



future directions
and pathways to

SUSTAINABILITY

2007

future directions
and pathways to

SUSTAINABILITY

2007



Sustainable Forest Management Network

3-03 Civil Electrical Engineering Building
University of Alberta
Edmonton, Alberta, Canada T6G 2G7

Tel: 780-492-6659
Fax: 780-492-8160
info@sfmnetwork.ca
www.sfmnetwork.ca



Networks of Centres of Excellence

SCIENTIFIC DIRECTOR

Dr. Jim Fyles
McGill University

NETWORK MANAGER

Bill Woodward

EDITORIAL

Marvin Abugov
Alison Boddy
Boyd Case
Shirley deVries
Margaret Donnelly
Cynthia Kaufmann
Bruce Macnab
Marc Stevenson
Jane Stewart
Alan Thimot

DESIGN

www.c3design.ca

TRANSLATION

Les entreprises Verret
Enterprises, Ltd. (Ltée.)

PRINTING

McCallum Printing Group
Printed in Canada

PHOTOGRAPHY

Cover: Alan Thimot
Page 2: Marvin Abugov
Page 3: Marvin Abugov
Page 4: Dan MacIssac
Page 5: Irena Creed
Page 6: Jim Fyles
Page 11: Dave Locky
Page 12: Marvin Abugov
Page 13: Jane Stewart
Troy McMullin
Page 14: Irena Creed
Page 15: Kevin Devito
SFM photo archive
Page 16: Jane Stewart
Page 17: Courtesy Networks of
Centres of Excellence

researchers

196

117 at 36 universities

16 at various provincial government research organizations

196 RESEARCHERS PARTICIPATED IN NETWORK RESEARCH PROGRAMS

23 at the Canadian Forest Service and other federal agencies

40 at more than 20 industry, Aboriginal organizations or NGOs

29 undergraduates

113 masters

84 phds

students

310 STUDENTS AND OTHERS WORKED ON NETWORK PROJECTS

310

27 postdoctoral fellows

12 research associates

45 technicians

30

members

12 industrial partners

3 federal government departments

2006-2007 NETWORK MEMBERSHIP

7 Aboriginal / First Nations

7 provincial and territorial governments

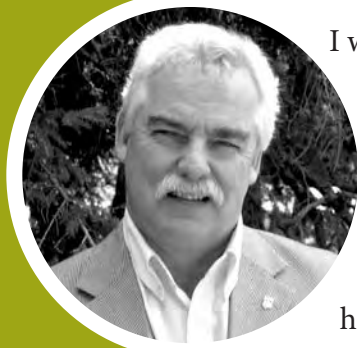
1 NGO

THIS IS AN IMPORTANT TIME
IN CANADA'S FORESTRY RESEARCH SECTOR

Rapid and wide ranging change seems to be constant. The SFM Network has been a leader in Canada's university forest research community, showing that it can deliver excellent science on a national scale in a way that speaks to a broad spectrum of forest practitioners. For example, Dr. Christian Messier was the first recipient of the NCE Board Chairs' Award in recognition of his important work in developing the TRIAD concept, which allows forest planning and management to be sensitive to the needs of biodiversity and protected areas, as well as those of the forest industry and Aboriginal peoples. The award, presented by Federal Industry Minister Maxime Bernier, is a testament to the kind of research excellence brought forward by a networked approach to discovering new knowledge.

Now in its 13th year, the Network truly has become a national collaboration. This dynamic partnership brings together diverse forest landscape stakeholders to actively seek resolution to numerous ecological, economic, and social issues facing our community. This partnership has been instrumental in the genesis of an exciting forest futures/scenario planning project that will describe the possible choices facing Canadian forest managers in the future. The national partnership also places the Network in a good position to undertake important State of Knowledge projects to synthesize research information on several key topics that will inform current practice and strategically position future research.

Research information serves no one unless it is delivered to those who need it in a format that can be understood and used. The SFM Network is committed to making the most of its research work, and we are proud of our ongoing and now highly developed knowledge exchange program. My thanks to the team of people who work with our researchers to prepare and widely distribute high quality documents and other products that help to translate research into practical information.



I wish to offer my thanks and sincere appreciation to Barry Waito for his five years of service as Board Chair – a job he did with distinction. On behalf of everyone involved with the SFM Network, thank you Barry for your boundless energy, dedication, and strategic guidance.

Barry was well served, as I continue to be, by a dedicated Board team, enthusiastic Research Planning Committee members, and a diligent cadre of highly skilled staff. As I complete my first year as Board Chair, I am privileged to be working alongside this group of talented people as we look forward to continued success ahead.

Sincerely,

Fraser Dunn

AFTER 12 YEARS OF HARD WORK, THE SFM NETWORK HAS HONED
A UNIQUE NICHE IN CANADA'S FOREST RESEARCH SECTOR

Network research crosses disciplines, involves partners from different user sector groups throughout the research cycle from the initial idea to the final results, and supports activity in more than one region of the country, making the results nationally relevant. This research approach complements rather than competes with the programs of other research organizations.

In many ways, this year marked a turning point in the Network's history, with the initiation of two new program areas: the Forest Futures project and State of Knowledge (SoK) projects. SoK projects are building on previous research from the SFM Network and elsewhere, and will produce syntheses of the state of knowledge as well as the state of practice and policy on topics of interest to the Canadian forest sector. The topics range from mixedwood management and adaptation to climate change to recipes for successful collaboration between Aboriginal communities and forest companies. SoK projects will build on the SFM Network's excellence in research and provide a knowledge base for our knowledge exchange program and our new Forest Futures project.

The Forest Futures project uses scenario planning to envision what Canada's future forest might look like by 2050. Taking into account key ecological, social, and economic drivers acting locally and globally, this visioning exercise will provide important advice to decision-makers on ways to improve forest management today and ways to create more sustainable forests tomorrow.

Both our Future Forest and State of Knowledge projects are unique in the Canadian woodlands sector and could only have been considered as a result of the many years of work done by the SFM Network. As such, I wish to most sincerely thank the members of our Board, Research Planning Committee, and Partners Committee for all their hard work in guiding the SFM Network's strategic agenda forward in this way.



