

**Identifying Common Ground
For Sustainable Forest Management
Criteria and Indicators Initiatives
In British Columbia, Canada**

April 26, 2004

Workshop Results

Summary for Discussion

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Table of Contents

Executive Summary	iii
0. Background to the Workshop	1
1. Defining Expectations for the workshop	2
2. Understanding the Criteria and Indicators Issue(s) for British Columbia	3
3. Creating a vision: What does success look like?	5
3.1. C&I system that enables Sustainable Forest Management	6
3.2. C&I Durable Framework and System Facilitates Policy and Practices Improvements	6
3.3. A system for learning and continuous improvement	6
3.4. Long term stable funding	7
4. Identifying what people are doing now, common areas of interest and distinctions and where you fit.	7
4.1. Primary Issue Area: EFFICIENCY	7
4.2. Primary Issue Area: Communication	9
4.3. Primary Issue Area: Purpose/Rationale	9
4.4. Primary Issue Area: Resources	10
4.5. Primary Issue Area: Resource Information Governance (C&I information systems)	11
4.6. Primary Issue Area: Science/Technology	11
4.7. Primary Issue Area: Drivers – Market and Regulation	14
4.8. Primary Issue Area: Participation from First Nations and NGO's	15
5. Generating Desired Outcomes for Common Areas of Interest	16
6. Action Planning	17
7. Next Steps	18
Appendix 1: Contacts with Email Addresses	19
Appendix 2. Draft framework for achieving goals defined by the workshop participants	20

Table 1 List of short and longer term expectations resulting from the workshop. 2

Table 2 List of issues identified in pre-workshop survey and working session 3

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Executive Summary

This report contains a summary of results from a workshop focused on identifying common ground on criteria and indicator initiatives in British Columbia, Canada. The workshop, delivered by FORREX, took place on April 26, 2004 in Vancouver, British Columbia. Thirty invited participants from government agencies, industry associations, forest companies, academic institutions and consulting firms took part in the discussions.

This report summarizes the results from the day's discussions as well as feedback from an on-line survey. The report is intended to help participants maintain an understanding of the common ground achieved that day, as well as communicate the results to their clients and managers.

Sections 1 through 8 are summaries of input received through a pre-workshop survey as well as through the workshop working sessions. A list of participants and interested individuals is found in Appendix 1. Appendix 2 contains a proposed framework for discussion as part of the first next step to moving forward on addressing the issues and common ground identified during the workshop.

The workshop was a starting point in an attempt to create some synergies and efficiencies in addressing issues associated with criteria and indicators initiatives. While the individuals participating represent a significant part of the expert community on this topic, the information presented was only a snapshot of the efforts and initiatives underway in British Columbia and Canada. The information in this report should be used in that context, as the issues and areas of common ground identified at the workshop are complex and many.

While progress and areas of work were identified, much remains to be done. It is the hope of the workshop participants that continuing the dialogue and coordinating efforts will improve British Columbia's performance in identifying and using scientifically defensible, reasonable and cost-effective indicators. As a result of their efforts, workshop participants see that:

1. Effective, efficient and scientifically sound C&I will be used by industry and agencies in planning, policy, implementing and monitoring effectiveness of forest practices;
2. Investments in C&I research, monitoring and modeling will be streamlined, increasing efficient spending and use of expert capital while reducing duplication of effort;
3. Resource management, policy and auditing practitioners will say they understand and can use the criteria, indicators, monitoring and modeling tools to assist them in their work.

In the longer term, achieving the above will enable British Columbia to be recognized as a world leader in sustainable forest management, and our forest sector will be regarded as the best in the world in forest policy, management and business systems.

0. Background to the Workshop

There are many organizations and individuals working on sustainable forestry criteria and indicators research and monitoring initiatives internationally, nationally, and provincially. Research institutes, universities and government research groups are investigating social, economic and biophysical criteria and indicators at an international, national, regional and local scale. In response to, and in support of international commitments, the Canadian Council of Forest Ministers recently revised a set of national criteria and indicators. Under the new Forest and Range Practices Act, the Province of British Columbia has taken on the responsibility for setting objectives for 11 Values and is looking into appropriate and meaningful science-based criteria and indicators for their effectiveness evaluation framework. Under the new legislation, Licensees are taking on responsibility for defining results and strategies to achieve provincial objectives and seek meaningful local-level (management unit) indicators. To secure market access, the Forest Industry is also seeking third party certification that requires performance indicators and monitoring frameworks. Finally the Forest Practices Board, as an objective third party watchdog responsible to the Public, retains its role of performing audits and reporting on forest practices. All parties seek an effective, efficient and meaningful mechanism to assess and report on performance. There is a desire to define a collaborative approach to criteria and indicators research and monitoring frameworks in order to improve communications, reduce duplication, reduce redundancy, increase efficiency and make more effective use of investment funds.

