



COASTAL ZONE CANADA 2008: MANAGING OUR OCEANS AND COASTS FOR A SUSTAINABLE AND PROSPEROUS FUTURE

Conference Statement and Call to Action

Canada's Oceans and Coasts: Clean, Green, and Prosperous

Preamble

The Eighth Coastal Zone Canada Conference (CZC 2008) was held from May 25 -28, 2008 in Vancouver, BC. Organized by the Coastal Zone Canada Association (CZCA) in partnership with the Canadian Coastal Science and Engineering Association (CC-SEA), the theme of the conference was “managing our oceans and coasts for a sustainable and prosperous future”. Marking thirty years since the first Canadian national conference on coastal management (the Shore Management Symposium) in Victoria in 1978, CZC 2008 provided an important opportunity to assess how far we have come towards managing our oceans and coasts and where we need to go in the future. The main conference was preceded by a Youth Forum in which high school and university students expressed their concerns and made practical recommendations for environmental protection and sustainable use of ocean and coastal resources. The contribution from the Youth Forum was very much appreciated by the main conference participants, and their recommendations have been included in the Call to Action (see 4.2 below).

Canada's rich ocean and coastal resources are critical to our ability to build a sustainable and prosperous future in the 21st century. Globally there have been great advances in ocean and coastal management, but huge challenges remain. Bounded by three oceans and the world's largest freshwater lakes system, Canada cannot maximize its potential for prosperity and sustainability into the 21st century unless we effectively understand, protect, restore, develop and govern our oceans and coastal zones in an integrated manner. This conference brought together 225 participants (public policy makers, academics, engineers, scientists, aboriginals, consultants, NGOs, students, and concerned individuals) from across Canada and 15 other countries to look at the advances in and setbacks to our understanding and management of coastal and ocean systems, both in Canada and globally.

The Conference Statement and Call to Action addresses five sub-themes that were covered in the conference:

- Governing and Regulating our Oceans and Coasts
- Developing and Managing our Oceans and Coasts
- Protecting and Restoring Our Oceans and Coasts
- Understanding our Oceans and Coasts
- Managing British Columbia's Oceans and Coasts

Below, we address each theme individually, and articulate a series of action items that reflect the spirited and informed discussions that took place at the conference. Those discussions and the recommendations arising from them were distilled into a conference statement by a small writing team headed by Peter Ricketts, Past President of CZCA. The draft statement was circulated to the CZCA Board for input, and the final version has been approved by the Board.

If there is one common thread that ties the conference statement together, it is that the need to work together has never been more urgent. We call upon those engaged in ICOM to strengthen existing partnerships and build new ones, to build capacity for effective

ICOM within their own organizations, and to help other organizations build capacity so that they can make effective contributions to the goals that we all share.

1.0 Governing & Regulating our Oceans and Coasts

The conference addressed many issues of governance and regulation in Canadian Integrated Coastal and Ocean Management (ICOM), and a number of critical areas were identified.

- 1.1 *Integration of Watershed to Ocean:* There is an urgent need to improve the coordination of ICOM from watersheds to the oceans among all levels of governance and decision-making (federal, provincial, territorial, municipal, aboriginal, industry, civil societies, communities, *etc.*). In this approach, the coast becomes the zone of integration of watershed and ocean management rather than a line of separation for jurisdictions and mandates. The contribution of all parts of a watershed, including headwaters and streams, to the ultimate health and makeup of coastal waters and the adjacent ocean is recognized. This requires new thinking on the part of government and all stakeholders, but speaks directly to a requirement of the Canada Oceans Act that “The Minister, in collaboration with other ministers, boards and agencies of the Government of Canada, with provincial and territorial governments and with affected aboriginal organizations, coastal communities and other persons and bodies, including those bodies established under land claims agreements, shall lead and facilitate the development and implementation of plans for the integrated management of all activities or measures *in or affecting* estuaries, coastal waters and marine waters that form part of Canada or in which Canada has sovereign rights under international law. (Oceans Act, Part II, para. 31).

