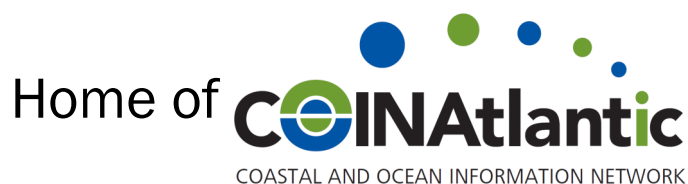




2013-2014 ANNUAL REPORT



ACZISC Secretariat

Dalhousie University
6414 Coburg Road, P.O. Box 15000,
Halifax, Nova Scotia B3H 4R2 CANADA
Tel 902-494-7162
Fax 902-494-1334
Email aczisc@dal.ca
Website www.coinatlantic.ca



Alexi Baccardax Westcott, Project Officer (left)
Andrew Sherin, Director (centre)
Jennifer Barr, Finance Officer (right)

“Solid, objective, and accessible information is essential to identify and respond to the quickening pace and complexity of environmental change, in Canada and globally.”
2010 Fall Report of the Commissioner of the Environment and Sustainable Development

The ACZISC 2013-2014 Annual Report is available in PDF format on the ACZISC website www.coinatlantic.ca and in hard-copy from the ACZISC Secretariat - email aczisc@dal.ca

A Message from the Director of the ACZISC Secretariat

This has been a very busy year for the Atlantic Coastal Zone Information Steering Committee and its Secretariat. Three Committee meetings were held: beginning with our May 2013 meeting in Charlottetown, PEI; followed by the September 2013 meeting in St. John's, NL; and finally our January 2014 meeting in Fredericton, New Brunswick. The Secretariat would like to extend a thank you to our local hosts for assisting it in organizing and executing these meetings, in particular Dr. Adam Fenech, UPEI, Geoff Coughlan and Randy Gillespie, Marine Institute, Memorial University and Russell Henry and Robert Capozzi of the Government of New Brunswick. The Secretariat would also like to express its gratitude to all of the presenters and their organizations for sharing their knowledge and experience with the ICOM Community of Practice through our meetings and the presentations and videos available on our website for those who couldn't attend. It goes without saying that the ACZISC appreciates its members' contributions to the Committee meetings and other Committee activities and especially to those members who are able to contribute financially to the work of the Committee.

A workshop was held at each meeting this year. In Charlottetown and Fredericton, COINAtlantic training sessions were held. In St. John's, the work on our project funded by Natural Resources Canada's Climate Change Impacts and Adaptation Division was advanced by defining the final appearance of the web mapping services of coastal erosion data layers for Newfoundland that were developed by the project and delivered to the internet using the Government of Newfoundland and Labrador web mapping infrastructure.

Coastal conference organization activities played a big part in the work of the ACZISC Secretariat in 2013-2014. As in 2001, when CoastGIS 2001 was held in Halifax, the ACZISC was one of the organizing partners along with Memorial University and University of Victoria for CoastGIS 2013 held in June 2013 in British Columbia. The ACZISC in addition to maintaining the coastgis2013.ca website, made two presentations, organized and led a workshop on LiDAR and LiDAR data accessibility in collaboration with the Government of British Columbia and a small group session on the Marine Geospatial Data Infrastructure (see page 21 of this Annual Report).

The ACZISC Secretariat also began contributing significantly to the organization of the Coastal Zone Canada Conference 2014 in this fiscal year. The ACZISC was one of the original partners in the first conference also held in Halifax in 1994. The Secretariat contributed to both the organizing and communications committees, and the planning of a half day youth session, several presentations, posters, and a COINAtlantic Workshop.

Two very substantial products resulted from the "Information Accessibility Policy Best Practices for Coastal Adaptation" project that was funded by the Climate Change Impacts and Adaptation Division of Natural Resources Canada. Both of these products were the result of fruitful collaborations. First, a Data Accessibility Benchmark was developed in collaboration with the Environmental Information Use and Influence Research Group at Dalhousie University. The benchmark is intended for the self-assessment by data providing organizations of their data accessibility policies and practices. Second, a set of GIS data layers of coastal erosion in Newfoundland was developed as a case study and model information service. These data layers were developed and will be published to the internet as web mapping services in collaboration with Dr. Norm Catto of Memorial University and the Government of

Newfoundland and Labrador. The project also supported enhancements to the COINAtlantic Search Utility.

Other significant collaborations pursued in 2013-2014 included expanding our relationship with the International Coastal Atlas Network by joining their International Steering Group, continuing our collaboration with the Department of Fisheries and Oceans for State of the Scotian Shelf Reporting, continuing to participate in the Advisory Committee for the National Coastal Climate Change Assessment, and in March participating in the establishment of the Ocean Data Management Community of Practice at a workshop hosted by the Marine Environmental Observation Prediction and Response Network (MEOPAR).

For the second year in a row, the ACZISC was privileged to host a Management without Borders student project at the Faculty of Management, Dalhousie University. This year a team of six Masters Students prepared the report “Improving Outreach and Communications for the Atlantic Coastal Zone Steering Committee”. The ACZISC Secretariat is working with the Committee to consider the report’s recommendations and how to implement several in 2014-2015.

Financial and identity challenges continued in 2013-2014. Financial challenges are discussed in the section on financial reporting on page 7. The identity of the ACZISC continues to be somewhat elusive. The organization has evolved from the one envisaged by the Council of Maritime Premiers in 1992; and new venues for intergovernmental conversations on coastal and ocean management have been established since that time. Changing representation on the ACZISC from member organizations and increased demands placed upon representatives by cost cutting and staff reductions have reduced commitment to the work of the ACZISC by member organizations. The priorities, and strategies of the ACZISC strategic plan remain valid, however, the structure required to deliver on the plan in the changing environment is less certain. This suggests that new models for the delivery of the strategic plan should be considered. In 2014-2015, the Secretariat in collaboration with the ACZISC Association Board, and the ACZISC Advisory Committee will explore a way forward.

Challenges aside, the highlight for 2013-2014 has been the accomplishments achieved through existing and new collaborations. These successful relationships will be maintained and enhanced in 2014-2015 and beyond.



Andrew Sherin
Director, ACZISC Secretariat



ACZISC 2013-2014 Annual Report

TABLE OF CONTENTS

The ACZISC	6
The ACZISC Vision and Mission	6
The ACZISC Strategic Plan (2012-2017)	6
The ACZISC Financial Report	7
Accomplishments in 2013-2014	10
Encouraging ICOM: Delivering Products: Coastal Update e-Newsletter	10
Encouraging ICOM: Delivering Products: coinatlantic.ca Website	11
Encouraging ICOM: Delivering Products: Social Media	12
Encouraging ICOM: Delivering Products: Meetings / Presentations	13
Encouraging ICOM: Collaboration: State of the Scotian Shelf Report	14
Encouraging ICOM: Collaboration: International Coastal Atlas Network	15
Encouraging ICOM: Collaboration: International Ocean Institute Canada	15
Encouraging ICOM: Collaboration: CoastGIS 2013.....	15
Encouraging ICOM: Collaboration: Coastal Zone Canada 2014	16
Encouraging ICOM: Collaboration: Dalhousie University Ocean Outreach.	16
Encouraging ICOM: Collaboration: MEOPAR Data Management Workshop	16
Encouraging ICOM: Collaboration: World Oceans Week	16
Sharing of data and information: COINAtlantic Search Utility.....	17
Sharing of data and information: COINAtlantic Training Sessions	18
Sharing of data and information: Information Accessibility Policy Best Practices for Coastal Adaptation.....	18
Engagement in the ACZISC.....	20
Presentations and Displays.....	20

APPENDIX I - Operating Structure

Operational Context	22
Operating Structure.....	23
The Committee	23
ACZISC Association	24
ACZISC Advisory Committee	24
ACZISC Secretariat	24

APPENDIX II - ACZISC Membership—March 2014	26
--	----



THE ACZISC

The ACZISC celebrated its 22nd anniversary in January 2014. The Committee was established in 1992, following the recommendation of the participants of a Workshop organized by the Council of Maritime Premiers in Amherst, Nova Scotia. The 2013-2014 year saw the continuation of implementing the strategic plan for the ACZISC that will direct its work through to 2017. The vision, mission, priorities and strategies below are taken from that strategic plan.

The ACZISC Vision

To achieve the sustainable use of coastal and marine resources in Atlantic Canada through integrated coastal and ocean management (ICOM).

