

# ***COASTAL ACTIVITIES IN ATLANTIC CANADA***

## ***Roundtable and Presentations***

### ***ACZISC Meeting #56***

**Date: Thursday and Thursday, 22-23 January 2009**

**Location: Bedford Institute of Oceanography, Dartmouth, Nova Scotia**

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#### ***PARTICIPANTS*** (<sup>1</sup> ACZISC member; <sup>2</sup> Advisory Committee member; <sup>3</sup> Director, ACZISC Association)

<b><i>Name</i></b>	<b><i>Affiliation</i></b>	<b><i>Tel. No.</i></b>
Wayne Barchard	Environment Canada, Coastal Communities and Ecosystems Division	902-426-4695
William Blight <sup>1</sup>	Public Works and Government Services Canada, Geomatics and Spatial Technology	902-496-5160
Paul Boudreau	ACZISC Secretariat, COINAtlantic	902-494-7452
Michael Butler <sup>2</sup>	ACZISC Secretariat and International Ocean Institute - Canada	902-494-1977
Kelly Cantelo	PEI Department of Fisheries, Aquaculture and Rural Development	902-368-5790
John Charles	Halifax Regional Municipality, Real Property Planning	902-490-5771
Norval Collins <sup>1, 2, 3</sup>	CEF Consultants	902-425-4802
Geoff Coughlan	Fisheries and Oceans Canada, NL Region, Oceans and Habitat Management (for Ray Finn <sup>1</sup> )	709-772-3469
Garth DeMont	NS Department of Natural Resources, Mineral Resources Branch	902-424-8138
Philip Finck	NS Department of Natural Resources, Mineral Resources Branch	902-424-2521
Nadine Gauvin <sup>1</sup>	Southern Gulf of St. Lawrence Coalition on Sustainability	506-858-4495
Jennifer Hackett	Fisheries and Oceans Canada, Maritimes Region, Oceans, Habitat and Species at Risk Branch	902-426-1491
Tim Hall <sup>1, 2</sup>	Fisheries and Oceans Canada, Maritimes Region, Oceans, Habitat and Species at Risk Branch	902-426-4116
Larry Hildebrand <sup>1</sup>	Environment Canada, Strategic Priorities Directorate	902-426-2131
Claudette LeBlanc	ACZISC Secretariat	902-494-1977
John Legault <sup>1</sup>	Fisheries and Oceans Canada, Gulf Region	506-851-6221
Ed Light <sup>1</sup>	Service NS and Municipal Relations	902-424-0173
Stephen Locke	Natural Resources Canada, Geological Survey of Canada - Atlantic	902-426-2730

## ***PARTICIPANTS (cont'd)***

<b><i>Name</i></b>	<b><i>Affiliation</i></b>	<b><i>Tel. No.</i></b>
Phil MacAulay	Fisheries and Oceans Canada, Canadian Hydrographic Service – Atlantic (for Steve Forbes <sup>1</sup> )	902-426-5017
Leslie MacMillan	Public Works and Government Services Canada, Geomatics and Spatial Technology	902-496-5247
Gavin Manson	Natural Resources Canada, Geological Survey of Canada - Atlantic	902-426-3144
Sean Weseloh McKeane	NS Department of Fisheries and Aquaculture (for Justin Huston <sup>1</sup> )	902-424-5830
Rodrigo Menafra	Representing the Canadian Parks and Wilderness Society and the Ecology Action Centre	902-229-3519
David Mitchell	NS Department of Fisheries and Aquaculture	902-424-2894
Jeffrey Parks	Conestoga-Rovers & Associates	902-468-1248
Kathryn Parlee	Environment Canada, Sustainable Communities and Ecosystem Initiatives	902-426-1719
Neil Parnell	RCMP, NS Coastal Watch Program	902-426-9453
Roger Percy	Environment Canada, Environmental Emergencies	902-426-2576
Anthony Pouw	Environment Canada, Environmental Emergencies	902-426-5894
Flemming Rasmussen	National Defence, Formation Safety and Environment (for Carol Lee Giffin <sup>1</sup> and Kyle Penney <sup>1</sup> )	902-427-0550
Mike Rothenburg	Atlantic Canada Opportunities Agency, Policy, Advocacy and Coordination – Nova Scotia	902-426-6685
Brent Rowley <sup>1, 2, 3</sup>	EIT Group	902-420-1435
Patrick Shea <sup>1</sup>	Government of Newfoundland and Labrador, Department of Fisheries and Aquaculture	709-729-1140
Andy Sherin	Natural Resources Canada, Earth Science Sector Office	902-426-9620
Bob Taylor <sup>1</sup>	Natural Resources Canada, Geological Survey of Canada - Atlantic	902-426-7736
Rob Thompson <sup>1</sup>	Parks Canada, Atlantic Service Centre	902-426-3445
Tony Turner <sup>1</sup>	Natural Resources Canada, GeoConnections	613-992-1407
Peter Wells <sup>1</sup>	Bay of Fundy Ecosystem Partnership, IOI-Canada and Dalhousie University	902-237-0600