To move towards some resolution in this issue, the Forest Practices Board engaged FORREX-Forest Research Extension Partnership to facilitate a dialogue with interested key parties to scope out the level of professional work that needs to be done to complete useful sets of criteria and indicators for the FRPA specified values at the appropriate temporal and spatial scales. FORREX will also facilitate collaborative development of sets of commonly accepted criteria and indicators, and work to increase awareness of the need for working models with generally acceptable methods of measurement and practical application. This workshop was the first step in a series of actions to ensure project outcomes are achieved.

FORREX worked with a small steering committee to define the workshop objectives and a list of experts to invite to the workshop. Individuals were then invited to the workshop and asked to provide input to a pre-workshop survey. The survey asked the following questions:

1. What do you think are the most pressing issues relating to the development and use of SFM criteria and indicators in B.C. right now?
2. Who needs to be involved to address the issues?
3. What do you hope will be different as a result of the meeting on April 26?
4. If those addressing the issue were successful, what would be different five years from now?

Seventeen individuals responded to the survey. Results were compiled by FORREX and used to refine the workshop process and guide further discussions and results.

1. Defining Expectations for the workshop

The original stated expected outcomes for the workshop were, that as a result of the workshop, we would have:

1. A common Vision for SFM Criteria and Indicators research and monitoring initiatives at the provincial, regional and management unit level and a better understanding of where their efforts fit in this vision.
2. Identified common areas of interest and engagement, as well as areas of divergence, with a focus on what we can do together.
3. A set of measurable short, medium and longer term outcomes for areas of common interest

Results from the pre-workshop survey provided more detail as to expected outcomes as a result of the workshop and are summarized below:

- We'll have a strategic view
 - Plans to do what by whom*
- We'll improve communication
 - On who's doing what
 - On what C&I are in use for what purpose
- We'll have a higher-level plan**
- We'll see increased coordination**
- We'll know who's doing what
- Opportunity for common or harmonized work by Ministries
 - A common approach to standards**
- See where we're having trouble
- Agree on a set of 50-100 indicators**
- Reduce the politics

The expectations identified with an “*” will be met following the workshop. Additional expectations were captured from workshop participants and are noted in Table 1.

Table 1 List of short and longer term expectations resulting from the workshop.

Short term	Longer term
• Increased willingness to work together	• Identify funding availability
• Listen and learn about what is going on	• Identify where data exists
• Looking for movement forward	• Define roles and responsibilities
• Understand the overall context to C&I	• Indicators based on SFM plans
• Clarity on issues from group to clear up confusion	• Better use of public money
	• Availability of public money to address issues
• Tie to Forest Practices Board and FRPA : is what they are doing complimentary of a conflict?	• Fewer indicators!!
• First nations perspectives included in the dialogue	• Agreement in principle of a core set (between 50-100)

• Reduced friction among academics and licensees	• Reduced NGO complaints
• Government taking a lead role	• Receptivity to solutions and examples being employed by progressive licensees and academics; no reduction of those standards
• Clearer understanding of what each participant is already doing	• Understanding of the strengths and weaknesses of a common set of C&I
• Shared vision	• Shared use of information

It was agreed that while the longer-term objectives were important, they required significant effort and would be achieved following the design and implementation of a collaborative program to address the various issues identified during the day. The workshop was designed to provide input so that all 3 originally stated short-term objectives could be achieved. It was agreed that over the course of the day we would clarify the issues, establish a vision, and start to gather information to get a sense of what criteria and indicator initiatives are currently underway and what needs to happen next to address issues in an effective and efficient manner.

2. Understanding the Criteria and Indicators Issue(s) for British Columbia

While many strategic processes start by focusing on a vision, it was felt that the need for a stronger understanding and agreement on the issues around C&I was an important place to start before moving into the solution phase of the discussion. The goal of this first part of the workshop was to get everyone to say at the end of the dialogue that they agree with, and are aware of the collective issues.

During the morning session, results from the pre-workshop survey question: “What do you think are the three most pressing issues relating to the development and use of SFM criteria and indicators in British Columbia right now?:” were presented. Responses were summarized in the following categories: 1) Efficiency, 2) Communication, 3) Purpose/Rationale, 4) Resources, 5) Scientific/Technical, 6) Drivers. Participants were then asked to spend some time reviewing the issues identified, confirm those they agree with, and add to the list if they felt some issues were missing. Table 2 represents the final list of confirmed and agreed-upon issues.