The ACZISC Mission

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

The ACZISC Priorities and Strategies (2012-2017)

- Priority 1 : Encouraging action on the implementation of Integrated Coastal and Ocean Management (ICOM) as a tool to realize environmental, economic and social sustainability.
- Delivery of products that meet the needs of ACZISC members and the wider ICOM community of practice (CoP) and advance the fuller realization of ICOM.
 - Collaborate with other parts of the ICOM CoP to increase awareness in others outside of the ICOM CoP of the importance of ICOM to environmental, economic and social sustainability.
- Priority 2: Collaborative sharing of data and information between members and with the wider ICOM CoP on the ICOM issues of priority to members.
- Reducing barriers to access to data and information.
 - Facilitating the commitment and investment of data providers to inter-organizational and public access to data and information.
- Priority 3: Encouraging the engagement of organizations in the ACZISC that are reflective of the diversity of the ICOM CoP.
- Develop more inclusive and structured processes for determining the non-committee member guest list of each ACZISC meeting
 - Prepare materials and use to solicit affiliations from groups not present at the ACZISC table but identified by current members as important additions to the ACZISC community/ ICOM CoP.
 - Encourage organizations in the ICOM CoP to participate in information sharing through the development of the COINAtlantic.ca website, the Coastal Update E-newsletter and social networking mechanisms such as Facebook.

ACZISC Association's Financial Situation and Forecast

The ACZISC Association finished fiscal year 2013-2014 with only a small deficit. This was a significant improvement over 2012-2013 when the Association had a planned deficit of \$23,032. The Association, the Committee and the Secretariat are very grateful to those organizations that contributed financially to the work of the ACZISC in 2013-2014. They include from the provincial governments, the Department of Fisheries and Aquaculture on behalf of the Province of Nova Scotia, the Departments of Fisheries and Aquaculture, Environment and Conservation, and Natural Resources for the Government of Newfoundland and Labrador, and the Department of Fisheries, Aquaculture and Rural Development from the Province of Prince Edward Island. Federal government contributors included the Ocean and Coastal Management Division, Maritime Region and the Atlantic Region of the Canadian Hydrographic Service of the Department of Fisheries and Oceans, Environment Canada, the Geological Survey of Canada of Natural Resources Canada, Atlantic Canada Opportunities Agency and Public Works and Government Services Canada.

Additional revenue was received from Human Resources and Social Development Canada under the Canada Summer Jobs Program, a contract with the Department of Fisheries and Oceans to author the Emerging Issues Theme Paper for the State of the Scotian Shelf and from the Climate Change Impacts and Adaptation Division of Natural Resources Canada for the project "Information Policy Best Practises for Coastal Adaptation."

The plan to attract sponsors for the Coastal Update newsletter was delayed following the advice that the identity of the ACZISC should be clarified before soliciting sponsors. The advice was part of the final report of our 2013-2014 Management without Borders team. The team was composed of 6 Masters students from the Dalhousie University Faculty of Management who completed the project "Improving Outreach and Communications for the Atlantic Coastal Zone Information Steering Committee".

In addition, the introduction of the Canadian Anti-Spam Legislation on 1 July 2014 requires that non-profit organizations comply with the legislation if they are involved in revenue generating activities (e.g. sponsorship). If we avoid any revenue generation or commercial content (e.g. links to private sector websites) in the newsletters we can continue our present practice without obtaining explicit approval from recipients.

The financial outlook for 2014-2015 is somewhat less positive. Although we knew by the end of 2013-2014 that we had received approval for a new Environment Canada Atlantic Ecosystem Initiative project for \$50,000, we have also had formal notification by some contributors that they are not able to continue with their contributions in 2014-2015 due to financial constraints in their organizations. This shortfall amounts to \$14,300 which has been partially compensated by increasing contributions from two contributors at the time of writing of this report in the amount of \$5,700.

It is prudent to more aggressively explore alternate funding sources for the work the ACZISC in 2014-2015.



Revenue Summary 2013-2014

06-May-14

ACZISC SECRETARIAT 2013 - 2014 Revenue Summary & 2014 - 2015 BUDGET

	2013- 2014		2014- 2015
	<u>PROPOSED</u>	<u>ACTUAL</u>	<u>PROPOSED</u>
	to 31 Mar. 2014		
MEMBERSHIP DUES			
PROVINCIAL GOVERNMENTS			
New Brunswick	5,000		5,000
Newfoundland and Labrador	10,000	10,000	6,700
Nova Scotia	20,000	20,000	20,000
Prince Edward Island	2,500	2,500	2,500
	37,500	32,500	34,200
FEDERAL DEPARTMENTS			
ACOA	5,000	10,000	10,000
Agriculture and Agri-Food Canada	-		2,500
Environment Canada	15,000	13,500	-
Fisheries and Oceans Canada	12,000	12,000	12,000
Health Canada	-		-
Industry Canada	-		-
National Defence	-		-
Natural Resources Canada	10,000	10,000	10,000
Parks Canada	-		1,500
Public Work and Govt. Services Canada	5,000	7,000	5,000
Outstanding dues from previous year	6,000	6,000	1,500
	53,000	58,500	42,500
CONTRACT REVENUE			
EC: Atlantic Ecosystem Initiative Project	-		50,000
HRSDC	2,741	2,781	4,908
COINAtlantic Workshop			500
Other Revenue	5,000		5,000
Coastal Update Sponsorship	6,000		6,000
Best Practices, NRCAN	27,000	16,875	-
Best Practices, NL			
DFO, State of the Scotian Shelf	6,500	6,500	-
Outstanding Contract Revenue	21,700	20,835	10,125
	68,941	46,991	76,533
OTHER			
Interest	-	65	-
TOTAL REVENUE	\$ 159,441	\$ 138,056	\$ 153,233

This revenue summary represents unaudited financial information presented to the Board of Directors of the ACZISC Association and the Atlantic Coastal Zone Information Steering Committee and is current to 6 May 2014.

Financial Report 2013-2014

06-May-14

ACZISC SECRETARIAT FINANCIAL REPORT 2013 - 2014 & BUDGET 2014 - 2015

	2013 - 2014		2014- 2015	
	<u>PROPOSED</u>	<u>ACTUAL</u> to 31 Mar. 2014	<u>PROPOSED</u>	<u>ACTUAL</u>
REVENUES				
New Brunswick	5,000		5,000	
Newfoundland and Labrador	10,000	10,000	6,700	
Nova Scotia	20,000	20,000	20,000	20,000
Prince Edward Island	2,500	2,500	2,500	
Federal Departments	47,000	52,500	41,000	
Outstanding dues from previous year	6,000	6,000	1,500	
Contract Revenues:				
EC: Atlantic Ecosystem Initiative Project	-		50,000	
HRSDC	2,741	2,781	4,908	
COINAtlantic Workshop			500	
Other Contract Revenue	5,000		5,000	
Coastal Update Sponsorship	6,000		6,000	
Best Practices/NL Info Serv, NRCAN	27,000	16,875	-	
NL Information Service, NL				
DFO, State of the Scotian Shelf	6,500	6,500		
Outstanding contract rev. from prev. year	21,700	20,835	10,125	
Interest	-	65	-	
TOTAL REVENUES	159,441	138,056	\$ 153,233	20,000
EXPENSES				
ACZISC Secretariat				
Staffing: Director and Project Officer ¹	88,000	76,997	80,000	
Finance Officer ²	11,000	8,786	11,000	
Science Horizons Intern	-		-	
Summer Student (HRSDC)	3,313	3,627	7,183	
Staff Development	1,500		1,500	
Administrative Services	1,000	843	1,000	
COINAtlantic Website Development	-	1,841	-	
Travel	7,900	4,155	7,900	
Equipment	500		500	
Communication: telephone, fax, email	3,000	2,739	3,000	
Office Supplies	1,000	440	1,000	
General Liability Insurance	1,370	1,368	1,370	
Conferences	3,000	5,279	3,000	
Photocopying	500	479	500	
Courier and Postage	100	37	100	
Meetings	1,500	1,154	2,000	
Printing	373	303	373	
Bank fees / Interest	50	127	150	
Other Contract Expenses				
NL Information Service, NRCAN	27,000	18,264	8,736	
Best Practices, NRCAN	7,000	6,899	-	
DFO, State of the Scotian Shelf		1,500		
AEI Project Expenditures			32,000	
ACZISC Association				
Audit	2,000	1,182	2,000	
Insurance for Directors and Officers	1,200	1,155	1,200	
Secretary/Treasurer	500	500	500	
Registry of Joint Stock Companies	30	30	30	
TOTAL EXPENSES	\$ 161,836	\$ 137,705	\$ 165,042	\$ -
	- 2,395	351 -	11,809	20,000
IN-KIND FROM DALHOUSIE UNIVERSITY ³				
	\$ 30,000	\$ 30,000	\$ 30,000	

Budget Notes

1. The Director position is half time and the Project Officer position is full time.
2. The Finance Officer is paid on an hourly basis.
3. Includes free office space and utilities, heating, access to the university computer network, and preferential communication rates.

This unaudited financial report represents was presented to the Board of Directors of the ACZISC Association and the Atlantic Coastal Zone Information Steering Committee and is current to 6 May 2014.



