



PacMARA
Pacific Marine Analysis
& Research Association

PacMARA Update to the Ocean Coordination Committee

***From Challenges to Opportunity
From Science to Decisions
From Policy to Actions***

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Agenda

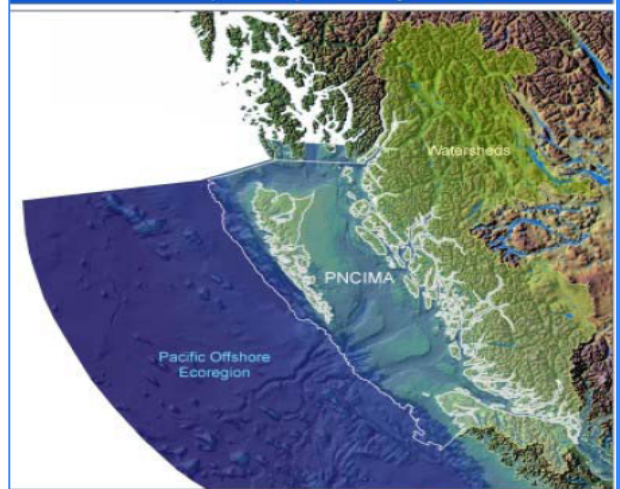
- ▶ **PacMARA Vision, Mission and Goals**
 - ▶ Act as an impartial knowledge broker
 - ▶ Catalyst to build capacity
 - ▶ Nurture a marine community of practice
 - ▶ Help enable the “Operational Marine EBM Framework”
- ▶ **EBM Courses: Increasing Capacity in BC?**
- ▶ **Framing Marine EBM in BC**
 - ▶ The EBM Gaps Program & How you can participate
- ▶ **Questions**

EBM in BC – GBR & PNCIMA

Canada enacted the Oceans Act in 1997

- The Act outlined a new approach to managing oceans and their resources based on the premises that:– oceans must be managed as a collaborative effort amongst all stakeholders that use the oceans, and– new management tools and approaches are required.
- The Act has changed the legislative basis for ocean management
- Managers are now required to consider the impacts of all human activities on Canada's ecosystems in marine resource management plans.

Pacific North Coast Integrated Management Area (PNCIMA) Boundary



2009 the BC Government announced an EBM system for Great Bear

- A combined land use planning area of over 6.4 million hectares, or more than twice the size of Belgium.
- Two million hectares of protected areas are in place, or more than twice the size of Yellowstone National Park.
- \$120 million Coast Opportunity Funds established for preserving the integrity of the Great Bear Rainforest and promoting economic development opportunities for First Nations.
- 114 conservancies have been established across the Central and North Coast planning regions.



PacMARA: Responding to the need

- ◆ Although EBM represented an integrated approach to environmental decision-making and is enabled in Canada under the Ocean's Act, **the need for enhanced multi-stakeholder and cross-sectoral cooperation is evident.**
- ◆ PacMARA arose from a series of workshops in 2003-2004 that brought together scientists, researchers, federal, provincial, and First Nations representatives, and (NGOs) interested in the northwest marine region of coastal British Columbia (now officially known as PNCIMA). **The group recognised a need for cooperation using science-based knowledge as a key to success achieving EBM in BC.**
- ◆ Responding to this need, PacMARA **was formed and began operating in 2003**, quietly providing service to BC's and the international marine science community;
- ◆ PacMARA was formally registered as **a BC not-for-profit society in January 2005.**
- ◆ **Charitable Status** in September of 2009

PacMARA Vision & Mission

- ◆ **Vision: A healthy, vibrant and sustainable marine environment, economy and community on Canada's west coast**
- ◆ **Mission: To be a catalyst & champion in BC's marine community of practice for a collaborative approach to ecosystem-based management. Including, research and analysis, informed decision making, policy development and effective regulation and enforcement in BC's coastal and marine environment.**
 - ◆ **Funded by: A combination of **contracts**, contributions from **government** and **charitable foundations** including the Gordon & Betty Moore Foundation, the Packard Foundation, Tides Canada.**
 - ◆ **Working with MCBI and EBMTools Group.**
 - ◆ **Collaboration with the University of Queensland, Stanford, Duke, Memorial University, UBC, EBM and the University of Victoria.**
 - ◆ **MOU in place with the BC Government.**

