BRITISH COLUMBIA
MARINE CONSERVATION ANALYSIS

BC MARINE CONSERVATION ANALYSIS PROJECT TEAM TERMS OF REFERENCE VERSION 10 - MAY 2009

1. PURPOSE

This document is a working Terms of Reference for the BC Marine Conservation Analysis (BCMCA) Project Team. The Project Team's purpose is to develop, coordinate, and implement the BCMCA in a way that is collaborative, inclusive, and transparent. The Project Team is made up of representatives from the Federal Government, Provincial Government, First Nations, environmental non-governmental organizations, user groups, and academia. This document outlines the Project Team's guiding principles and objectives, structure, responsibilities, decision-making arrangement, and communications procedures.

The Terms of Reference is a "living document" that can be updated by the Project Team as the project proceeds. It also includes a provision for modifying and/or expanding on the Project Team's Terms of Reference, subject to consensus agreement by the Project Team.

2. PROJECT GOAL AND PRODUCTS

The overall purpose of the BCMCA project is to collaboratively identify marine areas of high conservation value and areas important to human use in Canada's Pacific Ocean. There are several marine planning initiatives underway or in preparatory stages in BC. The BCMCA project does not seek to replace these processes. Rather, results of the project are intended to inform and help advance marine planning initiatives in BC by providing collaborative, peer-reviewed scientific analyses based on the best available ecological and human use spatial data at scales relevant to a BC coast-wide analysis.

The BCMCA project will generate two main products: (1) an atlas of known ecological values and human uses; and (2) Marxan analyses. The results of the BCMCA project are intended to help advance marine planning initiatives in BC by identifying areas of high conservation value.

The BCMCA project will use an iterative approach to develop its two products.

Product 1: Atlas of known ecological values and human uses

The atlas will show all the data used in the analysis and will include:

1. Maps of all known and available ecological data layers, such as species distributions and habitats.
2. A richness map of ecological features (combined ecological data).
3. Maps of all known and available human use data layers.
4. A richness map of human use components (combined human data).
5. A map showing both ecological and human use components.

Product 2: Marxan analyses

The Marxan analyses will use the data from Product 1 to:

1. Identify areas of high conservation value (using ecological data only).
2. Identify areas of high conservation value that minimize overlap with areas important to human use (using ecological and human use data).
3. Identify areas of high conservation value by incorporating additional marine reserve design principles to be determined by the Project Team prior to conducting the analysis (for example, maximizing connectivity, minimizing edge to area ratio).

Each Project Team member reserves the right to reconsider their involvement in the project at any time.

3. STUDY AREA

The BCMCA study area will comprise all of British Columbia's marine waters to the extents of Canada's Exclusive Economic Zone (0-200nm), including the North Coast, Central Coast, Haida Gwaii, the Strait of Georgia and the West Coast of Vancouver Island.

4. PRINCIPLES

To achieve the project goal, the Project Team and staff will adhere to these principles:

- Use the best available knowledge and information to inform project design and implementation, including the latest in marine conservation planning theory for specific Marxan scenarios;
- Assemble and use the best available biological, ecological, oceanographic, and human use data to inform the atlas and analysis;
- Comprehensively and transparently reflect the accuracy, scale and completeness of the data;
- Draw on the knowledge and expertise of governments (federal, provincial and First Nations), other resource managers, user groups, the conservation community, academics, and other scientists to develop sound, scientifically defensible methods and products;
- Utilize methods which are transparent in their application;
- Incorporate ecological and human use objectives in the analysis and balance these in a range of scenarios and options;
- Work cooperatively to achieve project goals;
- Create products which are widely supported by partner organizations.

5. MARXAN ANALYSIS OBJECTIVES

Six objectives and principles guide the development of Marxan analyses:

1. Represent the diversity of BC's marine ecosystems across their natural range of variation;
2. Maintain viable populations of native species;
3. Sustain ecological and evolutionary processes within an acceptable range of variability;
4. Build a conservation network that is resilient to environmental change;
5. Identify options that minimise impacts and maximise benefits to marine users while still meeting conservation objectives;
6. Consider a variety of conservation scenarios and options.

