



ACZISC

**Atlantic Coastal Zone
Information Steering Committee**

<http://www.dal.ca/aczisc>

**2003 - 2004
ANNUAL REPORT**

June 2004

2003 GULF OF MAINE VISIONARY AWARD

In December 2003, a 2003 Gulf of Maine Visionary Award was presented to the ACZISC:

"In recognition: of their role as leaders in the development of effective mechanisms to manage, promote understanding, and effectively exchange and disseminate coastal information and data; for the promotion of integrated coastal zone management initiatives; the successful development and coordination of an interagency and public information network; facilitation of discussions on integrated coastal management policy; and the formation of alliances and partnerships among government, academia, and the private sector to develop information products and services to maximize collaborative opportunities...."

To the Members of the ACZISC:

*It is with pleasure that the ACZISC Secretariat presents the **2003-2004 ACZISC Annual Report**. We hope that you will find the new format to be both visually pleasing and comprehensible.*

I would like to highlight a number of items of particular importance:

- *The ACZISC was extremely fortunate to have received a grant for the 2003-2004 fiscal year from ACOA to overcome a significant shortfall in funding. We would like to acknowledge this timely support from ACOA and, in this regard, the numerous letters of support from the private sector, government organizations and academia. The letters facilitated a positive outcome to the negotiations with ACOA.*
- *Another event of significance was the 'birth' of the ACZISC Association as an incorporated not-for-profit body under the under the Nova Scotia Societies Act. The Association will act as the legal entity for the ACZISC.*
- *Something of which the ACZISC members should be pleased was the awarding of a Gulf of Maine Visionary Award for 2003 to the ACZISC. The Secretariat proudly accepted the award on behalf of the Committee at a ceremony on 4 December at the Lord Nelson Hotel in Halifax.*

Finally I would like to thanks members for their continued and enthusiastic support of the ACZISC and its activities.

Yours sincerely,

*Michael J.A. Butler
Director, ACZISC Secretariat and
President, ACZISC Association
Dalhousie University
1226 LeMarchant Street
Halifax, NS B3H 3P7
Tel 902-494-1977
Email aczisc@dal.ca*

ACZISC

2003-2004 ANNUAL REPORT

TABLE OF CONTENTS

The ACZISC	5
Mission	5
Benefits	5
Outcomes.....	5
'Horizontalty'	6
ACZISC Operating Structure	6
The Committee	6
ACZISC Meetings	7
ACZISC Advisory Committee	8
ACZISC Association	8
ACZISC Secretariat	8
ACZISC Funding and Budget	9
Revenue Generating Projects	9
Operating Budget	9
ACZISC 2003-2004 Workplan	10
Communications	10
Geomatics.....	11
Integrated Coastal Management	12
Networking	13

APPENDICES

1 ACZISC Strategic Thrusts and Enabling Objectives	15
2 Definitions: Integrated Coastal Management and Geomatics	16
3 ACZISC Operating Structure	17
4 ACZISC Membership – March 2004	18
5 Presentations at ACZISC Meetings in 2003-2004.....	20
6 ACZISC Association Objects of the Society	21
7 ACZISC Association Board of Directors	22
8 ACZISC Financial Statement 2003-2004	23
9 ACZISC Coastal Update E-newsletter - March 2004	24

ACZISC

2003-2004 ANNUAL REPORT

“Lack of dissemination of knowledge is one of the major factors in the destruction of the coastal zone.”

Barthel and Lehfeldt, CZC 2000

THE ACZISC

The ACZISC celebrated its **12th anniversary in January 2004**. The Committee was established in 1992 to provide a forum for coordinating coastal zone information management in Atlantic Canada, following the recommendations of the participants in a Coastal Zone Information Management Workshop organized by LRIS (a former agency of the Council of Maritime Premiers) in Amherst, July 1991.

MISSION

The mission of the ACZISC has evolved since its implementation in 1992. Its current focus is to **promote regional cooperation in Atlantic Canada with regards to coastal mapping, geomatics and Integrated Coastal Management (ICM)**. The ACZISC Strategic Thrusts and Enabling Objectives of the Strategic Plan are included in Appendix 1 on page 15. Definitions of geomatics and ICM are provided in Appendix 2 on page 16.

BENEFITS

The **value-added benefits of the ACZISC** and its activities include 'one-stop shopping' for information; cost-effective access to a comprehensive network of expertise in information management and ICM; early detection and resolutions of inter-agency problems and conflicts; and reduced duplication of effort.

OUTCOMES

Significant **ACZISC outcomes** include the continuing success of the biennial Coastal Zone Canada Conference series initiated by ACZISC members in 1994; the influence on development policies of the four Atlantic Provinces as a result of the provincial coastal / marine economic studies initiated by the ACZISC in 1998; and the accelerated practice of ecosystem-based fisheries management and research following the ACZISC coordinated East Coast of North America Strategic Assessment Project (1992-1995).

'HORIZONTALITY'

The ACZISC functions as a **horizontal, inter-agency and inter-sectoral 'mechanism'** and operates on a consensus basis. It was used as one of four case studies in a report published in 2002 by the Canadian Centre for Management Development entitled ***Using Horizontal Tools to Work Across Boundaries: Lesson Learned and Signposts of Success***. As the title indicates, the tools and challenges of horizontality, exemplified by the ACZISC, are reviewed in the document. The report is available at <http://www.myschool-monecole.gc.ca/publications/html/horz%5Fe.html>.

In another study entitled ***Managing Collaborative Arrangements: A Guide for Regional Managers***, published by the Treasury Board of Canada Secretariat in 2003, the ACZISC is again cited as a case study in the context of a detailed analysis of the steps and elements of collaborative arrangements. The Treasury Board report is available at http://www.tbs-sct.gc.ca/rc-cr/guide_rm/index_e.asp.

ACZISC OPERATING STRUCTURE

The ACZISC Operating Structure consists of four major components: the **Atlantic Coastal Zone Information Steering Committee**, the **ACZISC Advisory Committee**, the **ACZISC Association** and the **ACZISC Secretariat**. Refer to Appendix 3 on page 17 for a schematic describing the Operating Structure.

THE COMMITTEE

The jurisdictions represented on the **Atlantic Coastal Zone Information Steering Committee** include the four Atlantic Provinces and eight federal departments and representatives from the private sector, academia and NGOs. A detailed list of ACZISC members and their jurisdictions as of March 2004 is attached as Appendix 4 on page 18.

Atlantic Provinces

New Brunswick, represented by the Department of Environment and Local Government, and Service New Brunswick

Newfoundland and Labrador, represented by the Department of Environment, the Department of Fisheries and Aquaculture, and the Department of Government Services and Lands

Nova Scotia, represented by the Department of Agriculture and Fisheries, and Service Nova Scotia and Municipal Relations

Prince Edward Island, represented by the Department of the Provincial Treasury, and the Department of Agriculture, Fisheries, Aquaculture and Forestry

Federal Departments and Agencies

Environment Canada
Fisheries and Oceans Canada
Industry Canada
National Defence
Natural Resources Canada
Parks Canada Agency
Public Works and Government Services Canada
Royal Canadian Mounted Police

Private Sector

Represented by the Champlain Institute

Academia

Represented by the Atlantic Provinces Council on the Sciences (APICS)

Other

Canada-Nova Scotia Offshore Petroleum Board
Canadian Centre for Marine Communications

Potential Members

Potential additional membership includes community group and industry associations, municipal agencies and other federal departments/agencies.

