

## Executive Summary

# The Potential for Area-Based Harvest Regulation in BC

### Why Regulate Timber Harvests?

Regulation of timber harvest has been a principle of forest management since the development of the discipline in eastern Europe in the 18<sup>th</sup> century. In fact, the first harvest regulation was area-based, with the harvest level calculated by dividing the land base by the desired rotation or harvest age of the timber crop.

The concepts of harvest regulation and allowable annual cuts (AACs) were initiated in BC through the Sloan Commission of 1945. Sloan saw harvest regulation as an instrument to establish a sustained yield policy in which allowable annual cuts were to prevent the depletion of the timber resource over time and provide some continuity of harvest for community stability.

In BC today, an allowable annual cut for a defined management unit is set by the provincial Chief Forester considering the current land use decisions and forest practices. Administration of the *Forest Act* has required AACs to be defined on a volume basis - as the amount of timber volume that can be harvested from a management unit each year.

### The Area-based Concept

At its simplest, area-based harvest regulation would define allowable annual cuts as the number of hectares that could be harvested annually. Area-based harvest regulation does not imply or require any changes in current land use or forest practices.

The basic objective of this concept is to simplify the determination of AACs, while improving public understanding of these determinations. Also, this approach will relieve the forest industry of some regulatory and administrative burden while still ensuring the stewardship of British Columbia's forests.

### Advantages

The advantages that have been identified for this alternative approach include:

**Improved public understanding:** Perhaps the most significant advantage of area-based harvest regulation is the expected increase in public credibility in the timber supply review process and allowable annual cut determinations. Area-based harvest limits are much easier to explain and to understand. They are more intuitively appealing. Harvest levels specified and controlled by area rather than volume units provide a more easily planned and measured verification of sustained-yield objectives, which the public is seeking.

**Clear land use tradeoffs:** Where land use choices are being considered in a land use planning process, with an area-based AAC, a reduction in the timber harvesting land base for non-timber uses would create a reduction in the projected timber supply, in the short and long term. This would early illustrate the land use choices. As many non-timber uses can be defined in area terms, multi-stakeholder tradeoffs should be easier to identify when everything is expressed in the same area terms.

**Simplified timber supply analyses:** In the current AAC determination process, substantial resources are devoted to the translation of forest areas into timber volume terms. This information is often disputed by many stakeholders and is not well understood by the public. With area-based regulation, this information would be much less important, thus significantly reducing the time and friction in the process.

**Less government regulation:** In terms of government regulation, timber tenure administration on an area basis is likely to reduce government costs, decrease government interference in industry decisions, and give the private sector more control over its business.

### Important Cautions

Area-based allowable annual cuts are not the same as (so-called) **area-based tenures**. The term 'area-based tenure', is used in BC to refer to a tenure with a single licensee being responsible for managing a specified unit of land, much like a woodlot or tree farm licence.

Area-based harvest regulation is also not the same as **spatially explicit timber supply analysis**. Timber supply analyses evaluate the potential flow of timber over time from a specific management unit; spatially explicit analyses track individual areas within a management unit during an analysis. An area-based AAC defines the amount of area that can be harvested but it does not define which tracts of forest can be cut.

## Challenges

The greatest challenge to implementing this concept will perhaps be overcoming the human tendency to resist a fundamental change of this nature. There are also technical challenges as follows:

**Setting projected harvest ages:** Area-based regulation requires definition of projected harvest ages – the age of forests when they will be harvested. This is also a challenge with volume-based regulation, and can likely be addressed using the current approaches.

**Partial harvesting:** Concerns have been expressed about how partial harvesting will be translated into an area basis, and how partial harvest objectives will be enforced. Potential solutions have been identified for these challenges – they now must be tested.

**Equitable operating areas:** With volume based regulation licensees within timber supply areas have been assigned operating or chart areas from which they harvest their assigned volume. If operating areas have to be reassigned to achieve consistent and equitable implementation of an area-based allowable annual cut, there may be difficulties that are not easy to resolve. Achieving equitable redistribution in timber supply areas will be a significant challenge to implementing area-based harvest regulation.

**Timber tenure administration:** The administration of timber tenures is closely tied to traditional volume-based harvest regulation in the province. Significant challenges exist to shift the administration process, but they are not unsurmountable. Some additional costs will be incurred to establish a new system.

## Next Steps

Extensive and wide ranging discussion and consideration of the options for harvest regulation have occurred within government and with others. There is general agreement about the need for a 'toolkit' of harvest regulation tools that can be used in appropriate circumstances. Testing a range of options is broadly supported.

The first step has been to amend the *Forest Act* to permit area-based harvest regulation. This legislation has now been approved (*Forest Act Section 151.3*). This opens the door for active trials as follows:

- **Partitioned cuts:** Where it is appropriate, in the ongoing Timber Supply Review the Chief Forester will define partitioned cuts on an area basis. The AAC decision for the Cranbrook TSA includes an area-based partitioned cut for dense pine problem forest types, and for restoration of fire-maintained ecosystems. (See [www.for.gov.bc.ca/tsb/tsr2/tsa/tsa06/ration/c-berry.pdf](http://www.for.gov.bc.ca/tsb/tsr2/tsa/tsa06/ration/c-berry.pdf)).
- **Woodlots:** There is substantial interest in testing this concept with woodlot licenses. A provincial trial has been proposed to involve a number of woodlots around the province. See the Woodlot License Trial Project website at: [www.for.gov.bc.ca/research/woodlot](http://www.for.gov.bc.ca/research/woodlot).
- **Tree farm licences:** Several tree farm licensees have expressed interest in testing area-based regulation, working cooperatively with the Forest Service.

Shifting to area-based harvest regulation with timber supply areas where volume-based licenses prevail creates challenges that will require innovative solutions. The Forest Service is willing to test the concept where licensees are collectively interested in cooperating in a trial. To improve understanding of the implications of shifting to an area-based regime, analysis of area as well as volume is being incorporated in the Timber Supply Review for timber supply areas, as time and resources permit.

*The Ministry of Forests is committed to broadly communicate the results of trials and further technical work.*

*A report outlining the status of discussion on area-based AACs and new information will be posted on the Area-based Allowable Annual Cut Analysis Project website at: [www.for.gov.bc.ca/research/areaaac](http://www.for.gov.bc.ca/research/areaaac).*