Meeting Provincial Forest Management Objectives Through an Alternative AVAC Determination Strategy By Jim Girvan

In today's forests in BC, there are many "underutilized" or "problem forest types" that are not harvested to their full extent, or subsequently regenerated into healthy forests, simply because they do not yield economic sawlogs.

These forest types are sometimes excluded from the allowable annual cut (AAC) determination done by the provincial chief forester, while at other times they are included with restrictions on their availability. Examples include dead pine in almost all areas of the Interior, burned wood, low-quality hemlock types, steep-slope types or leading balsam stands, to name a few. The current process of defining a timber harvest land base (THLB)—i.e., where the land is used to support the determination of the AAC and subsequently apportioned to tenure-holders—lead to several important forest management issues that bring up the question of whether an alternative process might serve forest management goals more effectively. There are a number of factors in play:

• Underutilized forest types included in the AAC are generally avoided by the major tenure-holders because they tend not to yield economic sawlogs. When these stands fail to be harvested as projected, the potential to achieve the mid-term AAC is reduced.

- Where a harvest partition is implemented by the chief forester to force the use of problem forest types while simultaneously limiting overharvest in the better stands, the problem types are again shunned by the major tenure-holders; this further contributes to reduced long-term sustainability. However, these stands remain under the control of the major tenure-holders via their apportionment.
- Partitions used to control "dead versus green" timber utilization do not allow for access to a partially damaged stand by a potential new entrant



who does not have access to tenure and who may want to use the dead wood component (and then sell the green sawlog component). Generally, this is because the hectares that support the AAC are already apportioned to the major tenure-holders.

 Complete exclusion of underutilized forest types from the THLB does not address key forest management objectives, as these stands simply do not get harvested and regenerated to form good-quality, future sawlogyielding forests. This limits opportunities for the innovative use of these forest types, and restricts their future contribution to the AAC.

The apportionment of the AAC (i.e., who gets tenure) is not the mandate of the provincial chief forester. This process falls instead to the Minister, making it possible that the connection between the chief forester's objectives in setting the AAC and the Minister's ultimate apportionment decisions becomes lost. This could occur, for instance, in cases where a partitioned AAC is simply allocated to existing tenure-holders despite the challenges associated with those timber profiles. When this occurs, there is a reliance on the tenure-holders—who for the most part have a singular sawlog or sawlog/ pulp log focus-to harvest these stands in such a way as to meet the provincial

forest management objectives identified by the chief forester.

In short, there is a need to ensure that provincial forest management objectives can be met, that all sawlogs are harvested and consumed to support local economies, and that First Nations or companies offering new and innovative uses for underutilized forest types have an opportunity to access timber. Furthermore, it is important they not be restricted by a system that focuses predominantly on established companies that rely solely on sawlogs for lumber production.

This opportunity might best be achieved by changing how the province sets the allowable annual cut

Specializing in Mechanical Falling and Processing on the BC Coast



We've completed another year with a zero medical incident report! Safety is our priority.



through a process referred to as a "dual-AAC determination."

In practice, a dual-AAC process would see the THLB redefined to include all sawlog and underutilized forest types. An AAC would then be set for the sawlog-yielding land base and apportioned to the existing major tenure-holders that could utilize it fully.

Concurrently, an AAC would be set for the underutilized forest types that meet provincial forest management objectives. Both AACs would be modelled at the same time to ensure the fulfillment of both stand- and landscape-level objectives. The Minister would then apportion these separated AACs accordingly.

As an example of this concept's possible application, the recent Prince George TSA AAC Rationale excluded leading balsam types from the THLB. This was for a variety of reasons, but was due primarily to a lack of harvest performance in these types by the major tenure-holders, in addition to First Nations concerns.

Leading balsam stands represent more than 17 per cent of the volume within the Prince George TSA (on 185,367 hectares). By applying the base case analysis assumptions, the maximum even-flow harvest level for these stands is about 385,000 cubic metres per year; granted, these stands also contribute to meeting landscape-biodiversity thresholds, and their retention may also contribute significantly to the protection of other non-timber values, including caribou and grizzly bear. However, these volumes could be made available as allowable cuts decline or to a new entrant in need of wood.

Key to this approach is that the leading balsam types AAC would be separate from the Prince George TSA sawlog AAC, and therefore would not be apportioned to the existing tenure-holders, as is typically done in a single AAC system (note: the balsam types are out of the AAC as a result of a historical reluctance to use them in the first place). This new AAC could be offered as a replaceable or non-replaceable tenure at the discretion of the Minister, and would allow new (possibly innovative and not sawlogfocused) entrants, or interested First Nations, into the industry.

Under current legislation, however, the chief forester cannot set more than one AAC for each single management unit. As a result, moving to a dual-AAC process would require legislative change.

A second recent example of where a dual-AAC model may have merit was seen in the Quesnel TSA. In this case, dead pine types continue to support the AAC and a partition limits the volume of green versus dead timber that can be harvested.

The major tenure-holders have demonstrated a reluctance to utilize dead timber as it moves to the end of its economic shelf life, and some even advocated for its exclusion prior to the setting of the current AAC. At the same time, new entrants looking for a secure supply of dead timber for production of such products as pellets still cannot access these stands other than through a business-to-business relationship with a major tenureholder. This is because all of the hectares supporting mixed dead and green timber support the AAC originally apportioned to the majors.

In the dual-AAC process, the green timber could be separated within the land base from the dead timber. An AAC could be set for the green timberland base only, and subsequently apportioned to the existing major tenure-holders. The dead pine types would then be identified as a subset of the land base and have a unique AAC. In this example, however, it is likely that the regenerated dead timber types would revert to the sawlog-producing land base over time. If they did, a "liquidation" approach to setting this second AAC (as is done with coastal timber licences) could be adopted, with allocation of subsequent tenures on a non-replaceable basis. Unfortunately, the current AAC in the Quesnel TSA includes all timber types and is apportioned to the traditional users.

A dual-AAC system could work in one of several ways: new entrants could provide proposals; the volume could be competitively bid to access the timber; or the timber could be direct-awarded to First Nations. While a partition set by the chief forester may achieve the same objectives if apportioned appropriately by the Minister, setting of a dual AAC solidifies the objectives and opportunities for apportionment. Green sawlogs from underutilized forest types would be sold to the market (given their inherent value), thereby reducing the concerns of the major tenure-holders needing access to sawlogs. In fact, sawlog availability might be seen to increase if other parties were focused on the harvest and utilization of these underutilized timber types. At the same time, harvested stands would be regenerated to healthy forests, helping to meet provincial forest management objectives.

In summary, the identification of a single sawlog land base supporting a single AAC within a TSA may restrict the provincial chief forester from achieving provincial forest management goals given that the apportionment decision lies outside that person's mandate. Furthermore, although the Minister may have the ability to apportion a partitioned, non-traditional use profile to new entrants under the current authority of the position, experience has shown that this rarely occurs.

As seen in both the Prince George and Quesnel cases, the adoption of a dual-AAC system could provide assistance to new entrants while enhancing provincial forest type utilization.