ACZISC MEETINGS

ACZISC meetings are held **three times per year in the Atlantic provincial capitals by rotation**. The meetings are attended by ACZISC Members and by observers from all sectors, including community groups, the private sector and students. In 2003-2004, meetings were held in Fredericton on 22 May 2003; in Halifax on 10-11 September 2003; and in Charlottetown on 28-29 January 2004.

In addition to the business portion of the meeting, the meeting agendas include: Working Group reports, a Roundtable Review of coastal activities and two focused presentations with discussions. The presentation topics are selected by the meeting hosts in consultation with the Secretariat. The topics of the meeting presentations and discussions in 2003-2004 are included in Appendix 5 on page 20.

ACZISC ADVISORY COMMITTEE

The Advisory Committee was established in 1995 to **review and provide advice on issues** related to: the effective administration and operation of the Secretariat and ACZISC; the identification and securement of funding for the Secretariat and ACZISC programs; and the comprehensiveness of ACZISC membership.

The Advisory Committee consists of: Justin Huston, Chair (provincial representative); Brent Rowley (private sector representative); Faith Scattolon (federal representative); Lois Whitehead (representative of academia); and Michael Butler (ACZISC Secretariat).

ACZISC ASSOCIATION

In November 2003, the ACZISC established a separate group, the ACZISC Association, **to act as the legal entity for the ACZISC**. The Association is registered as a not-for-profit organization under the Nova Scotia Societies Act. The objects of the Society are included in Appendix 6 on page 21.

The Association Board of Directors is composed of non-government members of the ACZISC (refer to Appendix 7 on page 22). The 1st meeting of the Board of Directors was held on 13 January 2004. The 1st Annual General Meeting is scheduled for January 2005 in Halifax.

ACZISC SECRETARIAT

The **function, roles and responsibilities** of the ACZISC Secretariat are as follows:

- To function as the executing agency for all the decisions of the ACZISC and its bodies and the Association and its Board of Directors
- To convene the meetings of the ACZISC and its bodies
- To convene the meetings of the Association.

The Secretariat office is located on the Dalhousie University campus at 1226 LeMarchant Street, Halifax, Nova Scotia B3H 3P7. The Secretariat is staffed by the Director, a Project Officer and a part-time Finance Officer.

The Secretariat operates on the basis of a **Memorandum of Understanding** between the Committee and the Association.

ACZISC FUNDING AND BUDGET

The **ACZISC revenue sources** were: \$97.5K in dues from the federal and provincial member agencies; a \$50K grant secured from ACOA (of which \$41.8 was paid in 2003-2004); and \$20.5K in contract fees, earned by the ACZISC Secretariat for the ACZISC. A negative balance of \$1.8K as carried over from the previous fiscal year.

The dues paid by individual federal departments are based on the relevance of the ACZISC to their respective departmental mandates.

REVENUE GENERATING PROJECTS

In 2003-2004 the Secretariat participated in the development and/or implementation of the following projects in support of the ACZISC mandate and to supplement revenues:

GeoConnections Metadata Project

The ACZISC Secretariat continued with the transfer of metadata from the Atlantic Coastal Database Directory to the GeoConnections Discovery Portal/ACIP, as per the terms of a contract with GeoConnections.

Ecozone Boundary Workshop

The ACZISC Secretariat was contracted by federal departments to organize and facilitate an Ecozone Boundary Workshop; to prepare a background document; and to prepare a Workshop report.

Ocean Management Research Network

The ACZISC Secretariat continued to provide personnel support to the OMRN National Secretariat, based at St. Mary's University in Halifax, Nova Scotia.

OPERATING BUDGET

The **2003-2004 operating budget for the ACZISC Association was approximately \$150K**. Budget items included staffing; travel; fees for administrative services; telephone/fax/internet; photo-copying; conference registration; courier and postage; office supplies; printing; and equipment.

The 2003-2004 Financial Statement is included in Appendix 8 on page 23.

**ACZISC
2003-2004
WORKPLAN**

The ACZISC Secretariat is responsible for the preparation of an **Annual Workplan**, which is reviewed by members at each of the ACZISC meetings. The workplan is implemented by the Secretariat with the assistance of Working Groups: **Communications, Geomatics and Integrated Coastal Management (ICM)**.

COMMUNICATIONS

**Communications
Working Group**

The Communications Working Group is **responsible for promoting an efficient and effective two-way flow of information among the Secretariat, members and associates**. It is co-chaired by Marianne Janowicz, NB Department of Environment and Local Government and Geoff Lewis, Industry Canada.

In 2003-2004, the Communications Working Group developed an **ACZISC Communications Plan** to promote effective internal and external communications and identify tools to:

- Disseminate information and knowledge relevant to ICM policy, practice and geomatics
- Promote events relevant to the ACZISC mission
- Increase the public's awareness of the ACZISC and its activities.

The communication activities identified in the ACZISC Workplan include:

ACZISC Website

The ACZISC website at <http://www.dal.ca/aczisc> is updated weekly. It includes: information about the ACZISC; **What's New**; the **Atlantic Coastal Database Directory**; the **Inventory of Atlantic Coastal Mapping Projects**; the **Atlantic Coastal Community Profile**; and **links** to ICM-related websites, conferences, documents, maps and imagery, resources for students and teachers and related programs.

**ACZISC Coastal
Update e-newsletter**

The Coastal Update is **prepared and emailed monthly by the Secretariat to members and to approximately 3,000 ACZISC associates**, an increase of 1,000 from the previous year. Several recipients in turn distribute the Updates to their own personal distribution lists. The Coastal Update contains brief items related to ICM and coastal mapping, with links for further information. These items include programs and activities; announcements;

documents, including manuals, reports, proceedings; and conferences, workshops and other events. The March 2004 edition of the ACZISC Coastal Update, as a sample, is attached in Appendix 9 on page 24.

ACZISC Meeting Minutes

In addition to being made available to meeting participants, the minutes of ACZISC meetings are distributed widely via the website. The **Summary of Coastal Activities in Atlantic Canada**, a component of the minutes, is a valuable reference for ICM personnel. The minutes of the three ACZISC meetings held during 2002-2003 were accessed by 2,291 individuals.

ACZISC Handouts

The **2-page information sheet** is customized for and made available at various events and conferences. It features a brief description of ACZISC activities and a listing of members.

In 2003-2004, issues were distributed at: ICM Workshop and the AGM of the Southern Gulf of St. Lawrence Coalition on Sustainability (April, Antigonish); ICM Module of the IOI Law of the Sea Programme at Dalhousie University (June, Halifax); Meeting of the Federal/Provincial Atlantic Fisheries Committee (July, Brudenell, PEI); Meeting with the Canadian Space Agency (July, Halifax); Atlantic Coastal Action Program Conference (September, Summerside); OMRN Conference (November, Ottawa); Ecological Monitoring and Assessment Network Conference (November, Halifax); Gulf of Maine Council on the Marine Environment Meetings (December, Halifax); Ecological Monitoring of our Ecosystems: From Research to Communities (January 2004, Charlottetown).