***PLEASE NOTE: “Coastal Activities in Atlantic Canada” is a subset of the Minutes of ACZISC Meeting #56, held on 22-23 January 2009 in Dartmouth, Nova Scotia.***

***To download the Minutes and Coastal Activity reports of previous ACZISC meetings, access the ACZISC website at <http://aczisc.dal.ca/docs-ACZISC.htm>.***

# ***COASTAL ACTIVITIES IN ATLANTIC CANADA***

## ***PRESENTATIONS***

The following presentations were made:

- **National Marine Conservation Areas of Canada**, by Rob Thompson, Parks Canada - <http://aczisc.dal.ca/NMCAs.pdf>
- **Update on Planning for the Coastal Zone Canada 2010 Conference**, by Kelly Cantelo, PEI Fisheries, Aquaculture and Rural Development - <http://aczisc.dal.ca/CZC2010.pdf>
- **COINAtlantic Online Demonstration** by Paul Boudreau, ACZISC Secretariat - see <http://COINAtlantic.ca>
- **Environment Canada and the Canadian Coastal and Oceans Agenda**, by Larry Hildebrand, Environment Canada; not posted - for information, email [Larry.Hildebrand@ec.gc.ca](mailto:Larry.Hildebrand@ec.gc.ca)
- **Integrating Science and Planning Practice for Coastal Adaptation to Climate Change in the Halifax Regional Municipality**, by John Charles, HRM and Gavin Manson, Geological Survey of Canada – Atlantic; not posted - for information, email [CharleJ@halifax.ca](mailto:CharleJ@halifax.ca) and [GManson@nrcan.gc.ca](mailto:GManson@nrcan.gc.ca).

## ***ROUNDTABLE REVIEW OF COASTAL ACTIVITIES and UPDATES ON ACZISC RELATED PROGRAMS***

**SOUTHERN GULF OF ST LAWRENCE COALITION ON SUSTAINABILITY:** Nadine Gauvin, SGSLCS, reported the following:

- The Coalition has begun working on a project to update the Traditional Fisheries Knowledge (TFK) mapping for the Southern Gulf of St Lawrence, undertaken 12 years ago for DFO. The DFO-sponsored project will focus on interviewing fishermen in the Southern Gulf to gather information which will be used to update the first series of TFK maps, and to document any changes.
- The Coalition has launched the Social Economic Overview Assessment (SECOA) - Values project which consists of surveying residents in coastal communities in the Southern Gulf to determine their attachment values re living in these communities. The results will also be mapped. The information gathered will be used by DFO to develop its integrated management process.
- The Coalition will be organizing sessions for non-profit groups in Atlantic Canada to train them on the use of geomatics for coastal and ocean planning, management and research. These sessions are being planned for February and March. COINAtlantic and the new online Regional Sustainability Atlas for the Southern Gulf (which uses Google Earth), funded in part by GeoConnections, will be the focus of training. Other online and free utilities, tools and resources will also be introduced.
- For more information on all Coalition activities, see <http://www.coalition-sgsl.ca>.