6. ROLES AND RESPONSIBILITIES

The roles and responsibilities of the Project Team are to:

- Develop a Terms of Reference for the BCMCA Project (including protocols for communication and data sharing);
- Provide guidance and advice on project-scale decisions;
- Provide direction to BCMCA project staff;
- Coordinate the planning and implementation of the BCMCA project;
- Facilitate communication within and between sector groups;
- Work cooperatively with the sub-teams, including the Human Use Data Working Group (see below), incorporating their advice and recommendations wherever possible while respecting the goals, intended products, principles, budget, and timelines of the BCMCA;
- Organize, prepare, and lead Expert Subcommittee Workshops;
- Monitor the progress towards achievement of project goals and objectives; and
- Ensure quality of work involved in all project deliverables.

Each member of the Project Team will be responsible for:

- Disseminating information on the BCMCA project to their own sector networks;
- Consulting and liaising with their sectors on project related issues;
- Ensuring that the alternatives, recommendations and advice proposed during the meetings of the Project Team are acceptable to their respective constituencies; and
- Communicating their sector's questions and issues to the Project Team.

7. STRUCTURE

7.1 Membership

7.1.1 Project Team Member

Project Team members have been invited to join the Project Team to represent a sector of interest (also called a constituent group). Sectors of interest have been formed for the purposes of streamlining and organizing discussions on interests, issues, and possible options, while ensuring representation of the diverse expertise among sectors with an interest in ocean resources, planning, and management. The Project Team reflects these sectors of interest, with representatives from the Federal Government, Provincial Government, environmental non-government organizations, user groups, and academia (see Appendix 1). Each member of the Project Team will serve as a liaison between the Project Team and the sector they represent. For example, the Federal Government representatives will represent all federal agencies with a marine conservation mandate. User group representatives will be drawn from the Human Use Data Working Group, with the support of that group (see below).

7.1.2 Alternate Project Team Member

Project Team members can identify an alternate representative for their constituent group. Alternate members are encouraged to be knowledgeable in the project and, at the request of the Project Team member, can be directly included in correspondence. Alternates are welcome to observe regularly scheduled meetings, subject to availability of meeting resources.

7.1.3 Project Team Observer

An observer has been invited to the Project Team to represent a constituent group. Observers are invited to speak, question, and participate fully in Project Team meetings. However,

observers can choose whether or not to be part of a decision. If they choose to be part of a decision they agree to follow the decision making procedures. Where observers choose not to attend meetings or participate in decisions, the Project Team will make the decisions necessary to move the project forward in their absence. Observers self-designate themselves as such and are recognized as observers on the BCMCA website and relevant correspondence.

7.1.4 BCMCA staff and contractors

The BCMCA also has project staff and contractors that work with the Project Team, Human Use Data Working Group, and Expert Subcommittees (see below). The Project Team oversees and directs staff and contractor work. Staff organize, attend, and provide support for Project Team and Human Use Data Working Group meetings, and help implement their decisions. Staff ensure that the procedures outlined in these terms of reference are followed.

7.2 Project Team Meetings

1. Scheduling: Project Team meetings will be held on a monthly basis by teleconference, with quarterly in-person meetings. Additional meetings may be scheduled to address specific issues as required. Meetings will be scheduled and located to minimize travel time and expense to all participants.

2. Support: For each meeting, BCMCA staff will develop agendas and compile minutes. Minutes will include topics discussed, recommendations on issues, agenda items for future meetings, tasks to be accomplished prior to the next meeting, and decisions made. Minutes will be distributed to members of the Project Team, alternates and others interested in the development of the project.

3. Attendance: In the interests of efficiency and continuity, attendance at all meetings is desirable. If a member of the Project Team is unable to attend a meeting an alternate should attend on their behalf. Alternates are welcome to observe regularly scheduled meetings, subject to availability of meeting resources. If both a Project Team member and their alternate attend the same meeting, they must declare who the acting representative is at the start of the meeting.

7.3 Decision-Making

The Project Team will work cooperatively to advance the project and will strive to obtain consensus on all decisions (see Appendix 2). Consensus is achieved when all Project Team members are willing to accept a decision, even if some members might have a different preference. In reaching a decision, all Project Team members should feel that their positions on the matter have been fully understood and given due consideration. Project Team members will ensure that dialogue around decisions is framed by the project's principles and objectives. Objections to decisions will likewise be rooted in these principles and objectives.

The Project Team will attempt to address the different interests of its members by developing a range of scenarios for the analysis component of the project.