ACTION 1.1: DFO should take the leadership to use the development of Large Ocean Management Areas (LOMAs) as a segue into provincial, municipal, and aboriginal (intra-governmental) cooperation in ICOM, with the coastal zone (*i.e.* backshore and shoreline lands, inshore and nearshore waters and submerged

lands) as the zone of integration between ocean and watershed management. Identify those LOMAs best positioned to engage in this dialogue (such as the Pacific North Coast Integrated Management Area (PNCIMA), the Eastern Scotian Shelf Integrated Management (ESSIM) Plan, and the Beaufort Sea Partnership (BSP) integrated management planning initiative.

- 1.2 *Value of Coastal Ecosystem Goods and Services:* The capacity to value ecosystem goods and services to improve decision-making needs to be enhanced at all levels of governance in Canada. This must include consideration of both use and non-use values (tangible and intangible) to overcome the limitations of standard cost-benefit analysis which generally undervalues coastal and ocean ecosystems and services. In recognising and understanding the true values of the goods and services provided to society by our coasts and oceans, and by assessing the costs associated with the loss or reduction of those services, we can better appreciate the importance of ICOM and the value that is added through the effective long-term management of ocean and coastal resources and environments.

ACTION 1.2: The CZCA and DFO should collaborate on a project to identify what progress and action has been taken around the world to determine both the value of coastal goods and services and the costs involved when they are removed or degraded, and develop data-specific recommendations for Canadian governments. This needs to include community/stakeholder values (social, cultural and economic) in support of effective coastal governance.

- 1.3 *Capacity Building for ICOM:* Canada must recognise capacity building for ICOM as a priority and the critical need to develop an action agenda. ICOM is not accomplished easily and because the integrated approach is so different from the typical hierarchical and sectoral approach of government, there is a great need to educate and train government personnel in ICOM. This has been recognised in countries that have developed CZM or ICOM programs (including the USA), and at international levels where ICOM training and development workshops are

commonly provided to increase management capacity and capabilities in developing countries. It is presumptuous of us in Canada to assume we have the human capacity and capabilities to develop and implement ICOM without addressing training and education requirements for managers, policy makers, and decision makers.

ACTION 1.3: For Canada to fully develop its ability to establish and implement ICOM, governments at all levels (federal, provincial/territorial, municipal, and aboriginal) must recognise that there is a need to build and develop human capacity at all levels of governance and decision-making, and that much of the expertise for this lies outside of government. Support for conferences, research, training workshops, and educational programs is essential if Canada is to maintain a global leadership position in ICOM and benefit from the development and application of ICOM. The CZCA, CC-SEA, and OMRN¹ should partner with key universities and colleges to develop ICOM training and education workshops and programs, and work with the governments in Canada to offer these to appropriate managers, policy makers, and decision-makers. Pilot workshops could be offered at the CZC 2010 conference.

- 1.4 *Continuing and Increasing the Importance of ICOM in the Canadian Arctic:* Following on from CZC 2006, the Arctic continues to struggle with the bio-physical effects of climate change and related socio-economic impacts on community prosperity, health, security, and sustainability. The CZCA is pleased with the significant commitments by the Government of Canada to address many of the critical Arctic issues raised in the CZC 2006 Tuktoyaktuk Declaration; however, there are concerns about major development activities that are being authorized without clear reference to the principles of ICOM. Canada must continue to take actions to ensure that the adverse impacts of climate change and human development are minimized in the Arctic by developing a pan-Arctic ICOM approach to ensure that individual activities regardless of agency

¹ OMRN - <http://www.omrn-rrgo.ca/index.php?action=home.index>

responsibility, including energy exploration, are developed and implemented in a regional context and within the fundamental ICOM principles of the Oceans Act.

ACTION 1.4: The Government of Canada must integrate the development of ICOM into its agenda in supporting sovereignty and prosperity in Canada's Arctic. In particular, moving forward on the Beaufort Sea LOMA, developing other LOMAs (especially in the eastern Arctic), and building capacity for community-based ICOM throughout the Arctic are critical to making progress on this agenda. This must include timely access to state-of-the-art information on the nature and impacts of change, a recognition and respect for emerging rights and northern traditional knowledge in decision-making, and the education of northern youth. The CZCA will continue to work with the Ocean Management Research Network (OMRN) in promoting and pursuing a Northern Network Initiative that developed out of the CZC 2006 conference in Tuktoyaktuk.