**ENVIRONMENT CANADA:** Larry Hildebrand, Strategic Priorities Directorate, reported the following:

- Larry is now working on assignment with EC HQ to assist in developing a coastal and oceans strategy for the Department. EC has significant legal and mandated responsibilities that affect the coastal and marine environment (e.g., Canadian Environmental Protection Act, Fisheries Act 36(3), Canada Wildlife Act); international obligations (e.g., London Convention); and partnership obligations and ongoing program responsibilities. However, EC does not have a clear policy framework for its involvement or a clear set of priorities and desired outcomes. The preparation and approval of such a coastal and ocean strategy will provide EC with a much clearer sense of its roles and responsibilities, as well as endorsed objectives that can be brought to the numerous coastal and oceans governance bodies for consideration and incorporation. Progress on the development of this departmental strategy will be reported at subsequent ACZISC meetings.
- The Conference Statement and Call to Action from the Coastal Zone Canada 2008 conference in Vancouver last May has now been endorsed by the Board of Directors of the Coastal Zone Canada Association (attached) and is in the process of being distributed to senior officials in key federal and provincial agencies for their consideration. This Call to Action also includes specific guidance for how subsequent Coastal Zone Canada conferences should be structured. This advice will be incorporated into the design and program for CZC 2010 in PEI.
- The Rights of Sand is a concept - indeed a doctrine - that is missing from, yet fundamentally important to, coastal management in Canada. This concept is well-known to the coastal science and engineering community that states that human actions will not interfere, diminish, modify or impede sand and other sediments from being transported to and along rivers, beaches and shores. Under this doctrine, projects should be designed or re-evaluated to mitigate any interference that the project may have with sand transport. There is much discussion of late about the present and predicted impacts of climate change on coastal ecosystems and infrastructure, but this more basic and timeless challenge deserves more prominent attention in our deliberations on coastal and ocean planning and management. Larry intends to continue pursuing and better understanding this concept and will report back at subsequent ACZISC meetings.

Wayne Barchard and Kathryn Parlee, Coastal Communities and Ecosystems Division, reported the following:

- Sustainable Communities and Ecosystems Division: Wayne will be Acting Manager of the Division during Larry Hildebrand's assignment with EC in Ottawa.
- Priority Ecosystem Initiative Management Framework (PEIMF): The PEIMF is EC's basis for the future selection, planning, delivery, and evaluation of priority ecosystems at the national level. The recently completed first phase of the process has identified 8 ecosystems as candidates for further consideration as Priority Ecosystem Initiatives (PEIs). The Atlantic Coastal Ecosystem (ACE) has been recommended as 1 of the 8 PEI candidates and the Division is currently preparing a proposal for support. Decisions on candidates will be made over the coming year.
- Gulf of Maine Council - Ecosystem Indicators Partnership (ESIP): The first phase of the Indicator Reporting tool is now available at <http://www.gulfofmaine.org/esip/>. The Tool currently has data from Gulfwatch, Musselwatch and the Gulf of Maine

Observing System. It will eventually include data for the priority indicators: climate change, fish and aquaculture, contaminants, coastal development, eutrophication and aquatic habitats. Data on climate change and eutrophication should be incorporated into the Tool in the next few months. Efforts will then focus on data for fish and aquaculture and contaminants. A general ESIP fact sheet and specific fact sheets are being developed to introduce the priority indicators for each theme area. In addition, hands-on training in the use of the Indicator Reporting Tool is being planned.

- Gulf of Maine Council - Eelgrass Workshop: The Gulf of Maine Council on the Marine Environment, Friends of Casco Bay, Casco Bay Estuary Partnership and Bay of Fundy Ecosystem Partnership are hosting a workshop on the Status, Trends, and Conservation of Eelgrass in Atlantic Canada and the Northeastern United States, which will be held on 24-25 February 2009 in Portland, Maine. The objective of the Workshop is the timely dissemination of information regarding the science and conservation of eelgrass among federal, state, and provincial agencies and environmental organizations.
- Collaboration on NGO Geomatics Capacity Building: There are a number of complementary initiatives presently underway to build the capacity of Atlantic Canadian Non-Government Organizations (NGOs) to use geographic information, tools and other resources. The ACZISC, the Southern Gulf of St. Lawrence Coalition on Sustainability, CoastalCURA and EC's Atlantic Ecosystem Initiative have recently been discussing a potential collaboration in the development and delivery of training and/or support activities.

Anthony Pouw, Environmental Emergencies, reported the following:

- Efforts are ongoing to update the information in the Shoreline Sensitivity Mapping for Atlantic Canada.
- EC Ottawa has taken the lead in the ongoing development of E-MAP, the web mapping interface for the sensitivity mapping.
- Updates include changes to the base map information to enhance capabilities for coastal and riverine modelling.
- E-MAP was primarily designed by EC - Atlantic Region.
- Data layers could be made available via COINAtlantic if they are proprietary to EC.