Where consensus cannot be reached, mediation can be used to help resolve disagreements. Mediation is a multi-step process wherein disagreeing parties:

1. Document the issue where simple consensus is not possible;
2. Detail the decision components;
3. Identify aspects at the root of the disagreement;
4. Identify the positions of those parties not on side for specific aspects, and their preferred solution;

5. Invite a neutral facilitator to bring disagreeing parties together for dialogue to close the gaps; and
6. Reach a new approach that they then present to the rest of the Project Team.

If mediation cannot resolve disagreements, the Project Team will move to an arbitration procedure. The arbitrator would review the positions of the disputing parties and choose one of the two positions or craft a third alternative. The Project Team will identify a list of arbitrators acceptable to everybody. The selection of an arbitrator to solve a given dispute will be made by the Project Team and everyone must express confidence in selections. If several potential arbitrators are identified, selection of one arbitrator for a given dispute would be based on arbitrator availability and any additional criteria agreed to by the Project Team. Alternatively the Project Team could agree to a panel of 2 or 3 identified arbitrators who are involved in the final decision. The Project Team is obligated to accept the arbitrator's decision.

The process of resolving a dispute through mediation and/or hand off to the arbitrator will be completed within the one month meeting cycle. For example, a dispute in a Project Team meeting will be resolved by the next Project Team meeting. Parties in dispute will have 10 working days to reach a resolution through mediation, and 10 days to hand off to arbitration. Where a party does not attend associated meetings or submit associated work within the timeline for mediation, the issue will move to arbitration. Where a party does not attend associated meetings or submit associated work within the timeline for arbitration, the arbitrator will decide based on the information he/she has available.

It is understood that members of the Project Team may take recommendations back to their constituencies or to a higher decision-making authority for approval where appropriate. Decisions that have been made can only be revisited when all members agree to revisiting them.

7.4 Sub-teams

7.4.1 Human Use Data Working Group

The Human Use Data Working Group is a committee of user group representatives convened by the Project Team as a means of soliciting input from each of the six human use sectors identified by the BCMCA. These sectors are: commercial fisheries, recreational fisheries, shipping and marine transportation, marine and foreshore tenures, recreation and tourism, and energy. Two seats are available on the Working Group for each sector.

The Working Group will provide recommendations and advice to the Project Team on the human use component of the BCMCA. The Project Team will incorporate their advice and recommendations wherever possible while respecting the goals, intended products, principles, budget, and timelines of the BCMCA.

The Working Group is lead by an independent facilitator. Two members of the Working Group also participate on the Project Team, with the support of other Working Group members. A third seat is available on a provisional basis for instances where other Working Group members have an interest in specific Project Team agenda items. Priority for the provisional third seat will be given to sectors not represented by the two Working Group members already on the Project Team.

Further details of the Working Group's responsibilities and structure are described in its Terms of Reference.

7.4.2 Ecological Expert Subcommittees

Six Expert Subcommittees are requested to review and advise on the development of the ecological atlas and analytical components of the BCMCA. These Expert Subcommittees are:

(1) Seabirds;
(2) Marine Plants;
(3) Marine Mammals;
(4) Marine and Anadromous Fish;
(5) Marine Invertebrates;
(6) Physical Marine Representation;

All Expert Subcommittees, excluding Physical Marine Representation, will meet for a one day workshop. During the workshops, specific recommendations for features to include in the analysis, data sources, data processing requirements, and conservation targets will be developed by the experts. Specific to the Physical Marine Representation report, the Project Team will draft a proposal for independent review and comment. Once the proposal has been reviewed, comments and concerns will be incorporated into the document and posted on the website. The BCMCA Project Team will consider and work towards the recommendations of the subcommittees when compiling data for the atlas and performing each step in the analysis.

The BCMCA will seek further peer review of the workshop reports, including a minimum of one reviewer from BC and one reviewer external to BC. The intent of this peer review is for experts not previously associated with the BCMCA to consider the content of the reports (features identified, data sources for the features and target ranges proposed for each feature). The BCMCA will also seek review, by data providers and experts who attended the workshops or reviewed the workshop reports, of the compiled data and associated metadata collected to inform each of the features identified in the workshop reports. Review comments will be made public but may not necessarily be acted upon by the BCMCA.

