Why the Forest and Range Evaluation Program is Important to You as a Forest Manager and Decision Maker



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This extension note is for government and industry managers and decision makers. In this note, we answer the following five key questions about the Forest and Range Evaluation Program (FREP):

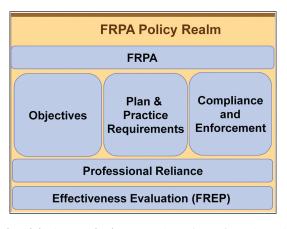
- 1. As a government or licensee decision maker, can I use FREP to quide or inform my decisions?
- 2. Is FREP determining whether current practices are environmentally sustainable?
- 3. Is FREP key to making professional accountability work?
- 4. Is FREP increasing the participation of First Nations in forest stewardship?
- 5. Can FREP help industry save money?

This note also describes FREP's importance as a foundation of the *Forest and Range Practices Act* (FRPA) and the opportunity FREP provides for ensuring achievement of some of government's key forest management goals.

FREP'S ROLE IN BRITISH COLUMBIA'S FOREST MANAGEMENT FRAMEWORK

FRPA is the regulatory framework for public forest and rangeland management in British Columbia. Key FRPA goals include:

- Provide industry "freedom to manage" in delivery of defined results
- Maintain environmental standards
- Continue to balance social, environmental and economic interests
- Maintain and enhance the level of public acceptance of forest and range management, and
- Maintain and sustainably enhance the province's timber supply.



FREP is critical to achieving a number of FRPA's goals and its ultimate success. As a foundation of FRPA, FREP is the mechanism that measures, validates, and provides for continued improvement of FRPA. FREP provides scientifically reliable information necessary to ensure sustainable environmental standards and practices.

A credible resource management framework must include a monitoring and evaluation process designed to provide resource managers with the information they need to keep their practices aligned with current knowledge and the status of the resources they manage. Monitoring and evaluating the status of public resource values is also of fundamental importance for the public owners of the resources, government regulators, forest professionals, forest licensees and a marketplace increasingly concerned with certified sustainability.

FREP does not determine forest and range legislation, policy or practices; rather, it provides the science-based knowledge needed to determine if these mechanisms are working as intended and if the 11 FRPA resource values are managed sustainably. This information is used to help policy makers

The FREP Mission:

To be a world leader in resource stewardship monitoring and effectiveness evaluations; providing the science-based information needed for decision-making and continuous improvement of British Columbia's forest and range practices, policies and legislation. http://www.for.gov.bc.ca/hfp/frep/index.htm



and on-the-ground forest professionals with their task of balancing social, environmental and economic values in the interest of British Columbians.

FREP began operational monitoring in 2005. Since that time, field staff have conducted thousands of individual riparian, water quality, biodiversity, range, visuals and soils assessments. In addition, FREP has published peer reviewed monitoring indicators and protocols for the 11 FRPA resource values and published more than 20 reports as well as many extension notes and district-level summary reports. We have completed assessment of baseline outcomes resulting from the Forest Practices Code and are now moving fully into FRPA-related monitoring.

AS A GOVERNMENT OR LICENSEE DECISION MAKER, CAN I USE FREP TO GUIDE OR INFORM MY DECISIONS?

Yes. FREP provides government and industry with sciencebased, province-wide quantitative and qualitative monitoring data on which to base decisions on forest and range policy, and practices.

District-level reports (biodiversity, riparian and water quality) outline key trends and opportunities to learn from what is currently working and what can be improved in forest and range practices. They provide valuable data for forest planners and District Managers to consider when making decisions on results and strategies for Forest Stewardship Plans (FSPs).

The knowledge and expertise of district staff related to management of the 11 FRPA resource values has been significantly enhanced through their role in FREP monitoring. District Managers can use this knowledge base to help facilitate discussions with licensees, inform and make decisions and influence practices and plans.