ACCOMPLISHMENTS IN 2013-2014

The accomplishments for 2013-2014 are organized by the strategic plans priorities and strategies.

Priority 1: Encouraging action on the implementation of Integrated Coastal and Ocean Management (ICOM) as a tool to realize environmental, economic and social sustainability.

Strategy - Delivery of products that meet the needs of ACZISC members and the wider ICOM community of practice (CoP) and advance the fuller realization of ICOM.

Coastal Update e-newsletter

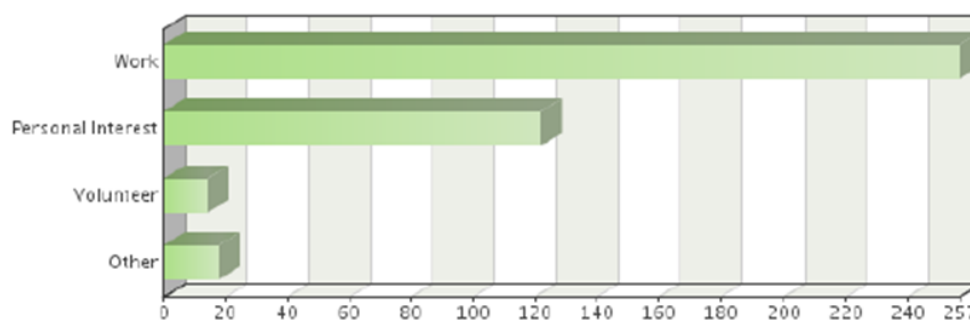
The Coastal Update e-newsletter contains brief items related to ICOM, geomatics and coastal mapping, with links and /or contacts for further information. These items relate to projects and programs; manuals, reports, proceedings; research and development activities; and conferences, workshops and other events.

In 2013-2014, the ACZISC Coastal Update was prepared and emailed each month, except for one July / August edition, by the Secretariat to ACZISC members and to more than 5,500 recipients.

In 2013-2014, the Secretariat collaborated with James Ross, a student with the Environmental Information Use and Influence (eiui.ca) Research Group at Dalhousie University who was studying the use of the State of the Scotian Shelf Report theme papers. Questions about the newsletter were included in his survey. Although the responses to these questions were low in number (45), it confirmed some aspects of the previous 2012-2013 survey. The majority of recipients read the newsletter every month and 27% of the respondents indicate they pass on all or parts of the newsletter to others. Indeed, 10% of the respondents indicated they received the newsletter from someone other than the ACZISC Secretariat. Both surveys suggest the reach of the newsletter goes beyond the subscription e-mail list. As reported in 2012-2103 a more comprehensive survey of newsletter recipients was conducted from 16 February 2013 to 31 March 2013; 312 recipients responded (204 from Canada, 43 from the USA, 27 from Europe and 24 from other parts of the world).

A large majority of the Canadian respondents were from Atlantic Canada with a significant response from British Columbia.

Discussions were held at several ACZISC



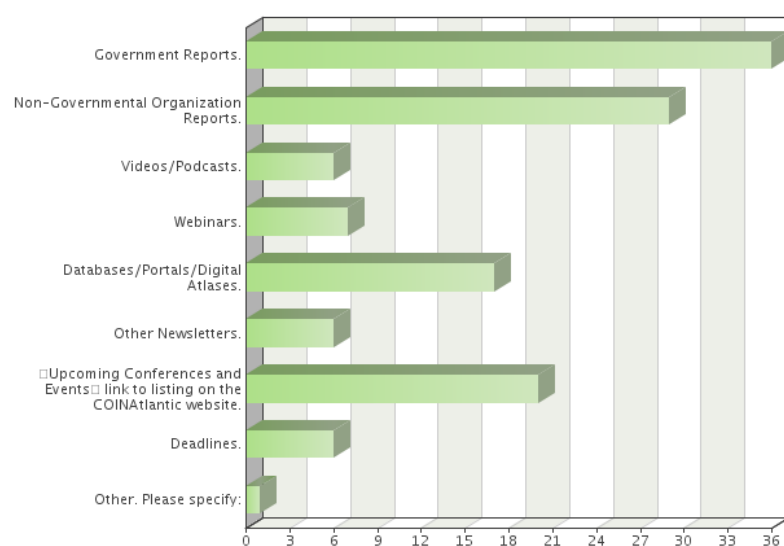
Bar chart from the 2012-2013 newsletter survey answering the question "Why do you subscribe to the ACZISC Coastal Update?"

meetings this year concerning soliciting financial sponsors for the newsletter. The Dalhousie Management without Borders student team also made recommendations on this idea. With the coming into force of anti-spam legislation by the federal government implementation of newsletter sponsorship may be impeded. The implications of this legislation will need to be investigated in 2014-2015.

Website

The name of the ACZISC's website is COINAtlantic which stands of Coastal and Ocean Information Network Atlantic.

The website is meant to function as a hub for Coastal and Ocean Information in Atlantic Canada. Additional online activities of the ACZISC are also called 'COINAtlantic', these include: the search utility, the geocontent generator, and social media pages which include YouTube, LinkedIn, Twitter and Facebook.



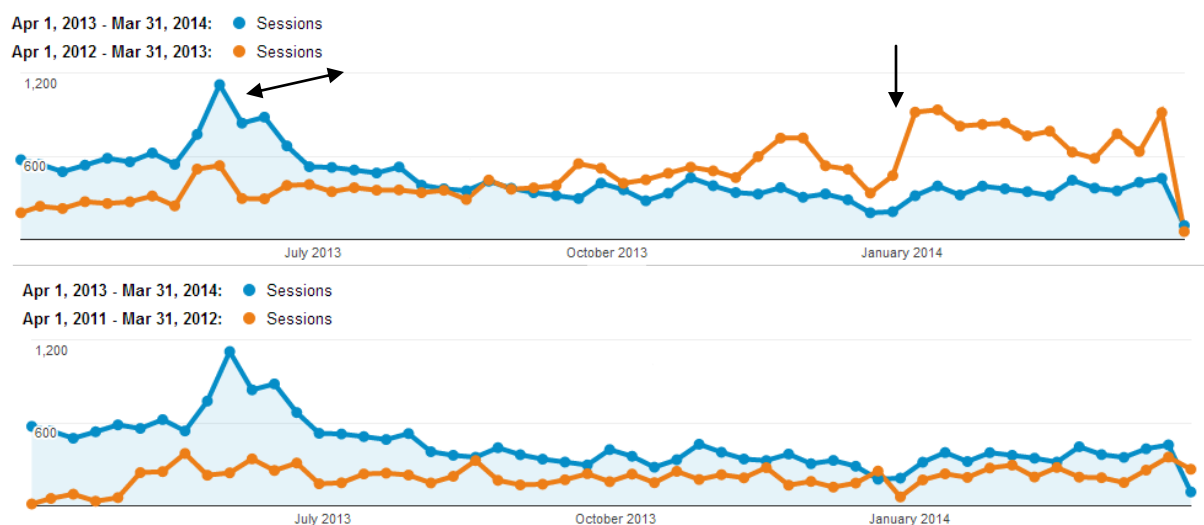
Bar chart from the 2013-2014 survey of newsletter recipients answering the question "What type of information in the ACZISC Coastal Update e-Newsletter interests you the most? (Choose all that apply)"

In 2013-2014, website theme pages under the ICOM, State of the Coast and Ocean, Coastal and Offshore Development, Climate Change, and Emerging Issues main menu items were enhanced. Pages were reorganized for maximum productivity and ease of accessibility and new theme pages were added. The Emerging Issues theme paper for the State of the Scotian Shelf Report was added. The website was also updated with information on the ACZISC meetings held in 2013-2014 including the vid-

eos of the presentations linked from the website to the COINAtlantic You Tube Channel. In 2013-2014, nine videos of presentations at ACZISC meetings were published.

The website visitations for the fiscal year 2013-2014 were 1932 visits / month (2128 vis-

its / month 2012-2013) and 2:12 minutes average visit duration (2:43 min. 2012-2013). The years 2012-2013 and 2013-2014 were anomalous years for the website because of website activity associated with the CoastGIS 2013 conference. In the top figure below, the increase in the monthly number of sessions per week (single headed arrow above orange line) from January 2013 to the end of March is directly related to CoastGIS as is the peak just before the CoastGIS meeting held in June (double headed arrow above the blue line) in the period April 1, 2013 to March 31, 2014. A more comparable period is arguably April 1, 2011 to March 31, 2012 shown in comparison with April 1, 2013 to March 31, 2014 in the bottom figure below. This comparison shows an increase in website sessions per week for 2013-2014 over the same period in 2011-2012 in almost every week after July 2013 (i.e. CoastGIS is over). The team of students from Management without Borders made several recommendations for improving the website which will be considered and implemented in 2014-2015.