Table 2 List of issues identified in pre-workshop survey and working session

1. EFFICIENCY	2. COMMUNICATION	3. PURPOSE/RATIONALE
Overlap	Lack of clarity	Lack of purpose
Duplication	Lack of awareness	Lack of focus
Lack of focus	Lack of understanding	Where this fits in our realities: management, policy, auditing, certification, markets?
Lack of coordination	Need for agreement on common set of indicators	More Context; less process

	between companies	
Need for cooperation/Need to reduce competition	Clearer language	Relationship between uses; integrated use; variety of uses
Lack of defined responsibilities	Understanding of Context	Lack of defined responsibilities and lead
Unknown return on public investment	Public reporting	Lack of clarity for when will they be used?
Lack of common system	Difference between C&I and Standards	Questions regarding regulatory framework
Lack of use of what we know now; full and effective use of work done and data available	Link to FRPA values	Quality assurance; need for consistency; flexibility
Lack of flexibility		Clearer direction from government
Economical Implementation		

4. RESOURCES	5. Scientific/Technical	6. DRIVERS
Efficient use of existing	Scientific rationale: Identify weaknesses Role of Indigenous knowledge	Regulation
Finding new resources	Methods	Markets and Certification; confusion
Long-term commitment	Analysis	State of the Forest Report 2005
Funding for use	Interpretation	Balance of social, economic and environmental indicators
Participation of NGOs	Too many diverging C&I	National and international protocols
First Nation's participation	C&I at appropriate scales	CCFM
	Rollup"ability"	Land use planning
	Small set of common indicators at various spatial and temporal scales	Public need for information
	Robust measurement methods	Changing knowledge base/science
	First Nations and social issues	Need for adaptive policy and regulatory framework: Learning and adjust
	Evaluation and adjustment at appropriate scales	Different realities
	Efficient monitoring system	First Nations Issues

	Lack of common information system	Our audience (who are they?)
	Access to data	
	Training	
	Understanding	
	Increased use by companies	
	Role of adaptive management	

3. Creating a vision: What does success look like?

Often groups will move right into solutions after they identify key issues that need to be resolved. However, there are often many solutions and many paths to a solution, so rather than focus immediately on solutions individuals were asked to think about what success would be so that as solutions are developed each will be more likely to contribute to that success.

Given that the participants agreed the above issues were many, and complex, they were asked to visualize what success looks like. Again, participants were invited to respond to a pre-workshop question: "If those addressing the issues were successful, what would be different 5 years from now?" Survey results suggest that if the issues were addressed, they see:

- Coordinated programs of use are demonstrating benefits
- Others are looking to BC for guidance
- Clarity
- A plan
- Accepted C&I based on science
- Clear, measurable targets
- Credible State of the Forest Report
- Fit with CCFM C&I
- General body of accepted, scientifically-based C&I for FRPA values
- SFM plans with C&I demonstrating improvements to forest management
- Uniformity
- Integrated programs and information systems
- Clear link from these systems to continuous improvement
- No need to do a wholesale rewrite of legislation
- In a better position to understand new issues, opportunities and threats
- Forest management applications linked and strategies developed and evaluated as linked entities: A true framework

After hearing a summary of the survey results, they were asked to think about, and share their thoughts on what would be different 5 years from now, if those working on the issues were successful. Their feedback is summarized below.

3.1. C&I system that enables Sustainable Forest Management

- When BC Forest Sector says they are managing forests sustainably, they are believed
- Shared Vision
- We will have defined clearly what we mean by SFM
- Sustainable Forest Management Plans will contain a core set of indicators and as a result of the plan implementation we will be able to roll up the results into a State of the Forest Report that is meaningful. Ground-based plans will support and demonstrate achieving success.
- There will be one government report on SFM, or individual ministry reports (MSRM, WLAP, MOF) will be based on same information. They will be credible and believable.
- Forest tenure holders understand what part of the footprint they contribute to, and what they can effect and are responsible for locally
- A competitive forest sector
- State of the Industry assessments and associated methods and standards for data collection
- FRPA accepted globally (in the international market place) and is perceived by all as a framework for sustainability

3.2. C&I Durable Framework and System Facilitates Policy and Practices Improvements

- We're on the road to assessing default practices and innovative practices and we see a commitment to change. These commitments truly inform future change.
- We can change policy and practices based on C&I results.
- We have an adaptive management framework
- The framework is durable and both the province and industry buy in and commit
- The system is flexible to address inherent biophysical, social and economic variability
- Ensures data quality
- Ethical use
- C&I that are not changed yearly; stability
- Efficient and trusted auditing and results
- Fit with management cycle

