

<b>Project Name</b>	<b>Describing EBM Pilots and Estimating Forestry EBM Operational Costs and Benefits</b>
<b>Program Area</b>	Decision Support
<b>Project No.</b>	DS03
<b>Related Projects</b>	DS04: Support for completion and integration of DSPs T03: Develop tools for on-the-ground EBM implementation T04: Provide guidance on implementing non-legal elements of EBM
<b>Start Date</b>	February 15, 2008
<b>Completion Date</b>	June 30, 2008

### **Overview**

Over the past 7 years there have been several attempts to “operationalize” aspects of EBM. These range from “EBM Pilots” in which First Nations worked with stakeholders to explore implementation of EBM objectives in particular territories, to “EBM transition pilots” in which CFCI forest Licensees attempted to implement the EBM elements in the JSP 2003 AIP.

The purpose of Phase 1 of this project is to document these pilots in terms of their EBM objectives, activities, results and other relevant information.

Although the various EBM pilots have produce valuable information, there is still uncertainty about the costs and/or benefits, economic and ecological, of implementing EBM in the coastal forest sector, particularly at the operational level. Some analyses have been strategic, using computer models to estimate effects on timber supply or “supply side impacts” that accrue due to additive landbase netdowns. Other efforts have used more detailed inventory and cost data to estimate operational level impacts; however, the results have varied due to data uncertainties, use of different mapping and analysis procedures and lack of peer review.

The purpose of Phase 2 of this project is to develop reasoned estimates of the range of potential operational level costs/benefits, economic and ecological, of implementing EBM in the coastal forest sector. Application of initial land use objectives and more comprehensive objectives vis-à-vis the EBM Handbook will be assessed.

Phase 2 of this project will examine different methods for inventorying EBM-related ecosystem features (e.g. HVFH) with a goal of identifying preferred methods. Preferred methods will be used to assess how harvest plans need to be modified from FRPA requirements to address EBM objectives. The project will assess a representative selection of previously logged cutting permits, and potentially more recent harvest/operational plans. The potential range of economic costs and ecological benefits of any needed modifications will be summarized in relevant metrics (e.g. \$/m<sup>3</sup>, ha of wildlife habitat).

## **Objectives**

- The primary purpose of Phase 1 of this project is to document previously completed EBM pilot projects in terms of the objectives, activities and results and assess what was achieved in terms of EBM implementation vis-à-vis the EBM Handbook.
- The primary purpose of Phase 2 of this project is to provide reasoned estimates of the potential short term costs and benefits, ecological and economic, of implementing EBM within coastal forestry operations.
- The secondary purpose of Phase 2 is to identify preferred methods of using available inventories and data to identify, map and inventory hydroriparian and other EBM ecosystem features.

## **Expected Use/User/Benefits**

- Phase 1 of the project will help to summarize what has been learned from initial efforts to implement EBM.
- Phase 2 of the project will help to resolve current uncertainty related to the short term operational and economic impacts/ecological benefits of the EBM land use objectives.
- Overall, the project will inform strategic analysis of “Full EBM” scenarios (e.g. DSP SELES modeling; CFCI Patchworks modeling) by providing information that will help to refine modeling assumptions (e.g. spatial landbase and aspatial volume netdowns required to address aquatic habitat objectives).
- The project will also potentially inform development and/or refinement of preferred tactical and operational planning methods related to implementation of EBM related land use objectives.

## **Key Tasks** (to be executed by contractor):

### Phase 1

1. Obtain from Licensees, First Nations and other relevant parties a list of completed EBM pilots (with assistance from the DS-03 project steering committee (PSC))
2. Develop a draft questionnaire, and circulate to the DS 03 PSC for review. The questionnaire should ask identified licensees to provide specific information about their EBM Pilots including:
  - a. description
  - b. contact information
  - c. location
  - d. objectives
  - e. elements of EBM the pilot explored (i.e. EBM handbook, Ministerial Order)
  - f. results from any independent audit (to determine efficacy of implementation)
  - g. monitoring provisions (inventories and other monitoring tools used)
  - h. outputs/results
3. Confirm the questionnaire with the DS03 PSC lead

4. Contact the Licensees and other Parties responsible for implementing the pilots to collect the requested information
5. Prepare a draft report documenting the EBM pilots, providing analysis identifying key themes, common findings and any gaps in information identified in reviews.
6. Review the draft report with the DS03 PSC
7. Finalize and deliver the report in hard copy or digital form.