The draft Chief Forester's Guidance on Coarse Woody Debris Management used FREP monitoring data and analysis. **FREP Report #18** is an evaluation of whether FSPs are meeting the objective set for cultural heritage values (i.e.; effectiveness of the FRPA model). District managers can use this report to help with FSP pre-approval discussions (both First Nations and licensees). Future policy and guidance related to the 11 FRPA resource values will be guided using FREP findings.

Case study: Validating the most basic premise of silviculture and the basis of AAC in BC

FREP's Stand-Development Monitoring (SDM) is examining British Columbia's fundamental silviculture assumption: once a reforested stand is declared free growing, it will achieve the target stand conditions at the anticipated harvest age or time period. SDM assessments are measuring post free-growing stand density, species composition and health and; comparing the results to what was present at free-growing and to future timber supply projections. This work has the potential to help refine timber supply modelling, inform AAC determinations, help plan for and mitigate climate change impacts and provide a foundation for achieving the Minister's silviculture objectives.

IS FREP DETERMINING WHETHER CURRENT PRACTICES ARE ENVIRONMENTALLY SUSTAINABLE?

Yes. FREP has developed monitoring indicators and protocols for each of the 11 resource values under FRPA. These indicators are key measures of resource value health and sustainability. Using these indicators, FREP is conducting province-wide assessments of forest and range practice outcomes for all FRPA resource values. The first values implemented include stand-level biodiversity, riparian, water quality, soils, forage, visual quality and recreation.

Through understanding FREP monitoring results, resource managers can learn from successful outcomes and those that need improving. Greater knowledge and understanding, when used to enhance policy, planning and practices, will help ensure that forest and range resources are being managed sustainably. FREP also enables government to credibly report on its commitment to maintaining environmental standards between the *Forest Practices Code* and the *Forest and Range Practices Act*.

Case study: Assessing Riparian Function

FREP riparian monitoring determines whether standards and practices are protecting stream health and the ability to sustain drinking water quality and fish habitat. The first three years of riparian monitoring, covering more than 1,000 streams, revealed that practices commonly applied over the last decade were largely effective for protecting water quality and fish habitat. Results indicate that we can virtually eliminate future forest management-related riparian impacts with key practice improvements. These improvements can be made by applying common, existing practices that are known to be effective on streams that are fish bearing and (or) a drinking water source.



Collaborative FREP-Haida Fish/Riparian monitoring training on Haida Gwaii

Photo credit: Lisa Levesque

IS FREP KEY TO MAKING PROFESSIONAL ACCOUNTABILITY WORK?

Yes. Under resource professional obligations (Code of Ethics, Bylaws) and professional accountability, there are a number of key responsibilities and requirements for forest resource professionals including:

- Consider risks to forest resources and remain current in their fields of practice
- Ensure professional opinions or judgements satisfy a balance between environmental, social and economic values
- Advocate and practise good stewardship of forest land based on sound ecological principles in order to sustain its ability to provide the values assigned by society, and
- Consider the medium- and long-term implications on the values assigned by society. (Association of British Columbia Forest Professionals, April 2008).

For professionals to fulfill their responsibilities and roles in professional accountability, they must be informed of the results of their plans, prescriptions and actions on the ground. They must be able to adapt their practices, where required, in a process of continuous improvement in response to objective, scientifically assessed evidence of outcomes and effectiveness in achieving government's objectives for British Columbia's public forests.

FREP indicators, protocols, data, reports and recommendations are key to achieving the obligations entrusted to resource professionals. FREP products help professionals remain current and informed on resource health and environmental sustainability, which is key to practising good stewardship of forest land based on sound ecological principles in order to sustain its ability to provide the values assigned by society.

Case study: Informing and facilitating professional accountability

In October 2009, the Chief Forester released his first Chief Forester's FREP report. This report identified important, non-prescriptive considerations for forest and range stewardship identified by FREP biodiversity, riparian and water quality monitoring results to date. In the Chief's words, "we will achieve continued improvements by making a few small, but key, changes where they count the most." The information contained in this report, will encourage dialogue among government and licensee professionals that will lead to continued improvements in practices and the success of professional reliance under FRPA. http://www.for.gov.bc.ca/hfp/frep/publications/chief_forester.htm

IS FREP INCREASING THE PARTICIPATION OF FIRST NATIONS IN FOREST STEWARDSHIP?