- 1.5 *ICOM for the Great Lakes:* Although not a central theme of this conference, reference continued to be made to a long-standing issue at CZC conferences past and present (particularly CZC'02 which was held on the Great Lakes), namely the need to include the Great Lakes and St. Lawrence River in Canadian ICOM. Particularly in the context of the presentations and discussion about physical processes, the Great Lakes constitute a major coastal zone and watershed in Canada, and are included in the US under its coastal management programs² as well as Parks Canada's National Marine Conservation Areas program³. Furthermore, with such a large proportion of Canada's coastal population living along the shores of the Great Lakes and Saint Lawrence River, the application of ICOM principles and policies to the Great Lakes/St. Lawrence is essential if we are truly committed to managing Canada's entire coastal zone.

² U.S. Coastal Management Programs - <http://coastalmanagement.noaa.gov/programs/welcome.html>

³ http://www.pc.gc.ca/progs/amnc-nmca/index_E.asp

ACTION 1.5: Environment Canada and Natural Resources Canada, in concert with DFO, should take the federal initiative to work with the Provinces of Ontario and Québec in developing a framework to incorporate the Great Lakes/St. Lawrence in Canada's IM activities and initiatives – applying coastal IM beyond the confines of the Oceans Act and utilising other legislative authorities (*e.g.* Canada Water Act⁴, Canadian Environmental Protection Act⁵). This initiative should also foster greater collaboration and cooperation between Canada and the United States in order to develop more effective transboundary management of the Great Lakes system, such as those identified in the Call to Action from Coastal Zone Canada 2002.

2.0 Developing and Managing our Oceans and Coasts

CZC 2008 was the result of an important collaboration between the CZCA and the CC-SEA, and issues of coastal development and management were a major focus of the papers and sessions. Conference participants identified the need to more explicitly incorporate coastal environments and coastal development in Canada's approach to ICOM, and four areas were identified as being of particular importance:

- 2.1 *ICOM Capacity Building within Government Agencies:* There is a lack of planning capacity in agencies at all levels of government (federal/provincial/municipal) to implement integrated management effectively. This requires a realignment of hiring policies in the Department of Fisheries and Oceans (DFO) as the lead agency and other agencies involved in the Oceans Act (at the federal level) and Coastal Management legislation and/or policies (at the provincial and municipal levels) to broaden and enhance needed skill-sets.

ACTION 2.1: The CZCA in collaboration with the CC-SEA and OMRN, should bring together experts in ICOM from across the country and from other

⁴ The Canada Water Act (1970) enables the federal and provincial governments to make joint arrangements for water resource and water quality management in Canadian waters.

⁵ CEPA (Part 7, Division 2) calls for the protection of the marine environment from land-based sources of pollution.

countries with experience in ICOM to determine the range of skill sets and capabilities needed for effective development and implementation of ICOM policy. This could be done at CZC 2010 in conjunction with workshops and sessions developed under Action 1.3 above.

- 2.2 *Oceans and Coastal Commission of Canada:* Integrated management is not solely focused on environmental protection; it also involves sustainable use of resources to sustain the well-being of communities and user groups. Canada needs a national public education and awareness campaign addressing the need for integrated management and identifying the desired outcomes. Furthermore, Canada needs a mechanism by which expert advice on ICOM from across the country and internationally can be channeled to the governments of Canada. To these ends, the participants of CZC 2008 reaffirm the calls from CZC 2004 and CZC 2006 to establish a national Oceans and Coastal Commission to raise the profile of our oceans and coasts among the Canadian population.