3.3. A system for learning and continuous improvement

- Improved direction to research and extension efforts that informs the C&I system
- We have a better understanding of the questions and so that we can prioritize and take action on gaps
- Improved conceptual work on C&I, particularly in social and economic areas.
- We have an effective, coordinated extension program for practitioners
- We are using what we know now more effectively
- Data and information is fully accessible at no or small cost
- Acceptance of professionals/professional credentials
- We have communicated what has been done to date
- We know what works; what is affordable; what we need to do next
- Complete field testing and experience with these systems so that it becomes an integral part of our business

- Case studies; best practices

3.4. Long term stable funding

- We have a well understood investment management system
- Financial resources are adequate and available
- We have investment evaluation criteria and can report on return on public investment (cost/benefit rather than ROI?)
- Beneficiaries of these investments clearly state their commitment (contribution?)
 - A. Funders are sure what their investing in
 - B. Efforts to ensure success are made
 - C. Targeting funding is possible

4. Identifying what people are doing now, common areas of interest and distinctions and where you fit.

Following confirmation of a common sets of issues and a vision of success, participants were asked to provide information about what they are working on now, or what they know is being worked on, to address the issues described and that fit within the vision framework. This information was collect from individuals, discussed in breakout sessions and then summarized to the whole group. Details were then collated following the workshop and are summarize in sections 5.1 through 5.8. The primary issue is described followed by a statement of a long-term success goal, current activities that are contributing to the goal, a list of outputs from those activities and measurable performance outcomes where they exist.

4.1. Primary Issue Area: EFFICIENCY

Long Term Success Goal:

- Continuous improvement of forest practices in reaching SFM
- Accepted and comprehensive criteria and indicator model

Current Activities that contribute to this Goal Area	(Generate these) Outputs:	(Which individually and in aggregate cause these) Measurable Outcomes:
(Forest Practices Board)		
Utilize C&I to conduct field effectiveness audits across FRPA values and publicly report findings	Strategy by August	
Supporting development of individual indicator sets across FRPA values.	This meeting Field tests – soils, riparian Planned testing of stand level biodiversity and visuals	Identified indicator sets Operationally auditable indicators Conducted audits and special reports.
Substantive dialogue with licensees (auditees) prior to public report		
MOF study of links between FRPA values and certification indicators	Report – June 14 th – scientific paper?	Acceptance by government and industry
Integration of hard and soft laws in forest management	Thesis, papers	Academic acceptance
Contribute to partnerships	Working relationships – improves	Confirming practices that work

(financial??)	credibility	Improve those that don't
Industry – agency developing and testing C&I	C&I model under development Awareness Staff transition - learning	Better on-the-ground management Identifiable partnerships Staff participate in results-based model
FREP Management Framework (Peter Bradford)	Charter Working group Business planning and budgeting Listing and ranking of evaluation questions Information management Roles and responsibilities/protocol for Regional/district level S/H involvement, team participation Partnerships (Board)	
Indicator and Protocol development	Soils, riparian, wildlife trees, range, biodiversity (landscape level + stand level), wildlife, resource features (Karst), recreation, water	Review of indicators across the board
Evaluation Project	Cutblock size, wildlife trees, range, recreation, timber	QA Complete review of government information management systems
Field Testing (Board)	Soils, riparian, wildlife trees	
Communication and Extension	Communication plan, extension and technical notes, terminology paper, website, S/H consultation and advice (academic, industry, regions), indicator workshop	
IEMS – Integrated environmental monitoring strategy	Coordination of environmental monitoring Stat of a resource and understanding it Supporting other types of monitoring for C&I	Actual cost savings Identification of gaps Strategies to fill these gaps
Potential other activities that could contribute	Outputs	Measurable Outcomes
FPB collaboration with industry on development of SFM plans	Special reports (e.g., beetle, range, free growing)	
Explore links to certification and SFM planning		Operationalize identified C&I set
Broader network than current: - more industry - more academic - more government agencies Working under a commonly accepted framework that has enough flexibility to encompass diversity of ecosystems and regional social, economic realities Link to NGO's	Hierarchy of B&I from that cover the province to regional variation. Science process of testing and improving/peer review Industry ensures practicability/ acceptance and use Credibility from participating NGO's	All licensees big and small use the C&I model Adaptive management Science papers Industry and provincial reputation is better Demonstrate biodiversity is being maintained Network of practice is wider Industry, agencies, NGO's are functioning as a group

4.2. Primary Issue Area: Communication

Long Term Success Goal:

Common understanding of C&I monitoring for effectiveness

Current Activities that contribute to this Goal Area	(Generate these) Outputs:	(Which individually and in aggregate cause these) Measurable Outcomes:
Effectiveness evaluation course (MOF, WALP, UBC)	Training of government and industry on basics of C&I and monitoring	Shared vision of program and common terminology
Effectiveness Evaluation protocol development	standards	Adopted by companies
GFIS	www.gfis.net	Better information flow to C+I community of practitioners
For-biodiversity website Examples for biodiversity		
Weyerhaeuser sponsored book on Effectiveness Evaluation (Biodiversity and AM)	In progress	
Conference on effectiveness evaluation and monitoring on biodiversity	Conference – Nov1-3 in Vancouver	BC practitioners more aware of outside and visa versa
FORREX – NRIN	An information/knowledge system – repository : www.forrex.org	Better informed practitioners
Res Inf Stds Committee web material +	Technical standards regarding aspects of C+I info	Accessible, consist, comparable, etc.

4.3. Primary Issue Area: Purpose/Rationale

Long Term Success Goal:

- Sustainable Forest Management – knowing why we want specific indicators
- FRPA implemented in a cost effective manner – intent understood
- Indicators integrated into planning, management, improvement cycle

Current Activities that contribute to this Goal Area	(Generate these) Outputs:	(Which individually and in aggregate cause these) Measurable Outcomes:
Huston-Morice town project on social indicators of SFM (UBC)	Thesis, research papers	Academic acceptance of results
Refinement of soil and water indicators based on international best management practices (UBC)	Research paper	Academic acceptance of results
Refinement of First Nations indicators based on best management practices (UBC)	Research paper	Academic acceptance of results
Streamlining G&I certification and local planning	CFS report	Academic acceptance of results
Government/ industry joint work	Leg/reg amendments	Reduced amendments
Industry training	FSP's submitted	FSP's approved
Contact (UBC) with MOF to develop stand level indicators for biodiversity	Potential questions of interest Potential indicators	Beginning of core set of indicators targeted to various questions

Contact (UBC) with MOF to develop landscape level biodiversity indicators	Questions of interest Potential indicators	“
Landuse planning (LRMP's and Sustainable Resource Management Plans)	SFM indicator framework applied in land use plans to define desired outcomes and facilitate monitoring/improvements	Integration with other planning, management, reporting and auditing, etc., will allow for efficiencies over all
Summary Sheet		
FPB through MOF funding projects to develop indicator sets		
Collaborative (University-Industry) indicator and application research (Fred)		Adopted findings guide management decision making
Refinement of aboriginal indicators	Academic papers	Acceptance by science community
SFM-NCE Research program		
Potential other activities that could contribute	Outputs	Measurable Outcomes
FPB focusing on government objectives	Report on specific findings	Acceptance by various “publics”
ABCFFP understand professional reliance	Clear guidance from members	Government and agencies accepting of professional accountability

4.4. Primary Issue Area: Resources

Long Term Success Goal:
SFM – Sustainable Funding Model

Current Activities that contribute to this Goal Area	(Generate these) Outputs:	(Which individually and in aggregate cause these) Measurable Outcomes:
Hydrometric Initiative	New mechanisms for collaboration	Sustainable water quantity networks supporting multiple view and needs (ROI 19:1) Increased investment (ROI: 9:1)
IEMS	Coordination – re EM in government	Savings, explicit gaps identified; strategies to fill gaps
Slocan – Framework based on limiting funding scenario using their operation dollars – framework also being used o channel/focus efforts of divisions (MSRM and WALP involved)	Overview document C&I rational document and report SFM tool kit Decision support tool kit Website containing all of this (www.SFMportal.com) FII funded projects to address knowledge gaps Different sectors working together to solve problems (certification neutral)	SFM plans in place in all operations Certification Evidentiary package for FRPA Developing and testing C&I models in AM framework

4.5. Primary Issue Area: Resource Information Governance (C&I information systems)

Long Term Success Goad:

Rational, understood and accepted roles, responsibilities and processes for collecting and managing resource information.

Current Activities that contribute to this Goal Area	(Generate these) Outputs:	(Which individually and in aggregate cause these) Measurable Outcomes:
BIMG (Business Information Management Group)	Government/industry co-development/ oversee of RI solutions	Business focused, transparent and defensible information custodianship and stewardship
Re-engineering research inventory committee	Client inclusive RI standards management and extension body	Client business needs supported by RI's standards that are recognized and utilized
Re-engineering RI business model	Sustainable funding and accountability and new government/ industry partnership	Non-discretionary information clearly defined "Protected" funding
Proposal on knowledge framework for resource data, including C&I and reports	Software – open access to data through internet	
Resource inventory attribute extrapolation e.g., stand structure (Riverside) – Cariboo operations, also Tembec and Slocan	Attributes for use in C&I evaluation (ind. Growth and yield)	Evaluation of forest condition in flexible format
Land Information B.C. Portal, opportunity to re-engineer		
Potential other activities that could contribute	Outputs	Measurable Outcomes
LIBC shift of focus from non-"fundamental" to strictly "fundamental" data sets e.g., base mapping, CDC, registries, monitoring (to support government policies), and capability by resource (may move to industry)		