Yes. As stated in the New Relationship vision, "Government will continue to work with First Nations to ensure that resource development decisions reflect their interests and concerns..." First Nations have been actively engaged in the development of the FREP cultural heritage resource value monitoring framework, protocol and indicators. This involvement has helped build relationships (much broader than FREP) and enhance trust between First Nations, government and industry. Many participating First Nations have stated that through this process they felt included, respected and trusted.

In 2008, four First Nations technicians were hired as auxiliary staff in four forest districts to assist in FREP. This successful pilot greatly enhanced relationships with local First Nations, helped build local First Nations' capacity and enhanced local district awareness of First Nations cultural values. FREP brought First Nations, the Forest Service and licensees together in respectful dialogue to understand cultural heritage resource values and their management.

Case study: Solving operational problems and building relationships

In July 2009, Cascades forest district staff, in collaboration with local First Nations and industry, completed several FREP cultural heritage resource value assessments. During these assessments, a number of effective management practices resulting in protection of resource values (Culturally Modified Trees (CMTs) and trails) were identified. The assessments also found some management practices that had resulted in damage or loss to previously identified cultural values. As a result, the local licensee voluntarily worked with the First Nation and district staff to develop a set of recommendations and opportunities for improving future practices. All parties saw the process and resulting outcomes as an excellent demonstration of working together in a professional and respectful manner that helped build relationships and improve future results.

CAN FREP HELP INDUSTRY SAVE MONEY?

Yes. The FREP monitoring indicators and protocols provide clarity to licensees concerning what government and leading scientists feel are the key attributes of the 11 resource values that require careful management. This certainty enables licensees to focus their stewardship efforts, providing an opportunity for more efficient and effective planning and practices.

FREP monitoring provides an opportunity to identify and resolve on-the-ground issues while impacts and costs are low; the same opportunities exist for early detection and remedy of policy and legislative issues which will help reduce long-term costs and enhance social licence. In addition, licensees can save development and data collection costs by accessing FREP monitoring data and results to inform planning and practices and for possible use under their existing SFM certification monitoring requirements.

Case study: Saving money, improving efficiency

FREP water quality indicators are a "provincial standard" under FIA; making it possible for licensees to receive funding for their water quality SFM certification-monitoring when using the FREP methodology. FREP is working with FIA to determine whether other FREP resource value indicators can become FIA funding eligible. Licensees receive funding for this monitoring, and save the cost to develop, test and finalize science-based, peer-reviewed and credible monitoring indicators and field procedures. The same cost savings can be applied to the biodiversity, water quality, soils and cultural heritage resource value monitoring needs for licensee's SFM certification.

SUMMARY:

This extension note answered five key questions about FREP that are important to forest managers and decision makers. Through these answers, we hope to build greater awareness of FREP and its value to you.

FREP has a key role in the success of the FRPA model. Most notable of these roles is monitoring the outcomes of forest and range practices on the 11 FRPA resource values and communicating these results in order to enhance knowledge, ensure sustainable practices and facilitate success of the professional reliance model. This in turn, will help maintain and enhance the level of public acceptance of forest and range management in British Columbia.

Extension notes, detailed reports, report summaries, data sets and other documents, targeted at government and industry forest professionals, are on the FREP website at: http://www.for.gov.bc.ca/hfp/frep/publications/reports.htm

FREP Continuous Improvement Model.





Assessment of a karst resource feature on Northern Vancouver Island Photo credit: Paul Griffiths



Field crews in Central Cariboo learning how to conduct Stand Development Monitoring (SDM) in post free-growing stands. Photo credit: Alex Woods

For more information about FREP visit:

http://www.for.gov.bc.ca/hfp/frep/

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