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Forest Futures Project: Scenario Analysis for Canadian Forests Report on the Workshop held in Halifax, June 19-21, 2007

Scenario analysis requires identification of focal issues and key drivers, compilation of knowledge on the drivers, identification of plausible scenarios, and analysis of implications. This report describes the facilitated workshop organized to determine the focal issues and key driving variables and outlines a working example of a scenario space developed during the workshop.

Focal issues and key driving variables

Workshop participants included members of the SFM Network Research Planning Committee (RPC) and invited guests. In total 26 people, including Network staff, participated in the activity. Led by Peter Duinker, Chair of the Core Team, and scenario expert Arden Brummell, the group was challenged to go beyond the usual thinking and to define the focal issues and key driving variables in Canada's future forested landscape.

The workshop kicked off with a tour of Point Pleasant Park. This 75-hectare park lies on the eastern end of the Halifax peninsula. In late September 2003, the park lost roughly 85% of its trees to Hurricane Juan. The destruction caused by the hurricane was seen as an opportunity to plan a sustainable ecosystem for the future. The field trip highlighted to the possibility of planning for future events even if they cannot be predicted.

The tour was followed by a presentation from Dr. Brummell on scenario planning. He outlined what scenarios are, their qualities, and the structured process used to develop scenarios. The first step in the scenario-building process is to identify the driving forces. Driving forces are what propel change or effect trends in a particular sector. It is essential to understand the driving forces as they determine key directions for the scenarios.

Through a series of plenary and breakout group discussions and intellectually challenging exercises, participants identified 14 driving forces relevant to the future of Canada's forests. The discussion was informed by the results of previous scenario discussion with the SFMN Board, RPC and the Forest Futures Project core team, and from a set of interviews with senior people in the government, industry, Aboriginal and NGO communities. The drivers identified as being important are (not listed in order of importance):

Global climate change Forest products demand Global energy Governance Ecosystem health Societal values Industry structure Global fibre supply Geopolitics Technology Aboriginal empowerment Competition for resources Demographics SUSTAINABLE **FOREST** MANAGEMENT NETWORK



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Because scenarios reflect underlying uncertainties, the next task was to look at which of the 14 drivers were the most uncertain. The participants identified societal values, geopolitics, climate change, competition for resources, and Aboriginal empowerment as the most uncertain. Dr. Brummell then encouraged the participants to identify the extremes of each uncertain driver. Below is an example of the results of this exercise.

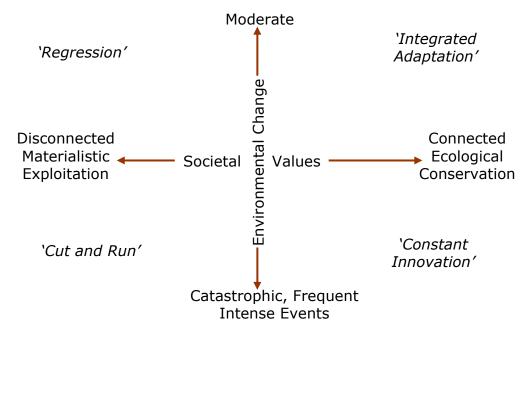
SOCIETAL VALUES

Conservation ------ vs. ----- Exploitation

Equity Cooperation Spiritual Forest values Ecological Inequity Conflict Materialistic Commodities Utilitarian

The majority of participants agreed that environmental change (mainly climate change) and societal values were the most critical uncertainties for the forest and forest sector of Canada. By plotting each driver on perpendicular axes, the group began to realize the scenarios associated with each quadrant (Figure 1). The group then brainstormed keywords to describe each scenario.

Figure 1. Scenario Space Example





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Regression:

- o Regression to sustained yield model (forget SFM) moving away from where we are now
- o Intensive Canadian forestry
- Less regulations
- o Sustained yield
- o Market change
- o Stakeholder-driven
- o Aboriginal relations 'incremental'
- o Foreign ownership
- o Business as usual? (debated)
- o Easier to conserve biodiversity

Cut and Run:

- Aboriginal conflict: no traditional food supply, loss of culture, assimilation, accelerated poverty, disengagement, separation from rest of society, deterioration of ecosystems equals collapse of traditional food supply, unable to sustain their lives, existing reserve system promoted, loss of cultural identities, assimilation
- o Short-term gain for exploitation
- o Bottom of barrel, scrambling to go on, survivalist
- o Intensive management attempts
- o Turbulent times
- Boom and bust
- o Intense cumulative effects resource quality degraded!
- o Eco-services not valued
- Human health problems
- o Faunal collapse
- o Humans have simply given up, lawlessness
- o Investments: chaos in stocks
- o Transfer of economic dominance

Constant Innovation:

- o Aboriginal engagement: higher level of engagement, period of opportunity
- o New relationships emerging between humans and nature
- o Concepts of sustainable use and respect emerging
- o Social responsibility
- Greater valuation on non-timber forest products, multiple values and community engagement in forest planning and decision making – the way value is taken from the forest will be very different
- o Communities much closer to forests
- o Ecosystem-based management
- o Learning-based environment (acknowledge the limits of prediction)
- Innovation is trying to do the best it can for the environment
- o Adaptation is key to try to mitigate some of the effects
- We engage a much wider range of knowledge (goes beyond scientific, technical...)
- Active engagement of risk and uncertainty
- Integrated planning



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- NGOs have a lesser role (are they in government now...?)
- Spiritual conversion
- Due to social values, biodiversity is still an emphasis, and not necessarily lost but rather there are shifts in species and biomes due to environmental change but there is a recognition by society that biodiversity is important
- o Protected area networks become important

Integrated Adaptation:

- o Restoration
- A time of experimentation
- o Aboriginal engagement
- Changes in governance
- o Non-timber values of the forest
- The biophysical environment is nasty
- o More windstorms have a younger forest
- o Small, local industry focusing on short term, short rotations
- o Industry focused on salvage but on a broader range of products
- o Innovative, cooperative
- o Multidisciplinary
- People are doing these things as a response
- o Institutionalization of emergency response
- Higher degree of social engagement on all fronts
- Continuing loss in biodiversity: biodiversity is severely compromised during catastrophic events, although it is recognized by folks to be important intervention tries but may not be successful

In summary, the workshop brought together expert opinions and stimulated thoughts about the future of the forest sector. Specifically, this activity addressed the question: "What are the driving forces likely to affect Canadian forests 40 years from now?" Opinions were diverse and did not always yield consensus. Most importantly, these exercises were an excellent contribution to the project and will construct the framework for building strong scenarios that will reflect the underlying uncertainties of the forest sector and contribute to strategic thinking, learning and decision-making.

Future Activity

Compilation of knowledge: Following the workshop, the core team was tasked with developing briefing documents on each of the drivers aimed at supporting future discussions. The documents will synthesize current knowledge and express it in non-technical language so that a shared knowledge base is available for future scenario activities.

Scenario Development: The next step in the scenario analysis process is to develop and assess the implications of detailed scenarios. This will be the focus of a workshop to be held in Montreal, November 14-15. Workshop participants will include members of the SFM Network Board, RPC, the Partners' Committee as well as invitees. For more information contact Tara Bond at tara.bond@sfmnetwork.ca.