ACTION 2.2: Building upon the work done by the CZCA to promote the establishment of an Oceans and Coastal Commission of Canada (OCCC) following the CZC 2004 and 2006 Calls to Action, the participants of CZC 2008 call upon the CZCA to support the initiative of the David Suzuki Foundation to create a Canadian Oceans Commission with the mandate to promote ICOM across Canada, to research and assess the state of ICOM in Canada and the world, to provide expert advice on ICOM policy and process to the Government of Canada, and to engage in public education and awareness initiatives that would increase understanding and support of the Oceans Act and related provincial, municipal, community, and private initiatives in coastal management. The participants of CZC 2008 call upon the Government of Canada to support this initiative and work to create the Commission before the next CZC conference in 2010.

2.3 *Need for Multi-agency Action to Implement ICOM in Canada:* Inflexibility in roles and responsibilities is impeding the implementation of ICOM in Canada. DFO is sometimes viewed as the only agency required by the Oceans Act to actually do anything about ICOM, whereas in fact multiple federal agencies are required to take action to develop and implement ICOM in Canada. DFO has a lead and a coordinating role, but that is not an excuse for other federal agencies to sit back and do nothing unless instructed or asked by DFO. Nor is this an excuse for DFO to hold back other agencies and discourage them from taking action unless it is directed and led by DFO. The Oceans Act is an enabling act not a disabling act, and all involved federal agencies have a responsibility to take action. DFO's overall responsibility is to ensure that these actions are strategic, coherent, and coordinated, and that role needs to be recognised and respected by all agencies acting under the mandate of the Oceans Act.

ACTION 2.3: DFO as the lead agency, and other federal agencies empowered under the Oceans Act, should take immediate action to encourage, facilitate, and support provincial, regional and municipal agencies, aboriginal agencies and communities, and other communities and organizations to get involved in integrated management planning and implementation. This can be coordinated with Action 1.1 (integrate watersheds to oceans) through the use of the LOMAs and provincial coastal management policies and frameworks currently in development to implement ICOM in Canada.

2.4 *Including the Coastal Dimension in Canada's Approach to ICOM:* Canada's approach to ICOM has emphasized the ocean sector, although the Oceans Act specifically identifies the integrated management of activities in estuaries and coastal waters (as well as marine waters) that form part of Canada or in which Canada has sovereign rights under international law (Part II, para. 30 (b)). The CZC 2008 conference addressed the important issues facing Canada's coastal zones, including coastal erosion, deposition, sea and lake-level changes, loss of

natural habitat, public access to the coast, and coastal development that pays little attention to the natural conditions of the coast.

ACTION 2.4: In keeping with Action 1.1, the Minister of Fisheries and Oceans should initiate a consultative process with other federal ministers and agencies, provincial and territorial governments, aboriginal and community organizations, and other stakeholders to develop effective management of coastal environments within the context of Canada's LOMAs.

- 2.5 *Enhancing Canada's International Role:* There is a strong sense that Canada is losing its recognised leadership position in ICOM, which is contrary to the mandate of the Oceans Act and policy commitments made in Canada's Oceans Strategy, Policy and Operational Frameworks and Oceans Action Plan. To boost Canada's international reputation and role, the conference participants recognised the need for Canada to play a higher profile in major international efforts to promote, facilitate, and build capacity for global ICOM.

ACTION 2.5: The Government of Canada must lead by example by taking a more proactive leadership role within the Global Forum on Oceans, Coasts and Islands⁶ and in providing public support for the emerging consensus on Integrated Watershed and Coastal Area Management.

3.0 Protecting and Restoring our Oceans and Coasts

Developing formal management and protective regions is a central focus of global strategies for ICOM, and the Oceans Strategy lays out Canada's commitments to building a national network of Marine Protected Areas (MPAs) and Large Ocean Management Areas (LOMAs). Conference participants identified a number of major concerns regarding the pace and extent of Canada's commitment to MPAs and LOMAs:

⁶ <http://www.globaloceans.org/>

3.1 *Expand the Network of MPAs:* There is an urgent need to expand and develop further the national network of MPAs as a critical aspect of protecting ocean resources and environments under the Oceans Act and related enabling legislation under the authority of Environment Canada and the Parks Canada Agency⁷. While the Government of Canada has identified the establishment of a national network of MPAs as a priority, to date action and progress in implementing this policy have been slow. There needs to be greater effort to deliver results and increase both the amount of ocean area and the number of key ocean regions covered by MPAs. This expansion of the Canadian MPA network must be coordinated within the context of a global network of MPAs; new MPA's must be integrated into functional national (and international) networks.