GEOMATICS

Geomatics Working Group

The Geomatics Working Group assists the Secretariat with planning and implementing ACZISC activities related to the **access, exchange and dissemination of geospatial and other data and information**. It also assists with the identification, securement and delivery of collaborative data and information projects related to ICM. Ed Light, Service Nova Scotia and Municipal Relations, and Andy Sherin, Natural Resources Canada, are the co-chairs.

The geomatics activities identified in the **ACZISC Workplan** include:

Atlantic Coastal Database Directory

The Atlantic Coastal Database Directory (ACDD), a major component of a regional information infrastructure, was developed in 1992 and is maintained on a regular basis. The metadata Directory **lists and describes databases of relevance to the coastal zone of Atlantic Canada**. The Directory is available at <http://www.dal.ca/aczisc/acdd>. In 2001-2002 a long-term strategy for the ACDD was developed to minimize duplication of effort by the ACZISC, GeoConnections and other metadata providers. The strategy included:

- the transfer of metadata from the ACDD to the GeoConnections Discovery Portal (GDP), the prime discovery and access component of the Canadian Geospatial Data Infrastructure (CGDI)
- the future development of the Atlantic Coastal Information Portal (ACIP) with the assistance of the GeoConnections Secretariat. ACIP will become the Atlantic window on the GDP. Emphasis will be placed on access and maintenance over the long term and ACIP's usability for coastal and marine applications.

In 2003-2004, the transfer of metadata from the ACDD to the GDP/ACIP was facilitated via a contract between the ACZISC Secretariat and GeoConnections

Inventory of Atlantic Coastal Mapping Projects

The Secretariat continues to maintain an Inventory of Atlantic Coastal Mapping Projects. The Inventory, available at <http://www.dal.ca/aczisc/czmproj>, is updated on a regular basis. It is intended to maximize the utilization of mapped products and minimize the duplication of mapping activities.

INTEGRATED COASTAL MANAGEMENT

ICM Working Group

The ICM Working Group was formed in May 2000 in response to the need to exchange information on provincial and federal programs, including Canada's Oceans Act (1997) and the Oceans Strategy. Information and experiences on ICM policy and programs are shared at meetings scheduled to coincide with the ACZISC meetings. Summaries of the ICM Working Group discussions are presented at the ACZISC meetings.

The ICM Working Group advocates the implementation of ICM in Atlantic Canada and maximizes collaborative

opportunities, in particular with reference to policy issues. It achieves its mandate by **providing a forum to share best practices and standards; networking, communication and outreach; and raising awareness of initiatives and research related to ICM**. It is co-chaired by Leslie Grattan, NL Department of Environment and Faith Scattolon, Fisheries and Oceans Canada.

NETWORKING

The participation of the ACZISC Secretariat and members in the following programs, in both executive and other roles, has significantly increased inter-program cooperation and coordination in Atlantic Canada:

Bay of Fundy Ecosystem Partnership

BoFEP focuses on the Bay of Fundy, its resources and ecosystems, people and communities. It is dedicated to promoting the conservation, protection and restoration of the ecological integrity, vitality, biodiversity and productivity of the Bay of Fundy ecosystem, in support of the social well-being and economic sustainability of its coastal communities. For information access <http://www.bofep.org>.

Canadian Geospatial Data Infrastructure

The CGDI is the technology, standards, access systems and protocols necessary to harmonize all of Canada's geospatial databases, and make them available on the internet. The CGDI/Marine Advisory Committee (MAC) was established in 1999 to ensure that the full functionality of the CGDI serves the interests of all marine stakeholders. For information, access <http://www.cgdi.gc.ca>.

Coastal Zone Canada Association

The Association is a non-profit society of coastal zone management professionals and others interested in and supportive of ICM goals. CZCA was formed in 1993 to organize and deliver the inaugural CZC 94 Conference in Halifax and has been the major sponsor of all of the subsequent biennial CZC conferences. For information on the CZCA, access <http://www.czca-azcc.org>.

The Secretariat and several ACZISC members have played a major role in organizing and delivering all of the CZC conferences to date. The ACZISC is organizing a panel session at CZC 2004 scheduled for 27-30 June 2004 in St. John's, NL. The theme of the session will be "The ACZISC: How and why it works?" Six panellists who represent the breadth of ACZISC membership and who have diverse but complementary responsibilities or roles will address 'Data, Information and Knowledge for ICM'.

Eastern Scotian Shelf Integrated Management Initiative

The ESSIM initiative is a collaborative management and planning process for the Eastern Scotian Shelf Oceans Management Area. The development of an integrated oceans management plan for this large offshore biogeographic area involves a broad range of interests, including government, First Nations, oceans industry and resource users, environmental interest groups, coastal communities, and university researchers. For information, access <http://www.mar.dfo-mpo.gc.ca/oceans/e/essim/essim-intro-e.html>.

Gulf of Maine Council on the Marine Environment

The Council is mandated to protect and conserve coastal and marine habitats within this bi-national ecosystem, which includes the Bay of Fundy and its watersheds. Membership on the Council includes New Brunswick, Nova Scotia, Maine, Massachusetts and New Hampshire. Several members of the ACZISC are represented on the Working Group and Council committees. For information, access <http://gulfofmaine.org>

Ocean Management Research Network

The aim of the OMRN is to create and share knowledge for the application of critical thinking and best practices to oceans management in Canada. The OMRN is interdisciplinary, with an initial focus on social science, providing a forum for researchers, managers, and policymakers to evaluate timely and innovative linkages, integrate lessons learned, transfer and share knowledge, and help create an expert core of ocean researchers. For information, access <http://www.omrn.ca>.

Southern Gulf of St. Lawrence Coalition on Sustainability

The Coalition is a grouping of partners who envision an environmentally, economically and socially sustainable Southern Gulf. The Coalition facilitates communications, networking and information sharing; organizes and facilitates meetings, workshops, forums or task forces; monitors the progress of implemented strategies, policies and regulations; assists communities to build their capacity and achieve their sustainability goals; facilitates access to expertise; and promotes awareness and education on sustainability. For information, access <http://www.coalition-sgsl.ca/>.

ACZISC STRATEGIC THRUSTS AND ENABLING OBJECTIVES

The ACZISC terms of reference, identified in the ACZISC 2002-2012 Strategic Plan, are as follows:

ACZISC Mission

To promote, facilitate and influence information management, policies and programs that enhance integrated coastal management in Atlantic Canada.

ACZISC Strategic Thrusts and Enabling Objectives

To achieve its mission, the ACZISC will:

Advocate the implementation of integrated coastal management in Atlantic Canada by:

- Networking, communication and outreach
- Providing a forum to share best practices and standards
- Raising awareness of initiatives and research related to ICM

Provide a conduit to access, exchange and disseminate geospatial and other data / information by:

- Identifying ICM-related data and information
- Facilitating its availability to the public
- Raising awareness of initiatives and research related to information management
- Encouraging the implementation of appropriate information management mechanisms

Capitalize on collaborative opportunities related to ICM by:

- Identifying projects and activities related to ICM
- Identifying potential collaborative projects
- Initiating, coordinating and managing projects and activities supporting ICM
- Establishing and maintaining linkages and partnerships among members and with other committees and organizations.