## Phase 2

1. In a pre-work meeting, review Terms of Reference with DS03 PSC, with the goal of developing an agreed upon workplan.
2. In collaboration with the DS03 PSC, identify and select for analysis a representative sample of harvest plans/cutting permits in the Central and North Coast that were developed in the Central and North Coast prior or during voluntary implementation of EBM.
3. For each selected historical cutting permit or current harvest plan, collate relevant operational planning and harvest information (e.g. harvest plans, silvicultural prescriptions, harvest billing data, air photos, log market values).
4. In collaboration with the DS03 PSC, and guided by relevant background documents, identify straightforward, standardized approaches for using inventories and other data to undertake operational planning that implements the initial LUOs and potential “Full EBM” Handbook objectives.
5. Employing the standardized approaches and operational planning information, assess how the pre-EBM cutting permits/harvest units would need to be modified to address the initial LUOs and “Full EBM” objectives.
6. Estimate any economic costs and/or benefits, in terms of \$/m<sup>3</sup> and/or jobs/m<sup>3</sup>, resulting from the modifications (e.g. additional planning, development and infrastructure costs, reduced harvest volumes).
7. Estimate any ecological benefits and/or costs resulting from the modifications (e.g. hectares of riparian forest or wildlife habitat maintained; increased windthrow).
8. Prepare a draft report which summarizes the analysis process, methods, assumptions, limitations and findings and submit to PSC for review and comment.
9. Revise and finalize the report.

## Milestones and Deliverables

<u>Phase 1</u>	<u>End date</u>
Confirm list of pilots	February 15, 2008
Confirm questionnaire	March 15, 2008
Draft report	April 15, 2008
Final report	April 30, 2008

  

<u>Phase 2</u>	<u>End date</u>
Initial meeting/review with project working group	February 15, 2008\7
Analysis areas identified;	March 15, 2008
Operational planning information acquired	April 15, 2008
Standardized inventory/planning procedures	April 30, 2008
Analysis complete; draft report prepared	May 30, 2008
<u>Report finalized and presented to EBMWG</u>	<u>June 30, 2008</u>

## Responsibilities

- Dan Cardinall to be EBM WG lead along with a project subcommittee consisting of:
  - Grant Scott, Wally Eamer
  - Glenn Farenholtz /David Flood (CFCI), Audrey Roburn (RSP)
  - MOE and MoFR technical representatives as appropriate
- Major partners include First Nation DSP technical representatives and CFCI companies.

## Linkages to other EBM Projects or Initiatives

- The project will inform analysis of DSP scenarios and options and potentially other strategic analyses (e.g. CFCI Patchworks) through development of information that can help to refine strategic model assumptions and specifications (DS03).
- The project can inform development of recommended approaches to forestry tactical and operational inventory and planning methods (T03).
- Project results can be used to inform development of guidance for implementing legal and non-legal elements of EBM (T04)

## Method of Implementation

Contract: Direct Award or RFQ

Expert Panel / Workshop

Internal EBMWG Task

Other: \_\_\_\_\_

Contractor qualifications: (to be confirmed/recorded to project file by EBM WG Director):

- Knowledge of coastal land use planning and development of coastal EBM.
- Experience and familiarity with tactical forest development planning (e.g. total chance and forest development planning).
- Experience and familiarity with operational planning and engineering.
- Extensive experience with, or access to, relevant GIS, air photo etc. expertise.

### Peer Review

- Draft copies of the report will be circulated to identified peer reviewers, the EBMWG members and project major partners for review and comment.

### Budget

<b>Item</b>	<b>Budget</b>	<b>Source</b>
Consultant/contractor:	\$50,000	EBMWG