ACTION 3.1: The Government of Canada must ensure that the establishment of the National Network of MPAs is truly a national priority (not just a patchwork of regional networks) and is developed within the context of the global network of MPAs. Through the Ministers of DFO and Environment Canada (EC) working together, Canada must increase the rate at which the MPA network is developed and completed, increase the proportion of ocean area and key ocean regions covered by MPAs, and improve Canada's performance relative to other developed ocean nations such as Australia and the USA.

3.2 *Implement Pacific North Coast Integrated Management Area (PNCIMA):* Most of the work to establish the PNCIMA has been done, and all of the stakeholders are waiting the announcement that this LOMA is now operational. There is an urgent need to get it going without further delay due to the uncertainty amongst the various parties and stakeholders over the official status of PNCIMA. Just do it!

ACTION 3.2: Government (federal, B.C. and First Nations) should immediately bring all of the parties and stakeholders together to confirm their commitment,

⁷ The mandate for the establishment and management of marine protected areas in Canada is derived from three federal Acts – The Oceans Act, Canada Wildlife Act and National Marine Conservation Areas Act.

define the governance structure for the LOMA, and publicly announce the formal implementation and operation of the PNCIMA marine use planning process.

4.0 Understanding our Oceans and Coasts

Information management, access to data, and the need to promote and educate Canadians about our oceans and coasts, and about ICOM in particular, is always a major concern at CZC conferences. CZC 2008 was no exception, and the conference participants were particularly concerned about the following:

- 4.1 *Data Democracy*: Canada needs a more open system for ensuring free and open access to all natural and social scientific data on oceans and coasts. Canada should adopt as a first principle that stakeholders in ICOM (e.g. NGOs, governments, aboriginals, scientists, academics) need to make their data available to ensure those involved in developing and implementing policy can access the full range of data needed for informed decision-making. One model to look at is the National Geophysical Data Center (NGDC)⁸, with the supporting role of the Coastal Services Center (CSC)⁹, operated by NOAA in the United States. NGDC's mission is to provide long-term scientific data stewardship for the Nation's geophysical data, ensuring quality, integrity, and accessibility, while the CSC provides a web portal to a large range of data, maps, publications, decision-support tools and software as well as training and education programs to support coastal and ocean management.

ACTION 4.1: Building on the DFO Oceans web-site and after reviewing other examples around the world, the Government of Canada should initiate a Canada Coastal and Oceans Data Portal using a web-based system to provide free access to all publicly-funded data and information concerning the coastal and ocean regions of Canada. In addition, this portal should be open to private organizations, industry, aboriginal (including traditional knowledge), NGO, and community-based groups. The portal must include a management system to ensure the

⁸ <http://www.ngdc.noaa.gov/>

⁹ <http://www.csc.noaa.gov/>

validation of the data and to keep the data and information updated, secure and accessible. While freedom of access should be a priority, it should not extend automatically to sensitive data (e.g. shipwreck locations).

- 4.2 *Communications and Outreach*: There is an urgent need to be more inclusive and strategic in the way in which we communicate to and educate Canadians about ICOM. This issue is partially addressed in Action 2.2 (Oceans and Coastal Commission), but it must also include greater education and training of government personnel about ICOM and the greater recognition of the role of youth. Federal/provincial/territorial/Aboriginal agencies must educate internal staff on the importance and relevance of ICOM to their work and how they can contribute to ICOM in Canada. They must also address the importance of bio-physical and governance integration and interconnectedness as a basis for managing resources and human activity in Canada's ocean and coastal regions.

There needs to be a significant commitment to involving youth in the ICOM process, starting with but not limited to education. Youth are a major stakeholder in ICOM and they need to be able to have direct input into the process; they need to have a real voice; and they need to be listened to within the context of all stakeholders in ICOM. The CZC 2008 Youth Forum presented the following challenges and statements to the CZC 2008 conference:

1. Make your knowledge accessible and interesting to the younger population.
2. Relay CZC research to youth through popular visual media (more youth friendly)
3. Academics can take inspiration from the environmentally progressive ideals of youth and could engage in an integrated approach towards raising awareness and understanding of the importance of preserving the integrity of the world's oceans and coasts.