Maximize the viability and relevance of the ACZISC by:

- Ensuring effective administration and operation
- Identifying and securing funding for the Secretariat and programs
- Ensuring comprehensive membership
- Publicizing the ACZISC and its activities.

INTEGRATED COASTAL MANAGEMENT: A DEFINITION

Cicin-Sain and Knecht, 1998: Integrated Coastal Management (ICM) can be defined as a continuous and dynamic process by which decisions are taken for the sustainable use, development and protection of coastal and marine areas and resources. ICM acknowledges the interrelationships that exist among coastal and ocean uses and the environments they potentially affect, and is designed to overcome the fragmentation inherent in the sectoral management approach. ICM is multi-purpose oriented, it analyzes and addresses implications of development, conflicting uses, and interrelationships between physical processes and human activities, and it promotes linkages and harmonization among sectoral coastal and ocean activities.

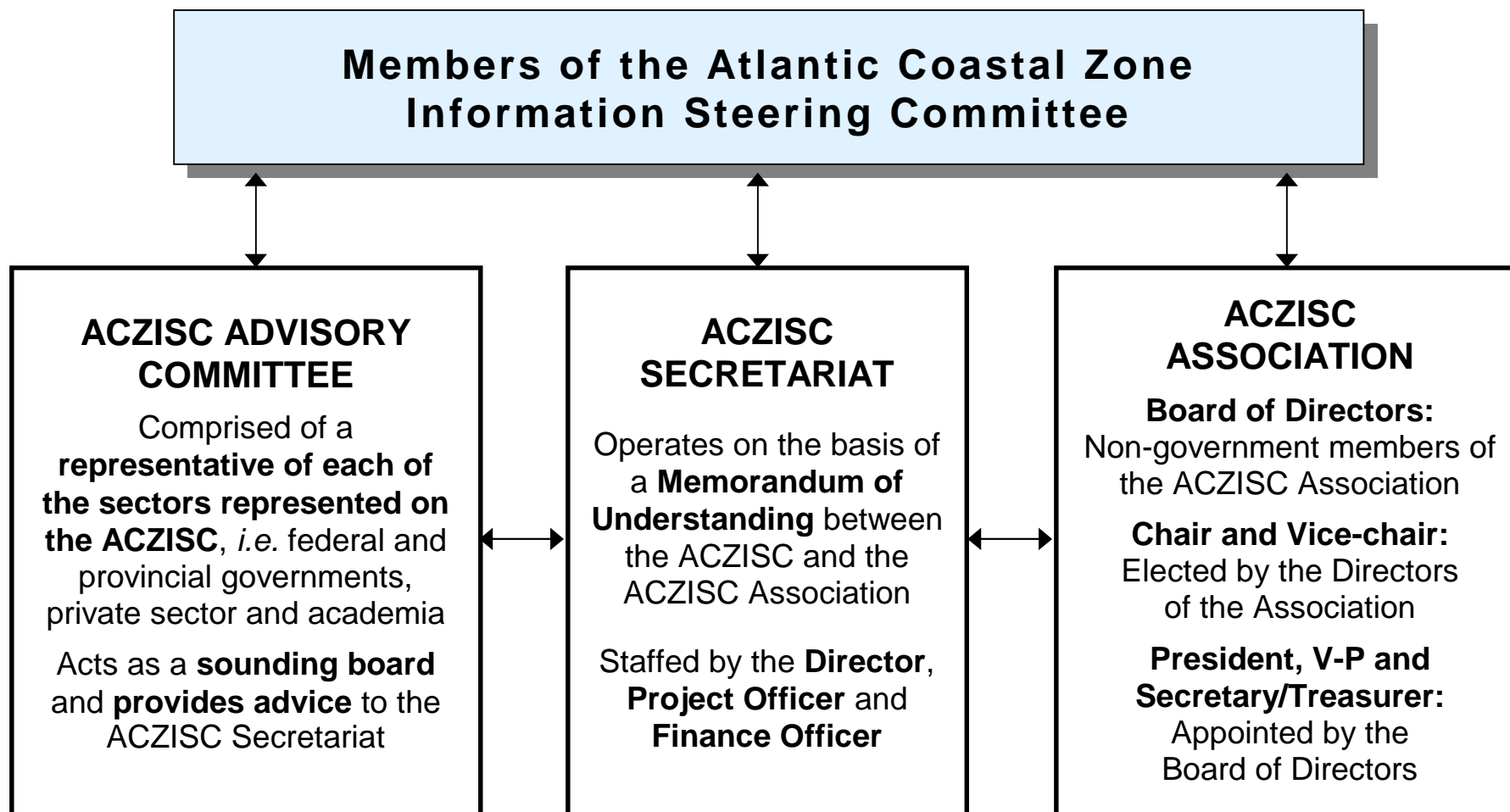
GEOMATICS: A DEFINITION

GeoConnections: Geomatics is the science and technology of gathering, analyzing, distributing and using information related to space – often known as "geo-info." Examples of geo-info include: topographic maps, aeronautical and nautical charts, geological, agriculture and forestry maps, legal surveys, property cadastre, aerial photography and satellite imagery, among other products.

Geomatics includes a broad range of disciplines that together create a detailed but understandable picture of the physical world and our place in it. It is a generic term that covers the disciplines of surveying (geodetic, cadastral, engineering and marine) and includes global positioning systems (GPS); mapping (photogrammetry, radargrammetry, cartography, automated mapping/facilities management and charting); remote sensing (data acquisition and application); as well as creating and maintaining Geographic Information Systems. It can also be considered to include the spatial component of Earth related processes (e.g., meteorology), social characteristics (e.g., census data), and economic activity (e.g., transportation of commodities).

Geomatics often overlaps other industries in the service, hardware and software and high-technology sectors. Services aspects of the industry involve project development and management, consulting, training and technology transfer, and analysis, while hardware aspects of the industry range from desktop to mainframe computers and specialized peripheral equipment such as satellite and ground receiving station equipment related to remote sensing. Within the software domain, Canadian geomatics firms supply several of the world's most sophisticated aerial and remote sensing image analysis systems, as well as many geographic information systems. Other important software aspects of the industry include different niche products that enhance other systems, provide advanced data management and access tools, and components that ease integration issues.