Sincerely,

A handwritten signature in blue ink that reads "Jim Fyles". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Jim Fyles

achieves international obligations

The SFM Network, as a national research network, directly contributes to continually refined practices that assist Canada in achieving its international obligations as defined by the Canadian Council of Forest Ministers.

Tim Barker, Senior Advisor, Forest Management
Daishowa-Marubeni International Ltd., Peace River Pulp Division

Climate change, global competition in forest products, and biodiversity conservation are just a few of the many issues creating new challenges for SFM Network partners. Such issues demand new insights, options, and solutions – and call for new kinds of research questions that could yield valuable insights regarding additional options and solutions. Two new programs initiated by the SFM Network over the past year are responding to these challenges.



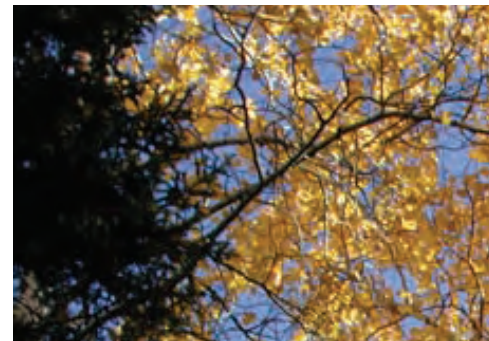
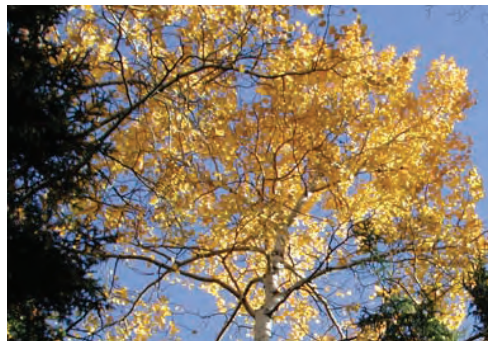
state of knowledge projects

State of Knowledge (SoK) projects are capturing the current states of knowledge, practice, and policy on critically important topics.

forest futures project

The Forest Futures project is envisioning what Canada's forests might look like well into the future and the different pathways that Canada as a country might take to ensure its forests remain ecologically, economically, and socially sustainable for future generations.

PROGRAMS



benefits aboriginal peoples

With the realization of climate change, it is more important than ever to have the SFM Network coordinate high level research that will be needed by government, industry, and Aboriginal organizations. Clearly, it is beneficial for Aboriginal peoples to participate in a process that includes industry and government in a research forum, like that of the SFM Network, that is non-political and non-confrontational and that also might generate deliverables that could be used to set policy for future forest management.

John Turner, Community Consultations Coordinator
Moose Cree First Nation

state of knowledge projects

The Network's SoK projects will summarize the published literature and will draw on the expertise of practitioners from a range of disciplines and sectors on topics identified by SFM Network partners as key challenges. The outcome of each of the SoK projects will be a comprehensive synthesis document that identifies points of consensus and debate, critical knowledge gaps, and potential changes in practice. The following SoK projects were approved at the end of the year:

SoK

Natural capital and ecosystem valuation as a tool for sustainable forest management.

Dr. Vic Adamowicz, University of Alberta

Implications for water resources of activities on the forested land base.

Dr. Irena Creed, University of Western Ontario

Ecological implications of altering the composition of mixedwood forests.

Dr. Ellen Macdonald, University of Alberta

Climate change vulnerability and adaptation for forest management in Canada.

Dr. Alison Munson, Université Laval

Protected areas in sustainable forest management: finding innovations across knowledge systems.

Dr. Yolanda Wiersma, Memorial University of Newfoundland

Reviewing Canadian experience of harmonization between First Nations and forest industries.

Dr. Stephen Wyatt, Université de Moncton, Campus d'Edmundston



scientifically credible and relevant

There is much to applaud with respect to the SFM Network. Its continuation will ensure the maintenance of an efficient, time-tested process for conducting scientifically credible and relevant research; diversity of proven research capabilities provides flexibility and depth to address new and emerging issues; geographical representation allows a national perspective on issues of interpretation of the science.

Gerry Still, Director, Research Branch
British Columbia Ministry of Forests and Range

forest futures project

Considering what the future will bring to Canada's forests and forest industry is the subject of the Network's Forest Futures project. The objectives are the following:

- **Develop a broad understanding, at the regional and national levels, of the key drivers likely to affect Canadian forests, forestry, and forest-based benefits to society over the next 40 years;**
- **Document current understanding of the key drivers and their projected futures;**
- **Bring together expert opinion on key drivers and future conditions through regional and national discussion forums;**
- **Develop plausible scenarios for the future of Canada's forests, based on current knowledge and expert opinion, and assess the implications of these scenarios for sustaining the many benefits Canadians draw from their forests;**
- **Assist participants and all Canadians to understand better the scope of future alternatives and consider appropriate, plausible responses to future change and uncertainty; and**
- **Draw regional, national, and international attention to the challenges and opportunities for sustainable forest management in Canada.**

forest futures



responsive structures and processes

We need a research organization like the SFM Network to continue to develop more responsive institutional structures and processes to address the underlying systemic changes that will characterize the future. Without it, we will not have the capacity to undertake the kind of integrated, large-scale work that is essential to understanding these complexities and uncertainties.

George Stankey
USDA Forest Service (retired), U.S.A.

getting to this point on the pathway

When the SFM Network was created in 1995, discussions on sustainable forest management (SFM) were in the early stages and relatively little research had been conducted on what needed to be done to achieve SFM. In the early years, the majority of SFM Network research focused on ecological aspects of forests and forestry to address the question of how managed forests differed from natural forests. This initial research phase explored whether management could produce a forest that resembled nature, how such forests could maintain a broader set of ecological values that could be used for monitoring, and how the land base could be partitioned into different management zones.

In 2001, the Network's second phase broadened the scope of research in the social sciences, Aboriginal issues, institutional issues, and alternative forest management approaches. This phase recognized the regulatory and policy frameworks by which SFM can be facilitated or discouraged, and identified and explored value-added products as drivers of SFM.

