# **EBMWG Project Close-Out Report**

Project #: El 06

Project Title: Ecosystems of Central and North Coast and South Central Coast BC

Steering Committee Members: Andy MacKinnon, Audrey Roburn, and Sally Leigh-Spencer

# 1.0 FUNDING

The total cost of the project is \$25,000. The project will be completed within budget.

# 2.0 EXTENT TO WHICH PROJECT OBJECTIVES WERE ACHIEVED

Obj	ective	Description	Evaluation (Text)	Summary*
1		d biogeoclimatic unit maps for I Coast BC, posted on eb.	One set of revisions were completed including refinement and application of spatial rule polygons at the sub-regional scale. Further revisions cannot be completed this fiscal year due to unanticipated issues with mapping cold air drainage and other valley pinchings. Maps provided are not final and will not be incorporated into the provincial database in current form. Final map revisions will be completed over the summer, and release for public use is anticipated to be Oct 2009 with the official release of BEC8.	Substantially met (to be fully met by October)
2	contair	ed BECMaster database ning all new ecosystem cation plot data.	A site unit table consists of a listing of plot number (within the provincial BECMaster database) is provided as an appendix in the report. The full database may be accessed through an official request to the BECMaster or RCO ecologists.	Fully Met
3	and cla	on initial analysis of plot data, assification and description of s and Site Series for Central orth Coast BC.	An annotated description of the steps to develop the final site series classification is provided in the report. Appendices include examples of short and long vegetation tables and ordination plots. The full database, including the current assigned Site Series, is available by an official request to the BECMaster or RCO ecologists. Because the assignment of Site Series classification to be used for final BEC unit descriptions is still in flux, these data do not accompany the current report. Because the data required more cleaning and filtering than initially anticipated, stand tables were not developed.	Substantially met
4		for report on "Ecosystems of I and North Coast BC".	A draft outline for a report on "Ecosystems of Central and North Coast BC" is provided in Appendix 5 of the report.	Fully Met

 $^{\star}$  Use: Fully met (100%), Substantially met (>75%), Partially met (50-75%), Marginally met (25-50%), Not met (0-25%)

# 3.0 MAJOR TASKS COMPLETED

Task	Description	Date
1	Establish new rule polygons and get maps digitized;	February 28, 2009
2	Gather existing TEM maps and reports for Central Coast;	February 28, 2009
3	Check new draft BEC maps and revise as necessary;	Initiated January, 2009; revisions to be completed October 2009
4	Identify and obtain TEM field plots which might be useful in classification;	February 28, 2009
5	Digitize and deliver draft maps;	March 31, 2009
6	Enter 2008 plots into BECMaster as required;	February 28, 2009
7	Ensure that all previous plots for Central and North Coasts are clean and complete and ready for analysis;	February 28, 2009
8	Sort and analyse vegetation data; begin to identify and describe site series; and	March 31, 2009
9	Prepare outline.	March 31, 2009

# 4.0 KEY PRODUCTS

Item #	Description	Completion date	Location
1	Revised, draft biogeoclimatic unit maps for Central Coast: paper maps and ARC GIS files	March, 2009 for Draft October anticipated for final	Finalized maps to be posted October 2009 on the EBM WG website and on BECWeb
2	Updated BECMaster database containing all new ecosystem classification plot data	March, 2009	BECMaster
3	Report on initial analysis of plot data, classification and description of variants and site series for Central and North Coast BC, and Outline for report on "Ecosystems of Central and North Coast BC".	March, 2009	To be posted on the EBM WG website

#### 5.0 PEER REVIEW

The project workplan and preliminary results were reviewed by the Project Steering Committee and circulated to EBM WG members. Revisions to the final biogeoclimatic unit maps for Central Coast were undertaken collaboratively by RCO ecologists MacKinnon, Saunders, and West, BC MFR Research Branch landscape ecologists (Chen and Walton), and Coastal Resource Mapping Ltd. (Nanaimo, BC), with a final verification by Bob Green against his TEM mapping for the region.

