

SUSTAINABLE FOREST MANAGEMENT

What is needed to demonstrate long-term forest stewardship?

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RECOMMENDATIONS

There are three (3) priority recommended actions to demonstrate how well BC is moving toward Sustainable Forest Management (SFM) using long-term forest stewardship practices. These are:

- 1) Adopt legally binding provincial resource management and extraction principles and a forest lands vision and associated goals,
- 2) Establish Government leadership to support and encourage forest dependent communities in developing a vision and goals for their local forests and expect forest managers to reflect them in forest management plans, and
- 3) Require forest managers to develop management unit plans that demonstrate they will deliver the expectations from the provincial and community visions & goals.

SUPPORTING RATIONALE for RECOMMENDATIONS

The late **Dr. Gordon Baskerville**, Dean, Faculty of Forestry, University of New Brunswick, was an eminent Canadian forest management leader. His following words are applicable today as they were three (3) decades ago when he wrote:

“When forest resource planning is undertaken, it is only a matter of time before the question is asked - "what is the *best* forest management?" A credible, simple answer to that question of many dimensions, cannot exist. To begin to answer the question, it is necessary first to **define a specific present forest**, and, to **define the specific future that is desired for that forest**. The objective is to manage the forest in a manner that creates, over time, the defined future forest. This requires hypotheses about the function of forest dynamics in the present and in the future forests. For management to facilitate managerial learning, those hypotheses need to be stated in explicit form, and the selection of each local action must be in context of natural temporal/spatial dynamics in the target forest. The problem is so naturally complex that **it is dangerous for a manager to presume 'correctness' of any local (stand level) action out of context of specific goals for what the specific forest, as a whole, is to become over time**. Further, our knowledge is such that, it is prudent management to treat each step as a hypothesis that a specific action will contribute measurably towards creating the defined target whole forest of the future.”

So, where are we in BC relative to Gordon's comments?

Gordon's comment: "... define a specific present forest"

In BC, the specific forest area definition is usually at one of three levels (i.e., Province, management unit-Tree Farm License-TFL, Timber Supply Area-TSA or watershed). Depending on the level of strategic planning being conducted, the strategies will vary but the intent is the management unit plans will collectively deliver the provincial desired future forest condition. The BC forest is very diverse requiring strategies to reflect the local forest values and community desires. In all cases it begins with identifying the vision and goals for the area which become the foundation for actions.

The provincial vision and goals drives developing the same for each management unit which combined are intended to achieve the former. This will require involvement of communities to identify what they wish their forests will contribute to the whole (<https://tinyurl.com/mzrgmlh>).

Gordon's comment: "...define the specific future that is desired for that forest"

Let's start at the big picture (i.e., BC forest as a whole). Over the last 30 years the Chief Forester of the day developed or updated a vision for the provincial forest. The most recent was in response to the BC Auditor General's 2012 criticism regarding the Ministry of Forests, Lands and Natural Resource Operations (MFLNRO) lack of clear timber objectives. The MFLNRO provided, in 2014, a vision statement as part of their response. It could be argued this addressed both Gordon's requirement for identifying the future of the Provincial forest and meeting the definition of Sustainable Forest Management (SFM).

"The Ministry's vision for sustainable management of B.C.'s provincial forests includes:

- *Managing forests to meet present needs without compromising the ability of future generations to meet their needs;*
- *Providing stewardship of forests based on an ethic of respect for the land;*
- *Maintaining and restoring proper ecosystem function and promoting ecological resilience for influences such as climate change;*
- *Balancing economic, social, spiritual, ecological and recreational values of forests to meet the needs of peoples and communities, including First Nations; and*
- *Conserving biological diversity, soil, water, fish, wildlife, scenic diversity and other forest resources."*

Sustainable Forest Management (SFM) definition: *The stewardship and use of forests and forest lands in a way, and at a rate, that maintains their biological diversity, productivity, regeneration capacity, vitality and their potential to fulfill, now and in the future, relevant ecological economic and social functions, at local, national and global levels, and that does not cause damage on other ecosystems. Food and Agriculture Organization of the United Nations (Canadian Institute of Forestry's The Forestry Chronicle Vol 70 (6): 666-674, 1994).*

