



Request for Proposals MaPP GIS and Marxan Consultants August 20 2012

Purpose

The British Columbia Marine Conservation Analysis (BCMCA) is requesting qualified consultants to respond to this request for proposal for GIS and Marxan analyses. The selected consultant(s) will complete a series of Marxan analyses in support of marine planning for the North Pacific Coast

Project Background

The BCMCA is a collaborative project assembling and analyzing spatial information about Canada's Pacific Ocean. The goal of this phase of the BCMCA project is to ensure that the integrated marine management and marine spatial planning processes in British Columbia understand and have access to the expert-driven and peer-reviewed BCMCA products. These products are publicly available to encourage discussion and debate about ocean use and marine conservation throughout B.C. More information regarding the BCMCA is available on the project website <http://www.bcmca.ca>.

Project Goals

The objective of the project is to complete a series of Marxan analyses for the MaPP study area. Marxan scenarios will focus on identification of areas of high conservation value consistent with the approach used by the BCMCA for the Marxan scenarios for Pacific Canada. Marxan analysis will employ data from the [BCMCA online data library](#) and additional data provided by marine planning partners.

Qualifications

The consultants should have demonstrated professional experiences, knowledge and abilities as follows:

- Experience
 - experience working with marine planning processes,
 - demonstrated experience running Marxan scenarios,
 - experience implementing GIS applications in support of resource management and marine planning,
 - experience working with ESRI software, specifically ArcGIS 10 and extensions,
 - experience preparing data for Marxan analysis, undertaking analysis and generating tabular and graphic outputs,
 - experience managing, editing, and combining disparate geospatial datasets and documenting issues associated with varying scale, quality, collection methodology, attributes, etc, and
 - experience generating a variety of digital products including quality thematic maps, and related graphs and charts using digital mapping techniques,
- Knowledge

- knowledge of GIS, spatial and tabular data models, database management and cartography principles;
 - knowledge of current trends and technical developments in the fields of marine-based resource management,
 - knowledge of FGDC and ISO 19115 metadata standards for geospatial datasets; and
 - knowledge of Marxan best practices, including those published by [PacMARA](#);
- Demonstrated Abilities
 - ability to prepare data for processing in Marxan, using predefined spatial planning units,
 - ability to calibrate Marxan analytical runs,
 - ability to adjust feature targets to generate varying scenarios,
 - ability to do standard statistical calculations using GIS applications,
 - ability to create, structure and manipulate spatial and attribute databases including geodatabases,
 - ability to create and maintain metadata and adhere to FGDC operating principles and data management (metadata) practices and standards,
 - ability to use ArcGIS applications to produce spatial products including maps, tables and descriptive statistics,
 - ability to produce graphic outputs of Marxan results suitable for hard copy and online publication,
 - ability to communicate technical issues effectively to technical and non-technical audiences,
 - ability to accept data via e-mail, FTP and portable storage devices,
 - ability of the contractor to be available by telephone, fax and e-mail, and
 - contractors should also have access to standard office automation tools, their own office and GIS software.

Proposed Tasks & Timeframe

The project is intended to commence in September 2012 with a final completion date of December 31 2012. Several meetings will be scheduled at key points in the work process to confirm work plans, progress towards completion, review of preliminary products, etc. These dates will be confirmed upon further discussion with the successful consultant and the BCMCA. The meetings may take place via telephone, Skype, conference call, email, etc.

The table below describes the anticipated tasks and a proposed timeline.

No.	Task	When
1	Ecological Data Review - Review BCMCA ecological datasets and identify any additional ecological datasets in collaboration with marine planning partners in North Coast BC	September
2	MaPP Data - Review, correct and incorporate any new data sets identified by marine planning partners into BCMCA planning units	September
3	Targets - Review BCMCA feature targets and determine appropriate range of feature targets for ecological runs for the MaPP study area, in collaboration with marine planning partners in North Coast BC	September
4	Calibration - Calibration for ecological runs	September
5	Scenarios 1 - Run first Marxan ecological scenarios with various feature targets (six different scenarios 3 target levels X 2 BLM)	September - October
6	Graphic Output 1 - Produce graphic outputs of Marxan results	October
7	Identify Areas - Identify areas that already contribute towards marine conservation objectives	September
8	Scenarios 2 - Run Marxan scenarios to determine how existing marine protected areas contribute towards achieving feature targets (six different scenarios 3 target levels X 2 BLM)	October 30
9	Identify Additional Scenarios - If time permits, identify additional Marxan scenarios in support of marine planning partners in North Coast BC	September – December
10	Scenarios 3 - If time permits run additional Marxan scenarios in support of marine planning partners in North Coast BC	November – December 31 2012
11	Graphic Outputs 2 and 3 - Produce graphic outputs of additional Marxan scenario results	November – December 31 2012

Terms

Proposals should include a fixed, all inclusive price for services described in this request for proposals. Payment will be to a maximum of \$15,000 including applicable taxes.

Payment schedules will be tied to the completion of the eleven tasks outlined above. A 10% holdback will be assessed against all payments and released upon the successful completion of all tasks. There will be a 5% penalty deducted from the specific milestone/deliverable fee for any overdue work after a week and 25% after a month.

Delayed delivery as a result of failure by BCMCA or partners to provide necessary data, information or direction in a timely fashion to the consultant will not result in penalty to the consultant, as long as delays have been appropriately tracked and the BCMCA Project Manager team has given approval for the delay in writing . All changes to the project after it is initiated (e.g., costs, timelines, deliverables) will need to be requested in writing to the BCMCA and approved by BCMCA Project Manager.

BCMCA is a project of Tides Canada Initiative. All materials belong to BCMCA, including any new products derived by the contractor in the course of completing the contracted tasks.

Proposal Submission

Please submit a cover letter, curriculum vitae and a proposed project work plan that includes identified timelines, tasks and a budget breakdown on or before Friday **September 14 , 2012.**

Please submit your proposal by email to: Gillian Saxby, BCMCA Project Manager, Phone: 250-335-1616, Email: gsaxby@bcmca.ca.

All enquiries related to this request for proposal are to be directed to Gillian Saxby, Project Manager.

Evaluation Criteria

The proposals will be evaluated based on the following criteria:

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| • Demonstrated GIS and Marxan experience | 40% |
| • Related marine experience | 20% |
| • Price | 20% |
| • Availability | 10% |