The Network also committed to engaging partners more deeply in research planning and to enhancing knowledge exchange. Collectively, these activities led to a better understanding of sustainable forest management and a stronger commitment to communicate that understanding to user sectors and society in Canada and abroad.

Now in 2007, given the ongoing pressures on Canada's forests from globalization, climate change, industry consolidation, threatened species, and expanding development and preservation campaigns, there are clearly many issues presenting Canadians with a future of increasing uncertainty. That is why the Network is embarking upon another exciting stage. The State of Knowledge and Forest Futures projects and its most recent research program investment allocations are starting down new paths and ensuring that SFM Network research will continue to have a significant impact on the ecological, economic, and social underpinnings of Canada's efforts to ensure its forests are sustainable for future generations.

1995 2001 2007

eight
new projects

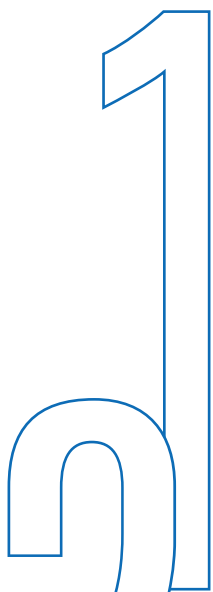
29

2006 | 2007 RESEARCH PROGRAM

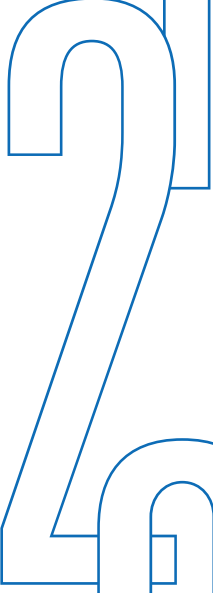
In 2006/2007, the SFM Network funded a total of 29 projects: eight new projects and 21 on-going projects now in their 2nd or 3rd year of funding.

The eight new projects were selected through a rigorous peer review process and responded to partner organization research priorities.


eight new projects




DR. PAUL ARP is leading a national research team to demonstrate how the mapping of hydrologically sensitive upland and lowland forested areas can be improved across Canada. With this new information, forest managers will be able to better situate the placement of roads and culverts, access trails, landing sites, and cutblock boundaries. They will be better able to identify subtle variations in riparian habitats to protect them against sediment, flooding, and chemical leeching from upslope locations. They will be able to improve planning for tree planting efforts, and ascertain the best time and placement for forest operations from summer through winter by considering wet versus dry and frozen versus unfrozen ground conditions.



DR. JIM BUTTLE and his colleagues are working to help forest managers develop more accurate indicators to assess water storage and movement in various forested landscapes across the country. Water is critical to sustaining forest ecosystems and communities living in forested areas, and information on its storage and movement is essential for forest managers. Dr. Buttle and his research team are creating a database of relevant forest and water research conducted throughout the country. This will be supplemented by data on factors such as climate, geology, soils, and forests across Canada. Ultimately, this will lead to a national framework that will allow forest managers to make decisions relevant, from site-specific stands to whole forests, and to translate that information among different stands as well as different landscapes for specific operational and climatic conditions.



DR. HAN CHEN and his research team are working to improve the scientific understanding of forest successional pathways and structural development to enable forest managers to better forecast future forest composition and structure. Current predictive forest succession models are open to some criticism because they are based on limited empirical data and make a number of assumptions that have not been critically tested nor validated. Dr. Chen's research team will examine forest succession in three central-eastern locations to quantify the ways in which forest cover types evolve over time; determine rates of change in species composition so that forest composition can be projected from individual stands within spatially explicit forest management models; define and classify stand structure types using both live tree and coarse wood debris; and quantify successional pathways of stand structure.



DR. FANGLIANG HE and his research team are working to increase our understanding of biodiversity in mixedwood boreal forests by describing and quantifying biodiversity patterns. Documentation of essential elements and relationships that influence mixedwood biodiversity will provide valuable information for determining the sizes and arrangements of retention patches that best maintain biodiversity. The team will also develop models and methods for assessing and predicting the impact of disturbances and management practices on mixedwood biodiversity that are statistically representative, reliable, and practical.

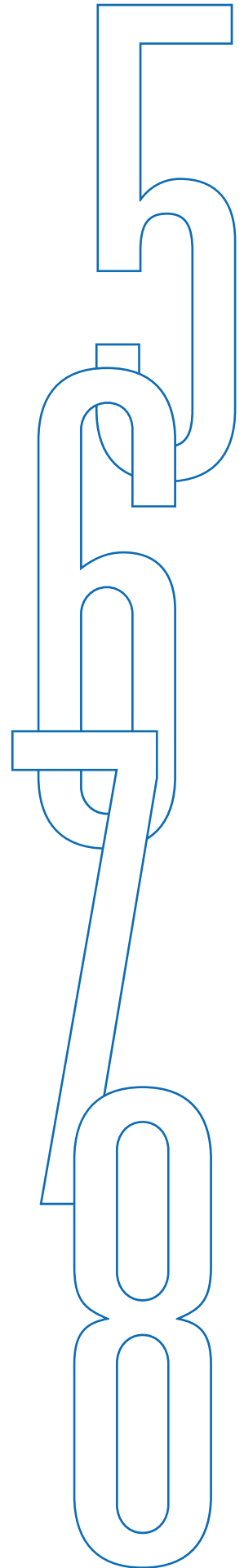
eight new projects

DR. JOHN INNES and his colleagues are working to determine how the cumulative impacts of development on Treaty 8 First Nations communities can best be managed given the diverse nature of resource developments and policy environments that exist in the different provincial/territorial jurisdictions throughout the Treaty 8 settlement area. They will develop modules for the implementation of a cumulative effects tool, including both social and ecological impacts, and will examine the policy environments that are leading to differing interpretations of the Treaty.

DR. SHASHI KANT is collaborating with research team members from British Columbia, New Brunswick, Ontario, China, Finland and Brazil on a project that will result in a better understanding of the influence of market structures, institutions, and policies on the Canadian forest industry. Economic models and techniques will examine the impact on the economic well being of Canadians and on the forest industry of market conditions and government policies, including, for example, trade actions, protected area policies, and policies related to mountain pine beetle infestations. The project will also assess the global competitiveness of different sectors of the Canadian forest industry, including analyses specific to selected provinces as compared to other countries.