ACZISC OPERATING STRUCTURE



ACZISC MEMBERSHIP – MARCH 2004

Tim Anderson, Head, Oceans Management Section, Oceans Programs Division, Oceans and Habitat Branch, Newfoundland and Labrador Region, **Fisheries and Oceans Canada**
PO Box 5667, St. John's, NL A1C 5X1
Tel 709-772-2852 - Fax 709-772-5315
Email andersont at dfo-mpo.gc.ca

William Blight, Regional Manager
Spatial Technology Resources
Public Works and Government Services Canada
PO Box 2247, Halifax, NS B3J 3C9
Tel 902-496-5160 - Fax 902-496-5547
Email william.blight at pwgsc.gc.ca

Norval Collins, **Private Sector / Champlain Inc**
Communication, Environmental and Fisheries Consultants
5443 Rainnie Drive, Halifax, NS B3J 1P8
Tel 902-425-4802 - Fax 902-425-4807
Email ncollins at cefconsultants.ns.ca

Réal Daigle, Manager, Impacts of Sea Level Rise on the Coastal Zone of Southeastern New Brunswick, Meteorological Service of Canada
Environment Canada
PO Box 23005, Moncton, NB E1A 6S8
Tel 506-851-6743 - Fax 902-490-0258
Email real.daigle at ec.gc.ca

Ken Dominie, Assistant Deputy Minister, Environment, Department of Environment and Conservation
Government of Newfoundland and Labrador
PO Box 8700, St. John's, NL A1B 4J6
Tel 709-729-2559 - Fax 709-729-7413
Email kdominie at gov.nl.ca

Cdr Paul Earnshaw, Commanding Officer of TRINITY JOSIC (Joint Ocean Surveillance and Information Centre)
National Defence
PO Box 99000 Stn Forces, Halifax, NS B3K 5X5
Tel 902-427-0550 (ext. 5720)
Fax 902-427-5724
Email earnshaw.pf at forces.gc.ca

David Finley, Manager,
Topographic Infrastructure
Service New Brunswick
Government of New Brunswick
PO Box 1998, Fredericton, NB E3B 5G4
Tel 506-444-4644 - Fax 506-453-3898
Email david.finley at snb.ca

Cst Gary Frail, Coastal Watch Program
Royal Canadian Mounted Police
3139 Oxford Street, PO Box 2286
Halifax, NS B3J 3E1
Tel 902-458-2237 (pager)
Fax 902-426-8845
Email gfrail at rcmp-grc.gc.ca

Carol Lee Giffin, Formation Environment Officer
Formation Environment, Maritime Forces Atlantic
National Defence
PO Box 99000 Stn Forces, Halifax, NS B3K 5X5
Tel 902-427-0550 (ext. 6881)
Fax 902-427-5417
Email giffin.cl at forces.gc.ca

Randy Gillespie, Vice-President
Canadian Centre for Marine Communications
PO Box 8454, St. John's, NL A1B 3N9
Tel 709-579-4872 - Fax 709-579-0495
Email rgillespie at ccmc.nf.ca

Larry Hildebrand, Manager, Sustainable Communities and Ecosystems Division, Community and Departmental Relations Branch **Environment Canada**
Queen Square, 16th Floor
45 Alderney Drive, Dartmouth, NS B2Y 2N6
Tel 902-426-2131 - Fax 902-426-6348
Email larry.hildebrand at ec.gc.ca

Bill Horne, Environmental Emergencies Advisor
Environmental Emergencies Section
Environment Canada
Queen Square, 45 Alderney Drive
Dartmouth, NS B2Y 2N6
Tel 902-426-6196 - Fax 902-426-9709
Email bill.horne at ec.gc.ca

Justin Huston, Coastal Zone Coordinator
Department of Agriculture and Fisheries
Government of Nova Scotia
PO Box 2223, Halifax, NS B3J 3C4
Tel 902-424-2996 - Fax 902-424-1766
Email hustonje at gov.ns.ca

Marianne Janowicz, Planner, Water and Marine Planning Section, Department of Environment and Local Government, **Government of New Brunswick**
PO Box 6000, Fredericton, NB E3B 5H1
Tel 506-457-4846 - Fax 506-457-7823
Email marianne.janowicz at gnb.ca

Steve Kempton, Liaison Officer
Canadian Coast Guard - Maritimes Region
Fisheries and Oceans Canada
176 Portland Street, Dartmouth, NS B2Y 1J3
Tel 902-426-6987 - Fax 902-426-4312
Email kemptons at mar.dfo-mpo.gc.ca

John Legault, Senior Ecosystem Biologist – Oceans, Gulf Region, **Fisheries and Oceans Canada**
Gulf Fisheries Centre, 343 University Avenue, Room 424, Moncton, NB E1C 9B6
Tel 506-851-6221 - Fax 506-851-3027
Email legaultj at dfo-mpo.gc.ca

Geoff Lewis, Senior Sector Officer, Energy and Marine Branch, **Industry Canada**
PO Box 940, Station M, Halifax, NS B3J 2V9
Tel 902-426-9475 - Fax 902-426-6094
Email lewis.geoff at ic.gc.ca

ACZISC MEMBERSHIP – MARCH 2004 (cont'd)

Ed Light, Senior Program Administrator, Registry and Information Management, Services Division, Service Nova Scotia and Municipal Relations

Government of Nova Scotia
PO Box 1523, Halifax, NS B3J 2Y3
Tel 902-424-0173 - Fax 902-424-0639
Email lighted at gov.ns.ca

Richard MacDougall, Director
Canadian Hydrographic Service, Atlantic
Fisheries and Oceans Canada
Bedford Institute of Oceanography
PO Box 1006, Dartmouth, NS B2Y 4A2
Tel 902-426-3497 - Fax 902-426-7827
Email macdougallr at mar.dfo-mpo.gc.ca

Neil MacNaughton
Director of Surveys and Mapping
Department of Government Services and Lands
Government of Newfoundland and Labrador
PO Box 8700, St. John's, NL A1B 4J6
Tel 709-729-3239 - Fax 709-729-0690
Email nmacnaug at gov.nl.ca

Brian McShane
Trade Commissioner, **Industry Canada**
PO Box 8950, St. John's, NL A1B 3R9
Tel 709-772-6602 - Fax 709-772-5093
Email mcshane.brian at ic.gc.ca

Jim Ramsay, Provincial Tax Commissioner,
Department of the Provincial Treasury
Government of Prince Edward Island
PO Box 2000, Charlottetown, PE C1A 7N8
Tel 902-368-4075 - Fax 902-368-6584
Email jbramsay at gov.pe.ca

Carol Ann Rose, Regional Director
Policy and Economics Branch, Maritimes Region
Fisheries and Oceans Canada
Box 1035, 6th Floor, 176 Portland Street
Dartmouth, NS B2Y 4T3
Tel 902-426-3694 - Fax 902-426-6767
Email rosec at mar.dfo-mpo.gc.ca

Brent Rowley, Private Sector
President, EIT Group
1587 Dresden Row
Halifax, NS B3J 2K4
Tel 902-420-1435 - Fax 902-421-1096
Email browley at eitgroup.com

Faith Scattolon, Regional Director
Oceans and Habitat Branch, Maritimes Region
Fisheries and Oceans Canada
Bedford Institute of Oceanography
PO Box 1006, Dartmouth, NS B2Y 4A2
Tel 902-426-2065 - Fax 902-426-9909
Email scattolonf at mar.dfo-mpo.gc.ca

Andrew Sherin, Senior Analyst
Geological Survey of Canada
Natural Resources Canada
601 Booth Street, Ottawa, ON K1A 0E8
Tel 613-995-0525 - Fax 613-995-7322
Email sherin at nrcan.gc.ca