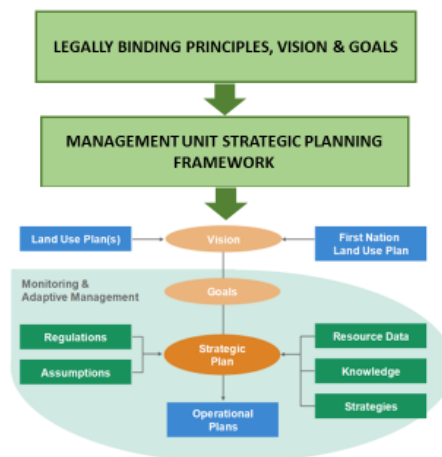
It is nice to have a vision and goals but if these are not reflected in the strategic plans of management units and other decisions, they are just “feel good” statements. Throughout the past three decades this has been the case, probably because the statements are not legally binding and thus not a Ministry or industry requirement to ensure the strategic plans (e.g., Forest Stewardship Plans-FSP) are measured against the statements. Consequently, the vision statements have seldom been used in operations or forest management planning decision-making.

It should be noted the Ministry vision statement is not restricted to timber, thereby, suggesting a vision and goals for other (e.g., biodiversity conservation) forest resources are required. The Province has selected a forest management model that identifies resource objectives (Forest and Range Practices Act-FRPA) but these do not reflect all the values within the forest that require attention to meet the definition of SFM. Regardless of this deficiency, the Ministry vision statement is broader resulting in a question related to the inconsistency.

Also, as noted in the 2013 Auditor General’s report on provincial biodiversity conservation, significant deficiencies currently exist in regards to the management of one of these non-timber resources. Unfortunately, goals and targets for biodiversity conservation are not available resulting in their protection and management limited to applying constraints on timber supply. This is not what Gordon was envisioning. SFM requires balancing the management of all the forest values, not just the limited list in FRPA.

The Ministry’s response to the Auditor General regarding timber objectives, included a commitment to developing “...a ‘Charter’ that outlines government’s principles, priorities and decision-making framework that is intended to complement this Timber Goals and Objectives document.” If produced as a legally binding document, this will add value to forest management guidance. Currently, work is being conducted by MFLNRO in response to this commitment. The Provincial principles, vision and goals would provide the basis for developing management unit plans. A proposed framework for strategic planning of BC forests is presented below.

PROVINCIAL FOREST STRATEGIC PLANNING FRAMEWORK



This is not new, as versions of the contents have been presented over the last 30 years with limited uptake except for a few examples. Success with these examples is evidence we know how to do it. It just needs Government leadership in the form of requiring demonstration spatially and temporally how proposed strategic plans (e.g., FSP) will meet the provincial and local vision and goals for the forest!

Gordon's comment: "...it is dangerous for a manager to presume 'correctness' of any local (stand level) action out of context of specific goals for what the specific forest, as a whole, is to become over time"

The FSP is currently the plan that identifies the direction and overall management being proposed for an area by the Licensee. It is intended to be the plan that outlines the stewardship proposed for the management of the 11 values identified by Government as the indicators of SFM. The Forest Practices Board (<https://tinyurl.com/yby4qz3x>) raised issues regarding the suitability of the FSP. This is the only plan where public involvement is required.

Developing confidence in the achievement an integrated forest resource vision requires demonstrating explicitly and spatially (based on a spatial forest inventory) and temporally (e.g., over a 100 year period) how an identified sustainability vision and desired future forest condition for a given land area can be delivered. This typically involves the use of scenario building tools which have been available to forest managers for nearly three (3) decades. Scenario building methodology is a tested tool for developing balanced multi-value forest management plans. It has been used extensively in the USA to demonstrate how strategic forest plans will protect species at risk and many other species on a management unit. Applying this tool or something comparable on each TFL and TSA as a means of meeting Gordon's requirement and the preparation of the FSP and operations plans would also address many of the issues raised by concerned citizens and communities regarding long-term forest stewardship of their local forests. **So why are only a few instances where a forest manager has adopted this SFM demonstration tool?** The usual reasons are that it is not a legal requirement and an unnecessary cost. In addition, Government has not provided leadership in challenging the forest industry on this issue. The cost argument involves short-term thinking as an accepted FSP using this methodology needs only to be updated every 5-10 years and includes support of the community thereby reducing costs associated with public involvement and actions demonstrating SFM to third party auditors for forest certification.

The most successful examples of using this scenario building tools are where all values other than timber are initially planned with the volume of timber for harvesting being a residual even though it is one of the values to be included. Initial scenarios during this exercise usually will not meet all the desired targets, including timber. This results in participants thinking about how to balance the values but not including unreasonable risks to one or more values and arriving at realistic and measurable goals and targets. After review of several scenarios this balance becomes apparent and thus is the basis for the FSP. During this exercise all involved become educated on what is being proposed for their local forest and the risks being accepted, thus meeting Gordon's intent and the definition of SFM.