PacMARA is Unique

- ◆ PacMARA has grown beyond its “ENGO” roots and its mission is to be "as representative as possible".
- ◆ PacMARA unites people through non-advocacy activity around the common issue "good information and science for effective decision-making"
- ◆ PacMARA can facilitate organization of programs and projects
- ◆ As a society with charitable status PacMARA can attract money from multiple sources in Canada, the US and elsewhere to fund key ecosystem base management projects

- ◆ Similar organizations exist in other places but PacMARA addresses an unfilled niche for BC
- ◆ PacMARA is established and ready for a larger, more public role going forward

PacMARA – Recent Accomplishments

- ◆ Hosted an international 4-day workshop to discuss and address challenges that inhibit the successful use of marine spatial planning tools
- ◆ Published the “Marxan Good Practices Handbook” – the most commonly used marine spatial planning tool
- ◆ Developed an inventory of EBM knowledge & process gaps and remedial actions required to develop EBM plans for BC’s Coast
- ◆ Facilitated the development of a monitoring and research program for the Bowie Seamount Marine Protected Area
- ◆ Working with the BCMCA, co-funded a Marxan best practices workshop, case study and Marxan training.
- ◆ Facilitated discussions regarding development and field-testing of the InVEST (Integrated Valuation of Ecosystem Services and Tradeoffs) tool for application in area-based planning with diverse stakeholders

Current PacMARA Activity: Marine EBM Program

- **The Marine EBM Gaps Program is a series of activities facilitated by PacMARA to:**
 - ◆ **Improve the understanding of what Marine EBM Practice is.**
 - ◆ **Create a common understanding of the implications and impact of Marine EBM**
 - ◆ **Improve capacity to undertake marine EBM on the Pacific Coast of Canada.**

- **The activities include:**
 - ◆ **Developing and delivering an outreach and training program (Marine Spatial Planning and Marxan with Zones).**
 - ◆ **Framing the marine EBM environment with community Champions.**
 - ◆ **Facilitating a common understanding of the EBM framework**
 - ◆ **Linking EBM science with marine policy development.**
 - ◆ **Facilitating the application of EBM in marine planning and decision-making.**
 - ◆ **Leveraging EBM investments to date, including existing tools, skills and knowledge.**
 - ◆ **Facilitating a regular Forum of EBM practitioners where they can exchange knowledge, and experiences building on the 30 year tradition of integrated planning in BC.**

1. PacMARA Marine EBM Courses

➤ Courses Planned:

- ◆ Introduction to Marine Spatial Planning (Directors & Managers)
 - ◆ Will be done in conjunction with EBMTTools and MCBI.
 - ◆ Will include content from courses given in Europe.
 - ◆ **Tentatively Scheduled for April 12**
- ◆ Marxan with Zones (Planners and Analysts)
 - ◆ Done in conjunction with University of Queensland and EBMTTools Network.
 - ◆ Train the Trainer Component (2 to 3 new resources in BC).
 - ◆ 13 to 15 seats for new trainees (BC to get priority).
 - ◆ Will include content from improved best practices handbook.
 - ◆ **Tentatively Scheduled for April 14 thru 16.**

➤ Initial offering will be followed up with outreach:

- ◆ Based on demand training modules will be offered in regions and individual communities
- ◆ Additional training modules for other tools will be added to increase capacity with regard to ecosystem modelling and trade-offs

2: Identifying a coherent Marine EBM frame from “Tree to Sea”

Sustainable Society, Environment & Economy for the BC Coast Demands consistent EBM practices in both terrestrial and marine environments

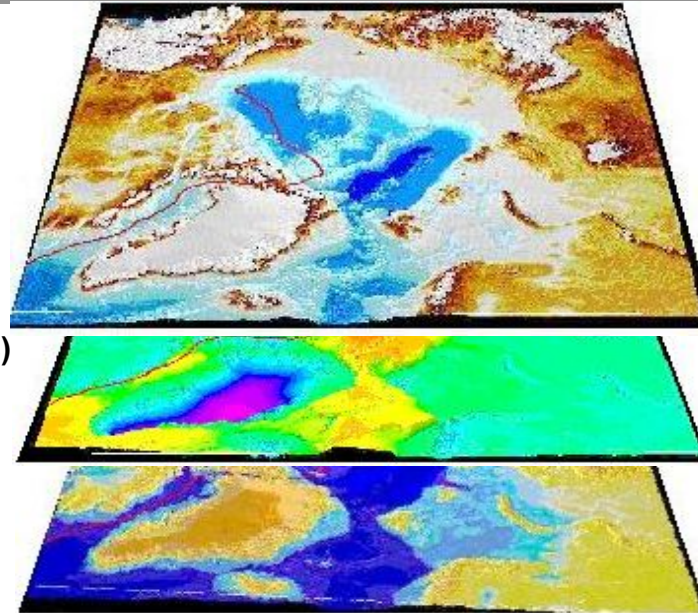


Started as an activity to address Information gaps for EBM Information

Who has it, where its at, and if it is dated, incomplete or sparse?