7.4.3 Marxan Subcommittee

The BCMCA also plan to co-host a Marxan expert workshop with the Pacific Marine Analysis and Research Association (PacMARA) to obtain expert guidance on proper and robust use of Marxan specific to the BCMCA. The BCMCA plans to complete Marxan test runs with data available at the time of the workshop in order to refine the questions posed to workshop participants and solicit feedback on recommended calibrations. The BCMCA will consider and work towards the recommendations from the Marxan workshop when compiling data for the atlas and performing the analyses.

Where feasible, the BCMCA will also act on the recommendations of the Marxan Best Practices Workshop which was hosted by PacMARA in April, 2007. The BCMCA will serve as one of several Marxan best practices cases studies.

7.4.4 Other Subcommittees

The Project Team may add and dissolve additional subcommittees as necessary throughout the project.

8. CODE OF CONDUCT

Participation in the BCMCA Project Team entails responsibilities for each member - to their sector's interests, the broader public, the Working Group, the Project Team itself, and the BCMCA project. To ensure that Project Team interactions are effective and efficient, a code of conduct is outlined. Project Team members should:

- Demonstrate a commitment to the Project Team by working cooperatively and in good faith to move the BCMCA towards its goals and products, respecting the principles and objectives described above;
- Demonstrate a commitment to the Project Team by planning for the continuity of their membership in the group until the end of the BCMCA project (fall 2009);
- Demonstrate respect for other members by: (1) respecting their values and interests, (2) avoiding inflammatory language, (3) listening to others without interrupting, and (4) being punctual;
- Ensure honest and open communication and the timely sharing of information or concerns relevant to the Project Team and BCMCA;
- Ensure appropriate communication with external audiences that: (1) accurately describes the BCMCA and the Project Team and (2) is consistent with the BCMCA strategy and Terms of Reference;
- Ensure accountability to the interests of their sector and the Project Team by: (1) attempting to fulfill all of the responsibilities outlined in these Terms of Reference, (2) communicating the Project Team's progress to these and other audiences, and (3) communicating their sectors issues and information to the Project Team and Working Group.

9. COMMUNICATIONS

The BCMCA Project Team Communications Procedures document provides a detailed description of communications protocols, including communications objectives, key messages, and procedures for the Project Team's internal and external communications. The procedures stipulate that the Project Team will not circulate any communications materials to external audiences until all Project Team members have had an opportunity to review and approve their content. The standard period for this review is 5 working days. Where the Project Team identifies a need to consult within their organizations prior to a particular decision, the review period will be lengthened to accommodate this. The Project Team will also develop a communications strategy to accompany the BCMCA's products. The communications strategy will articulate how products will be communicated within member organizations and to external audiences.

All BCMCA products (atlas, Marxan scenarios), will be accompanied by documentation describing the process used to generate them.

10. DATA STORAGE AND SHARING

The following is the data sharing protocol for the BCMCA project:

(1) Living Oceans Society will store the data on a BCMCA computer and act as custodians of the working data until a final BCMCA data repository is established.
(2) The original data holders will remain custodians of the source data.
(3) When a dataset is requested or offered, the Project Team will ask the data provider to grant full access to the data in raw format to all project partners for exclusive use in the BCMCA project..Raw data, processed data, and Marxan input files will be shared in accordance with any restrictions outlined by data providers in data sharing agreements. Any of the assembled data shared among Project Team members will be used for purposes agreed to by the Project Team.
(4) The Project Team will process and summarize data, and offer combined datasets and processed data back to original custodians (upon approval of all original holders of data).

(5) If someone requests raw data from a member of the Project Team, Project Team members will refer the person to the data custodian, unless otherwise directed by the custodian through a data sharing agreement.
(6) The Marxan input and output files will be made available to all project partners throughout the duration of the BCMCA project and following its completion.
(7) Project partners will be permitted to use the Marxan data to run their own analyses upon completion of the BCMCA products, testing, and peer review.

11. AMENDMENTS TO THE TERMS OF REFERENCE

These Terms of Reference can be amended by the Project Team at any meeting when all members of the Project Team agree to the amendment.