DR. THOMAS MANESS and his research team are working on tools that can be used by resource managers, local stakeholders, public advisory groups, and community representatives to more effectively develop local forest resource development strategies. The initial goal is to work directly with practitioners and local stakeholders in order to learn more about how the public would make trade-offs on critical sustainable forest management planning issues, as part of a reciprocal learning and decision-support process. A second goal is to assess the effectiveness of interactive visualization-based methods of presenting complex sustainable forest management planning models to resource managers, local stakeholders, and community representatives.

DR. JEREMY RAYNER and his research team are conducting three comparative case studies to improve future development of integrated land management (ILM) policies in British Columbia, Alberta, and Manitoba. Policy makers have become increasingly concerned about the cumulative impacts of multiple resource industries operating on the same land base, where each works in its own self-contained planning “silo”. ILM offers a way to break down these silos. The team’s recommendations will be based on other extensive comparative studies of successful ILM policy designs in Canada and abroad.



The Network hosted its fourth international conference, Sustaining Canada's Forests: Building Momentum, from June 20-22, 2006, in Edmonton, Alberta.

The conference was directed specifically at sharing the results over a four year period of the Network's very successful research and knowledge dissemination program. More than 350 participants attended the conference.



Forty presentations and six keynote addresses were presented, featuring Minister David Coumts, Alberta Sustainable Resource Development, Dr. Avrim Lazar, CEO of the Forest Products Association of Canada, Mrs. Paule Têtu, Sous-ministre associé, Forêt Québec, Dr. Ken Higginbotham, Vice President of CANFOR, Mr. Jean-Claude Gavrel, Director, NCE Program, Grand Chief Edward John of the B.C. First Nations Summit and Dr. George Stankey, USDA Forest Service. Some of the highlights of this year's event included:

Concurrent sessions covering topics such as wildlife habitat, forest tenure, aquatic systems, public participation, values at risk, and Aboriginal forest tenure;

Eight partner showcases featuring presentations on examples of the successful implementation of collaborative research partnerships; and

Two discussion forums, *Social License: the influence of public confidence in forest management*, and *The roles protected areas can play in forested landscapes*, providing diverse perspectives on key areas in sustainable forest management.

The Network also participated in numerous other important national and regional forest related events. The Network's Scientific Director participated in the design team for the new national Wood Fibre Centre. In addition to attending the Networks of Centres of Excellence Annual Meeting in Ottawa, Ontario, the Network also participated in the following: National Forest Strategy Coalition Annual General Meeting in Winnipeg, Manitoba; Environment Canada's Forest Sector Table discussions in Ottawa, Ontario; 10th National Forest Congress in Hull, Québec; Canadian Institute of Forestry annual general meeting (AGM) in Cochrane, Ontario; Canadian Model Forest Network AGM in Rimouski, Québec; British Columbia Professional Foresters AGM in Vancouver, B.C.; and Price Waterhouse Coopers Global Forest Competitiveness conference in Vancouver, B.C.



projects | reports | notes

The Network's Knowledge Exchange Program showed a strong year of growth and expansion, particularly in eastern Canada as well as with provincial and territorial government partners across the country.

Three new projects were initiated:

A collaborative synthesis project between the Canadian Forest Service and the SFM Network will summarize the potential impacts of climate change on Canada's forest sector. This synthesis will compile unpublished forest sector material prepared for the National Assessment on Climate Change Impacts and will focus on regional implications for forest management.

Julienne Morissette, Ducks Unlimited Canada, is leading a collaborative riparian guideline project between Ducks Unlimited Canada's Western Boreal Program and the SFM Network to develop a synthesis report on riparian areas and their management. The project will use case studies from Network partner operations to illustrate concepts and challenges. The draft text will be reviewed in 2007 in preparation for publication.

Dr. Marc Stevenson, the Network's Aboriginal Research Manager, is working with PhD candidate Pam Perreault at the University of British Columbia on a synthesis project entitled, *Capacity for What and for Whom? Aboriginal and Non-Aboriginal Capacity Needs for Sustainable Forest Management*. The document is expected to be published in 2007.

Two Synthesis Reports were published summarizing results and management implications with respect to the following:

Public participation in sustainable forest management: a reference guide. Beckley, Parkins and Sheppard

Fire cycles and forest management: an alternative approach for management of the Canadian boreal forest.

Lauzon, Bergeron, Gauthier and Kneeshaw

Seven Research Notes were published (publication number in brackets):

Compaction of boreal forest soils. (No.17)

Criteria and indicators and a decision support system for an alternative zoning approach to sustainable forest management. (No.18)

Considering climate change in sustainable forest management. (No.19)

Modeling stand-level indicators of sustainable forest management in TFL 49. (No.20)

Assessing SFM values: a tool for describing attachment to place. (No.21)

Wood-ethanol in Canada: production technologies, wood sources and policy incentives. (No.22)

Wood-ethanol plantations: implications for sustainable forest management. (No.23)





The Network's knowledge exchange team organized four research development and knowledge transfer workshops.

In August 2006, more than 120 participated in two-day discussions of past research and new priorities in Québec City and Edmonton. The Québec meeting included presentations by nine Network researchers on topics ranging from the importance of woody debris in forests to public participation in forest planning. The Edmonton workshop included presentations by Network partners on management of caribou, protected areas, and adaptation to climate change. Both meetings gave opportunities to initiate collaborations between researchers and Network partners to address the new research priorities for the year.

More than 60 attended the Maritime Knowledge Exchange Workshop in Fredericton, New Brunswick on March 8, 2007, organized in collaboration with J.D. Irving and the Canadian Forest Service.

More than 100 attended Management of Aquatic Systems in Forested Landscapes in Winnipeg, Manitoba on March 20-21, 2007. The workshop was held in collaboration with the SFM Network, Manitoba Conservation, Ducks Unlimited Canada, the Manitoba Model Forest, and Louisiana Pacific Canada Ltd. The objective was to initiate a regional working group in Manitoba to provide an overview of Network research and promote the development of Forest Practice Guidelines based upon the most recent sustainable forest management practices.