4. Youth are taking action now and are not waiting for the future to inherit the earth.

ACTION 4.2: The CZCA should work to develop the CZC conferences to include the following components in addition to the traditional presentation sessions:

1. A more definitive training and education mission, with specific workshops for government personnel involved in ICOM policy and decision making in Canada. Government agencies should be encouraged to provide funding for their personnel to attend.
2. Greater integration of youth in the conference, involving more integration of the Youth Forum with the main conference (the Youth Forum is too isolated from the main conference event).
3. More integrative discussion sessions so that the participants can be actively and creatively involved in exploring new ideas and more fully utilise the unique biennial opportunity that the CZC conferences present in bringing together such a multi-disciplinary and multi-stakeholder gathering of ICOM experts, practitioners, and users.
4. Planning for inter-CZC conference workshops and working groups that produce more concrete solutions and actions:
 - a. subsequent CZC conferences would present/discuss outcomes of workshops;
 - b. these workshops would have specific questions to address;
 - c. these workshops could identify action-based themes for future CZC conferences

- 4.3 *Recognition of the Importance of Physical Processes in ICOM:* The conference recognises that ecosystem integrity includes the physical processes (currents, waves, sediment transport, and processes of erosion and deposition) in addition to biological and socio-economic processes. Physical processes have often been excluded from ICOM in Canada because of the importance of fisheries and habitat management as driving forces behind Canada's approach to ICOM. Yet

they form a critical set of processes and factors in determining coastal and ocean ecosystems, and ICOM cannot be effectively addressed without including them.

ACTION 4.3: Natural Resources Canada (NRCan) needs to become more proactively involved in the ICOM mandate under the Oceans Act. In concert with DFO and Environment Canada, NRCan should develop clear goals and objectives for the effective inclusion of physical processes in the ecosystem-based management approach to ICOM in Canada.

5.0 Managing BC's Oceans and Coasts

The CZC 2008 conference sessions identified and presented a wide range of ICOM activities and opportunities within the province of British Columbia. The conference participants were both energized by the level of ICOM activity and initiative in BC, and frustrated by the apparent barriers that were preventing a more fast-paced rate of progress. There was a strong feeling that all the leaders in BC (federal government - especially DFO, EC, and Parks Canada - provincial government, First Nations, other stakeholders) should seize the opportunity to step up and work together to show that BC's oceans and coasts can be clean, green, and prosperous. This will require political will and strong and effective leadership in a number of integrated areas, including sustainable fisheries, MPA development, healthy coastal communities, and best management practices.

A number of action items were identified and supported by the conference participants:

ACTION 5.1: That DFO, the Province of BC, and First Nations announce and start the public PNCIMA process as the west coast's first operating LOMA (see Action 3.2).

ACTION 5.2: That DFO and the Province of BC establish an ICOM Planning Office or Offices to promote, coordinate, communicate, and oversee the implementation of the

ICOM planning process in BC. That office must be given the funds necessary to complete the planning process successfully and fully engage the partners involved.

Concluding Statement

Considerable progress has been made on ICOM under the Oceans Action Plan and is being continued under the Health of the Oceans Initiatives. However, greater emphasis is needed to ensure that Canada's approach to ICOM does not simply break up into a series of projects. The actions proposed under this CZC 2008 Conference Statement and Call to Action are designed to strengthen the overall integrity of ICOM in Canada and to ensure that we are building ICOM capacity and understanding today and for future generations.

To paraphrase the Managing BC's Coasts outcome, and in reference to the major theme of CZC 2008, the conference participants believe that all the leaders in Canada (federal government - especially DFO, EC, and Parks Canada, provincial government, aboriginal, others with vested interests) must step up and work more closely together to show that Canada's oceans and coasts can be clean, green and prosperous.

Carpe diem! Seize the day!
