February 2006

Future Forest Ecosystems of BC Symposium
Working Group Report: Alternative Management Models (Paradigms)

Present:

Albert Nussbaum; Bill Bourgeois; Peter Affleck; Chris Ritchie; Lisa Matthaus; David Haywood-Farmer; Bruce Larson; George Holberg; Evelyn Hamilton; Bruce Sieffert

Leader: Henry Benskin; Facilitator: Mike Pedersen; Scribe: Nikki Rivette

Context:

The purpose of the symposium was to review the ecological and management change agents impacting the forests of British Columbia, and to evaluate the current forest management paradigm to determine how we can prepare to manage our forests into the future.

Working Group No. 6's assignment was to assess possible future management paradigms:

- What are the desirable characteristics of the management paradigm required to respond nimbly and effectively to the coming changes?
- How does the current management paradigm rate regarding the desirable characteristics?
- What alternative paradigms hold the most promise, and how do they rate regarding the desirable characteristics?
- Compare and contrast (pros and cons) 2 or 3 potential management paradigms
- Identify key information needs.

The Working Group decided that a prior discussion of paradigm SCOPE (given the symposium's relatively narrow focus on ecological processes) and MEASURES (as a basis for evaluating and rating alternative paradigms) was needed.

Scope:

Working Group members preferred the term "model" to "paradigm", given the varying interpretations around the latter term.

Three considerations under "scope" were identified: *triple bottom line*, *governance* and *broad scope*.

Working Group members concluded that identification and assessment of alternative forest management models must be undertaken in the context of the "triple bottom line". This includes regard for all values (e.g. fibre, non-timber, wilderness, range, visual resources) and for desired economic, environmental, social and cultural outcomes.

The assumed governance framework is also an important consideration. In other words, who should manage the forest to determine what we want from the forest, what practices are allowed and where? The future model should consider augmenting the roles of communities and First Nations. It must continue to recognise the direct relationships between economic, social and environmental outcomes. Working Group members noted that these broader considerations are becoming increasingly evident in land use planning, in ecosystem-based management, and in the New Relationship with First Nations.

It was generally felt that current and alternative management models should be assessed broadly and objectively. All need to imbed a definition of sustainability. All need adequate scope to encompass the fibre and manufacturing system and its implications for management and for all forest values. We need to challenge ourselves in such areas as:

- examining the relative merits of models based on "optimisation" or "minimising regret;"
- taking a long term view with an understanding of short-term costs and opportunities;
- founding new approaches on real evidence, not on myth;
- re-examining traditionally accepted concepts such as "crop rotation."

Measures

Consistent with the above findings on "scope", it follows that the "desirability" of any alternative model needs to be assessed against broad measures.

The "resiliency" theme seemed applicable to all elements of the triple bottom line:

Ecological resiliency is consistent with healthy forests;
Community resiliency is consistent with diversification;
First Nations resiliency is also consistent with diversification;
Economic resiliency—in local, regional and provincial economies—is consistent with marketplace acceptance of goods produced under the triple bottom line to meet customer needs.

Other measures for assessing the desirability of models were: fairness; forward thinking; ease of understanding; political acceptance at all levels including First Nations; who benefits—e.g. corporations, communities, First Nations, the

Province; stability; flexibility; adaptability; compatibility (e.g. managing for compatible timber and range outputs while maintaining ecosystem integrity); short-, medium- and long-term implications.

The need for clarity in how we go about measuring was considered important. For instance, particularly where data are weak, professional judgement in different disciplines could be relied on to "red-flag" areas of concern, allowing forecasting in which all factors are weighed with appropriate resource emphases, to achieve informed choices that balance social, environmental and economic objectives and targets.

Finally, we need to embrace a learning culture and be prepared to make constant adaptive adjustments, because we cannot know the future.

Question #1:

What are the desirable characteristics of the management model (paradigm) required to respond nimbly and effectively to the coming changes (next 100 years)?

Sustainability

- should be assessed over multiple timeframes to address the varied interests of affected stakeholders and First Nations;
- should be assessed in steps appropriate to particular planning horizons for specified subject areas;
- always indicates a dynamic resilience, but not necessarily a static stability;
- includes mechanisms for balancing social, environmental and economic objectives and targets.

Resilience

- is the ability to cope with change and to evolve, providing more options;
- implies the desirability of long-term persistence while acknowledging that many factors bear on whether a particular community will exist in perpetuity;
- requires definition of the levels at which resilience is desired—on each hectare, each management unit, community, region, or the province;
- includes the insight to avoid missing future opportunities and to maintain options to realise forest benefits;
- "resilient people" with personal resourcefulness can combine to make the shift to achieve "resilient communities" (e.g. Chemainus);
- community resilience is achieved when people retain the economic means to sustain a livelihood that provides a desired quality of life and well-being from a diverse range of economic options and drivers. However, community resilience cannot be considered in isolation from the bigger picture of neighbouring communities, province and country;

- requires continuous monitoring to identify needed changes;
- requires the willingness to adopt a mix of strategies, to compensate for the inability to know the future.

Equitable and fair distribution of risk

- includes the distribution over time, and inter-generational equity;
- we need to assess risk upfront and recognize how it is distributed;
- most of the time, risk does not go away but may be shifted around, including onto ecosystems and/or future generations;
- risk should not be a deterrent to, but an integral component of, decision making.