Work on a distance education course on ecosystem management, organized by Dr. Alison Munson, Université Laval, was supported by the Network. The course, targeted at foresters and biologists in Quebec, covers the basic principles of ecosystem management and the legislative changes following the Coloumbe Commission.

The Network supported the translation from English to French of four chapters written for a book on ecosystem management by Dr. Sylvie Gauthier, UQAM. The complete text is available in French.



aboriginal peoples

The capacity to engage in current employment and economic development opportunities in forestry and other natural resource sectors is one of the key capacities that forest-dependent Aboriginal peoples and communities would like to address over the short term. This is the current focus of all federally funded forest-related Aboriginal capacity building initiatives. At the same time, in order to engage effectively in these opportunities, Aboriginal peoples must also have the capacity to represent themselves as well as their communities in engagements with government and industry. This requires a grounded understanding of community values, goals, needs, and rights, and their articulation with personal aspirations – a tall order without the necessary financial support and resources to undertake comprehensive community visioning exercises.

Focusing exclusively on the development of short-term capacities in the forest sector at the expense of long-term capacities required to realize individual and community goals and aspirations may be setting Aboriginal peoples and communities up for failure given that forestry in the future may look very different from today. Engagement and representation capacities challenge Aboriginal peoples and communities on both levels: short-term, to capitalize on existing opportunities; long-term, to realize their desired relationships with their lands and resources.

Over the past 12 years, the Network's Aboriginal program has been laying the groundwork to begin to realize these aspirations. This past year, Dr. Marc Stevenson began a compendium of best cases and practices for incorporating Aboriginal peoples and their knowledge into sustainable forest management. He also initiated a series of guidelines for research with

Aboriginal peoples and communities, undertook the development of a strategy to incorporate non-forestry sector industries (e.g. oil and gas sector) into the Network's Aboriginal program, strengthened the Aboriginal partnership by welcoming the Treaty 8 First Nations of Alberta into the SFM Network, and provided assistance in developing relevant sustainable forest management frameworks sensitive to Aboriginal needs to Network Aboriginal partners and the Network's knowledge exchange personnel. As noted in the Knowledge Exchange section, he and Ms. Pam Perreault began preparing a synthesis paper entitled, *Capacity For What? And for Whom*. The paper will provide direction regarding how to best assess the capacity requirements and strengths of Aboriginal communities so they can participate effectively in sustainable forest management on their traditional lands on terms and conditions acceptable to them.



student researchers | principal investigators

A total of 310 people were working on SFM Network projects in 2006/2007. This included 113 masters, 84 phds, 27 postdoctoral fellows, 29 undergraduates, 45 technicians and 12 research associates.

Many of the Networks of Centres of Excellence across the country have supported the creation of student-run network associations. These network subgroups serve as networking, communications, educational, and research resources for the variety of student researchers involved. This year, the NCE, at its annual meeting, launched a comprehensive initiative to create as many student-run networks as possible. SFM Network PhD candidate, Henrik Hartmann, accepted the challenge to create such an organization for the SFM Network.

This past year marked the first time that the Aboriginal student workshop/field trip was combined with a forum designed to assist in the development of future research proposals. The Aboriginal workshop and field trip, in collaboration with Elders from Pikangikum First Nation, was held in Red Lake, Ontario on September 14. The Elders participated with several Network principal investigators and student researchers to explore some of the issues and perspectives central to the Whitefeather Forest Initiative. The venue then changed to Winnipeg, where in-depth discussions were held regarding the issues concerning the Network's upcoming Call For Proposals. More than 30 researchers and students participated in these unique events.



directors | committees | team members

The work of many dedicated individuals, including the members of the Board of Directors, Research Planning Committee, Partners Committee, Executive Committee, Strategic Planning Committee, and Management Team, guided the SFM Network through a successful year. In particular, the Board of Directors, who met on six occasions, focused much of its attention on planning the work of the organization between now and the conclusion of its NCE research funding in March 2009.

In February 2006, the Board held a strategic planning retreat in Ottawa that served to focus efforts in regard to future Network options. As a result of this meeting, three optional scenarios for a legacy initiative were presented. Thus far, the Board has shown support for an option which includes an increased mandate and capacity for communications and knowledge dissemination. The Board also considered a broad scientific agenda which would serve the partnership and the country well into the intermediate future. Various partner representatives indicated that they believed their organizations would increase their participation and investment in a national legacy initiative.



Mr. Fraser Dunn, Director of Applied Research for the Ontario Ministry of Natural Resources, was elected Board Chair. He was pleased to welcome several new members, including Gary Lipinski of the Metis National Council, Lorraine Reckmans of the National Aboriginal Forestry Association, Grand Chief Arthur Noskey of the Treaty 8 First Nations of Alberta, Walter Matosevic, Chief Forester for CANFOR, Don Harrison, Executive Director of the Alberta Forest Research Institute, and Mike Martel, Senior Vice President and Chief Forester for Tembec.

The Partners Committee met twice in 2006/2007 under the leadership of Dr. Samantha Song, Environment Canada. Meetings included the Partners Research Planning meeting, May 2-4, 2006 in Victoria, B.C. that was held specifically to identify research priorities for the coming year, and a retreat on November 15, 2006 in Montréal, Québec. In addition to articulating and establishing research priorities for the Network's annual research program, these meetings focused on the opportunities for a future national academic research initiative continuing beyond March 2009.

The Research Planning Committee met six times through the year, under the chairmanship of Dr. Terry Veeman, to formulate research direction and priorities, finalize the Call for Proposals, guide the competitive review process, advise the Board regarding investments in new research work, and monitor progress in ongoing research projects.

The SFM Network communications program continued to profile Network research results through print, broadcast media, and the web throughout 2006/2007.

In November 2006, following 18 months of concerted effort, the Network launched a new, fully bilingual web site. The enhancements included a new content management system that permits staff to easily create and edit editorial, graphic, and photographic content; and a new database management system that allows researchers to more easily update their reports to the Network and allows staff to more easily compile statistical reports for the NCE Program. A new online conference registration tool is presently being developed.