**NATURAL RESOURCES CANADA**: Bob Taylor and Andy Sherin, Geological Survey of Canada – Atlantic, reported the following:

- The Geoscience for Ocean Management (GOM) program is finishing and a new one is starting, *i.e.* Sustainable Offshore Resource Development (SORD).
- Under the previous GOM and Enhancing Resilience in a Changing Climate (ERCC) programs, activities focused on the Halifax Regional Municipality (HRM) including a marine geochemistry project that focuses on the impact of new sewage treatment plants in Halifax and Dartmouth on the quality of marine sediments in Halifax Harbour (<http://www.halifax.ca/harboursol/index.html>). This proposal was developed in collaboration with Dalhousie University, DFO, and HRM, and was funded in February 2008 for two years through NSERC's Strategic Grants Program. The project is led by David Scott of Dalhousie University and involves an MSc student (Gwen Williams) who is doing most of the processing and analysis of the samples.

- The main driver for the project is the rare opportunity to monitor marine environmental conditions as new sewage treatment plants are built, and to link the sediment geochemistry with biological indicators (e.g., foraminifera) to understand historical baselines and predict future conditions. There is also a significant regulatory link with Environment Canada's recent decision to strengthen sewage treatment regulations across the country beginning in 2009 (<http://www.ec.gc.ca/default.asp?lang=En&n=714D9AAE-1&news=FA83843D-2731-4CA1-8750-C75F380B572A>).
- The hope is to expand these studies into other harbours across Canada as part of the new SORD program.
- Lidar mapping and integrating coastal science, i.e. including future sea levels and storm surges into harbour planning. This project involves COGS-AGRG, NRCan, Dalhousie University and DFO. A presentation on this topic is on the agenda of tomorrow's ACZISC ICOM Working Group meeting.
- Other news:
  - Limited monitoring of coastal change, begun in the 1980s, was conducted in the fall of 2008 at key sites around Nova Scotia. A summary of changes caused by post-tropical storm Noel is available on CoastWeb at [http://gsc.nrcan.gc.ca/coast/index\\_e.php](http://gsc.nrcan.gc.ca/coast/index_e.php).
  - Bathymetric lidar may be conducted off les Îles-de-la-Madeleine in collaboration with DND, EC and the Institut national de la recherche scientifique (INRS), led by Bernard Long in Québec City.
  - 27 February is the deadline to submit proposals for Regional Adaptation Collaboratives (RAC) - [http://adaptation.nrcan.gc.ca/collab/index\\_e.php](http://adaptation.nrcan.gc.ca/collab/index_e.php). NRCan will establish the regional programs (\$30M) and develop Tools for Adaptation (\$5M) over 4 years. Letters of Intent were due in August 2008.
  - CoastGIS 2009 is scheduled for 28 September - 2 October 2009 in Santa Catarina, Brazil - <http://www.coastgis.com.br/index.php>. Abstracts are due on 28 February. The new Canadian representative on the CoastGIS science committee is Rosaline Canessa, University of Victoria.
  - The purpose of the Wildlife Benefits Estimation Toolkit is to provide state-level agencies and others with a practical tool for estimating the economic benefits of implementing State Wildlife Action Plans and other conservation actions. Anybody interested in information on this toolkit produced by the Defenders of Wildlife in Washington, DC should contact Andy Sherin.

Tony Turner, GeoConnections, reported the following:

- The GeoConnections Management Board, which oversees the program, met in December 2008. Each of the four thematic communities outlined their major achievements since 2005 and priorities for the remainder of the current GeoConnections program. For the Environment and Sustainable develop theme, \$5.6 million has been spent on some 62 geospatial projects since 2005. Performance measures for key results categories - User Readiness, Regional Atlases, Publishing Content, and Decision Support Systems - have already been met. Aside from completing existing agreements, the remainder of the program will focus on outstanding program delivery gaps, namely multi-agency initiatives to address the two priority issues – land use planning (also includes watersheds, coasts and oceans) and environmental assessment.

