

The FRPA Evaluator

Routine/Extensive Indicator Workshop

Introduction

The FRPA Resource Evaluation Program (FREP) is designed to assess the effectiveness of the *Forest and Range Practices Act* (FRPA) in meeting government's objectives for each of the forest and range resource values under the Act, and to evaluate the appropriateness of the objectives themselves. This is accomplished primarily through effectiveness evaluations that use selected indicators or attributes of a particular resource value to determine the effects of forest management on that resource.

There are three basic types of effectiveness evaluations conducted under FREP. Routine evaluations are relatively general evaluations that use simple visual estimates or measurements, often to answer yes/no type questions. Routine evaluations usually sample at a lower level of intensity, and may use checklists or categorical data collection. Extensive evaluations are generally more rigorous and quantitative than routine evaluations, and involve categorical data collection using visual estimates or more detailed measurements. Extensive evaluations can use similar checklists to routine evaluations, but with a higher frequency of data collection in a given area. Intensive evaluations are detailed examinations involving quantitative measurements of attributes or categorical data collected on a repeated schedule over time in order to detect long-term trends. Generally, all three types of evaluations include comparisons with baseline or other reference data such as adjacent unharvested sites.

During 2003, routine and extensive indicators for three resource values (riparian, soils and stand-level biodiversity) were developed and tested as a basis for gaining experience in developing and implementing scientifically valid indicators for effectiveness evaluations. Each of these projects developed a set of draft routine and extensive indicators, which were tested in the field by the Forest Practices Board. The results from these routine/extensive indicator projects were discussed at a workshop held in January 2004.

The Workshop

The workshop began with a brief overview of the FRPA Resource Evaluation Program (FREP) and an explanation of some of the terminology related to effectiveness evaluations. For detailed information on FREP, and some of the concepts and terminology associated with the program, see <http://www.for.gov.bc.ca/hfp/frep>

The next section of the workshop consisted of team members from each project presenting the results and experience gained from developing their specific indicators, followed by presentations on the results of the field testing for each project. A copy of each of these presentations can be viewed at the above external ftp site.

The final component of the workshop focused on group discussions, where project team members collaborated to come up with recommendations for developing and implementing indicators for routine, extensive or

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The FRPA Evaluator is a regular publication of the FRPA Resource Evaluation Program designed to inform stakeholders on program development and implementation, and report on the results of evaluation projects.

This Issue: In this issue, we provide an overview of the results of an indicator development workshop held in January 2004, including the characteristics of a government indicator and a seven-step process for developing and implementing indicators.

Upcoming Issues:

The next issue will be a review of FRPA Resource Evaluation Program accomplishments in 2003/04 and a look towards plans for 2004/2005.

For more information on the purpose, objectives, scope, deliverables, stakeholders, structure, and management of the FRPA Resource Evaluation Program, please refer to the FREP Charter at our web site:
<http://www.for.gov.bc.ca/hfp/frep>

intensive effectiveness evaluations. This information is intended to serve as a guide for future resource value teams involved in developing indicators for effectiveness evaluations under FREP.

Characteristics of a Good Indicator

Based on their individual experience, workshop participants were able to determine what worked and what didn't work when it came to developing useful indicators. After considering input from all parties, the group defined a good indicator as having the following characteristics:

- Focused on answering a specific evaluation question;
- Correlated to what you want to measure;
- Based on valid scientific research and literature;
- Relevant at various scales (site, feature, landscape);
- Responsive to forest and range practices in a predictable way;
- Low naturally occurring variability;
- Well documented (rationale, methodology, analysis);
- Peer reviewed;
- Understood and supported by stakeholders;
- Practical, easy to measure, interpretable;
- Cost effective;
- Baseline data available; and
- Part of a suite of indicators for evaluating a resource value.

Guidance for Developing and Implementing Indicators

Workshop discussions revealed many lessons learned by team members of the different projects. Through these discussions, a process began to unfold by which indicators could be developed, implemented and continually improved in a consistent and effective manner. This process is summarized below:

Step A: Identify specific evaluation questions for a resource value to determine the effectiveness of legislation and forest practices.

Step B: Develop a draft set of practical indicators and field procedures for the resource value at different levels of evaluation intensity (routine, extensive, intensive).

Step C: Determine the specific purpose of the evaluation, refine the questions to be answered, select the intensity level(s) of the evaluation, and choose a sampling protocol of suitable indicators.

Step D: Conduct an operational pilot to test the sampling protocol of indicators, data collection methods, data analysis, data interpretation and rationales. Refine as required.

Step E: Implement the evaluation and document lessons learned. Further refine the indicators and methodologies where appropriate.

Step F: Report the results, including recommendations for continuous improvement.

Step G: Refine policy (or other appropriate change, e.g. implement training) if required.

Conclusion

A number of sets of indicators are at various stages of development at this time. In addition to the indicators for soils, riparian and stand-level biodiversity, draft indicators for visuals, water and karst will be developed by March 31, 2004. Field testing the indicators for visuals, water and karst will occur during the field season of 2004.

District-level stewardship monitoring protocols and training for at least three of the above resource values will be pilot tested this year.

Additional Information

For more information on the recommendations of the indicator workshop, see FREP Technical Note #1 at: <http://www.for.gov.bc.ca/hfp/frep>