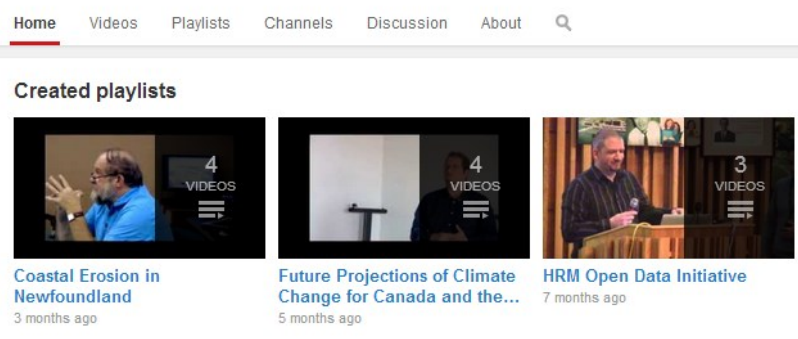


COINAtlantic Website visitor statistics from Google Analytics. Top, number of sessions by week April 1, 2013 to March 31, 2014 (blue line) compared to the number of sessions per week for the period 1 April 2012 to March 31, 2013 (orange line). Bottom, number of sessions by week April 1, 2013 to March 31, 2014 (blue line) compared to the number of sessions per week for the period 1 April 2011 to March 31, 2012 (orange line).

Social Media

The Secretariat maintains a Facebook page, a LinkedIn group, a YouTube video channel and a Twitter account which are accessible from the coinatlantic.ca website. These communication channels are used to pass on time sensitive information to friends and followers.

COINAtlantic



You Tube playlists of ACZISC Meeting presentation videos.

Meetings and Presentations

As in previous years, three ACZISC meetings were held in 2013-2014 in the Atlantic provincial capitals by rotation. The meetings were attended by members and by associates from various sectors, including government departments and agencies, NGOs, academia, community



Al Hanson presenting at ACZISC Meeting #69



Norm Catto presenting at ACZISC Meeting #70

groups and the private sector, and by university students. The ACZISC meetings were held in Charlottetown, PEI (#69) 29-30 May 2013, St. John's, NL (#70) 11-12 September 2013 and Fredericton, NB (#71) 15-16 January 2014.

The Minutes of ACZISC meetings and the Coastal Activities reports, based on the roundtable components of ACZISC meetings, are a valuable information resource for ICOM

MEETING	TOPIC	PRESENTER
ACZISC Meeting #69 Charlottetown, PEI 29-30 May 2013	Northumberland Strait Environmental Monitoring Partnership	Michael van den Heuvel, University of Prince Edward Island
	Future Projections of Climate Change for Canada and the Atlantic Region Using Global Climate Models Used in the IPCC Fifth Assessment Report (2014)	Adam Fenech, University of Prince Edward Island
	Salt Marsh Migration in Prince Edward Island	Al Hanson, Environment Canada
	ACZISC Coastal Update Newsletter Survey Results	Alexi Westcott, ACZISC Secretariat
ACZISC Meeting #70 11-12 September 2013, St. John's, NL	MPA Network Planning Strategy for the Newfoundland and Labrador Shelves Bioregion	Nadine Templeman, Oceans Program, DFO NL Region
	Coastal Explorers: A New Educational Initiative Involving Students in Real-Time Monitoring of the Marine Environment	Chelsie Archibald, Oceans Learning Partnership
	Coastal Erosion in Newfoundland: Short-term and Long-term Assessment	Norm Catto, Memorial University
ACZISC Meeting #71 15-16 January 2014, Fredericton, New Brunswick	Updates on Climate Tools and Coastal Adaptation Projects in New Brunswick	Prativa Pradhan, Environment and Local Government New Brunswick
	GeoNB - Progress 2008 to 2013	Bernie Connors, Service New Brunswick
	Recent ACAP St. John Projects: Marsh Creek Restoration Initiative (MCRI)	Tim Vickers, Executive Director, ACAP St. John.

and geomatics personnel. In addition to being made available to meeting participants, the minutes and coastal activities reports are available via the ACZISC website at <http://coinalantic.ca>. As mentioned in the report on the website, videos have been taken of the presentations made at the meetings and nine have been published on ACZISC website. All other videos are in the process of being edited or awaiting approval for distribution. At all ACZISC meetings during 2013-2014, participants were asked to fill out an evaluation form. Some excerpts from the evaluations are included in the box below.

COMMENTS FROM THE MEETING EVALUATIONS

The evaluations of the meetings of the ACZISC by participants continue to be overwhelmingly positive. The presentations and discussions are characterized as "very good", "topical", "nice mixture", "Great!" and "top notch!". The Roundtable review portions of the meetings are also well received with comments like "worthwhile - great opportunity for info-sharing across the provinces", "concise and informative", "always useful" and "lots of activity and research throughout Atlantic Canada".

Strategy - Collaborate with other parts of the ICOM CoP to increase awareness in others outside of the ICOM CoP of the importance of ICOM to environmental, economic and social sustainability.

State of the Scotian Shelf Report

The ACZISC Secretariat continues to collaborate with the Department of Fisheries and Oceans, Maritime Region on State of the Scotian Shelf reporting. The ACZISC houses the



Table 2: Factors required for successful MSP implementation (from Ehler 2008).

1. Legal authority and political support for MSP; ideally statutory and enforceable.
2. Sound information base of both natural and social science.
3. Clear and measurable objectives.
4. Early and frequent stakeholder involvement.
5. Consideration of plans and objectives in other sectors of the economy.
6. Integration with plans for adjoining coastal areas, terrestrial land-use plans, and coastal watershed plans.

Table 2 from the State of the Scotian Shelf Emerging Issues theme paper.

internet access to the theme papers on its website and participates in the Advisory Committee that provides advice on the theme paper content and reviews drafts of the theme papers before they are published. In 2013-2014 a single theme paper was added to the website, *Emerging Issues*.

The ACZISC Secretariat was engaged by the Department of Fisheries and Oceans to write the Emerging Issues Theme Paper for the State of the Scotian Shelf Report. Although most of the research and writing for the theme paper was completed in 2012-2013, the final review, editing, layout and publication was carried out in 2013-2014.

International Coastal Atlas Network



The ACZISC Secretariat produced two ICAN newsletters in 2013-2014, one in September 2013 and one in March 2014. The March 2014 newsletter contained an article on the enhancements to version 2 of the COINAtlantic Search Utility. In addition, Andy Sherin, Director, participated in the ICAN 6 meeting held in Victoria before the CoastGIS 2013 conference and lead the discussion on the ICAN communications plan. He was invited to join the International Oceans Data Exchange (IODE) Steering Group for ICAN.



Members of the IODE ICAN Project Steering Group that attended ICAN 6. Andy Sherin, ACZISC Secretariat, is on the far right.

International Ocean Institute—Canada

The Secretariat presented a lecture to the participants in the IOI Training Program: *Ocean Governance: Policy, Law and Management* in June 2013.

CoastGIS 2013, the 11th International Symposium on GIS and Computer Mapping for Coastal Zone Management



The Secretariat participated in the organizing of CoastGIS 2013 held in Victoria, BC, 18-21 June 2013 in collaboration with Dr. Rosa-

line Canessa, University of Victoria and Dr. Rodolphe Devillers, Memorial University of Newfoundland. The Secretariat maintained the coastgis2013.ca website, made two presentations “COINAtlantic: Sharing through Open Tools and Open Standards” and “Towards a benchmark for data and information accessibility”, conducted a conference workshop on

LiDAR and LiDAR data accessibility in collaboration with Tina Neal of the Government of British Columbia, and chaired a small group session on the Marine Geospatial Data Infra-



structure (see report on page 21). Some of the participants in the LiDAR Data Accessibility Workshop at CoastGIS 2013

Coastal Zone Canada 2014



Alexi Westcott, Project Officer for the Secretariat contributed to the organizing and communication committees for Coastal Zone Canada 2014 conference as it returned to Halifax 20 years after its inaugural meeting in Halifax in 1994. She tweeted @czc2014 starting the spring 2014 and promoted the conference through regular tweets as well as assisting in other promotional activities of the communications committee. She also organized a half day Youth Session pulling together a team from a number of other organizations to put together a session that would contribute a youth statement to the conference and provide mentoring to the participants.

Dalhousie University Ocean Science Outreach and Communication Group

Alexi Westcott contributed to the ad-hoc group from departments and organizations related to ocean studies at Dalhousie University to raise the profile of ocean science on campus and beyond.