Question #2:

How does the current paradigm rate, regarding the desirable characteristics?

The Ministry's vision statement is "diverse and sustainable forest and range values in British Columbia."

Some consider that the underlying management mindset is even-flow sustainability with timber as the foremost consideration and everything else seen as a constraint on timber on certain parts of the land base. Is timber volume—where an even-flow allowable annual cut is seen as an input that governs the actions on other resources—an appropriate surrogate for community health, resiliency and economic well-being?

Others see sustainable forest management as explicitly dealing with both timber and non-timber resources, as in Canfor's Code pilot. Timber resources are managed while addressing concerns from non-timber resources, with allowable annual cuts being determined after consideration of both—that is, as an output rather than an input.

Ecosystem-based management recognises the need to maintain ecological integrity while providing the basis for human well-being, including socio-economic well-being. This entails social choices to achieve desired outcomes in a balancing of social, economic and environmental objectives and targets, all decisions being made with explicit and well-informed consideration of the risks involved in tradeoffs. The challenges are (1) to determine what needs to be left in the forest to maintain ecological integrity while providing sufficient opportunity to realize human well-being from the forest and from alternative opportunities, and (2) to determine management objectives and targets utilizing a mechanism for developing options that allows stakeholders and First Nations to agree on particular scenarios.

Some consider the 6% “cap” on Code impacts to be an arbitrary constraint that is inconsistent with sustainable forest management. Others note that the effects of the cap have never been measured, and that the cap isn’t universal, as for instance in accommodating species at risk. Essentially, while the cap is intended to constrain actions that could lead to unacceptable socio-economic results, establishing it as a predetermined constraint in isolation is seen as inconsistent with ecosystem-based management.

In demonstrating sustainable forest management, while the objectives of the Forest Planning and Practices Regulation do apply to Crown forest land, we must also acknowledge that although there are about 1200 landscape units in the province, probably only about 10 percent currently have comprehensive landscape unit plans showing a full range of values, and we have limited Sustainable Forest Management Plans for management units.

Some contend that the current model will not be testable objectively until the *Forest and Range Practices Act* has been fully implemented, so we should “let the dust settle.” Others felt this should not be allowed to preclude innovative change. There are several outstanding questions. Will we need an explicit mixed species objective to address the issue of planting too much pine? Do we need an intermediate planning level between Land and Resource Management Plans/Higher Level Plans and Forest Stewardship Plans, or will Forest Stewardship Plans meet the need, given also the *Land Act* and the Land Use Objectives Regulation? In facing climate change, should current biodiversity ratios be amended to reflect greater, and increasing, uncertainty?

Recommendations:

- some feel that our management model appears generally sound, relative to demonstrating sustainability and resiliency, but acknowledge the need to fine-tune settings in moving to a resilience model. Some expressed concern over the possible implications of additional prescription;
- one challenge is to meet the landlord’s needs without overly constraining the licensees as to how they should achieve the objectives and targets;
- the emphasis should be on establishing resilient FORESTS across landscapes or forest management units, with appropriate recognition for other needs (e.g. range), with less emphasis on getting trees established to meet administrative criteria on individual blocks;
- some see an underlying emphasis in current timber supply projection models that is inconsistent with a resilience model for sustainability in other forest uses.

Question #3:

What alternative management models (paradigms) hold most promise and how do they rate regarding the desirable characteristics?

At the present time, societal attitudes regarding resource management are changing significantly. First Nations and communities are demanding more engagement and this will force more collaborative approaches. One big question is "at what level should decisions be made?" At present, the provincial government makes the resource management decisions on all Crown land. Some see a need to consider local Community Resource Boards for the future. Others argue for maintaining provincial direction through the provincial staff reporting to the Deputy Minister of Forests and Range.

Flexibility is paramount in managing our forest resources, to enable us to adapt to climate change impacts and to catastrophic events such as the Mountain Pine Beetle and the 2003/4 wildfires, and to enable us to "move up the value chain" to obtain more value from the wood we harvest. Flexibility must permit the achievement of objectives within a management unit, a Timber Supply Area or a region. The separation of logging from manufacturing has merit and is happening in the United States and in some isolated instances in British Columbia—should this be part of the new model?

There was a general recognition of the importance of information—including better forest inventories, monitoring, modelling and long-term research—for adaptive management to achieve resilient forests. Also, there is a need for close collaboration between the science provider and user communities, to enable quicker responses to information needs or to instituting changes in forest policy and practices.

The case was made for giving more attention to the management of non-timber forest products as an integral consideration in the design of resilient future forests and communities. This includes giving attention to the issue of property rights and appropriate tenure provisions.

Some Working Group members argued—though it was not unanimously supported—that there are some positive elements in the Forest Revitalisation Plan, and that we need to build on what we've got, rather than "throwing the baby out with the bath water." This included allowing the *Forest and Range Practices Act* to be fully implemented, along with the New Relationship and community initiatives such as the Omineca Beetle Action Coalition and the Cariboo-Chilcotin Beetle Action Coalition, and then stepping back and undertaking a "resiliency review." Again, others felt that incompleteness in the status quo should not be a reason to preclude making needed innovative changes.