

# EBMWG Project Close-Out Report

**Project #:** AM-06, part 1 only.

**Project Title:** Refine Old Growth Thresholds

**Steering Committee Members:** Jody Holmes, Shannon Janzen, Audrey Roburn, Bill Beese, Andy MacKinnon, Carolyn Whittaker (FORREX)

## 1.0 FUNDING

The project demonstrates a successful partnership funding model with a better than 2:1 leverage of EBMWG funds. The total cost of the project to date has been ~\$35,000 of which in addition to \$15K of EBMWG funding, ~\$10K was contributed by Forrex and ~\$10K was contributed by CFCI and RSP to pay for contractors to write the background paper.

## 2.0 EXTENT TO WHICH PROJECT OBJECTIVES WERE ACHIEVED

Objective	Description	Evaluation (Text)	Summary*
1	As per recommendations from CCLRMP and NCLRMP, to determine whether there is a more appropriate mechanism to “refine” the old growth representation targets presented in the EBM Handbook and in particular: Is the low risk target supported by science? Is it possible to develop an alternative “grouping” of ecosystems with associated risk curves, thresholds and precautionary targets? How, if at all, is it related to spatial deployment strategies?	The primary objective of the workshop re threshold refinement was resolved based on an expert review of the best available science.	Fully met
2	To develop guidance related to on the ground implementation of these thresholds (with an emphasis on reserve design during the transition to EBM handbook target implementation, differences between TEM and forest cover base information, and implementation of RONV targets)	<p>Of the additional questions posed to participants, there were several different outcomes:</p> <ul style="list-style-type: none"> <li>- some <b>were resolved</b> (e.g. the list of adaptive management questions)</li> <li>- one <b>will be resolved in a follow-up webconference</b> with the same expert participants (i.e. RONV-based targets while natural disturbance continues on the landbase)</li> <li>- <b>additional expert work was recommended</b> for other questions (e.g. the contribution of stand-level retention to landscape-level targets; conservation planning primer; deciduous site series surrogates)</li> </ul>	Substantially met

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

### 3.0 MAJOR TASKS COMPLETED

<b>Task</b>	<b>Description<sup>1</sup></b>	<b>Date</b>
1	Complete draft Discussion Paper (Old Forest Targets: Refining Thresholds with Science)	Feb 5 <sup>th</sup> , 2007
2	Finalize workshop structure (i.e. duration, presentation/ participation)	Jan 9 <sup>th</sup> , 2007
3	Finalize list of workshop topics / questions / tools	Feb 9 <sup>th</sup> , 2007
4	Confirm participants and facilitator. Finalize workshop agenda	Feb 22 <sup>nd</sup> , 2007
5	Host Workshop	Feb 27-28 <sup>th</sup>
6	Develop final report for EBM Working Group including recommendations and next steps	May 22 <sup>nd</sup> .
7	Final Discussion Paper (with comments incorporated) complete for publication	End June, 2007

### 4.0 KEY PRODUCTS

<b>Item #</b>	<b>Description</b>	<b>Completion date</b>	<b>Location</b>
1	Background research paper – first draft for workshop	February 5 <sup>th</sup> , 2007	Sent to all workshop participants, to be posted on Forrex website
2	First summary report to EBMWG including recommendations for further work	April 13 <sup>th</sup> , 2007	Sent to all EBMWG members
3	Complete minutes of workshop	End of May	To be posted to Forrex website for review by workshop participants
4	Reserve Design Tool for planners	Early June, in time for CFCI operational training workshops	TBD
5	Web conference recommendations on implementation of RONV	Mid June	TBD
5	LINK article (extension to Forrex information users)	TBD	LINK publication
6	Final paper draft (incorporating comments from workshop)	End of June	Forrex website
7	Finalized, abbreviated paper for publication in peer-reviewed journal	End of June	Journal TBD

<sup>1</sup> These tasks are drawn directly from the workplan submitted to the EBMWG in revised form December 20<sup>th</sup>, 2006.