Eric Theriault, Advisor, Environmental Affairs
Canada - Nova Scotia Offshore Petroleum Board
1791 Barrington Street, Halifax, NS B3J 3K9
Tel 902-496-0742 - Fax 902-422-1799
Email etheriault at cnsopb.ns.ca

Rob Thompson, A/Director, Atlantic Service
Centre, **Parks Canada Agency**, Historic Properties
1869 Upper Water Street, Halifax, NS B3J 1S9
Tel 902-426-3445 - Fax 902-426-4659
Email rob.thompson at pc.gc.ca

LCdr Bob Thwaites, Executive Officer
TRINITY JOSIC (Joint Ocean Surveillance and
Information Centre), **National Defence**
PO Box 99000 Stn Forces, Halifax, NS B3K 5X5
Tel 902-427-0550 (ext. 5767)
Fax 902-427-5724
Email thwaites.rg at forces.gc.ca

Mike Warren, Director, Planning Services
Department of Fisheries and Aquaculture
Government of Newfoundland and Labrador
PO Box 8700, St. John's, NL A1B 4J6
Tel 709-729-3708 - Fax 709-729-6082
Email mikewarren at gov.nl.ca

Lois Whitehead, APICS Executive Director
Atlantic Provinces Council on the Sciences
Dalhousie University
1390 LeMarchant Street, Halifax, NS B3H 3P9
Tel 902-494-3421 - Fax 902-494-6643
Email apics at dal.ca

Cameron Wilson, Section Head, Content and
Connectivity Section, GeoAccess Division.
Canada Centre for Remote Sensing,
Natural Resources Canada
615 Booth Street, Room 650
Ottawa, ON K1A 0E9
Tel 613-996-6377 - Fax 613-947-2410
Email cameron.wilson at ccrs.nrcan.gc.ca

David Younker, Director, Fisheries and Aquaculture,
Department of Agriculture, Fisheries, Aquaculture and
Forestry, **Government of Prince Edward Island**
PO Box 2000, Charlottetown, PE C1A 7N8
Tel 902-368-5252 - Fax 902-368-5542
Email dsyounker at gov.pe.ca

PRESENTATIONS AT ACZISC MEETINGS IN 2003-2004

In 2003-2004, the meeting presentations and discussions were the following:

ACZISC Meeting #39, 22 May 2003, Fredericton, NB:

- **Impacts of Sea-level Rise and Climate Change on the Coastal Zone of Southeastern New Brunswick** by Réal Daigle, Manager, Impacts of Sea-level Rise and Climate Change on the Coastal Zone of Southeastern NB, Meteorological Service of Canada, Environment Canada
- **Implementation Process for the New Brunswick Coastal Areas Protection Policy and the Wetlands Policy** by Marianne Janowicz, Planner, Water and Marine Planning Section, NB Dept of Environment and Local Government

ACZISC Meeting #40, 10-11 September 2003, Halifax, NS:

- **Sewage in the Coastal Zone** by John Clarke, Manager of the Municipal Wastewater Effluent Section, Environment Canada and Tony Blouin, Manager of Environmental Policy, Halifax Harbour Solutions Project, Halifax Regional Municipality
- **Species at Risk Act** by Diane Amirault, Wildlife Biologist, Endangered Species at Risk Section, Environment Canada; Stephen Barbour, Senior Biologist, Parks Canada Agency; and Arran McPherson, Species at Risk Scientist, Maritimes Aquatic Species at Risk Office, DFO

ACZISC Meeting #41, 28-29 January 2004, Charlottetown, PEI:

- **Invasive Species in PEI** by Neil MacNair, Aquaculture Biologist, PEI Dept of Agriculture, Fisheries, Aquaculture and Forestry
- **Keeping the Garden Green and the Water Pristine (Sustainable Resource Policy for PEI)** by Katherine Clough, Director, Strategic Planning and Measurement, PEI Dept of Agriculture, Fisheries, Aquaculture and Forestry.

ACZISC ASSOCIATION OBJECTS OF THE SOCIETY

The objects of the Society (from the Societies Act Memorandum of Association) are:

- i To encourage and support the sustainable use of coastal and marine resources in Atlantic Canada through integrated coastal zone management;
- ii To promote, facilitate and influence information management, policies and programs for the purpose of enhancing integrated coastal zone management in Atlantic Canada;
- iii To develop, provide and support public education programs concerning the ocean and coastal environment and its importance as a critical component of global environmental systems;
- iv To strengthen the expertise and capacity in the oceans and coastal zone sectors of government, and parastatal and non-governmental organizations in Atlantic Canada;
- v To develop, provide and support technical assistance projects, training programs, policy advice and consulting resources for professionals engaged in the oceans and coastal zone sectors.
- vi All other activities which are ancillary to the objects of the Society.

**ACZISC ASSOCIATION
BOARD OF DIRECTORS**

Norval Collins
President, Communication, Environmental
and Fisheries Consultants
5443 Rainnie Drive
Halifax, NS B3J 1P8
Tel 902-425-4802
Fax 902-425-4807
Email ncollins at cefconsultants.ns.ca

Brad Fay
President, Brad Fay and Associates
3 Elizabeth Drive
Halifax, NS B3N 1S2
Tel 902-477-0946
Email bfay at hfx.eastlink.ca

Randy Gillespie
Vice-President, Canadian Centre for
Marine Communications
PO Box 8454
St. John's, NL A1B 3N9
Tel 709-579-4872
Fax 709-579-0495
Email rgillespie at ccmc.nf.ca

Brent Rowley, **Chair of Board**
President, EIT Group
1587 Dresden Row
Halifax, NS B3J 2K4
Tel 902-420-1435
Fax 902-421-1096
Email browley at eitgroup.com

Lois Whitehead, **Vice Chair of Board**
Executive Director, Atlantic Provinces
Council on the Sciences
Dalhousie University
1390 LeMarchant Street
Halifax, NS B3H 3P9
Tel 902-494-3421
Fax 902-494-6643
Email apics at dal.ca

**ACZISC ASSOCIATION
FINANCIAL STATEMENT 2003-2004**

REVENUE

Balance carried forward	-1,801
Interest	69
Dues:	
Nova Scotia	12,000
Newfoundland and Labrador	15,000
Prince Edward Island	1,500
Federal Departments	69,000
Grants: ACOA	41,835
Contract Revenues	20,500
	\$ 158,103
TOTAL REVENUE	\$ 158,103

EXPENSES

Staff	125,979
Travel	14,180
Administrative Services	6,079
Telephone / Fax / Email	1,359
Photocopying	254
Conferences	75
Courier and Postage	558
Office Supplies	1252
Printing	19
Interest	181
	\$ 149,936
TOTAL EXPENSES	\$ 149,936

BALANCE TO BE CARRIED FORWARD \$ 8,167

IN-KIND CONTRIBUTIONS

Dalhousie University	12,000
----------------------	--------

Jennifer Barr, Treasurer
ACZISC Association
8 June 2004

ACZISC COASTAL UPDATE E-NEWSLETTER - MARCH 2004

Here is the **ACZISC COASTAL UPDATE** for your interest and consideration. Please feel free to circulate it among your own networks. This and previous Updates are available at <http://www.dal.ca/aczisc/new>. Please note that the inclusion of items in the Coastal Update does not imply endorsement by the ACZISC Secretariat and member agencies.

