



Forest Representation Targets for the Central and North Coast of British Columbia Workshop

February 27th and 28th, 2007

Vancouver Fairmont (Airport) Hotel, Canvasback Room

Co-sponsored by the Ecosystem Based Management Working Group and FORREX.

Workshop Goal

By the end of the workshop, the participants and experts will have created a list of recommendations on coarse filter biodiversity representation, specifically:

1. any required refinement of ecological risk thresholds, by ecosystem group if possible, based on best available scientific information, and
2. guidance for implementation with an emphasis on reserve design during the transition to EBM Handbook target implementation.

These recommendations will be forwarded to the Ecosystem Based Management Working Group for consideration and recommendations to Government to Government decision-makers. A summary of workshop proceedings will also be published in LINK. The draft paper will be revised and submitted for publication in a peer-reviewed journal.

DAY 1 – The Scientific Basis of Threshold Refinement

Key Questions for Day 1 Discussion

1. What representation levels (i.e. low and high risk thresholds) does the scientific literature support?
2. What are the ecological linkages between stand-level retention and landscape-level reserves? To what degree, and under what conditions, can increased amounts of stand-level retention substitute for landscape-level reserves, and vice-versa?
3. Are any of the following criteria appropriately used to “refine” thresholds through grouping ecosystems and/or assigning different representation levels to different groups?
 - a. Habitat value of individual ecosystems
 - b. Relative frequency/rarity
 - c. Connectivity value
 - d. Proportion of ecosystem in protected areas
 - e. Ecosystem sensitivity to reductions in old seral
 - f. Ecosystem sensitivity to excess levels of mid and early seral habitats
 - g. Development of old growth attributes over time
 - h. Similar ecosystem function

4. How can targets set as a proportion of natural old forest (based on natural disturbance rates) be achieved and implemented while natural disturbance continues on the landbase?
5. What adaptive management questions on old growth representation could be addressed in future research?

Day 1 Agenda - February 27, 2007

Time	Item	Who
8:15 to 8:30	<i>Coffee and breakfast served in the Canvasback Room</i>	
8:30 to 9:00	<ul style="list-style-type: none"> • Goals for the workshop • General overview of workshop structure • Review of objectives and expected outcomes for Day 1 • Setting expectations (roles of facilitator, experts and participant) 	Facilitator – Shawn Morford
9:00 to 9:15	<ul style="list-style-type: none"> • Introduction of expert panel • Introduction of participants 	Facilitator – Shawn Morford
9:15 to 9:35	Background to the Central and North Coast Process (including context around EBM goals, risk thresholds for old forest representation, threshold refinement)	Jody Holmes and Shannon Janzen
9:35 to 10:20	<p>What representation levels (i.e., low and high risk thresholds) does the scientific literature support at the landscape scale?</p> <ul style="list-style-type: none"> • Introduction to paper • Approach to landscape-level science (Section 2.1 of paper) 	Rachel Holt, Laurie Kremsater and Karen Price
10:20 to 10:35	<i>Coffee Break</i>	
10:35 to 11:35	Discussion of landscape-level science	Expert panel discussion (45 min) Questions from participants (15 min)
11:35 to 11:55	<p>What are the ecological linkages between stand-level retention and landscape-level reserves?</p> <p>Approach to interactions between stand and landscape scales (Section 2.2 of paper)</p>	Rachel Holt, Laurie Kremsater and Karen Price
11:55 to 12:15	Discussion of interactions between stand and landscape scales	Expert panel discussion (15 min) Questions from participants (5 min)
12:15 to 1:15	<i>Lunch - provided</i>	

1:15 to 1:45	<p>Applying the science to the coast: What criteria can be used to “refine” the coastal thresholds through grouping ecosystems and/or assigning different representation levels to different groups?</p> <ul style="list-style-type: none"> • Coastal thresholds based on science (Section 4.1 of paper) • Assessment of criteria to refine coastal thresholds (Section 4.2 of paper) 	Rachel Holt, Laurie Kremsater and Karen Price
1:45 to 3:15	Discussion of coastal application and potential threshold refinement criteria	Expert panel discussion (70 min) Questions from participants (20 min)
3:15 to 3:30	<i>Coffee Break</i>	
3:30 to 4:00	<p>How can targets set as a proportion of natural old forest (based on natural disturbance rates) be achieved and implemented while natural disturbance continues?</p> <ul style="list-style-type: none"> • Discussion 	Expert panel discussion (20 min) Questions from participants (10 min)
4:00 to 4:45	<p>What adaptive management questions on old growth representation should be addressed in future research?</p> <ul style="list-style-type: none"> • Discussion 	Expert panel discussion (30 min) Questions from participants (15 min)
4:45 to 5:00	<ul style="list-style-type: none"> • Review of outcomes, decisions and next steps • Brief introduction to Day 2 	Facilitator – Shawn Morford

DAY 2 – Considerations for Implementing Old Growth Targets

Key Questions for Day 2 Discussion

- 1) What spatial considerations should we take into account when making choices about applying old growth representation targets
 - a. Should old forest reserves be chosen based on overlap with other features? If so, in what order of priority (e.g., red/blue listed ecosystems → old riparian forest → old growth non-THLB → old growth THLB → focal species habitat)?
 - b. If there is not enough old forest to meet targets, are there priorities for which younger forest to choose for recruitment (e.g., next oldest first, adjacent forest for connectivity)?