Eight news releases were produced in collaboration with the NCE announcing the 2006/2007 project allocations as described in the research program section. The announcements were timed to coincide with the Network's 2006 conference.

These news releases garnered attention in the *Peterborough Examiner*, *Edmonton Journal* (two articles), *Whitehorse Star*, CBQ-FM/CBC

Radio Thunderbay, Fredericton *Daily Gleaner*, *Nanaimo Daily News*, Global Television (Edmonton), *Montreal Gazette*, *U of A Express News* and Canada News Wire. As part of the pre-conference activities, a special media training session for practitioners was led by international media training consultant Tom Donoghue.

At the December 2006 NCE Annual Meeting, the Network's Communication Manager co-chaired the communications section working group. This leadership role included chairing national teleconference calls to coordinate a poster series to be displayed as part of the NCE Board Chairs announcement. A news release and communications plan supported the announcement of Dr. Christian Messier as the inaugural winner of the first NCE Board Chairs Award. Dr. Messier's award was covered in the *Globe and Mail*, *Canada.com*,

Canwest News Service, Global News Regina, *Montreal Gazette* and *Vancouver Sun*. In French Canada, coverage included 24 Heures, CBC Radio, (Montreal), *Journal de Montreal*, *Le Monde Forestier*, and Radio-Canada.

Network research, knowledge exchange, and networking activities continued to be profiled through feature articles in the *Forestry Chronicle*. The Network's Projects and Publications Guide was totally revamped and updated.



financial statements

2
0
0
7

AUDITOR'S REPORT

To the Directors of the Sustainable Forest Management Network

I have audited the balance sheet of the Sustainable Forest Management Network as at March 31, 2007, and the statements of revenues and expenditures and changes in net assets and cash flows for the year then ended. These financial statements are the responsibility of the Network's management. My responsibility is to express an opinion on these financial statements based on my audit.

I conducted my audit in accordance with Canadian generally accepted auditing standards. Those standards require that I plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In my opinion, these financial statements present fairly, in all material respects, the financial position of the Sustainable Forest Management Network as at March 31, 2007, and the results of its operations and its cash flows for the year then ended in accordance with Canadian generally accepted accounting principles.

J. A. Pawluik Professional Corporation
Chartered Accountant

Edmonton, Alberta
June 20, 2007

SUSTAINABLE FOREST MANAGEMENT NETWORK

BALANCE SHEET

March 31, 2007

	2007	2006
ASSETS		
Current Assets		
Cash	\$ 1,767,584	\$ 1,016,550
Accounts receivable	168,333	266,628
Prepaid expenses	10,236	20,157
	<u>\$ 1,946,153</u>	<u>\$ 1,303,335</u>
LIABILITIES		
Current Liabilities		
Accounts payable and accrued liabilities	\$ 113,591	\$ 93,461
Deposit	51,619	12,816
Deferred revenue	510,000	292,688
	<u>675,210</u>	<u>398,965</u>
NET ASSETS		
Unrestricted	1,270,943	904,370
	<u>\$ 1,946,153</u>	<u>\$ 1,303,335</u>

STATEMENT OF REVENUES AND EXPENDITURES AND CHANGES IN NET ASSETS

Year Ended March 31, 2007

	2007	2006
Revenues		
NSERC/SSHRC	\$ 4,100,000	\$ 4,100,000
Provinces, Territories, Federal Agencies	1,475,000	1,375,000
Industries and other	884,391	1,092,719
Conference	\$ 129,698	—
Flow-through contract	20,608	62,631
	<u>6,609,697</u>	<u>6,630,350</u>
Expenditures		
Research	4,612,565	4,933,602
Knowledge exchange and tech transfer	525,679	412,215
AGM/conference	222,274	22,904
Central administration	861,998	939,253
Flow-through contract	20,608	62,631
	<u>6,243,124</u>	<u>6,370,605</u>
Excess of Revenues over Expenditures	366,573	259,745
Unrestricted Net Assets, Beginning of Year	904,370	571,226
Transfer from Internally Restricted Net Assets	—	73,399
Unrestricted Net Assets, End of Year	<u>\$ 1,270,943</u>	<u>\$ 904,370</u>

STATEMENT OF CASH FLOWS

Year Ended March 31, 2007

	2007	2006
CASH PROVIDED BY (USED FOR)		
Operating Activities		
Excess of revenues over expenditures	\$ 366,573	\$ 259,745
Net change in other non-cash working capital		
Accounts receivable	98,295	200,622
Prepaid expenses	9,921	(19,157)
Accounts payable and accrued liabilities	20,130	6,655
Deposit	38,803	12,816
Deferred revenue	217,312	17,688
	<u>751,034</u>	<u>478,369</u>
Increase in Cash	751,034	478,369
Cash, Beginning of Year	1,016,550	538,181
Cash, End of Year	<u>\$ 1,767,584</u>	<u>\$ 1,016,550</u>

honours and awards

Han Chen

Lakehead University Contributions to Research Award

Steve Cumming

Canada Research Chair in Boreal Ecosystems Modeling

J.S. Frideres

Alberta Centennial Medal

Outstanding contributions to communities in Alberta

Christian Messier

Canadian Institute of Forestry Canadian Forestry Achievement Award

Networks of Centres of Excellence Board Chairs' Award

Sean Thomas

Canada Research Chair in Forests and Environmental Change

principal investigators and projects

Carbon credit trading: the law, firm behaviour, economics, and landscape impacts

Glen Armstrong

University of Alberta

Tools for generating maps of hydrologically sensitive areas for use in forest operations planning

Paul Arp

University of New Brunswick

Social sustainability: strategies for definition, measurement, and management

Tom Beckley

University of New Brunswick

Effects of landscape composition and pattern on the abundance and fitness of wildlife indicator species at multiple scales: do thresholds exist?