MEOPAR Data Management Workshop

The ACZISC Secretariat was invited to a workshop organized by the Marine Environmental Observation Prediction and Response Network (MEOPAR) to address the integration of data management practises with ocean observation systems within Canada. The workshop was held in Montreal on 24-25 March 2014. The meeting outcomes included proposal to establish a Canadian Ocean Data Management Community of Practice with the draft mission to make Canada's ocean data & information universally accessible and useful and to turn ocean data into knowledge.

World Oceans Week

Again in 2013-2014, the ACZISC participated in World Oceans Day celebrations on 7 June 2013 along with many other organizations on the Halifax Waterfront. We highlighted



Oceans Day activities of other organizations throughout the Atlantic provinces on the website. In addition the ACZISC Secretariat had a display at the Oceans Career Fair and Industry Showcase on 6 June 2013 at the Cunard Centre in Halifax. The Showcase was sponsored by the Nova Scotia Oceans Technology Council.

The Small Boat Gallery at the Maritime Museum of the Atlantic in Halifax on World Oceans Day. The ACZISC display is located at the bow of the boat in the top left of the picture with four young scientists playing our protected area / protected species matching game.

Priority 2: Collaborative sharing of data and information between members and with the wider ICOM CoP on the ICOM issues of priority to members.

Strategies - Reducing barriers to access to data and information.

- Facilitating the commitment and investment of data providers to inter-organizational and public access to data and information.

COINAtlantic Search Utility

The key initiative under priority 2 in 2013-2014 continued to be the development and promotion of COINAtlantic concepts and tools. Enhancements were made to the COINAtlantic Search Utility (CSU). The CSU enhancements include:

- The speed of loading the application has been improved by reducing the size of Java script libraries;
- A web mapping service can now be added to the map directly from the “URL link to functional mapping server” field found in the metadata display at the bottom of the CSU window (see red box in the figure on the next page for the WMS provided by the Ocean Tracking Network);
- The CSU now uses the GetLegendGraphic feature of the WMS standard to display a legend for an added spatial resource;
- The CSU maintains a local data base of discovered spatial resources that can also be searched using the “Local Database Search” tab. When the “Add WMS layer” feature of the CSU is executed manually by the user, the URL and abstract metadata for the added WMS layer is added to the local database. Thusly, the local database grows with the use of the CSU, accumulating the results of searches and the manual entries of WMS.

Welcome to the COINAtlantic Search Utility


[Map Gallery](#) | [Feedback](#)

Search for Map Layers

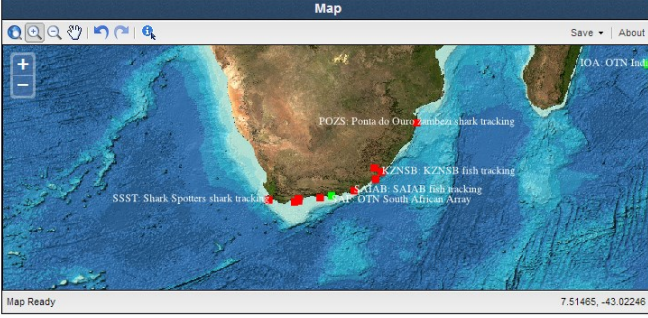
Search Results

Live Search

Local Database Search

Title	Link
Ocean Tracking Network (OTN)	http://www.marinebiodiversit...
BDSH Models and Photographers	http://umapper.s3.amazonaws...

Map



Map Layers

Layers

Legend

- otn_resources_metadata_points
- Deployment Collaborations
- Tracking Collaborations
- Data Collaborations
- Undefined
- Active Acoustic Stations
- Vacant Acoustic Stations
- Other Active Stations
- Planned Stations
- Closed Stations
- Places [NRCan toporama]
- Feature Names [NRCan toporama]
- Boundaries [GeoBase]

Additional Search Information

URL link to functional mapping server (WMS/WFS)	http://global.oceantrack.org:8080/geoserver/wms?request=getCapabilities&service=wms
URL link to existing ISO standard metadata	http://members.oceantrack.org/data/metadata/ISO-50041.html

COINAtlantic Search Utility showing the locations and legend for stations from the Ocean Tracking Network.

Further enhancements are planned including enabling the local database to respond to Catalogue Services on the Web (CSW) requests and the CSU search to query CSW-compatible metadata catalogs in addition to the present search of the internet.

COINAtlantic Training Sessions

A COINAtlantic Training Workshop was held on May 30, 2013 in conjunction with the ACZISC Meeting #69 in Charlottetown, PEI. Participating in the workshop was Mike Reid of Dalhousie University who demonstrated **CoastBase**, a database of information on priority coastal issues in Atlantic Canada developed by the Coastal Research Network (CRN) in Nova Scotia. A second COINAtlantic Training Workshop was held in conjunction with ACZISC Meeting #71 in Fredericton, NB.

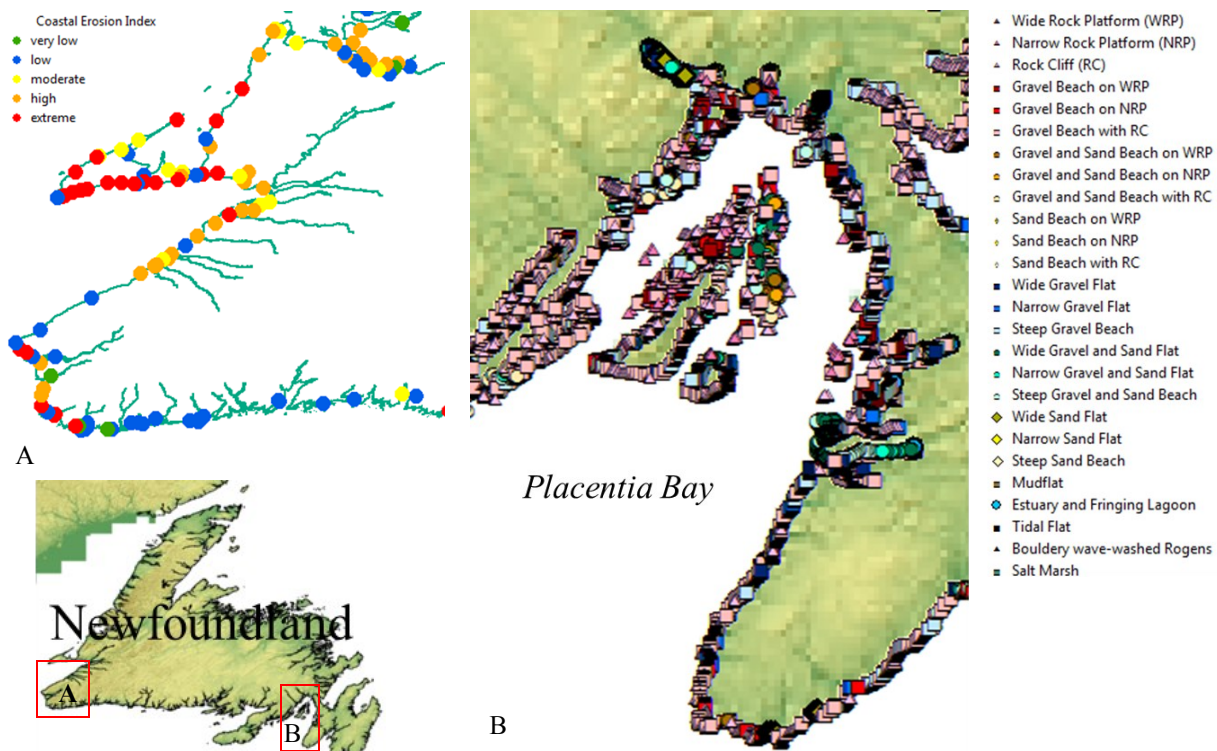
A full day COINAtlantic Training Workshop was planned for 20 June 2014 just after the Coastal Zone Canada 2014 conference. The workshop has been planned to not only familiarize participants with the use of the CSU and the CGG, but Jeff McKenna of Gateway Geomatics took participants 'under the hood' and introduced the Open Source components used to build the tools.

Information Accessibility Policy Best Practices for Coastal Adaptation

The Secretariat continued to work on the project funded by the Climate Change Impacts and Adaptation Division of Natural Resources Canada to develop a benchmark for information accessibility policies to support coastal climate change adaptation. Accomplishments in 2013-2014 included:

1. The development of a draft benchmark for information accessibility policies to support coastal climate change adaptation working in collaboration with Dr. Bertrum MacDonald of the School of Information Management. The benchmark contains 11 principles and criteria a data providing organization can use for self assessment of their information accessibility policies. A poster was prepared for the Coastal Zone Canada 2014. The benchmark will be tested, evaluated and updated in 2014-2015.