The ACZISC was formed in 1992 to help establish a coastal zone information infrastructure in Atlantic Canada as a precursor to Integrated Coastal Management. The Committee is multi-disciplinary and multi-sectoral with representation from eight federal departments, four Atlantic provincial governments, academia and the private sector. Please refer to the ACZISC website at <http://www.dal.ca/aczisc> for details.

ACZISC COASTAL UPDATE - MARCH 2004

UPCOMING ACZISC MEETINGS

- 25 June 2004: ACZISC Meeting #42, St. John's, NL, in conjunction with Coastal Zone Canada 2004, 27-30 June also in St. John's. For information on CZC 2004, access <http://www.czc04.ca>
- 15-16 September 2004: ACZISC Meeting #43, Fredericton, NB
- 19-20 January 2005: ACZISC Meeting #44, Halifax, NS
- 18-19 May 2005: ACZISC Meeting #45, Charlottetown, PEI

For information on the ACZISC meetings, email the ACZISC Secretariat at leblancc@ca.inter.net

WORKSHOP: WATERSHED MANAGEMENT ON PRINCE EDWARD ISLAND

A workshop entitled "Watershed Management on PEI: It's Where We Live" will be held on 27 March 2004 in Charlottetown. Speakers will discuss the elements of a watershed plan, the process by which a plan is implemented and managed and the means by which watershed communities are engaged into the process. The registration deadline is 23 March. For information or to register, access <http://www.upei.ca/avcinc/peiwatersheds.html>

GEOMATICS ATLANTIC 2004

Geomatics Atlantic 2004 is scheduled for 7-9 June 2004 in Fredericton, New Brunswick. The program will include pre-conference workshops, exhibitions, keynote speakers, technical presentations, and poster presentations. The Conference is aimed at personnel from government agencies, the private sector, the post-secondary education sector, large municipalities and utility companies. The Geomatics Atlantic conference has been held annually since the mid 80s. For information, access <http://www.geomaticsatlantic.com/>

23RD ANNUAL SUBMERGED LANDS MANAGEMENT CONFERENCE

The SLM Conference is scheduled for 19-24 September 2004 in Halifax, Nova Scotia. Conference themes include: jurisdiction and ownership of submerged lands; surveying, mapping and legal issues; public trust doctrine; commercial and recreational uses; fish habitat and aquaculture issues; navigation and shipwrecks; marine protected areas; hazard mitigation and coastal planning. For information, access <http://www.gov.ns.ca/natr/land/slmc>

USING TOPOGRAPHIC LIDAR TO MAP FLOOD RISK FROM STORM-SURGE EVENTS

Storm-surge flood risk mapping was a major objective of a recent Climate Change Action Fund project to evaluate coastal impacts of climate change and sea-level rise on Prince Edward Island. A paper published recently in the Canadian Journal of Remote Sensing documents critical issues in lidar data acquisition and processing, including the need for ground validation. It also demonstrates the utility of high resolution digital elevation models (DEMs) derived from lidar data for flood risk mapping. The paper is available at <http://pubs.nrc-cnrc.gc.ca/cjrs/cjrs30/m03-053.pdf>

C-CIARN WORKSHOP REPORTS

- The 3rd regional Canadian Climate Impacts and Adaptation Research Network - Atlantic Workshop was held in June 2003 in Charlottetown, Prince Edward Island. The aim of the Workshop was to explore adaptation strategies for communities, municipalities, infrastructure and transportation systems in the Atlantic Region. The Workshop report is available at <http://www.dal.ca/~cciarn/resources/workshop3/index.html>

- The Canadian Climate Impacts and Adaptation Research Network – Coastal Zone Sector held a workshop entitled "The Highs and Lows of Water Level: The Vulnerability of Coastal Communities to Water Level Change" in February 2003 in Vancouver, British Columbia. The Workshop focused on the implications of climate induced water level changes to coastal communities. The Workshop report is available at http://c-ciarn.bio.ns.ca/reports_e.php

MARINE CADASTRE ISSUES: WORKSHOP REPORT

The Report on the Outcomes of the UNB-FIG Meeting on Marine Cadastre Issues, held at the University of New Brunswick in Fredericton, New Brunswick on 15-16 September 2003 is available at <http://gge.unb.ca/Research/LandStudies/MarineCadastre/UNB-FIG-Report.pdf>. The aim of the meeting was to highlight conceptual, technical and institutional issues relating to marine cadastres.

ADDRESSING THE DEPLETION OF THE ATLANTIC SALMON IN MAINE

A new report from the National Academies' National Research Council states that urgent actions are needed if the once-abundant Atlantic salmon in Maine are to be replenished. Rehabilitation efforts are needed statewide to preserve Maine's population of the fish, which constitutes most of the Atlantic salmon population in the United States. For information, access <http://www4.nationalacademies.org/news.nsf/isbn/0309091357?OpenDocument>

ICM INDICATORS

A paper published in the Journal Ocean & Coastal Management 2003, entitled "Frameworks and indicators for assessing progress in integrated coastal management initiatives", is available at http://www.crc.uri.edu/comm/download/Olsen_Frameworks.pdf. The paper offers two frameworks for assessing progress over the extended time periods involved: the four Orders of Outcomes that group together the sequences of institutional, behavioural and social/environmental changes that can lead to more sustainable forms of coastal development; and a version of the more familiar ICM policy cycle.

PUBLIC CONSULTATIONS: SPECIES AT RISK ACT

The Species at Risk Act (SARA) was proclaimed in June 2003, and is one of a three-part Government of Canada strategy for the protection of wildlife species at risk. The Act provides the public with a consultation process. The current public consultation documents are: Consultation on Amending the List of Species Under the Species At Risk Act; and Federal Policy Discussion Paper: Critical Habitat. 14 May 2004 is the deadline for commenting. For information and to download the documents, access http://www.sararegistry.gc.ca/public/default_e.cfm

CLIMATE CHANGE LEADING TO THE DECLINE OF FISH STOCKS

Overfishing is not the sole cause of dramatically declining fish stocks in the north Atlantic Ocean, or worldwide, according to marine biologists at a recent Royal Society meeting in London. Environmental changes such as climate warming may be just as important. The scientists urged governments to consider these factors when managing fisheries. For information, access an article in the news section of the journal Nature at <http://www.nature.com/nsu/040301/040301-8.html>

A GEOSPATIAL FRAMEWORK FOR THE US COASTAL ZONE

A recent report from the National Academies' Committee on National Needs for Coastal Mapping and Charting concludes that a national project to collect real-time data on tides, topography and ocean depth along US shorelines should be started to provide more accurate information about the country's coastal zones, including improved maps and charts. The report is available at <http://www.nap.edu/books/0309091764/html/>