Stan Boutin

University of Alberta

Hydroecological landscapes of Canada's forests

Jim Buttle

Trent University

Forest successional dynamics in the eastern-central Canadian boreal forests: modeling compositional and structural pathways and their diversity characteristics

Han Chen

Lakehead University

Cooperative learning for integrated forest management: building a C&I framework for the Whitefeather Forest Initiative, north-western Ontario

Iain Davidson-Hunt

University of Manitoba

Landform-based hydrologic indicators of disturbance in heterogeneous landscapes: water cycling in relation to disturbance in the western boreal forest

Kevin Devito

University of Alberta

Old-growth forests in eastern Canada: exploring tradeoffs among timber, biodiversity, carbon, and public preferences

Peter Duinker

Dalhousie University

Keystones and functional indicators for sustainable forest management, with special emphasis on the cavity nesting community

Susan Hannon

University of Alberta

Developing biodiversity patterns for predicting the effect of management on the boreal mixedwood forests of Alberta

Fangliang He

University of Alberta

Barriers to the management of cumulative effects of development in the Treaty 8 region of Canada

John Innes

University of British Columbia

Market and institutional structures, economic welfare and global competitiveness of the Canadian forest industry

Shashi Kant

University of Toronto

Role of pest management in sequestering carbon in the 2008-12 Kyoto Commitment Period: integration with CBM-CFS3 and economic analyses

Van Lantz

University of New Brunswick

Natural regeneration of white spruce following logging in mixedwoods

Vic Lieffers

University of Alberta

Management implications of forest dynamics, succession, and habitat relationships under differing levels of silviculture in New Brunswick forests

Dave MacLean

University of New Brunswick

Dynamics of woody debris in eastern boreal forests: implications for carbon and wildlife management

Jay Malcolm

University of Toronto

Using interactive forest planning models and visualization to assess public preferences for trade-offs among possible SFM futures

Thomas Maness

University of British Columbia

Spatial forest management planning under uncertainty due to natural disturbance

Dave Martell

University of Toronto

Implementing and testing decision-support tools to evaluate forest management scenarios for SFM: a multiple scale and perspective approach

Christian Messier

Université du Québec à Montréal

Commercial development of non-timber forest products and forest bio-products: critical factors for success

Darcy Mitchell

Royal Roads University

A participatory approach to aboriginal tenure reform in Canada

Dave Natcher

Memorial University of Newfoundland

A systems approach to integrating ecological, economic, and social values within the SFM framework developed for Riverside TFL 49

John Nelson

University of British Columbia

Designing and implementing integrated strategies: risk and opportunities of an integrated landscape management strategy in western Canada

Jeremy Raynor

Malaspina University-College

Developing a science-based decision support framework for shoreline forest management
Paul Sibley
University of Guelph

The first remeasurement of the EMEND experiment and associated work
John Spence
University of Alberta

The challenge of institutional redesign: tenure, competitiveness and sustainability
Ilan Vertinsky
University of British Columbia

Incentive policies for sustainable forest management
Marian Weber
Alberta Research Council

Tree mortality following partial stand harvests: a cross-Canada study
Sean Thomas
University of Toronto

corporation members, board committees and staff

GRANTING COUNCILS

- Networks of Centres of Excellence / Government of Canada
- Natural Sciences and Engineering Research Council of Canada (NSERC)
- Social Sciences and Humanities Research Council of Canada (SSHRC)

PARTNERS

Governments

- Government of Canada (Environment Canada) (Natural Resources Canada–Canadian Forest Service) (Parks Canada, Ecological Integrity Branch)
- Government of Alberta (Advanced Education and Technology–Alberta Forestry Research Institute) (Sustainable Resource Development)
- Government of British Columbia (Ministry of Forests and Range)
- Government of Manitoba (Manitoba Conservation)
- Government of Newfoundland and Labrador (Department of Natural Resources)
- Government of Ontario (Ministry of Natural Resources)
- Gouvernement du Québec (Ministère des Ressources naturelles et Faune)
- Government of Yukon (Department of Energy, Mines and Resources)

Industries

- Abitibi Bowater Inc.
- Alberta-Pacific Forest Industries Inc.
- Canadian Forest Products Ltd.
- Daishowa-Marubeni International Ltd.
- J.D. Irving, Limited
- Louisiana-Pacific Canada Ltd.
- Manning Diversified Forest Products Ltd.
- Tembec Inc.
- Tolko Industries Ltd.
- Weyerhaeuser Company

NGO

- Ducks Unlimited Canada
- Aboriginal**
- Gwich'in Renewable Resource Board
- Heart Lake First Nation
- Kamloops Indian Band
- Kaska Tribal Council
- Little Red River Cree Nation
- Metis National Council
- Moose Cree First Nation
- Treaty 8 First Nations of Alberta

Institutions

- University of Alberta (host institution)
- British Columbia Institute of Technology
- Concordia University
- Dalhousie University
- Lakehead University
- McGill University
- Memorial University of Newfoundland
- Mount Royal College
- Royal Roads University
- Ryerson University

- Simon Fraser University
- Thompson Rivers University
- Trent University
- Université de Moncton
- Université de Montréal
- Université de Sherbrooke
- Université du Québec à Chicoutimi
- Université du Québec à Montréal
- Université du Québec à Rimouski
- Université du Québec à Trois-Rivières
- Université du Québec en Abitibi-Témiscamingue
- Université Laval
- University of British Columbia
- University of Calgary
- University of Guelph
- University of Lethbridge
- University of Manitoba
- University of New Brunswick
- University of Northern British Columbia
- University of Ottawa
- University of Regina
- University of Saskatchewan
- University of Toronto
- University of Victoria
- University of Waterloo
- University of Western Ontario
- University of Winnipeg
- Wilfrid Laurier University

Affiliated Members

- Canadian Institute of Forestry
- Forest Ecosystem Science Cooperative, Inc.
- Forest Engineering Research Institute of Canada (FERIC)

- Fundy Model Forest
- Lake Abitibi Model Forest
- Manitoba Model Forest
- National Aboriginal Forestry Association

(August 2007)

