.

Timber Tenures

- Government transfers specific rights to use Crown, or public, forest and range land and resources to others through tenure agreements. A timber tenure can take the form of an agreement, licence or permit. Each is a legally binding contract that provides the contract holder with specific rights to use public forests over a specific period of time, in exchange for meeting government objectives, including forest management obligations and the payment of fees including stumpage.
- Over a dozen forms of tenure have been developed to reflect forest uses, from timber harvesting and road building, to ranching. This diversity in tenures also reflects the needs and interests of tenure holders, whether they are large or small operators, First Nations, communities or individuals.
- Volume-based tenures grant licensees the right to harvest a certain amount of timber within a specified timber supply area, allowing several licensees to operate in the same management unit. Area-based tenures grant the licensee virtually exclusive rights to harvest timber within a specified area.
- Replaceable tenures generally have terms ranging from 20 to 25 years, providing licensees with the long-term security to invest in business planning, forest management, and manufacturing. Every five to 10 years, the licence may be updated or replaced to reflect current government policy. Non-replaceable tenures are granted for a fixed term to achieve specific goals.

Status of Forest Inventories

- The Ministry of Forests, Lands and Natural Resource Operations maintains and updates forest inventory information, including maps and ground samples of the forest cover, for all timber supply areas. Most forest cover maps were created in the last 20 years although some, such as Tweedsmuir Park, are older, and others are newer.
- The ministry keeps the entire inventory current and accurate through three processes:
 - Each year, new harvested areas and reforested areas are copied into the inventory.
 - Each year, forest stands are “grown” to increment their age, height, and volume in the inventory.
- Each year, mortality caused by the mountain pine beetle is mapped from the air and used to update the forest inventory.
- The ministry is focusing inventory efforts on areas affected by the mountain pine beetle. In recent years, it completed a re-inventory of the Quesnel Timber Supply Area and site productivity mapping of areas affected by the mountain pine beetle. In 2012/13 the ministry is:
 - conducting a complete inventory ground sample of the Morice Timber Supply Area
 - initiating a complete re-inventory of the Lakes Timber Supply Area and Vanderhoof Forest District
 - initiating an inventory improvement project in Fort St. James Forest District
 - re-measuring permanent sample plots and establishing young stand monitoring plots in management units affected by the mountain pine beetle
 - completing a re-inventory of Williams Lake and 100 Mile House timber supply areas

More information:

Forest Analysis and Inventory Branch

<http://www.for.gov.bc.ca/hts/>

Timber Supply Review Background

<http://www.for.gov.bc.ca/hts/pubs.htm>

Timber Tenures in British Columbia

www.for.gov.bc.ca/ftp/hth/external/!publish/web/timber-tenures/timber-tenures-2006.pdf