#### 6.0 MAJOR FINDINGS & RECOMMENDATIONS

#### 6.1 Revised biogeoclimatic unit maps for the Central Coast

Draft mapping to revise the BEC linework for the Central Coast was completed under this project. These maps require further revisions to account for unanticipated issues with mapping cold air drainage and other valley pinchings. These map revisions will be completed as part of the El-06 project, with final maps made available for public use in October, 2009.

### 6.2 Updated Access database containing all CNCSCC ecoplots (BEC Master files)

Detailed examination of the plots in the Central Coast Forest Region's BEC database revealed that data pertinent to classification were not collected consistently. An assessment of the quality and utility of each plot data was undertaken and corrections were made where possible. Unsuitable data was removed based on a list of plot selection criteria.

Analytical tools and techniques applied in ecosystem classification include short vegetation summaries, prominence bar tables, long vegetation reports, ordination, combined species tables, and edatopic grids.

Because the assignment of Site Series classification to plots and membership of plots within the future BEC unit database is still in flux, these data do not accompany the project report and should not be considered final.

#### **Recommended Next Steps**

• Update classification based on further vegetation description and correlative sitesoil-vegetation analysis.

#### 6.3 Stand Tables for Site Series

Mensuration data are available for a portion of the plots within the working database. These data are primarily from the 2008 field season and some historical thesis information. Standardized cruise compilation summaries have not yet been completed.

### **Recommended Next Steps**

• Complete standardized cruise compilation summaries for new ecoplot data

## 6.4 Final Report

The Ecosystems of Central and North Coast and South Central Coast of BC final report will be further developed upon completion of additional analysis. Development of written materials to accompany numerical analysis is underway along with consideration of specific sub-regional illustrations and figures (e.g., new landscape cross sections, photographic illustrations, new BEC flowchart, and classification approach materials).

### **Recommended Next Steps**

- Update report upon completion of further database analysis
- Coordinate external peer review of methods and revisions
- Complete written materials and sub-regional illustrations and figures to accompany numerical analysis

# 6.5 Informing reserve design

The updated maps will be useful in detailed reserve design. The updated BEC lines are expected to result in very small changes to the SSS dataset. Upon completion of this project in October 2009, updated BEC subzone/variant maps will be available for the entire area covered by both coastal Land Use Orders except for the very southern portion of the South Central Coast<sup>1</sup>.

## Next steps as part of El-06:

 The final BEC maps, to be made available in October 2009, will be circulated with a summary of changes to inform planners working with the SSS dataset of where the new BEC maps might influence their work.

### 7.0 LRF TECHNICAL LIAISON COMMITTEE RECOMMENDATIONS

The LRF Technical Committee recommends that following completion of this EBMWG project (which includes posting the final maps by October 31<sup>st</sup>, 2009), the remaining steps to complete final biogeoclimatic database updates and map revisions, and development of a final report on the Ecosystems of Central and North Coast and South Central Coast of BC, as noted in Section 6 above, should be resourced and undertaken.

## 8.0 RELEVANCE/SIGNIFICANCE FOR EBM IMPLEMENTATION

This project contributed to the larger task of revising the current biogeoclimatic mapping and classification in the Central Coast and North Coast (separate resources were required for other components of the project, such as helicopter work). This updated mapping and classification will facilitate ecosystem-based management by allowing managers to utilize the best and most up-to-date information pertaining to coastal ecosystems. Describing ecosystems at a sub-regional scale (rather than using the traditional regional approach) allows for more local detail to be explored and emphasized in biogeoclimatic unit descriptions.

<sup>&</sup>lt;sup>1</sup> The North Coast BEC maps were updated previously.

Accurate ecosystem maps will ensure forest tenure holders and spatial reserve design teams plan site and landscape level reserve designs that meet ecosystem representation targets identified in the South Central Coast and Central and North Coast Land Use Objectives. Over time, the updated BEC database and map will serve as an invaluable reference to inform and track EBM implementation.