

<b>Project Name</b>	<b>Focal species habitat mapping</b>
<b>Program Area</b>	<b>Ecological Integrity</b>
<b>Element</b>	<b>Ecosystem Data and Mapping</b>
<b>Project No.</b>	<b>EI02a (formerly DS03)</b>
<b>Related Projects</b>	<b>AM 02, AM 03, EI02b, EI03, DS04</b>
<b>Start Date</b>	<b>April 2008</b>
<b>Completion Date</b>	<b>March 2009 (2<sup>nd</sup> year of 2 year project)</b>

### **Overview**

Spatial identification of focal species habitats is one of the key building-blocks for implementation of EBM. Both the South Central Coast Order (July 27, 2007) and the Central and North Coast Order (December 19, 2007) contain specific direction to include, to the extent practicable, habitat elements for species at risk, ungulate winter range, regionally important wildlife including: mountain goats, grizzly bears, northern goshawks, tailed frogs and marbled murrelets within old forest retention areas. This approach is intended to reduce timber impacts while maximising the benefits of old forest reserves and is thus key to both the human well being and ecological integrity aspects of EBM.

Prior to the initiation of this project in 2007, focal species habitat identification was largely model-based with spotty field verification. These models are largely untested and use base information of questionable accuracy, particularly when applied to focal species habitat identification and mapping.

In 2007, the EBM Working Group provided 100K of funding for year 1 of this 2 year project. 56.5K of these funds were used to complete marbled murrelet air photo interpretation to classify habitats according to their physical structure. This work has been completed across >40 Landscape Units to date (work is ongoing). 44.5 K have been allocated to the identification of critical seasonal habitats for grizzly bears in the North Coast plan area – this work has recently been initiated and is expected to continue through 2008. There is no comprehensive habitat assessments exist for grizzly bears in the North Coast; this information is critical to implement the grizzly bear provisions of the Central and North coast Order. It should be noted that Regional Ministry of Environment FIA funds have been re-allocated to this project subsequent to receipt of the EBM Working Group funding, for a total of over 200K dedicated to this project to date.

Given the very large landbase and extensive data gaps that exist in the North and Central Coast Plan areas, additional funding is needed to complete focal species habitat work. It is imperative that this focal species habitat mapping project be continued in the Central and North Coast, to ensure that old forest retention areas are designed to maximise overlap with focal species habitats (“co-location”).

An additional 100K of funding from the EBM Working Group is required to continue the work already started under this project to obtain as broad geographic coverage of focal species information as possible to guide old growth reserve placement and to support adaptive management and risk assessment projects being undertaken by the EBM Working Group.

This project proposal is intended to address priority focal species inventory gaps to provide the basis for spatially-defined habitat protection measures as a key building-block of EBM. Since only 1 field season remains available for conducting field inventories prior to the March 2009 deadline for “full implementation of EBM”, and over 200K of total funding has been allocated to this project to date (EBM Working Group and government FIA allocations) this project is a very high priority for funding.

### **Objectives**

To complete focal species inventories to support species-specific habitat protection measures and to maximize co-location of coarse filter reserves for old growth representivity in the North and Central Coast plan areas. In 2008, the project will continue the assessment/ identification of critical grizzly bear habitats in the North Coast. Air photo interpretation protocol (APIP) will be applied for marbled murrelets in the Central and North Coast to pursue a seamless layer of information for this species across the plan areas (note this will be done via the BCCF Grant that has been facilitated by receipt of EBMWG funding).

Supplemental inventories will also be conducted for other focal species including northern goshawk and tailed frogs, dependent on available resources/funding. Attempts will be made to utilise resources from the Ministry of Environment FIA allocation, other agency funding opportunities and will capitalise on field crews available through the BC Conservation Corps.

Project outcomes will be available to refine existing modelling approaches and support co-location of coarse filter biodiversity reserves.

The resulting upgrades to focal species habitat information will enable development of base case information for focal species risk assessment (project EI02b) and adaptive management efforts (AM02, AM03, DS04). The results will also inform socio-economic and human well-being assessments by providing more detailed spatially defined areas required for the protection of focal wildlife species in the plan areas.

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

Funding this project will increase the geographic coverage of focal species habitat data, enable credible comparisons to be made between plan areas and support Detailed Strategic Planning.

Further spatial coverage of focal species inventory to guide fine-filter habitat protection measures and help guide co-location of coarse filter biodiversity elements, in keeping with ecosystem-based management principles. Project outcomes will enable comparison with existing modelling approaches, facilitating refinement of models for future application to help guide the recovery strategies by providing more accurate estimates of suitable focal species habitat. This will ensure that decisions regarding spatial reserve locations are based on accurate information, maximising benefits to focal species while reducing socio-economic impacts co-location of coarse filter and fine-filter reserve elements to the extent possible. The project outcomes will be directly relevant to both the Detailed Strategic Planning (DSP) process and to landscape unit/ old growth management area or New Direction Strategic Land Use planning.