4.6. Primary Issue Area: Science/Technology

Long Term Success Goal:

- Scientific basis for rationalizing criteria in indicators as well as a common method of measuring indicators.
- User-driven applied R&D supporting SFM*

Current Activities that contribute to this Goal Area	(Generate these) Outputs:	(Which individually and in aggregate cause these) Measurable Outcomes:
Developed a strategic framework to implement an aquatic resources monitoring program in the Bulkley Forest District and beyond.	The framework – a series of +/- 60 questions that focus on the watershed in question and helps to identify appropriate monitoring indicators	Money will be spent monitoring appropriate indicators for water resources
Framework applied to 30 prioritized	Streamline article in Prep	People will be exposed to a

watersheds in the Bulkley District		logical/technical approach for determining indicators.
Design of a regional assessment of SFM and sustainability in Ruanzhou Province, China	Thesis, papers, reports to Chinese government	Adoption of framework by regional government
Re-writing of SFM standards	New Standards	Adoption
Economic indicators in intensive forestry in eastern Canada	Thesis, papers	Adoption by Tembec
Review of certification schemes and how to use evaluation the FRPA evaluation program	Review report	Sense of what some core indicators (based on criteria) may be and where to use them
Research project on Birds as indicators of forest harvesting (Weyco, WALP, SFU)	Scientific papers about "birds in trees"	Relationship between density of trees and abundance of different species of birds
Research on birds and forest structure (Weyco, WALP, SFU)	Understanding the process that contributes to bird occupancy in forests	Scientific understanding of process
Research project on framework for developing biodiversity monitoring program (SFU, Interfor, WALP)	Report	Implementing of biodiversity monitoring program
Habitat structure benchmarks on Vancouver Island	Measures of habitat structures of "natural" forest	Compare these to retention in managed stands to see if retention is "good"
Ecosystem representation on Vancouver Island	Shows which ecosystems do not have much area protected and so need to be monitored	Increase protected areas/retention target monitoring
Major research program out of UBC	Scientific findings	Improved SFM adapted by industrial partners
Team building	Three regional Teams	Changes in practice/ sometimes policy
Effectiveness monitoring	Protocols, short courses	Adopted by companies and government
MOF research program with many research projects related to soil, water, range, ecology, wildlife and biodiversity	Reports, extension notes, products and activities, enhanced expertise	Suite of credible indicators, meaningful monitoring information.
Sustainable Forest Management Network Strategic Plan	Assess alternatives and strategies for ecol, econ, and social C&I	Credible science based C&I
Research on ecological C&I	Study of thresholds	Improvement of biodiversity C&I
Research on economic C&I	Fragmented work on greear (?) outputs and productivity	Improvement of economic C&I
Research on social C&I	Attempt (just beginning) to conceptualize appropriate criteria Incorporation of Aboriginal C&I	Approved social C&I
Networking of researchers and practitioners	Coordination/collaboration of R&D, applied, practical approaches	More efficient, more relevant
*Forest Science Board	FIA Forest Science Program Priorities	Priorities, projects and project deliverables that support C&I

Summary of April 26, 2004 C&I Workshop Results: For discussion purposes

		priorities
*MOF research support for FRPA Effectiveness Evaluation (method, indicators)	Efficacy of FRPA monitored and reported	Changes to FRPA over time based on monitoring and evaluation (scientific)
*CCFRM S&T Working Group	2005 National C&I Report	Increased # of indicators supported by data and analysis which government can feasibly report on
* MOF Research – long term research monitoring	Ability to validate long-term indicators of forest practices	# of indicators which have long-term as well as short term monitoring information
FORREX R&D extension		
SFI local implementation committee and – BCSIC – x walk BC plant communities classification to international classification – as well as maintain and protect rare, endangered plant communities	Contributed \$\$ Commitment to provide data Table – that allows for better understanding between/among jurisdictions and agencies	Better plans that manage for rare G1/G2 endangered plant communities
Local Landscape Systems Management simulator (LLEMS) (Interfor) Hamish Kimmins @ UBC – linking ecological process models to local scale looking at questions related to type of VR doing	Model to examine impacts of VR (tied to ecological process model)	Better utilization/ understanding of impacts of Variable Retention
Potential other activities that could contribute	Outputs	Measurable Outcomes
Development of a cumulative impacts framework in Northern B.C (for impacts on First Nations)	3 theses, science papers, workshops	Acceptance by First Nations, government and industry
Trade-off analysis for SFM on Riverside's Kelowna TFL	Thesis, research papers, model for Riverside Forest Products Ltd	New planning system implemented by Riverside Forest Products
Mutual recognition of certification schemes	Report and discussions	Mutual recognition
SFM Network	Synthesis reports and published research on indicators, and use of indicators and assessment of forest practices	Greater science base for indicator definition, selection and assessment of forest practices effects
FORREX and other extension service providers	Knowledge transfer	
Evaluate ongoing research projects for relevance to C&I		
SFM Network Research – further work on soil and water C&I		
Economic C&I research	Broader suite than currently exists	
Social sustainability research	More outputs beyond the forest community level	
Integrated C&I work (including some trade-off analysis) encompassing ecological, economic, and social assessment	Assessment of specific strategies and alternatives	