- c. Are there specific ecosystem types that should be prioritized when looking at spatial layout of reserves (e.g., level of threat and/or harvest pressure; relative rarity; site series surrogates (SSS) that are at risk subregionally; SSS at risk by landscape unit)?
 - d. Does the terrain, harvest history, productivity profile, and/or geographic location affect layout of reserves?
- 2) What key spatial information layers are needed for effective reserve design? Are there gaps and hence priorities for developing specific information layers? Does the quality of the data affect reserve design choices? If so, how?
 - 3) How is it most effective to use site series ecosystem mapping in the absence of a complete coverage of the plan area?
 - a. How well do Terrestrial Ecosystem Mapping (TEM) and SSS line up and what are the implications for planning? How much is this related to the scale/quality of Biogeoclimatic Ecosystem Classification (BEC)?
 - b. Is it possible to use TEM to define rarity classes and meet representation targets in the absence of comprehensive TEM?
 - c. Is it appropriate to group SSS or site series? If so, how?
 - 4) Are there existing decision support tools that could be used to support decision making on spatial deployment?
 - 5) What, if any, specific considerations should apply to ecosystem representation in deciduous site series surrogates?
 - a. Should there be a representation target for deciduous ecosystems?
 - b. How should we deal with “converted” SSS (deciduous-leading sites that have been converted from conifer-leading old forests that require representation)?

Day 2 Objectives

- To complete discussion of any issues not finalized on Day One
- To provide recommendations on how to implement old growth targets spatially both in present operating context and in transition to EBM Handbook targets.

Day 2 Agenda - February 28, 2007

Time	Item	Who
8:15 to 8:30	Coffee	
8:30 to 9:00	Day 2 – Moving forward <ul style="list-style-type: none"> • Review Day 1 outcomes and next steps • Agenda review 	Facilitator – Shawn Morford
9:00 to 10:00	Outstanding issues from Day 1	Facilitator – Shawn

	<ul style="list-style-type: none"> Format to be decided after Day 1 	Morford
10:00 to 10:25	<p>Spatial Deployment - Mapping & planning considerations</p> <p>A. Presentation on conservation planning principles</p>	<p>Rachel Holt, Laurie Kremsater and Karen Price</p> <p>Expert panel discussion (5 min)</p>
10:25 to 10:40	Coffee	
10:40 to 12:30	<p>Spatial Deployment - mapping & planning considerations</p> <p>B. Context</p> <ul style="list-style-type: none"> Overview of subregion and three landscape units used for scenarios <p>C. Landscape unit reserve design mapping scenario presentation:</p> <ul style="list-style-type: none"> 30/70 Interim Strategy (Schedules B/F) Alternative approach to rarity 50% target for each ecosystem 70% target for each ecosystem <p><i>Discussion:</i></p> <ol style="list-style-type: none"> What spatial considerations should we take into account when making choices about applying old growth representation targets? <ul style="list-style-type: none"> Should old forest reserves be chosen based on overlap with other features? If so, in what order of priority (e.g., red/blue listed ecosystems → old riparian forest → old growth non THLB → old growth THLB → focal species habitat)? If there is not enough old forest to meet targets, are there priorities for which younger forest to choose for recruitment (e.g. next oldest first, adjacent forest for connectivity)? Are there specific ecosystem types that should be prioritized when looking at spatial layout of reserves (e.g., level of threat and/or harvest pressure; relative rarity; site series surrogates (SSS) that are at risk subregionally; SSS at risk by landscape unit)? Do the terrain, harvest history productivity profile, and/or geographic location affect layout of reserves? What key spatial information layers are needed for effective reserve design? Are there gaps and hence priorities for developing specific information layers? Does the quality of the data affect reserve design choices? If so, how? 	<p>Jody Holmes, Shannon Janzen, Bill Beese and Chuck Rumsey</p> <p>Presentations and Expert Panel discussion (approx 1.5 hrs)</p> <p>Questions from participants (20 min)</p>
12:30 to 1:30	Lunch - Provided	
1:30 to 1:50	<p>Ecosystem Mapping Considerations</p> <p>a. Phillips TEM and SSS mapping exercise presentation (10 minute</p>	

	overview) b. Big BEC presentation (10 minute overview)	Bill Beese Andy MacKinnon
1:50 to 2:45	<i>Discussion:</i> 1. How is it most effective to use site series ecosystem mapping in the absence of a complete coverage of the plan area? a. How well do TEM and SSS line up and what are the implications for planning? How much is this related to the scale/quality of BEC? b. Is it possible to use TEM to define rarity classes and meet representation targets in the absence of comprehensive TEM? c. Is it appropriate to group SSS or site series? If so, how?	Expert panel discussion (30 min) Questions from participants (15 min)
2:45 to 3:00	Coffee Break	
3:00 to 3:30	Decision Support <ul style="list-style-type: none"> Discussion of existing decision support tools that could be used to support decision making on spatial design of reserves 	Shannon Janzen/Jody Holmes Expert panel discussion (20 min) Questions from participants (10 min)
3:30 to 4:00	Converted and/or Deciduous SSS <ul style="list-style-type: none"> Presentation – map and summary of key issues <i>Discussion:</i> 1. What, if any, specific considerations should apply to ecosystem representation in deciduous site series surrogates? a. Should there be a representation target for deciduous ecosystems? b. How should we deal with “converted” SSS (deciduous-leading sites that have been converted from conifer-leading old forests that require representation)?	Jody Holmes Expert panel discussion (8 min) Questions from participants (2 min)
4:00 to 5:00	Wrap-up 1. Summarize and confirm recommendations 2. Key questions emerging from the workshop 3. Next steps	Facilitator – Shawn Morford and workshop organizers