2. A workshop was held in conjunction with ACZISC Meeting #70 in St. John's, NL on the 12 September 2013 to determine the legends and symbology for the web mapping services .
3. Final GIS products for the model information service were developed for the coastal character and sensitivity indices for the Island of Newfoundland in ArcGIS. Four reports authored by Dr. Norm Catto on Coastal Erosion in Newfoundland were documented using the COINAtlantic GeoContent Generator. The final GIS products have been forwarded to the Government of Newfoundland for distribution as Web Mapping Services. These services will be tested and promoted in 2014-2015 with a customized version of the COINAtlantic Search Utility. A poster demonstrating this use case and a presentation on the development of the GIS products were prepared for Coastal Zone Canada 2014.



Examples of GIS products for the model information service developed for the Information Accessibility Policy Best Practices for Coastal Adaptation project. Top left: Coastal Erosion Index for the southwest coast of the Island of Newfoundland; Right: Point data set for Coastal Character for Placentia Bay in Newfoundland; Bottom left: Location Map.



Photos from Coastal Erosion in Newfoundland Community Reports for Ferryland (left) showing overwash damage and and Humber Arm (right) showing a mixed gravel-sand flat.





Priority 3: Encouraging the engagement of organizations in the ACZISC that are reflective of the diversity of the ICOM CoP.

Strategies - Develop more inclusive and structured processes for determining the non-committee member guest list of each ACZISC meeting.

- Prepare materials and use to solicit affiliations from groups not present at the ACZISC table but identified by current members as important additions to the ACZISC community/ ICOM CoP.

- Encourage organizations in the ICOM CoP to participate in information sharing through the development of the COINAtlantic.ca website, the Coastal Update E-newsletter and social networking mechanisms such as Facebook.

The Secretariat invites guests from a wide range of organizations with an interest in coastal and ocean management. In 2013-2014, 24 organizations were affiliated with the ACZISC through membership and more organizations through meeting participation. Seven new organizations attended ACZISC meetings in 2013-2014. Fifty-four contributions were made by affiliated organizations to ACZISC products.

Presentations and Displays:

Atlantic Canada Coastal & Estuarine Science Society

The ACZISC Secretariat displayed a poster at the meeting of the Atlantic Canada Coastal & Estuarine Science Society held on 10 May 2013 at the Centre for Geographic Sciences in Lawrencetown, NS.

Oceans Career Fair and Industry Showcase

The ACZISC Secretariat set up a display at the Oceans Career Fair and Industry Showcase held on 6 June 2013 at the Cunard Centre in Halifax, NS. The Showcase was sponsored by the Oceans Technology Council a component of the Aerospace and Defence Industries Association of Nova Scotia.

World Oceans Day Celebration

The ACZISC Secretariat set up a display at the Maritime Museum of the Atlantic to mark World Oceans Day on 7 June 2013.

International Ocean Institute—Canada

The Secretariat presented a lecture to the participants in the IOI Training Program: Ocean Governance: Policy, Law and Management on 3 June 2013.

CoastGIS 2013

The ACZISC made four presentations and displayed a poster at CoastGIS 2013 in Victoria, BC, 19-21 June 2013:

- *COINAtlantic: Sharing Through Open Tools and Open Standards*
- *Towards a Benchmark for Data and Information Accessibility*

- **CanCoast: A National-scale Framework for Characterizing Canada's Marine Coasts** (on behalf of the Geological Survey of Canada)
- Report from the small group discussion on the Marine Geospatial Information Network (MGDI).

Recommended Actions from the MGDI Small Group at CoastGIS 2013

- **Request data sets on the federal open data portal including:**
 - A standard pan-Canadian high resolution shoreline data set that defines the inter-tidal zone;
 - A base bathymetry 500 m grid for Canada;
 - Physics, chemistry, plankton and fisheries data; and
 - Historical weather and climate.
- **Request that the marine community is represented prominently on the**
 - Canadian Geomatics Roundtable and Strategy; and the
 - Policies and implementation of the Federal Geospatial Platform
- **Canada needs a CanGOOS to coordinate ocean observation in Canada.**

MEOPAR Data Management Workshop

The ACZISC Secretariat made a presentation on the COINAtlantic Chain of Information Access to the MEOPAR workshop held on 24-25 March 2014 in Montreal, PQ.





About the ACZISC: Operational Context

Coastal and ocean resources and activities make significant contributions to the economies of the Atlantic Provinces. The 2010 report, *Economic Impact of Marine Related Activities in Canada*¹, published by the Department of Fisheries and Oceans and based on data from 2006 estimated the oceans sector contributed \$12.9 billion to the GDP of the region or 3.5 % of the region's total GDP. Perhaps more importantly the sector accounted for 175,790 direct and spin-off jobs. Within the sector offshore oil and gas contributed most to the GDP, the seafood sector contributed the next highest amount but led in employment. Other contributions are made by marine transportation, tourism and the public sector, principally the federal departments of National Defense and Fisheries and Oceans.

The coastal zone encompasses a multitude of activities and the management of its resources overlaps several jurisdictions involving many stakeholders. Canada's Ocean Strategy² defined the following sectors as participants in an integrated management process: federal authorities, provincial, territorial and regional authorities, aboriginal organizations and communities, industry and resource users, non-governmental organizations, community groups and the academic, science and research communities. These organizations represent what the ACZISC refers to as the ICOM Community of Practice.

In Atlantic Canada, the coastal land-water interface is exposed increasingly to a wide variety of physical, biological and chemical stresses that threaten the region's economic, social and ecological sustainability. In the first stage of the ACZISC strategic planning exercise a summary of the issues impacting Atlantic Canada's coasts and oceans was developed including the forces of changing coastal economies and demographics and global demands for energy and food. Competing needs and interests and coping with rapid change due to a changing climate and economic growth were defined as pressures. These forces and pressures led to impacts including decreased resiliency of ecosystems and reduced capacity of ecosystem services, habitat destruction and reduced biodiversity and productivity, Increased risks to human health and recreational opportunities from decreased coastal water quality, and increased costs and risks for marine infrastructure and coastal communities. Although it was recognized that economic benefits were possible from increased activity in multiple marine sectors, increasing challenges were faced to realize economic and social benefits without negative environmental impact.

Intergovernmental and interagency cooperation is essential for managing the coastal and ocean resources as is the accessibility of information to support management functions as recognized by the Commissioner of the Environment and Sustainable Development in his 2010 Fall Report³.

¹<http://www.dfo-mpo.gc.ca/ea-ae/cat1/no1-1/no1-1-eng.htm>

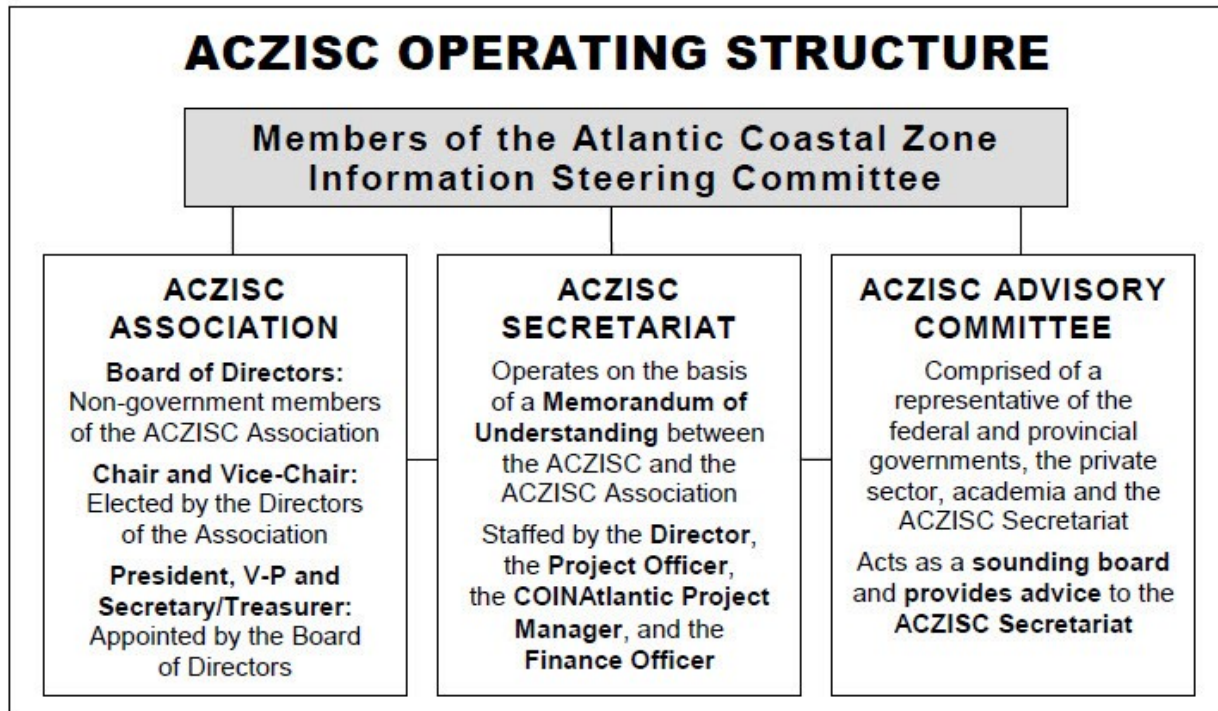
²<http://www.dfo-mpo.gc.ca/oceans/publications/cos-soc/index-eng.asp>

³http://www.oag-bvg.gc.ca/internet/English/parl_cesd_201012_e_34435.html

"Solid, objective, and accessible information is essential to identify and respond to the quickening pace and complexity of environmental change, in Canada and globally."
2010 Fall Report of the Commissioner of the Environment and Sustainable Development

OPERATING STRUCTURE

The ACZISC Operating Structure consists of four major components: the Atlantic Coastal Zone Information Steering Committee made up of members from federal and provincial departments and agencies, non-governmental organizations, industry associations, and academe; the ACZISC Association and its Board of Directors, incorporated under the Societies Act of Nova Scotia and the employer of the Secretariat; the ACZISC Advisory Committee, which is a subcommittee of the ACZISC that provides advice to the Secretariat; and the ACZISC Secretariat.