LINGERING OIL INJURY FROM THE EXXON VALDEZ

A major reassessment of the status of recovery from the effects of the Exxon Valdez oil spill off Alaska (1989) was conducted in the winter of 2001-02. For information, access the 2003 Status Report of the Exxon Valdez Oil Spill Trustee Council at http://www.evostc.state.ak.us/pdf/2003status_report.pdf. A recent article in Science entitled "Long-Term Ecosystem Response to the Exxon Valdez Oil Spill" refers to the unexpected persistence of toxic subsurface oil and its continued effect on wildlife. For information, email the senior author, Charles Peterson (University of North Carolina), at cpeters@email.unc.edu

COPRANET: THE EU COASTAL PRACTICE NETWORK

Twenty EU partners from eleven countries will be working over the next three years to deliver the CoPraNet project. The objectives of the project are: to help establish a coastal practitioners network and bridge the gap between planners, managers and the research community throughout Europe; and to support interregional exchange of best practice information on sustainable tourism and coastal erosion and beach management through an integrated approach. For more details access <http://www.nwcoastalforum.co.uk/activities.php>

DRAFT US NATIONAL COASTAL CONDITION REPORT II

The Office of Wetlands, Oceans, and Watersheds, Coastal programs, has released the draft National Coastal Condition Report II for public comment. This report is the second in a series and describes the ecological and environmental conditions in U.S. coastal waters. For information and to download the report, access <http://www.epa.gov/owow/oceans/nccr2/index.html>

MARINE PROTECTED AREAS TECHNOLOGY NEEDS ASSESSMENT IN THE USA

The goal of the MPA Technology Needs Assessment was to gather additional information on MPA-related applications of technology, gauge technical capacity within the marine management community, and evaluate associated needs. The results will guide the US National MPA Center and supporting institutes as they design products and services to support a national network of MPAs. The Assessment report is available at http://www.csc.noaa.gov/mpa/mpa_needs.html

DEADLINES

- 19 March is the deadline to register for a 2-day "Course on Remote Sensing for Spatial Analysts" scheduled for 14-15 April 2004 in Charleston, South Carolina. Students will be presented with management scenarios and will use remote sensing, in combination with spatial data, to investigate issues such as land cover and use, shoreline erosion, and fisheries and benthic habitat assessment. For information, access http://www.csc.noaa.gov/crs/rs_training.html

- 30 March 2004 is the deadline for submitting abstracts to the "7th International Marine Environmental Modeling Seminar", scheduled for 19-21 October 2004 in Washington, DC. The theme is Environmental Modeling for North American Coastal Waters: Impact Assessment, Resource Management, and Mitigation. For information, access <http://www.sintef.no/imems2004/>

- 1 April 2004 is the deadline for submitting abstracts to the "16th Annual World Conference on Ecological Restoration", scheduled for 24-26 August 2004 in Victoria, British Columbia. For information, access http://www.serbc.info/public/ser_seminar

- 1 April 2004 is the deadline for submitting abstracts to the "Coastal Zone Asia Pacific Conference 2004", scheduled for 5-9 September 2004 in Brisbane, Australia. Topics include: Coastal poverty and sustainable livelihoods; Coastal ecosystem management; Community participation; Coastal resource economics; Coastal area planning; Integrated coastal management; and Coastal communities and cultures. For information, access <http://www.coastal.crc.org.au/czap04/index.html>

- 2 April 2004 is the deadline for submitting abstracts to the "6th Bay of Fundy Ecosystem Workshop", scheduled for 29 September - 2 October 2004 in Cornwallis, Nova Scotia. Topics include: Physical, chemical and biological oceanography; Ecology and natural history of the region; Fisheries; Wildlife biology; Resource use by humans; Ecosystem health or integrity; Marine protected areas, wildlife reserves or parks; and Coastal or watershed issues around the Bay. For information, access http://www.bofep.org/2004_workshop.htm

UPCOMING CONFERENCES AND OTHER EVENTS

- 19-20 March 2004: "New Brunswick Climate Change Hub Workshop", Fredericton, New Brunswick. For information, access <http://www.nbhub.org/Html/workshop.htm>

- 22-23 March 2004: "11th Annual Conference of the Fishermen and Scientists Research Society", Halifax, Nova Scotia. For information, access <http://www.fsrns.ca/events/ac2004.html>

- 28-31 March 2004: "GeoTec Event", Toronto, Ontario. For information, access <http://www.geoplace.com/gt/htm/default.asp>

- 31 March - 3 April 2004: "International Symposium on Quantitative Ecosystem Indicators for Fisheries Management", Paris, France. For information, access <http://www.ecosystemindicators.org/>

- 1 April 2004: "Geomatics IT Showcase 2004", Centre of Geographic Sciences (COGS), Lawrencetown, Nova Scotia. For information, access http://www.cogs.ns.ca/news/Geomatics_Showcase_2004.html

- 14-15 April 2004: "Workshop on Microbial Source Tracking (MST) Applications", Wolfville, Nova Scotia. For information, email Denise Sullivan at carp@annapolisriver.ca

- 19-23 April 2004: "Coast to Coast '04", Australia's National Coastal Conference, Hobart, Australia. For information, access http://www.nre.vic.gov.au/web/root/domino/cm_da/nrenm.nsf/frameset/NRE+Coasts+and+Marine?OpenDocument

- 20-22 April 2004: "15th Global Warming International Conference and Expo", San Francisco, California. For information, access <http://www.globalwarming.net/gw15-overview.asp>

- 21-22 April 2004: Conference entitled "Integrated Coastal Zone Management: Fact or Fiction?", Plymouth, UK. For information, access http://www.science.plym.ac.uk/pass/PASS_ICZM.htm
- 26-28 April 2004: "CoastWetChange", the International Conference on Lagoons and Coastal Wetlands in the Global Change Context: Impacts and Management Issues, Venice, Italy. For information, access <http://www.corila.it/CoastWetchange/>
- 26-29 April 2004: "Forum on Coastal Change", Woods Hole, Massachusetts. For information, access <http://www.whoi.edu/institutes/coi/activities/forums.htm>
- 26-28 April 2004: "Coastal Environment 2004", the 5th International Conference on Environmental Problems in Coastal Regions, Alicante, Spain. For information, access <http://www.wessex.ac.uk/conferences/2004/coastalenvironment04/index.html>
- 28-29 April 2004: "8th Canadian Pollution Prevention Roundtable (CPPR)", Ottawa, Ontario. For information, access http://www.c2p2online.com/main.php3?section=98&doc_id=65
- 28-30 April 2004: "12th Annual GIS Research UK Conference", Norwich, UK. For information, access <http://www.uea.ac.uk/env/gisruk/>
- 28-30 April 2004: "Oil Spill 2004", the 4th International Conference on Hydrocarbon Spills, Modelling, Analysis and Control, Alicante, Spain. For information, access <http://www.wessex.ac.uk/conferences/2004/oilspill04/index.html>
- For a more complete list of upcoming conferences and workshops, access <http://www.dal.ca/aczisc/conf>

The ACZISC Secretariat

IMPORTANT NOTE: If you do not wish to receive the ACZISC Updates, please email the Secretariat at leblancc@ca.inter.net and your name will be deleted from the distribution list.