APPENDIX 1 - PARTICIPATING ORGANIZATIONS

Project Team Members

British Columbia Integrated Land Management Bureau
Fisheries and Oceans Canada
James Cook University
Living Oceans Society*
Nature Conservancy of Canada*
Parks Canada
Sport Fishing Advisory Board – from Human Use Data Working Group
British Columbia Seafood Alliance – from Human Use Data Working Group
User group representative (rotating seat) - from Human Use Data Working Group

**Organizations that represent a group of 6 non-governmental organizations*

Project Team Observers

British Columbia Oceans and Marine Fisheries Division
Coastal First Nations
Haida Fisheries Program
West Coast Vancouver Island Aquatic Management Board

Human Use Data Working Group

British Columbia Marine Trades Association
British Columbia Salmon Farmers Association
British Columbia Seafood Alliance / Canadian Groundfish Research and Conservation Society
Coast Forest Products Association
Council of Marine Carriers
Herring Conservation and Research Society †
Ocean Renewable Energy Group
Sport Fishing Advisory Board
Shell Canada
Underwater Harvesters Association
Wilderness Tourism Association

†*Alternate member for BC Seafood Alliance/Underwater Harvesters Association*

APPENDIX 2 – CONSENSUS DECISION-MAKING

2.1 Excerpts from: Consensus Decision Making

By Ellis Melton
http://ellis.melton.com/meetings/Consensus.html

Make sure the group understands the nature of consensus. It's usually not everyone's first choice, but it's a decision everyone can live with. If someone can't live with it, it's up to them to make a counterproposal.

Consensus means that every member can say...

1. "I believe that you understand my point of view and that I understand yours;
2. Whether or not I prefer the group decision, I support them because:
    - They were reached fairly and openly;
    - They are the best decisions at this time;
    - We all share in the final decision."

Consensus decision making takes more time and energy. However, most groups find that energy spent on the "front-end" (during the consensus process) results in a far more efficient and effective implementation of the decision later on.

Reaching consensus means...

1. All participants contribute resources. Encourage use of one another's resources and opinions. View different as helpful rather than as a hindrance;
2. Everyone understands the issue;
3. Everyone has a chance to describe their feelings about the issue;
4. All share in the final decision.

2.2 Excerpt from: Using consensus decision-making to increase team effectiveness

By Judith Stein
http://web.mit.edu/hr/oed/learn/teams/art_decisions.html

Now that we know that consensus decision-making is not necessarily unanimous support for a particular decision, it is important to define just what consensus decision-making is. Consensus is achieved when everyone on the team has had ample opportunity to have his or her ideas considered and can fully support the team's decision. Consensus decisions mean that the entire team has come to agreement on a course of action, even if individuals might have a different preference. Consensus decisions often lead to completely new solutions that the team arrives at in the course of its discussion.

In the course of the discussion leading to consensus, individual team members may change their ideas (based on new information or perspectives from their team) or they may decide to defer their individual feelings or needs to those of the team. The key point is that this process is deliberate and fully voluntary on the part of the team member. Positive reasons why individuals modify their positions to support a team's decision include:

1. Agreement with most parts of the proposed decision;
2. A decision to let go of a non-crucial element of their point of view in order to strengthen team alignment on the topic;

3. Understanding that the final decision does not compromise their values;
4. An assessment that the final decision has the best chance for successful implementation because so many members of the team support it.

Reaching consensus can take time, although consensus-based decision-making gets easier with practice. Teams using a consensus-based decision-making model will need to develop good meeting practices to make sure that every individual has an opportunity to participate in the decision-making process. The ability to define the decision topic clearly, and the ability to build agreements and sensitivity to the team's process will all help successful decision-making by consensus.

It is important that the team pay attention to group process so that no team member changes his or her mind because they fear repercussions for disagreement, or they are somehow "bullied" by the team (through hostile remarks or "friendly teasing") into changing their views.

Team members can check for consensus by seeing if each member of the team can agree to the following four statements:

1. I've heard your positions;
2. I believe you've heard my position;
3. The decision does not compromise my values;
4. I can fully support the proposed decision and its implementation.

In good consensus decision-making, every member of the team must feel that they have been listened to and that their ideas have been given a fair assessment.

2.3 Excerpts from "Team Problem Solving"

By Sandy Pokras
These article excerpts are adapted, in part, from materials from Interaction Associates, LLC, Mastering Meetings.

A consensus decision is one which everyone on the team...

1. Sees as a fusion of the information, logic, and feelings expressed;
2. Understands and essentially agrees it represents a common reality;
3. Can live with, go along with, support and accept;
4. Believes is a worthwhile approach in the best interests of the team.