- Key activities include:
  - o Fostering the creation of a network of Integrated Land Management practitioners through an ILM initiative led by Environment Canada;
  - o Building capacity with the Canadian Environmental Assessment Agency to support their use of geomatics for environmental assessment requirements;
  - o Encouraging the development of the COINAtlantic multi-agency system to facilitate the discovery of data and access to web services for the coastal and ocean users.
- GeoConnections is increasingly focussed on laying the ground work for developing a path forward for the CGDI after March 2010. Through contracts, work is underway to explore the role of mass market geomatics (e.g., Google Earth) and links between geomatics and national and international agreements and laws, among other investigations. Creating a revised conceptual framework for the CGDI is also under development. Results of these activities, led by the GeoConnections Policy team, will help determine how the CGDI will be actively shaped post 2010.
- The GeoConnections funding and partnership program will officially end on 31 March 2010. A decision by Treasury Board on a one year extension of the Program to 31 March 2011 is expected in February 2009. The extension is requested because of the lag time experienced with respect to spending money since 2005. No new money is associated with the proposed extension. Rather, the remaining resources will be shared over the remaining fiscal years.

**GOVERNMENT OF NOVA SCOTIA:** Ed Light, Service NS and Municipal Affairs, reported the following:

- The Government of NS, through the direction of the GeoNOVA Steering Committee, will establish a Lidar Working Group. The Working Group will look closely at the technology to better understand the present and long term benefits of its use in the Province's mapping related programs.
- Work continues on the Education and Geomatics project as reported at the last ACZISC meeting. Sessions have been scheduled throughout February with industry representatives, post secondary and public school educators and recent geomatics graduates. The aim is to strengthen the geomatics industry in Nova Scotia by better understanding the opportunities and potential gaps in the education sector.
- An update on the GeoNOVA Alliance - a new model for sharing of geographic information within the Government of Nova Scotia - was provided at the last ACZISC meeting. The deadline for the delivery of the working group's report has been extended to the end of March 2009.
- With regard to making the Nova Scotia Coastal Series available via a web mapping service (WMS), CHS has indicated to the Province that they will not allow the existing Coastal Series to be scanned and made available as a WMS. Discussions continue in an effort to gain the necessary permissions; however, at the moment, the CHS decision impacts GeoNOVA's ability to make coastal data available to COINAtlantic and NS's Provincial Oceans Network.
- GeoNOVA has been asked to develop a plan to conduct a mapping review in Nova Scotia early in fiscal year 2009-2010. Background work is now underway. More information will be made available in the future.

Sean Weseloh McKeane, NS Department of Fisheries and Aquaculture, reported the following:

- State of Nova Scotia's Coast Report: The consulting firm CBCL Limited will be submitting a first draft of the "State of Nova Scotia's Coast Report" for review by the Provincial Oceans Network (PON) in mid-February 2009. The study covers key trends relating to the Province's coastline including: natural; socio-economic; and built coastal environments – using State of Environment reporting methodology; and more detailed information on NS' six priority issues (coastal development; water quality; sensitive coastal ecosystems and habitats; public coastal access; working waterfronts; sea-level rise and coastal storm events).
- Climate Change Action Plan: The Government of Nova Scotia released the Climate Change Action Plan on 16 January. The Plan includes several cross linkages with PON's coastal work, especially related to climate change adaptation (e.g., Action 62: Release a Sustainable Coastal Development Strategy by 2010. A major part of the strategy will focus on strengthening our resiliency to climate change impacts along our coast.) For more information, access <http://climatechange.gov.ns.ca>.
- Oceans Day 2009: This year's annual Oceans Day celebration will take place on the Halifax Waterfront on Friday, 5 June. All ocean and coastal related organizations are invited to participate with an information booth or display. Email Sean Weseloh McKeane for more details ([weselosw@gov.ns.ca](mailto:weselosw@gov.ns.ca)).

Garth DeMont and Phil Finck, NS Department of Natural Resources, reported the following:

- The Geological Services Division (GSD) of the Department of Natural Resources is tasked with the collection and distribution of geoscience data for the Province of Nova Scotia. The GSD maps bedrock and surficial geology, captures and promotes data on the Province's mineral resources, and samples and models the rock, soil and till geochemistry.
- Recent changes to the GSD program structure reflect internal efforts to meet the recent demand from the environmental sector. The Division now has an Environmental Geology Section which undertakes projects such as the Coastal Zone Mapping Project. Last year the GSD signed an MoU with the NS Department of Environment on a Water Resources Project. The GSD hired one full time hydro-geologist and an intern to work on mapping groundwater resources in the Province, a key component of the Province's Water Strategy.
- The GSD is currently working on two main Coastal Zone Mapping projects, one for Central Antigonish County and the other for St. Margarets Bay. The coastline of St. Margarets Bay will be 'walked' to gather information related to coastal hazards, including armour (both natural and built) and erosion. ArcGIS products at 1:10,000 will be produced and used for flood predictions. The long-term goal is to map the entire coastline of NS.
- The Department of Natural Resources is a participant on the Provincial Ocean Network (PON). GSD staff work with the Department's representative on PON to address issues related to geoscience. The Department also worked directly with the consultants contracted to write the State of the Coast Report for NS. Geoscientists are making efforts to communicate the strong connections between geology and the shape, composition and vulnerability of the Province's coastline.
- Unfortunately, there is a notable absence of geology in land-use planning documents in Nova Scotia. There are many naturally occurring geo-hazards which should be identified in these documents. Restrictive development covenants