The Committee

Membership in the ACZISC is inter-agency, multi-sectoral, and multi-disciplinary. ACZISC members represent governments and organizations which have a mandate for and can contribute to the development, coordination and implementation of ICOM. This includes policy, mechanisms and tools to facilitate access by practitioners to relevant data and information. The ACZISC functions as a 'horizontal mechanism' to implement its mandate.

In 2013-2014, membership included the four Atlantic Provinces, eleven federal departments and agencies, non-governmental organizations, community organizations, academics and the private sector. A detailed list of members as of March 2014 is included in Appendix I.

“Complex, cross-cutting issues will continue to challenge public servants to work together across vertical lines to offer coherent, relevant solutions to those they serve.”
Using Horizontal Tools to Work Across Boundaries: Lessons Learned and Signposts for Success, Canadian School of the Public Service, Publication Number P106E.



ACZISC Association

In November 2003, the ACZISC Association was established 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 Association are:

1. To encourage and support the sustainable use of coastal and marine resources in Atlantic Canada through integrated coastal zone management;
2. To promote, facilitate and influence information management, policies and programs for the purpose of enhancing integrated coastal zone management in Atlantic Canada;
3. 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;
4. To strengthen the expertise and capacity in the oceans and coastal zone sectors of government, and private and non-governmental organizations in Atlantic Canada;
5. 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;
6. All other activities which are ancillary to the objects of the Society.

Membership in the Association is open to anyone supporting the objects of the Association. The ACZISC Association Board of Directors is composed of non-government members of the ACZISC Committee. The list of the Directors for 2013-2014 is included in Appendix I.

Meetings of the Board of Directors were held on 8 May 2013, 5 Sept 2013 and 13 Jan 2014. The 8th Annual General Meeting of the Association was held on 7 May 2014, in Dartmouth, Nova Scotia.

ACZISC Advisory Committee

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

The members of the ACZISC Advisory Committee are: William Whitman (provincial representative); Grant Gardner (academic representative); Tim Hall, Chair (federal representative); Brad Fay (private sector representative); and Andrew Sherin (ACZISC Secretariat). The Secretariat communicates with the Advisory Committee on an as-needed basis. The Advisory Committee met by teleconference on 17 December 2013.

ACZISC Secretariat

The ACZISC Secretariat operates on the basis of a **Memorandum of Understanding** between the ACZISC Committee and the ACZISC Association. The primary **function, roles and responsibilities** of the Secretariat are:

- 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; and
- to deliver products as determined by the ACZISC.

The offices of the ACZISC Secretariat are located on the campus of Dalhousie University, at 6414 Coburg Road. The offices are shared with the International Ocean Institute and the Institute of Research in Materials. The Secretariat consists of a half-time Director, Andrew Sherin, a full time Project Officer, Alexi Baccardax Westcott, and a part time Finance Officer (Jennifer Barr). The position of COINAtlantic Project Manager has been vacant since the departure of Paul Boudreau to retirement and the departure of Adam Fancy to Environment Canada after the completion of his Science Horizons Internship. The role has been filled in part by the Director and the Project Officer.

Andrew Sherin, Director, continued to participate in Advisory Committee for the National Coastal Climate Change Assessment that will be published by Natural Resources Canada (NRCan) in early 2015. Andrew is also a member of the State of the Scotian Shelf Advisory Committee and was the co-chair of the organizing committee for CoastGIS 2013, the 11th International Symposium on GIS and Computer Cartography for Coastal Zone Management held in Victoria, BC 18-21 June 2013. Andrew joined the International Ocean Data Exchange (IODE) Steering Group for the International Coastal Atlas Network and is the editor for its newsletter.

Alexi Baccardax Westcott, Project Officer, was a member of the organizing and communications committees for the Coastal Zone Canada conference held in Halifax in 15-19 June 2014.

A summer student was employed during the summer of 2013 with financial assistance from the Canada Summer Jobs program. Gillian Bond, a third year Bachelor of Science student in marine biology and earth science assisted the Secretariat in adding new content to the website at coinatlantic.ca.

In addition a Dalhousie University Masters of Marine Management student, Tamara Wilson, was an intern with the Secretariat.

In 2013-2104, the Secretariat participated in the Management without Borders program for the Dalhousie Faculty of Management. A team of Masters of Management students reviewed the ACZISC communication tools and made a number of recommendations which the Secretariat will consider and implement over the next months.



APPENDIX I

ACZISC Membership—March 2014

Atlantic Canada Opportunities Agency

William Blight, Regional Manager
Real Property Geomatics Services
Public Works and Government Services Canada
PO Box 2247, Halifax, NS B3J 3C9
Tel 902-496-5160 - william.blight@pwgsc.gc.ca

Robert Capozzi, Coastal and Marine Planner
NB Department of Environment
PO Box 6000 Fredericton, NB E3B 5H1
Tel 506-453-8946 - robert.capozzi@gnb.ca

Norval Collins,
President, CEF Consultants
630 Larry Uteck Blvd., Suite 205, Halifax, NS
B3M 0G4 Tel 902-425-4802 -
ncollins@cefconsultants.ns.ca

Brad Fay, Director, ACZISC Association and
Associate & Geomatics Consultant
Interpretation Resources Inc.
c/o 3 Elizabeth Drive, Halifax, NS B3N 1S2
Tel 902-477-0946 - bfay39@gmail.com

Ray Finn, Regional Director, Oceans, Habitat and
Species at Risk Branch, Fisheries and Oceans
Canada, Newfoundland and Labrador Region
PO Box 5667, St. John's, NL A1C 5X1
Tel 709-772-2442 - ray.finn@dfo-mpo.gc.ca

Sgt Gary Frail
Royal Canadian Mounted Police
PO Box 2286, Halifax, NS B3J 3E1
Tel 902-458-2237 (pager) - gary.frail@rcmp-grc.gc.ca

Richard Gallant, Deputy Minister
PEI Department of Fisheries, Aquaculture
and Rural Development
PO Box 1180, Montague, PE C0A 1R0
Tel 902-838-0983 - rkagallant@gov.pe.ca

Grant Gardner, Director, ACZISC Association and
Coastal Zone Canada Association (CZCA), (on leave,
2013-2014) Memorial University of Newfoundland,
St. John's, NL A1B 3X7
Tel 709-864-3259 - ggardner@mun.ca

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

Randy Gillespie, Director, Centre for Applied Ocean
Technology
Fisheries and Marine Institute, Memorial University
PO Box 4920, St. John's, NL A1C 5R3
Tel 709-778-0764 - randy.gillespie@mi.mun.ca

Michel Goguen, Director of Hydrography
Canadian Hydrographic Service - Atlantic
Fisheries and Oceans Canada
Bedford Institute of Oceanography
PO Box 1006, Dartmouth, NS B2Y 4A2
Tel 902-426-3497 - Michel.Goguen@dfo-mpo.gc.ca

Leslie Grattan, Newfoundland and Labrador Envi-
ronmental Industry Association
90 O'Leary Avenue, 1st floor, St. John's, NL
A1B 2C7
Tel 709-739-8176 - lgrattan@nl.rogers.com

Tim Hall, Regional Manager, Oceans and Coastal
Management, Oceans, Habitat and Species at Risk
Branch, Fisheries and Oceans Canada, Maritimes
Region, Bedford Institute of Oceanography
PO Box 1006, Dartmouth, NS B2Y 4A2
Tel 902-426-4116 - tim.hall@dfo-mpo.gc.ca

Russell Henry, Senior Policy Advisor, Policy and
Planning, NB Department of Agriculture and Aqua-
culture and NB Department of Fisheries PO Box
6000, Fredericton, NB E3B 5H1
Tel 506-457-6922 - russell.henry@gnb.ca