Stakeholder Information

- Endangered species
- Hydrographic Charts
- Facilities information
- Marine habitat
- Geological mapping, (aggregates, gas hydrate etc)
- Climatology
- Seabed classification
- Marine Archaeology



Framework information

- Bathymetric base
- GPS & navigation
- Seismic Surveys
- Disposition (leases, tenures, licences, etc.)
- Administrative areas
- Satellite imagery
- Tide and Current
- Magnetic and gravity data
- sub bottom profiles

Foundation information

Spatial, Temporal, and Administration Reference
e.g., Geodetic control, Tidal Model, Seamless Hydrographic Datum

Goal: Find out whats missing or inaccessible and start new inventory

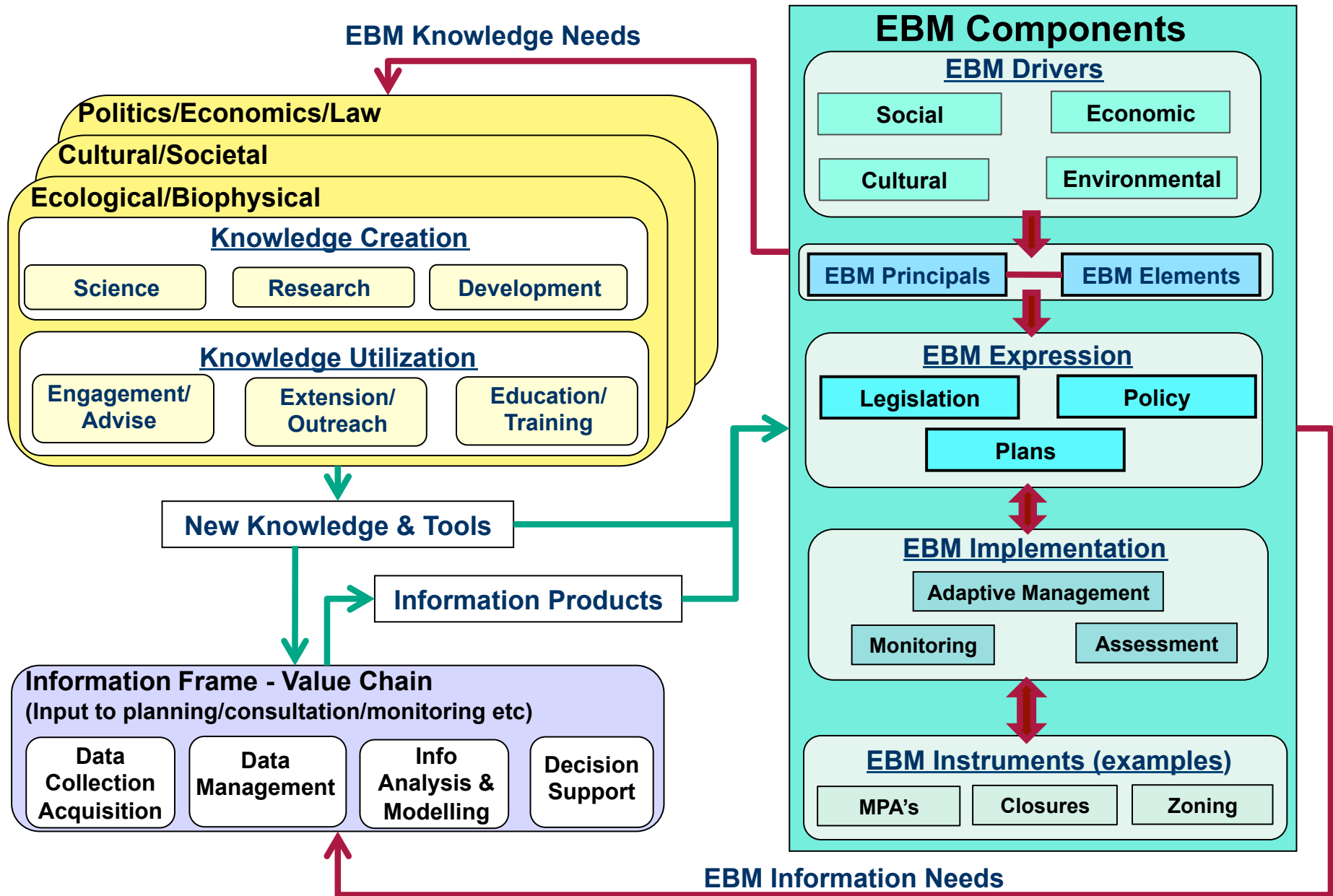
The EBM Gaps Program Components

◆ Stage 2 Solidify Program Elements (Complete)