should be used to mitigate dangers associated with these hazards. The risks associated with unstable coastal zones are one example of the geo-hazards that should be included in planning documents. The primary goal of the Central Antigonish Project is the development of a Statement of Provincial Interest in Geology and Mineral Resources for incorporation in Service NS' land use planning handbook. The GSD partners on the project include the Climate Change Group at the NS Department of Environment, the Eastern District Planning Commission, COGS\AGR and the NS Department of Economic Development - Antigonish RDA. The first component of the project, a coastal zone lidar survey, was flown in December 2008. The field mapping components will be undertaken in the summer and fall of 2009.

- The GSD is trying to identify research activities related to coastal zone mapping currently being undertaken by other government agencies and universities. We feel that the ACZISC is a key source of information and a venue to identify new project partners.

**GOVERNMENT OF NEWFOUNDLAND AND LABRADOR:** Patrick Shea, Fisheries and Aquaculture, reported the following:

- Two coastal management areas, Placentia Bay and Coast of Bays, are in the process of finalizing their integrated management plans. This involves final endorsement by stakeholders and community representatives.
- ACAP Humber Arm continues to make progress with activities including the Books for Boats program and the Coastal Matters Speaker Series.
- The Stephenville / Port au Port Coastal Management Area no longer has a coordinator, but continues to host meetings and discuss issues in the area.
- The Great Northern Peninsula has just received funding approval for a coordinator for three months to conduct a project focused on coastal mapping, education awareness, detailed analysis of coastal issues and the development of a long term workplan.
- DFA Newfoundland and Labrador continues to participate with DFO NL Region in the Gulf of St. Lawrence Western Newfoundland Southern Labrador Subcommittee and the Placentia Bay Grand Banks Large Ocean Management Area Planning Committee.
- Provincial government personnel have attended two presentations from Parks Canada on the proposal to conduct a feasibility study on the South Coast of the Province, with the long term goal of possibly establishing a National Marine Conservation Area in the South Coast Fjords.
- The Canadian Council of Fisheries and Aquaculture Ministers will be meeting in Ottawa on 27-28 January. The agenda includes discussion of coastal management terminology.

**NATIONAL DEFENCE:** Flemming Rasmussen, MARLANT Formation Environment, reported the following:

- DND continues to make progress with its GIS projects. Most are related to internal applications dealing with Land - Range and Training Areas, and the Military exercise areas off the east coast that are published in Transport Canada's Notice to Mariner's - Annual edition.
- DND has been involved in remediating a former air-bombing range east of Halifax in the West Chezzetcook area. NRCan and DND have been tracking the significant

beach erosion in that area over the past 5 decades. It is hoped that an underwater sidescan sonar survey scheduled for the spring of 2009 will provide data indicating the stability of the foreshore. A PPT was presented to illustrate the magnitude of shoreline transformation over time.