Nicole Hynes, Resource Planning Supervisor
Sustainable Fisheries and Oceans Policy
NL Department of Fisheries and Aquaculture
PO Box 8700, St. John's, NL A1B 4J6
Tel 709-729-1140 - nicolehynes@gov.nl.ca

Vladimir Kostylev, Section Head, Coastal and
Shelf Studies, Natural Resources Canada,
Bedford Institute of Oceanography, PO Box 1006,
Dartmouth, NS B2Y 4A2
Tel 902-426-8319
vladimir.kostylev@nrca-nrcan.gc.ca

Ed Light, Manager, Project Director- GIS, NS
Transportation and Infrastructure Renewal,
1672 Granville - Floor 4 - Johnston Building,
Tel 424-7651, - lighted@gov.ns.ca

ACZISC Membership—March 2014 (cont'd)

Albert MacDonald, Director
Municipal Affairs and Provincial Planning
PEI Department of Finance, Energy and Municipal Affairs
PO Box 2000, Charlottetown, PE C1A 7N8
Tel 902-368-5582 - afmacdonald@gov.pe.ca

Brian McShane, Innovation Officer, Policy, Analysis and Intelligence Branch, Industry Canada
PO Box 8950, St John's, NL A1B 3R9
Tel 709-772-6602 - mcsbane.brian@ic.gc.ca

John Oliver, Environmental Compliance Specialist
Regulatory Affairs, Energy Policy
NL Department of Natural Resources
PO Box 8700, St. John's, NL A1B 4J6
Tel 709-729-2365 - johnoliver@gov.nl.ca

Parks Canada

Kathryn Parlee, Ecosystem Advisor,
Strategic Integration and Partnerships,
Environment Canada, Atlantic Region
45 Alderney Drive, 15th Floor, Dartmouth, NS B2Y 2N6
Tel 902-426-1719 - kathryn.parlee@ec.gc.ca

Kyle Penney, Environment Officer, Formation Safety and Environment, Maritime Forces Atlantic, National Defence
PO Box 99000 Stn Forces, Halifax, NS B3K 5X5
Tel 902-721-8622 - kyle.penney@forces.gc.ca
Alternate for Carol Lee Giffin

Bobbi Rees, Policy, Planning and Research Analyst, Sustainable Fisheries and Oceans Policy NL
Department of Fisheries and Aquaculture
PO Box 8700, St. John's, NL A1B 4J6
Tel 709-729-0650 - BobbiRees@gov.nl.ca
Alternate for Nicole Hynes

Emily Rideout, NS Coastal Secretariat
NS Department of Fisheries and Aquaculture
Tel 902-247-3710 - rideoueh@gov.ns.ca
Alternate for Bill Whitman

Brent Rowley, President, EIT Group
1592 Queen Street, Halifax, NS B3J 2J1
Tel 902-420-1435 - browley@eitgroup.com

Nicole Rowsell, Senior Policy, Planning and Research Analyst, Policy and Planning
NL Department of Environment and Conservation
PO Box 8700, St. John's, NL A1B 4J6
Tel 709-729-1589 - nicolerowsell@gov.nl.ca

Science Atlantic
Attention: Lois Whitehead, Executive Director
1355 Oxford Street, PO Box 15000
Halifax, NS B3H 4R2 Tel 902-494-3421 -
lois.whitehead@scienceatlantic.ca

Southern Gulf of St. Lawrence Coalition on Sustainability

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

LCdr Bob Thwaites, Canadian Forces Maritime Warfare Centre, National Defence
PO Box 99000 Stn Forces, Halifax, NS B3K 5X5
Tel 902-721-1906 - bob.thwaites@forces.gc.ca

Peter Wells, Bay of Fundy Ecosystem Partnership (BoFEP)
Senior Research Fellow, IOI-Canada
6414 Coburg Road, PO Box 15000
Halifax, NS B3H 4R2
Tel 902-237-0600 - oceans2@ns.sympatico.ca

Louise White, Regional Health Risk Assessor and Toxicology Specialist, Safe Environments Programme, Health Canada
1505 Barrington Street, Halifax, NS B3J 3Y6
Tel 902-426-0984 - louise_white@hc-sc.gc.ca

Bill Whitman, Manager, NS Coastal Secretariat
NS Department of Fisheries & Aquaculture
Tel 902-638-2026 - whitmaw@gov.ns.ca



Atlantic Coastal Zone Information Steering Committee

ACZISC Secretariat

Andrew G. (Andy) Sherin

Director
ACZISC Secretariat
Dalhousie University
6414 Coburg Road, PO Box 15000
Halifax, NS B3H 4R2
Tel 902-494- 6184
Fax 902-494-1334
Email a.sherin@dal.ca

Jennifer Barr

Finance Officer
ACZISC Secretariat
Dalhousie University
6414 Coburg Road, PO Box 15000
Halifax, NS B3H 4R2
Tel 902-494-1980
Fax 902-494-1334
Email jennifer.barr@dal.ca

Alexi Baccardax Westcott

Project Officer
ACZISC Secretariat
Dalhousie University
6414 Coburg Road, PO Box 15000
Halifax, NS B3H 4R2
Tel 902-494-7162
Fax 902-494-1334
Email ACZISC@dal.ca

ACZISC Advisory Committee

Academia Representative:

Grant Gardner, (on leave, 2013-2014)
Memorial University of Newfoundland,
St. John's, NL A1B 3X7
Tel 709-864-3259 - ggardner@mun.ca

Provincial Government Representative:

Bill Whitman, Manager, NS Coastal Secretariat
NS Department of Fisheries & Aquaculture
Tel 902-532-8449 - whitmawe@gov.ns.ca

Federal Government Representative:

Tim Hall, Chair
Regional Manager, Oceans and Coastal Management,
Oceans, Habitat and Species at Risk Branch,
Fisheries and Oceans Canada, Maritimes Region,
Bedford Institute of Oceanography
PO Box 1006, Dartmouth, NS B2Y 4A2
Tel 902-426-4116 - tim.hall@dfo-mpo.gc.ca

Secretariat Representative:**Andrew G. (Andy) Sherin**

Director
ACZISC Secretariat
Dalhousie University
6414 Coburg Road, PO Box 15000
Halifax, NS B3H 4R2
Tel 902-494- 6184
Fax 902-494-1334
Email a.sherin@dal.ca

Private Sector Representative:

Brad Fay
Associate & Geomatics Consultant
Interpretation Resources Inc.
c/o 3 Elizabeth Drive
Halifax, NS B3N 1S2
Tel 902-477-0946
Email bfay@eastlink.ca

NGO Sector Representative

Vacant

ACZISC Association

Board of Directors

Paul Boudreau, Vice Chair of Board

Senior Research Fellow
International Ocean Institute - Canada
Dalhousie University
6414 Coburg Road, PO Box 15000
Halifax, NS B3H 4R2
Email PaulBoudreau@dal.ca

David Boyce

Past-president, Southern Gulf of St. Lawrence Coalition on Sustainability
116 Poverty Beach Road, RR#4
Montague, PE C0A 1R0
Tel 902-962-2705
Email david.boyce@bellaliant.net

Brad Fay

Associate & Geomatics Consultant
Interpretation Resources Inc.
c/o 3 Elizabeth Drive
Halifax, NS B3N 1S2
Tel 902-477-0946
Email bfay39@gmail.com

Grant Gardner, Chair (until 7 May 2014)

Office of the Provost and Vice-President
(Academic)
Memorial University
St. John's, NL A1C 5S7
Tel (on leave, 2013-2014)
Email ggardner@mun.ca

Kathleen Parewick

Researcher/ Project Manager, Department of Geography, Memorial University
44 William St.
St. John's, NL A1C 2S1
Tel 709-728-8393
Email paerewyck@hotmail.com

Executive Officers

Michael Butler, President

International Oceans Institute – Canada
Dalhousie University
6414 Coburg Road, PO Box 15000
Halifax, NS B3H 4R2
Tel 902-494-1977
Fax 902-494-1334
Email michael.butler@dal.ca

After 30 April 2014:

Andrew Sherin, President

ACZISC Association
6414 Coburg Road, PO Box 15000
Halifax, NS B3H 4R2
Tel 902-494-6184
Email a.sherin@dal.ca

Claudette LeBlanc, Vice President

ACZISC Association
6414 Coburg Road, PO Box 15000
Halifax, NS B3H 4R2
Tel 902-667-3087
Email leblancc@ca.inter.net

After 30 April 2014: Vacant

Jennifer Barr, Secretary/Treasurer

Finance Officer, ACZISC Secretariat
Dalhousie University
6414 Coburg Road, PO Box 15000
Halifax, NS B3H 4R2
Tel 902-494-1980
Fax 902-494-1334
Email jennifer.barr@dal.ca