### **Key Tasks**

*(NB: actual extent of tasks to be completed will be dependent on ability to secure funding supplemental to those provided by the EBM WG. MOE will develop a detailed workplan once funding amounts are confirmed).*

To be executed by the Ministry of Environment:

- Contract administration
- Prioritisation of inventory efforts according to gap analysis (Janz 2007) and results of 2007 habitat mapping project.
- Provide local knowledge and expertise to contractor(s)
- Collation of existing resource information relevant to the project
- Assist contractor(s) in stratification of study areas
- Participate in field surveys
- Provide editorial input on draft reports

To be executed by contractor(s):

- Coordinate and conduct habitat inventories for focal species identified in the North and Central Coast plan areas, according to inventory gaps identified by MOE Regional staff.
- Identify key areas for habitat inventory priority by focal species in consultation with regional MOE staff and considering available resource information (i.e. air photos, TEM mapping, etc.)
- Develop criteria for stratification of inventory efforts, including but not limited to: environmental risk, land status, development pressures, status of species inventory in plan areas, overlap with current Detailed Strategic Planning efforts and ability to support decision making in a timely fashion.
- Ensure inventory methods employed are consistent with accepted methodologies, according to focal species habitat being assessed.

- Develop a map of key habitats for focal species in support of Wildlife Habitat Area delineation and placement of coarse filter reserves under EBM.
- Provide recommendations for refinement of existing habitat models to guide future focal species habitat identification and prioritisation

### **Scope Considerations**

- Given the geographic scope of the project and the extensive data gaps the need for supplemental funding in addition to the 100K received from the EBM WG in 2007 was identified in the original project description.
- Funds from the EBM Working Group will be used to leverage funding from other sources including MOE FIA allocations (up to \$100K will be provided as matching funding), Regional MOE base budgets (including MOE staff time provided as “in kind” project support).
- Forest licensees (Western Forest Products and International Forest Products) are also being approached to supplement the project from their FIA allocations. Discussions are ongoing with forest licensees in the plan area to ensure coordination of inventory activities. The project scope will be refined according to the amount of funding received.

### **Deliverable(s) and/or Milestones**

April 2008: Identify contractors, data gaps, available resources to stratify inventories

May 2008: select contractor(s), identify areas to be inventoried

June – Sept. 2008: conduct first field season inventories in selected areas according to risk and species priority

Oct-Nov. 2008: assess results of inventories and implications to modelling approaches

Dec. 2008: submission of draft report for review.

March 2009: final report for Phase 2 due\*.

\*Note: spatial data will be provided to projects and Detailed Strategic Planning tables as it becomes available on a Landscape Unit by Landscape Unit basis. This will ensure that the latest focal species habitat information is used to guide co-location decisions.

### Deliverables:

- Spatially defined habitat inventory for key focal species within the plan areas in support of fine-filter components of EBM.
- Report(s) outlining suggested refinements to existing modelling approaches to enable future socio-economic and environmental analyses

### **Responsibilities**

This project will be lead by the EI02 sub committee of the EBM Working Group. Project management (including contract administration and technical work) will be delegated to the Ministry of Environment technical staff, lead by Steve Gordon. Project outcomes

will be reported back to the EBM Working Group through the EI02 Sub Committee and to the full EBM Working Group on request.

**Linkages to other EBM Projects or Initiatives**

- AM03 (project will supplement limited existing focal species information, thereby assisting in development of credible ecological baseline for AM)
- AM04 (this project will provide baseline information related to focal species in the plan areas, thereby supporting future adaptive management efforts)
- EI02b (will enable assessment of the degree to which existing protection areas provide for focal species habitat, informing risk assessment. Will also guide placement of landscape level biodiversity reserves)
- EI05 (outcomes will provide baseline for comparison of the availability/ condition of key habitats for focal species through time)

**Expected Method of Implementation**

Seed funds to work in conjunction with existing research projects

- Contract: RFP
- Expert Panel / Workshop
- Internal EBMWG Task
- Other: Ministry of Environment

**Budget**

Item	Budget	Source
EBM working group (2nd year project funding @ \$100,000 per year)	\$100,000	EBM Working Group
MOE FIA allocation (subject to receipt of EBMWG funding) 2 years X \$100,000/year	\$100,000	MOE
Forest Licensee FIA (unconfirmed) – 2 years @ \$50,000 – \$100,000 per year	\$50-100,000	WFP/ IFP