BOARD MEMBERS

- Mr. Fraser Dunn
(Board Chair)
Ontario Ministry of Natural Resources
- Mr. Henry Benskin
B.C. Ministry of Forests and Range
- Mr. Robert Charlie
Gwich'in Renewable Resource Board
- Mr. Don Harrison
Alberta Forestry Research Institute
- Mr. Gary Lipinski
Metis National Council
- Dr. David MacLean
University of New Brunswick
- Mr. Mike Martel
Tembec Inc.
- Walter Matosevic
CANFOR Corporation
- Dr. Christian Messier
Université du Québec à Montréal
- Mr. Len Moores
Newfoundland and Labrador Forest Service
- Chief Morris Monias
Heart Lake First Nation
- Dr. Gordon Miller
Natural Resources Canada–Canadian Forest Service

Grand Chief Arthur Noskey
Treaty 8 First Nations of Alberta

M. François Provost
Ministère des Ressources naturelles et Faune

Ms. Lorraine Rekmans
National Aboriginal Forestry Association

Dr. John Saddler
University of British Columbia

Dr. Tat Smith
University of Toronto

Dr. John Spence
University of Alberta

Ms. Sylvie Boucher (Ex-Officio)
Networks of Centres of Excellence

Mr. Pat Wearmouth
Weyerhaeuser Company Ltd.

Dr. James Fyles (Ex-Officio)
Scientific Director

Ms. Lucille Partington

Mr. Barry Waito (Ex-Officio)
Past Chair

Mr. Bill Woodward (Ex-Officio)
Network Manager

RESEARCH PLANNING COMMITTEE

Dr. John Stager (Retired)
University of British Columbia

Dr. Vic Adamowicz
University of Alberta

Dr. Paul Barten
University of Massachusetts

Dr. Eric Butterworth
Ducks Unlimited Canada

Mr. Boyd Case (Retired)
Natural Resources Canada– Canadian Forest Service

Dr. Irena Creed
University of Western Ontario

Ms. Wendy Crosina
Weyerhaeuser Company Ltd.

Dr. Patrick Duffy (Retired)

Dr. Peter Duinker
Dalhousie University

Dr. George Hoberg
University of British Columbia

Dr. Ed Iwachewski
Ontario Ministry of Natural Resources

Mr. Henry Lickers
Mohawk Council of the Akwesasne

Dr. Paul McFarlane
University of British Columbia

Dr. Samantha Song
Environment Canada

Dr. Fiona Schmiegelow
University of Alberta

Dr. George Stankey (Retired)
Corvallis Forestry Sciences Laboratory

Dr. Ron Trosper
University of British Columbia

Mr. Guy Tremblay
Abitibi-Consolidated Inc.

Mr. John Turner
Moose Cree First Nation

Dr. Terry Veeman (Chair)
University of Alberta

Dr. W. Jan A. Volney
Natural Resources Canada – Canadian Forest Service

Dr. Barry White
Alberta Sustainable Resource Development

Dr. Jim Fyles (Ex-Officio)
Scientific Director

Dr. Bill Woodward (Ex-Officio)
Network Manager

Ms. Sylvie Boucher (Ex-Officio)
Networks of Centres of Excellence

PARTNERS COMMITTEE

Dr. Samantha Song (Chair)
Environment Canada

Dr. Eric Butterworth (Vice Chair)
Ducks Unlimited Canada

Industry

Mr. Tim Barker
Daishowa-Marubeni International Ltd.

Mr. Dave Beck
Ainsworth Lumber Co. Ltd.

Mr. Jean-Paul Bielech
Manning Diversified Forest Products

Ms. Wendy Crosina
Weyerhaeuser Company Ltd.

Mr. John Deal
Canadian Forest Products Ltd.

Ms. Margaret Donnelly
Louisiana-Pacific Canada Ltd.

Dr. Elston Dzus
Alberta-Pacific Forest Industries Inc.

Mr. Paul Jeakins
Canadian Forest Products Ltd.

Mr. John MacGillivray
Bowater Forest Products Division

Dr. Mike Martel
Tembec Inc.

M. Gaétan Pelletier
J.D. Irving, Limited

Mr. Paul Poschmann
Abitibi-Consolidated Inc.

Dr. Kari Stuart-Smith
Tembec Inc.

Mr. Steve Vizslai
Tolko Industries Ltd

Government

Mr. Jeff Delaney
Manitoba Department of Conservation

Mr. Dave Fong
Newfoundland Forest Service

Mr. Donald Harrison
Alberta Forestry Research Institute (AFRI)

Dr. Ed Iwachewski
Ontario Ministry of Natural Resources

Ms. Aynsle Odgen
Yukon Energy, Mines and Resources

M. Germain Paré
Ministère des Ressources naturelles et Faune

Mr. Gerry Still
British Columbia Ministry of Forests and Range

Dr. W. Jan A. Volney
Natural Resources Canada – Canadian Forest Service

Mr. Mike Walton
Parks Canada (Yukon)

Aboriginal

Mr. Robert Charlie (Chair)
Gwich'in Renewable Resource Board

Mr. Clément Chartier (President)
Metis National Council

Ms. Patricia Aliwenzie (Chief)
Moose Cree First Nation

Mr. Hammond Dick (Tribal Chief)
Kaska Tribal Council

Mr. Jim McGrath
Kamloops Indian Band

Mr. Morris Monias (Chief)
Heart Lake First Nation

Mr. Jim Webb
Little Red River Cree Nation

CENTRAL ADMINISTRATION

Mr. Marvin Abugov
Communications Manager

Ms. Alison Boddy
Administrative Assistant

Ms. Tara Bond
Administrative Coordinator

Ms. Margaret Donnelly
Knowledge Exchange Advisor

Ms. Shirley deVries
Financial Administrator

Dr. Jim Fyles
Scientific Director

Ms. Cynthia Kaufmann
Knowledge Exchange Coordinator (part-time)

Mrs. Estelle Lavoie
Network Receptionist

Mr. Bruce Macnab
Research Administration Manager

Dr. Nathalie Perron
Knowledge Exchange Liaison Specialist Eastern Canada

Dr. Marc Stevenson
Aboriginal Program Manager

Ms. Jane Stewart
Knowledge Exchange Coordinator

Mr. Alan Thimot
Information Management Consultant

Mr. Bill Woodward
Network Manager