4.7. Primary Issue Area: Drivers – Market and Regulation

Long-term Success Goal:

- British Columbia has SFM and is believed when it says so (public support for our practices)
- Achievement of SFM objectives set by government of FRPA values
- Maintained market share

Current Activities that contribute to this Goal Area	(Generate these) Outputs:	(Which individually and in aggregate cause these) Measurable Outcomes:
Provincial State of the Forests Report	List of indicators, reports on them, methods of assessment/ new method of data assembly to the province (seemless forest cover of whole province)	Service Plan commitments met Redirection of government resources Public need for information met Data and information more accessible (e.g., overview of timber supply and connections to underlying data) Greater efficiency in use of information Identification of gaps in data sets and methods and tools to use the data set
	Data and information more accessible	Public information requests met MOF seen as source of information on SFM
	Generate new methods of data assembly	Greater efficiency in use of available information, gaps
National C&I list (revision)	List of indicators – revisions (Sept 2003)	National commitment met
National C&I report	National assessment of SFM – new one in 2005	National commitment met
Tolko ISO 14001	Registration Third party audits	Market place access
CSA – SFM	Public Advisory Group, audit, FN	Local community support
TSA – CSA	Many companies and government (BCIS)	Public support
IFPA - Merritt	AAC uplift (50%) to FN FN support	Scientific validity of AAC FN identification of values at the landscape level
Slocan/Canfor More emphases on socio-economic side through its work with UBC – economic/policy analysis		Emphasis on relationship building as a starting point.
Lignum Lifeforms project	Attributes required by groups of species –forest/habitat attributes	
Stand structure classification	Description of the forest cover through attributes – integrated with life forms	
SFM indicators project	Description of SFM indicators as can be obtained from attribute description from VRI, etc	
MSc thesis in “operational application	Challenges associated with	

of C&I and monitoring	operational monitoring	
Growth and yield program	PSP re-measurement and yield curve development to assist in predicting attributes	
Draft of future forest condition	Attributes across the management unit that will move us towards SFM	
Data/knowledge information system design	Open access system for resource data updates and knowledge transfer	
Natural disturbance and insect/disease research	Incorporation of research results into EMS as guidance to best practices as potential indicators	
ISO - EMS	Incorporation of monitoring components into EMS	
Summary Notes – effectiveness emphasis		
Working with MOF on indicator sets for 11 FRPA values	11 indicator sets adapted for audit	Generally accepted indicators
Use in audits	Published audits and investigations	Credible effectiveness audits
Use in public reports on effectiveness	Published audits and investigations	Credible effectiveness audits
Link with certification	Investigations that incorporate certification information	Reduction of duplication of efforts Use of private sector audits in public assurance
Link with SFMP	Experimental audits – bench tests SFMP frameworks	Ability to use SFM frameworks and SFMPs in public assurance
Potential other activities that could contribute	Outputs	Measurable Outcomes
Newsletters	To customers	Feedback
Website	To public	
Public meetings		
Focus survey	Employees, contractors, customers, suppliers	Improved view of forest management activities
Strategic Plan	Forestry Key Performance Indicators, environmental Key Performance Indicators	Annual report Reduced non-compliance
Resource inventory updates	Current condition of the forest based on attributes	
Evaluation of social indicators - completed	Compendium of social indicators being proposed	
SFI Certification	Audits re: meeting stated commitments that are related to SFM	
Identification of land use targets - MSRM	Targets for us to include in the future forest condition identification.	

4.8. Primary Issue Area: Participation from First Nations and NGO's

(Understanding roles and need of all sector participants – government, industry, FN, research, ENGO, Communities, and the resource needs that allow them to participate effectively.)