**FISHERIES AND OCEANS CANADA:** John Legault, DFO Gulf Region, Oceans and Habitat, reported the following:

- Since the designation of the Centre of Expertise for Coastal Management at DFO Gulf Region, tools and strategies are being developed for Ecosystem Risk Assessment to facilitate Integrated Management of coastal resources. To that end, the Region has been working with DFO Ottawa to identify the Northumberland Strait as a pilot for Strategic Environmental Assessments.
- Two major projects are being undertaken through the Southern Gulf of St. Lawrence Coalition on Sustainability to acquire additional data and analysis required for the assessments:
  - o Updating the Traditional Fisheries Knowledge datasets undertaken 12 years ago. The Coalition has hired the original team of Lee MacNeill and his associates to carry out an abbreviated interview survey to document changes and to obtain more detailed information on the locations of fisheries activity.
  - o Undertaking a survey of social/community attachments to their geographic areas - why do people live where they do. A panel of academics will develop the protocols and questionnaires for focus group interviews. It is likely that this will become a record of social/cultural values that will be overlaid on the environmental and economic data to develop vulnerability indices for Risk Assessments of ecosystem units.
- Letters of Agreement with NB, NS and PEI are being prepared to access the land-based data and information managed by the Provinces for use in the Northumberland Strait assessment.
- The Gulf Region has also been working with two other DFO regions in the identification of Ecological and Biological Significant Areas (EBSAs). Within the Gulf of St. Lawrence, 10 EBSAs have been identified, 4 of which are completely within the Southern Gulf. For the past year, DFO staff been doing geographic and ecological assessments to identify candidates for Areas of Interest (AOIs) for future consideration as Marine Protected Areas. Two potential AOIs are the Shediac Valley and the Cape Breton Trough.
- DFO has worked with the Southern Gulf of St. Lawrence Coalition on Sustainability to implement the Coalition Regional Sustainability Atlas and Bibliography.
- DFO will be conducting a workshop in Moncton on Integrated Risk Management and Assessment for provincial and federal regulators and planning practitioners.

Tim Hall, DFO Maritimes Region, Oceans, Habitat and Species at Risk Branch, reported the following:

- In March 2009 DFO Maritimes will begin a series of public consultations on the identification of potential Areas of Interest (AOIs) for the establishment of a new Marine Protected Area on the Scotian Shelf. Possible sites have been identified through the ESSIM process and were presented at the 4<sup>th</sup> ESSIM Forum Workshop on 25-26 November in Halifax. The goal is to announce an AOI candidate in May 2009.

- The Southwest NB Marine Resources Planning Initiative has developed a discussion paper outlining a process for the establishment of an Integrated Management Plan for its geographic area. The Steering Committee will be holding a public forum to gather input on the discussion paper on 12-13 February 2009 in St. Andrews, NB.
- There will be a meeting of the ESSIM Stakeholder Advisory Council on 27-29 January 2009 in Dartmouth, NS. The main item for discussion will be on incorporating the results of the 4<sup>th</sup> ESSIM Forum Workshop into a Workplan for 2009-2010.
- The Oceans and Coastal Management Division continues to work on the development of an Ecosystem Overview Report (EOR) for the Gulf of Maine / Bay of Fundy. It is anticipated to have a draft report completed by 31 March 2009 and to have it peer reviewed in 2010.
- In partnership with the Gulf of Maine Council, OCMD is also developing preliminary material for the potential development of a State of the Environment-type report for the Gulf of Maine. An initial scoping paper will be discussed at the next Gulf of Maine Council meeting in June 2009.

Jennifer Hackett, DFO Maritimes Region, Oceans, Habitat and Species at Risk Branch, reported the following:

- ESIP Impervious Surface Mapping Project:
  - o The St. Croix International Waterway Commission and the Gulf of Maine Council Ecosystem Indicator Partnership (ESIP) are working together to generate impervious surface GIS maps for NB's coastal watersheds, in support of a new ESIP coastal development indicator (see <http://www.gulfofmaine.org/esip>). These maps will join seamlessly with existing impervious surface maps for the Gulf's New England States.
  - o Technology transfer and pilot mapping for the transboundary St. Croix watershed is set for February-March 2009, with funding assistance from the US/Canada International Joint Commission and in-kind support from the US Geological Survey and the Moncton campus of the NB Community College.
  - o Funding has been requested from the NB Environmental Trust Fund to expand this mapping to key portions of NB's other Gulf of Maine/Bay of Fundy watersheds later this year. For further information email: Christine Tilburg, ESIP Program Manager - [ctilburg@securespeed.us](mailto:ctilburg@securespeed.us).
- Gulf of Maine Ocean Data Partnership (GOM-ODP) - Environmental Exchange Network Project:
  - o The Partnership, hosted administratively by the Gulf of Maine Ocean Observing System (GoMOOS), focuses on building efficient means for data discovery, accessibility, and interoperability among the partners. Funded via a National Environmental Exchange Network (<http://www.exchangenetwork.net>) grant from EPA, the Project will create a host node according to exchange network protocols and develop an XML schema based on standards.
  - o Data aggregated to the host node via the consensus-based schema will be served through a spatially referenced web application maintained by GoMOOS. A draft consensus-based schema has been prepared. Partners are working on mapping their data to the draft schema to determine if it will fit their data needs.

