

Developing Guidance for Routine Evaluations
Workshop Report
Jan. 28, 2004

Purpose of the workshop:

To prepare recommendations regarding development and implementation of routine evaluations.

Report:

This report summarizes the presentations and discussion from the workshop.

Characteristics of a good indicator:

- You know what to do with the data
- Focused on answering a question (meaningful)
- Relevant to the value and the objective set by government for the value
- Affected by, and sensitive to, forest and range practices; responsive in a predictable way
- Measures key information (at various levels of detail)
- Based on research and literature (valid)
- Well documented (including rationale)
- Peer reviewed
- Agreed upon
- Understandable
- Practical and easy to measure
- Low inherent (naturally occurring) variability
- Relevant at various scales
- Interpretable
- Cost effective
- Baseline / reference values are available (needed for some projects)
- Correlated to what we really want to measure
- Suite of indicators captures the answer to the question

Guidance for developing indicators:

Goal of indicator development: An agreed upon list of indicators functional at all levels. If this is not achievable show how more detailed indicators nest under general indicators and how they are correlated at different levels of detail and scales of application.

As part of this overall goal: Develop an agreed upon list of high level “factors” for each resource value in FRPA that can be used as the basis for indicator development.

Phases of indicator development

1. Reasonable timeframe is 4 – 6 months for all phases listed below
2. Use workshops and individual / group assignments as appropriate
3. Develop a list of questions to be addressed (may be either focused on the impact of a practice OR the status of a component of the ecosystem OR a matrix combination of both). When developing the questions consider who will ask / use the questions; the scale of application; and how they link to the objectives set by government in FRPA

4. Create a team (developers /researchers) and include representative of implementers and stakeholders (licensees, ENGOs, district staff)
5. Develop a list of possible indicators (includes intensive, routine and extensive)
6. Reduce the list by removing duplicates
7. Match the indicators to the questions
8. Reduce the indicators to the “best candidates” (see list of indicator characteristics as criteria)
9. Determine what data results / values / interpretations for the indicators will be considered “effective” (i.e. the forest or range practices are acceptable); AND what results will be considered not “effective”.
10. Document the chosen indicators; provide rationale for choice and cite scientific literature as support
11. Have the indicator documentation peer reviewed and respond to reviewer comments / suggestions
12. Consult with stakeholders to gain their agreement on the indicators
13. Design methodology for use of the indicators based on the specific evaluation question to be answered and the type of application (e.g., FP Board audits; C&E; districts; industry; ENGOs; certification). Each application methodology may require methods that match different questions; risk levels; confidence required in results; and levels of judgement.
14. Note – Critical for “indicator development team” and “methodology design team” to provide the “testing team” basic training on the indicators if these teams are different people.
15. Pilot test the indicators / methodology. Include representative(s) of the indicator development team in the pilot test.
 - a. Conduct field training (learn the language) – if people conducting pilot are different than development team.
 - b. collect data
 - c. conduct data analysis to determine if the data results answers the question
 - d. interpret the data and determine if effectiveness can be assessed
 - e. test the results with decision makers to determine if they will accept the results as a basis for policy / practices change
 - f. refine the indicator and the methods
16. Address data management; roll-up and storage
17. Continuous improvement of indicators and methods over time; including a goal of coordination with certification activities and merging of approaches and terminology (principles, criteria, indicators, verifiers)

Phases of indicator implementation:

Note: this activity may overlap with indicator development if pilot testing has not been conducted.

1. Use a team approach (e.g. government / industry / academics)
2. Understand the indicators (see training in indicator development)
3. Develop methodologies (see indicator development)
4. Conduct field training
5. Test indicators (see indicator development)

6. Use of electronic in-the-field data collectors can greatly reduce data entry time and errors
7. Data collection AND quality assurance - start small to work out problems and gain experience
8. Data analysis and interpretation (allow sufficient time / budget for these activities)

Use of routine evaluations:

- Use handheld, electronic in-the-field data collectors where available and practical
- Recognise that routine evaluations are part of an overall program and will lead to more detailed evaluations when red flags indicate follow-up is required
- Some indicators require more training than others
- Even simple indicators need to be well documented and rationalized
- Consider how information will be used; what conclusions / policy changes will be based on the results (consider the relationship of data to information)
- Determine how to resolve conflicting conclusions among a suite of indicators as part of the interpretation process; conflicting results among indicators may indicate the need for more testing or validation of assumptions
- Manage quality assurance (consider duplicative evaluations)

Participants

	<u>Indicator development</u>	<u>Implementation / test</u>
Riparian Project	Peter Tschaplinski	Kevin Edquist
	Steve Chatwin	Steve Tribe
	Richard Thompson	Derick Tripp
		Clare Vincent
Soils Project	Shannon Berch	Rick Trowbridge
	Chuck Bulmer	Steve Tribe
	Mike Curran	Bob Kopp
Stand-level biodiversity Project	Nancy Densmore	Bryce Bancroft
	Wendy Bergerud	
	Peter Bradford	
Others	Brian Nyberg	Chris Mosher
	Gerry Still	
	Shirley Mah	
	Laurie Kremsater	
Future Project Leaders	Kathy Paige Garth Webber Atkins Les Swain	

Notes from Presentations

Riparian:

Start with questions to be addressed or all possible impacts of practices
Consider questions that are important to the public / stakeholders
List extensive indicators first – long list, all we can think of
Refine list of extensive indicators – eliminate duplicates
Evaluate refined list using criteria (doable, cost, use of data) in workshop to get final list
Aim for data that is Yes / No
Design project to determine if compliance occurred; then conduct an overview survey;
then a more detailed survey
Use a hierarchy of questions
Determine how to roll up results to form interpretations

Soils:

Short timeframe
Clear communication of the assignment is important
Is the goal qualitative or quantitative information?
Consider qualifications of field people in designing indicators and methods
Use a workshop to set up the indicator framework, then assign tasks to experts for
development of specific indicators
A second workshop would have been useful
Documentation is important – including rationale
Training session is important
Note the difference between a science approach and an accounting approach
Document what happened on the ground regarding the impact of practices and then can
compare over time – including checking ideas against the literature
Peer review is essential
Use standards as proxies (CCFM). Then evaluate the standards
How to validate the standards and assumptions?
Site selection is important – how to design survey to respond to risk
CI for indicators is important

Riparian / Soils Testing:

Important to test the indicators in other types of evaluations
Field training that includes developers and testers is very useful
Industry accepted the indicators
A combined team of experts builds credibility
Work toward a common set of accepted indicators
Consider application goals and objectives up front (audit vs. special report vs. routine
evaluations)
Separate the indicators from the sampling methodology
Include users in team developing indicators
Link compliance and effectiveness
Include developers on audit field team
Use professional judgement – interpretation of data

Indicators are best left general and are commonly accepted

Note: Need to focus on the question to be addressed and the level of confidence (in either the science or audit world) required in the answer. Know this before choosing indicators and methods.