- ➔ Introduce the Challenge Dialogue during the BCMCA/PacMARA workshop (May 26/27)
 - Brief the EBM program to participants
- ➔ Refine Gaps Program Plan - present to stakeholder community (OCC, GEOBC, WED, GBMF, DFO, Chamber of Shipping, Ocean Renewable Energy Group, UBC Fisheries, Uvic Ocean Technology Network, etc)
- ➔ Develop a Project Planning Memo
- ➔ Challenge dialogue process begins (Fall 2009)
- ➔ Develop Schedule for EBM Program



Draft Conceptual Marine EBM Framework



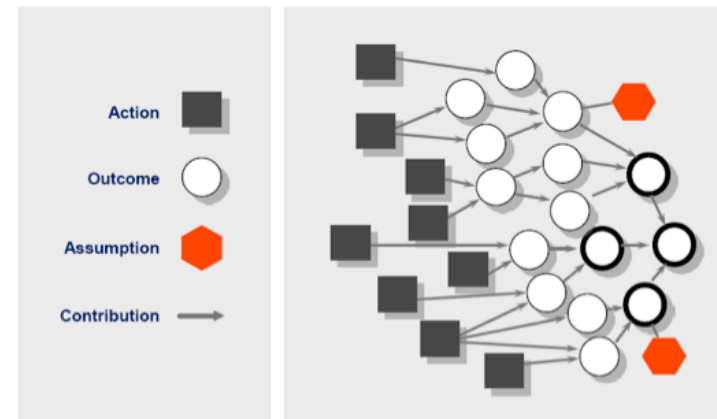
The EBM Gaps Program Components

- ◆ **Stage 3 - Challenge dialogue process continues (Winter 2009)**
 - ➔ **Review of DRAFT Marine EBM Principles, Elements and Assessment Framework (developed by WWF and others (Nov. – Dec.)**
 - Publish outcomes of Review as input to Challenge Process
 - ➔ **Complete Draft Challenge Paper- Contact Champions (Jan. 2010)**
 - ➔ **Invite participants and Circulate Challenge Paper for Workshop 1- (Feb 1)**
 - ➔ **Schedule Workshop 1 – Early March, 9,10th , 2010**
 - First EBM Workshop - Built around the challenge of alignment of the community of practice around the Proposed Marine EBM Frame
 - ➔ **Schedule Workshop 2 April 7th , 2010**
 - Second EBM Workshop - Built around the Challenge Dialogue planning to fill gaps and grow capacity
 - ➔ **Schedule Workshop 3 April 28th, 2010**
 - Outcomes - Actions to fill gaps identified and prioritized

The EBM Gaps Program Components

- ◆ **Stage 4 Program Delivery (April to June 2010)**
 - **Complete Strategy plan operationalizing the Marine EBM framework for BC using Outcome Mapping**
 - **Develop Project Proposals in conjunction with others to address gaps**
 - **Develop Funding proposals to key agencies and foundations in conjunction with all members of the community of practice.**

The outcome map links actions to outcomes



Summary

From Challenges to Actions From Science to Decisions

◆ Objective

- ➔ Be a catalyst for collaboration & provide non-partisan facilitation of outcome driven – evidence based decision making related to Ocean and Marine planning

◆ Activity streams

- ➔ EBM Knowledge Gaps Research Programs (data, knowledge, science , methods, applications, process)
- ➔ Collaboration & Networking (Community of Practice)
- ➔ Methods Development & Case Studies (Marxan, Marzone, Invest)
- ➔ Provide advance methods for identifying the analysis and innovation gaps, planning, facilitation, and issue resolution (Challenge Dialogue, Outcome maps)
- ➔ Directly support delivery of Ocean/Marine shared information services (discovery & access, as well as visualization & analysis services) for information/knowledge management and decision support

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