## 5.0 MAJOR FINDINGS/CONCLUSIONS

The panel of experts agreed on the following (for exact wording, see workshop proceedings):

- The EBM Handbook 70/50/30 approach is essentially sound and does not require further “refinement” at this time – in particular the addition of RONV to the old growth target is already considered a “refinement”. Specifically:
  - The available evidence does not support moving away from the 70% RONV low risk threshold for each ecosystem type and it is likely<sup>2</sup> that 70% RONV will maintain ecological integrity
  - High risk (30%RONV) is OK at watershed in context of 70/50/30 approach
  - Truly rare ecosystems (to be determined by further work) should have targets >70%
- Stand level retention may<sup>3</sup> be counted towards landscape level targets immediately if it:
  - meets landscape level objectives
  - Is large enough to have forest interior
  - Is mappable and permanent
  - doesn’t meet the above criteria in the short term may be counted later if it contributes to ecosystem recovery.
- Notwithstanding value of existing evidence and agreement on 70% hypothesis, further work (research and monitoring) is required (see workshop proceedings for detailed list of adaptive management questions)
- To implement OG representation targets:
  - As much as possible, spatialize reserves
  - Overlap old growth retention with all other “fixed” reserves like hydorr riparian etc. first
  - Situate remaining reserves using conservation principles to maximize additional ecological values like focal species (e.g. ungulate winter range, griz critical habitat etc.)
  - Centralize and make representation information accessible to all parties
  - Create tracking system to deal with multi-licensee situation
  - Provide training for GIS and planning foresters on how to spatialize reserves

The panelists also recommended the following work be undertaken:

1. Finalize the discussion paper incorporating comments from expert panel (underway)
2. With the expert panel, finalize discussion via webconference on two topics:
  - a. Achieving RONV while natural disturbance continues. (underway)
  - b. Decision support tools, including Bayesian approaches
3. Create a old growth reserve design planning tool for use by forestry planners (underway - Kremsater, Holt, Rumsey, Price)
4. Undertake a second expert workshop to address additional key implementation issues including (subject of a separate project proposal):
  - a. What site series surrogates should we use? Refinement of the site series surrogates (e.g. particularly with improved Big BEC; eliminating GIS slivers)

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<sup>2</sup> Note that the panel explicitly defined the term “likely” to mean >66% confidence, and “very likely” means >90% confidence. These terms are used in the same way as in the recent International Panel on Climate Change report.

<sup>3</sup> amount that would count will vary based on the risk level of the ecosystem in question

- b. How should we address deciduous site series surrogates? Could be a product of conversion of a conifer-leading SSS, and currently have no RONV target associated with them.
- c. What are the appropriate groupings (if any) of ecosystem types?
- d. Can you crosswalk from site series (TEM) to SSS? (bring forward spatial example, e.g. overlaying SSS maps on TEM) and examine success of previous crosswalk attempts.)
- e. Refine contribution rules for stand level retention
- f. What if any technical barriers and/or solutions are created for full EBM implementation by the interim old growth targets (use practical examples)

## **6.0 RELEVANCE/SIGNIFICANCE FOR EBM IMPLEMENTATION**

The use of cumulative multi-scale (30/50/70) old growth representation targets is a key strategy proposed by the EBM Handbook to maintain ecological integrity. The primary result of the background paper and workshop has been to reduce outstanding concerns about the scientific basis of the existing EBM Handbook representation thresholds and targets through consensus of a large expert panel. In addition (notwithstanding the need for further work) the workshop and several associated outputs (webconference and reserve planning tool) will provide much needed practical advice on how to go about implementing old growth representation targets on the ground. In particular, the information provided by the background paper and workshop will be relevant in the following ways to EBM implementation:

- To inform discussions (LRFs, DSPs) on “endpoint” and a transition plan to full EBM implementation - so decision makers understand the level of certainty and risk associated with old growth representation targets while making decisions about the rate of transition and variances
- Confirming the low risk threshold for design of spatial and temporal “full EBM” scenarios (DSPs)
- Helping to inform/refine the design of spatial old growth reserves (DSPs, planning foresters)
- To establish reference point for ecological baseline analysis and for ongoing adaptive management (EBMWG, PIMCs)