Long Term Success Goal:

TEK and FN participation in SFM – local, regional and national level

Current Activities that contribute to this Goal Area	(Generate these) Outputs:	(Which individually and in aggregate cause these) Measurable Outcomes:
NAFA – working with CCFM to ensure Aboriginal SFM C&I for National Forest Strategy	Increased role for TEK and FN involvement in SFM NAFA website	FN participation at all levels TEK as science process
Development of Indigenous research capacity of BC and National level	FN actually connecting with recognized authorities on SFM issues – publication coming out	Changes made to reflect TEK and FN needs
Development of FN Needs Analysis and Aboriginal Forestry Extension capacity	FORREX First Nations Needs assessment	
Development of understanding of Indigenous knowledge fit into SFM processes	Government and industry can actually cite TEK and FN indicators	Modify based on TEK and FN indicators
Reduce information gaps between FN and others that lead to conflict	FN participation based on non conflict or protocol means	
Joint solutions project (JSP – Interfor – Central Coast) – groups come together in a LRMP type process and get agreement in principle at the table	Facilitates LRMP type table communication	Local/regional/international acceptance of LRMP recommendations Role of implementation/monitoring between government/FN's (EBM Council)
Potential other activities that could contribute	Outputs	Measurable Outcomes
Development of community infrastructure for participating in all levels of SFM activities		
Public education process for understanding SFM		
Collaboration with universities and other research institutes		

The group recognized that, while the summaries contain substantial information, there are many initiatives relating to C&I that were not captured through this process. They recommended additional research and a gap analysis to determine what is currently being done that is addressing the issues identified, and what needs to continue to be supported, and what new activities need to be initiated to address the key issues.

5. Generating Desired Outcomes for Common Areas of Interest

While there were many desired outcomes defined, the group agreed that an overarching statement of common desired outcomes would help in focusing future C&I planning and implementation efforts. Following discussions with the group they agreed in principle that the following statements clearly capture what they hope to see in the future:

1. Effective, efficient and scientifically sound C&I will be used by industry and agencies in planning, policy, implementing and monitoring effectiveness of forest practices;

2. Investments in C&I research, monitoring and modeling will be streamlined, increasing efficient spending and use of expert capital while reducing duplication of effort;
3. Resource management, policy and auditing practitioners will say they understand and can use the criteria, indicators, monitoring and modeling tools to assist them in their work.

6. Action Planning

As previously stated, the workshop was as starting point for creating synergies and efficiencies in addressing issues associated with criteria and indicators of sustainability. The group agreed that they should continue to remain in contact and that the following actions should occur:

- When John Innes and Bruce Fraser are finished with their work on summarizing key C&I research initiatives, everyone be given an opportunity to look at the results.
- We will use FORREX's three visions as a guide
- A steering committee should be created in the next two month to keep this initiative going with the support from academics.
 - This steering committee put a plan together for a year to look at where we are at. It was also suggested that to deal with the issue of scale - technical teams would be created to address these and make recommendations.
 - The make up the steering committee should include the four government agencies (FPB, MOF, WALP, MSRM) as well as representatives Industry (Riverside, Tolko, Canfor and Interfor and other industry partners interested in the initiative were suggested)– *participants involved in the discussion also suggested that there be a First Nation, academic and NGO component.*
 - This should be an inclusive rather than exclusive initiative, with the understanding of managing expectations and establishing realistic goals.
- Show case of successes/ marketing/communication
- Clarification of vision and pathways to get to the vision
- Synthesis of existing data and get it out – synthesis of current activities to be done and distributed well before August 2004 – what needs to be done and by whom?
- Let Ministers know in a briefing – briefing note to key ministers, deputies and CEO's (Bruce)
- Leaver funding – Forest Practices Board starting to make comments known – degree of collaboration needs to go up between and within organizations
- Increase awareness of industry initiatives/ recognition of existing cost initiatives
- Build business case (e.g., Hydrometric Project) to show how efficiencies can be reduced and costs saved.
- Recognize where things are at legislatively and link to those results with FRPA – test audits – communicate these in next year.
- Communication mechanism – intra net site? Public web-based forum?

7. Next Steps

Follow up from today (April 26th, 2004):

- E-mail will be the official form of communication
- Summary of workshop will be provided to participants within 3 weeks
- A steering committee will be established to guide program development and action planning. John Innes, John Dunford, Greg Jones, Don Gosnell, Bill Bourgeois , Peter Bradford volunteered for this committee.
- A presentation to the Deputy Ministers Committee on Resources and Development was recommended – Bruce Fraser to give update/profile initiative

Appendix 1: Contacts with Email Addresses

Workshop Participants and Invitees

	Name	Email Address	Attendance
1.	Alex Ferguson	aferguson@slocan.com	Yes
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Appendix 2. Draft framework for achieving goals defined by the workshop participants

