EBMWG Project Close-Out Report

Project #: EDS03, Phases 1 and 2

Project Title: Describing EBM Pilot Projects and Estimating Forestry EBM Costs and Benefits

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1.0 FUNDING

The estimated total cost of the project is $50 000. Final billings are outstanding and the project will be completed within budget.

2.0 EXTENT TO WHICH PROJECT OBJECTIVES WERE ACHIEVED

Objective	Description	Evaluation (Text)	Summary*
1	Document previous EBM pilot projects in terms of the objectives, activities and results and assess what was achieved in terms of EBM implementation.	A final report provided documentation on 21 EBM pilot projects, including assessment of which EBM objectives each project attempted to address.	Fully Met
2	Provide reasoned estimates of the potential short term stand level costs and benefits, ecological and economic, of implementation EBM within coastal forestry operations.	A final report provided documentation and summary analysis of the costs and benefits of efforts to implement EBM in 49 harvest units, 24 in the Central Coast, 14 in the Central Coast and 11 in the North Coast.	Fully met
3	Identify preferred methods of using available inventories and data to identify, map and inventory hydroriparian and other EBM ecosystem features.	Appendix 1, Section C of the final report documented the data and procedures used to identify EBM ecosystem features.	Marginally Met

* Use: Fully met (100%), Substantially met (>75%), Partially met (25-75%), Marginally met (0-25%), Not met (0%)

3.0 MAJOR TASKS COMPLETED

Task	Description[1]	Date
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)	February 26, 2008
2	Develop a draft questionnaire, and circulate to the DS 03 PSC for review.	March 1, 2008
3	Contact the Licensees and other Parties responsible for implementing the pilots to collect the requested information	March 7, 2008

[1] These tasks are drawn directly from the detailed project description submitted to the EBMWG March 13 2008 and from the amended project approval to fund, submitted to the EBM WG Co-Chairs August 29, 2008.

Task	Description[1]	Date
4	Prepare a draft report documenting the EBM pilots, providing analysis identifying key themes, common findings and any gaps in information identified in reviews.	May 7, 2008
5	Finalize and deliver the report in hard copy or digital form	September 18, 2008
1	In a pre-work meeting, review Terms of Reference with DS03 PSC, with the goal of developing an agreed upon workplan	March 17, 2008
2	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).	May – July, 2008
3	Assess how the pre-EBM cutting permits/harvest units would need to be modified to address the initial LUOs and "Full EBM" objectives.	July – Sept., 2008
4	Estimate any economic costs and/or benefits in terms of $/m3 and/or jobs/m3, resulting from the modifications (e.g. additional planning, development and infrastructure costs, reduced harvest volumes). Estimate any ecological benefits and/or costs resulting from the modifications (e.g. hectares of riparian forest maintained; increased windthrow).	July – Sept., 2008
5	Prepare a report which summarizes the analysis process, methods, assumptions, limitations and findings and submit to PSC	October 19, 2008

4.0 KEY PRODUCTS

Item #	Description	Completion date	Location
1	Report summarizing objectives and outcomes of various EBM pilot projects undertaken between 2000-2008.	September 18, 2008 ??	To be posted on the EBM WG website
2	Report summarizing methods, peer review process, data, assumptions and findings of assessment of stand level costs and benefits of implementing EBM objectives.	October 28, 2008	To be posted on the EBM WG website

5.0 PEER REVIEW

A peer review process for the project methodology was initiated for the project in March 2008, with four peer reviewers actively engaged. Written comments regarding the methodology were received and a follow-up conference call on April 11th helped to clarify key points and main concerns. A response was prepared for each of these key points (Appendix 2). Following a further discussion of these key points, the methodology was further refined (Appendix 1).

A draft of the report was circulated to the Project Steering Committee and the EBM Working Group in October 2008. Comments received from two of the PSC members were addressed through final revisions to the report.

6.0 MAJOR FINDINGS

Stand Level EBM Benefits

- A high proportion of harvest units assessed had very effective levels of stand retention (20% to 30% plus, regardless of regulatory regime. Most of this would have existed even under FRPA).
- In almost half of the cutblocks sampled, application of FRPA approaches met EBM requirements.
- Many of the sample blocks had considerable retention to protect riparian functions, regardless of regulatory regime.
- Additional stand level retention required to meet EBM standards ranged from .04 ha to 4.0 ha.
- Many of the ecological benefits from EBM will accrue at the watershed or landscape level (and higher) from requirements that include: old forest representation, riparian forest retention, Sensitive Watershed planning, Upland stream objectives, red and blue ecosystems, and mapping to ensure the protection of important wildlife areas, among others.

Stand Level EBM Costs

- Total estimated incremental stand-level costs for EBM range from cost per unit volume by $0.10 to $0.34 per cubic meter. These are made up of planning costs only.
- Where EBM features were present or stand level retention targets were not quite met, usually only small adjustments were necessary to meet the requirements for EBM. None of these adjustments were seen as changing the economics of harvesting at the cutblock level, although planning requirements were anticipated to increase.
- The report authors expect that operational costs beyond the cutblock level will have a greater impact on the overall incremental cost per cubic metre of EBM, due to reduction in the total area available, a more dispersed harvest and increased infrastructure requirements on a per unit volume basis, although this was not demonstrated through the work done in the report.

7.0 RELEVANCE/SIGNIFICANCE FOR EBM IMPLEMENTATION

Phase 1 project results contribute to the record of preliminary EBM implementation efforts and may provide useful inputs into ongoing adaptive management activities such as the Experimental watersheds project.

Phase 2 project results may contribute to:

- assessments of EBM implementation cost which may be relevant to a range of different decision processes such as determination of cost allowances for EBM within the stumpage appraisal system, and consideration of the impacts to forestry operational costs of changes to legal objectives to guide EBM implementation.

- assessments of the incremental effects of full implementation of EBM in relation to stand level retention as it relates to maintaining ecological integrity and forestry operational costs.

- More efficient utilization of existing information sources to identify and address ecological features relevant to EBM implementation within forestry operations.