- Incorporating discovery metadata into the schema in a manner that interfaces seamlessly with discovery metadata already registered by partners at one of the national registries (NASA's GCMD, Canada's GeoConnections or GeoSpatial OneStop) has developed as a significant desired attribute which is under active research.
- The partnership is exploring collaboration with COINAtlantic.

Geoff Coughlan, DFO NL Region, Oceans and Habitat Management Branch, reported the following:

- Placentia Bay/Grand Banks (PB/GB) Large Ocean Management Area (LOMA):
  - The terms of reference have been conditionally adopted for the PB/GB LOMA Committee and an outline was adopted as a guidance document for the IM Plan.
  - An Integrated Management Plan Working Group (IM Plan WG), reporting to the PB/GB LOMA Committee, has been established. The WG has been tasked with developing the PB/GB LOMA IM Plan. The first undertaking will be to develop the vision, overarching goals and strategic objectives of the Plan.
  - A Social, Economic and Cultural Working Group (SEC WG) will also be formed. The goal of this WG will be to develop social, cultural and economic objectives that will be incorporated into the IM Plan.
  - The DFO Policy and Economics Branch has compiled a Trends Analysis for the PB/GB LOMA. The Trends Analysis along with the Socio-Economic Overview will form the basis for developing the SEC objectives.
  - Annette Power will lead a series of workshops and meetings to further prioritize PB/GB LOMA Conservation Objectives originally identified by DFO Science.
- Area of Interest (AOI) for Marine Protected Area Establishment: An internal DFO AOI Regional Selection Process Working Group has been formed. Informal discussions were carried out to update representatives of FFAW, GEAC, CAPP, CNLOPB, WWF, CPAWS, EC, PC and the Province on DFO's plans and activities. Following these discussions five EBSAs were selected from eleven to form the basis of discussion for formal consultations, scheduled to be completed by mid February. Plans are to announce an AOI within the PB/GB LOMA by 31 March 2009.
- Gulf of St. Lawrence Integrated Management (GOSLIM): The terms of reference for the GOSLIM western Newfoundland and southern Labrador (WNSL) Sub-Committee have been adopted. The Sub-Committee has discussed how it would consider elements of GOSLIM planning such as prioritization of conservation objectives, identifying social-economic objectives and how to achieve enhanced stakeholder involvement in GOSLIM Gulf-wide.
  - A Working Group has been formed to finalize an assessment of social, economic and cultural features and trends in WNSL. This document will form part of an overview for the Gulf of St. Lawrence to be completed by March 2009.
- Coastal Management Areas: In April 2009, DFO will host a meeting in Corner Brook of all five CMAs in NL to share ideas and to discuss initiatives and coastal issues.

- Marine Protected Areas:
  - o The results of the Gilbert Bay cod monitoring program were presented at a Steering Committee meeting in October.
  - o The analysis of data collected as part of the lobster monitoring program in Eastport is ongoing. There are plans to present the results at a science feedback meeting in March.
  - o The report entitled "Assessing Marine Protected Areas as a conservation tool: a decade later, are we continuing to ensure the viability of the lobster population at Eastport, Newfoundland" has gone through the DFO internal review process and is being developed as a technical report.
  - o The Gilbert Bay and Eastport monitoring reports and the Proceedings of two MPA Regional Update and Science Workshops will be submitted for publication to the Ocean and Coastal series for the NL Region.
- Coldwater Corals Centre of Expertise (COE): Jason Simms, Manager of the Centre, is continuing consultations on the new COE with WWF Canada, other DFO regions, etc. A presentation on the COE will be made at the Oceans Task Group meeting in Ottawa during the week of January 26<sup>th</sup>.
- Canada-Newfoundland and Labrador Committee on Ocean Management: CNLCOM is currently looking at web-based mechanisms to increase information flow for the committee.
- South Coast Strategic Environmental Assessment: DFO Oceans NL Region has a representative on the South Coast (NL) SEA working group established by the Canada-Newfoundland and Labrador Offshore Petroleum Board (CNLOPB).
- Fogo Island Model Community for Fishery Stewardship: DFO Oceans NL Region has been involved in a community-based initiative looking at establishing Fogo/Change Islands as a model community for fishery stewardship. As part of the initiative the experimental use of baited cod pots has been undertaken to demonstrate a fishing gear with the potential to increase product quality and have a lower environmental impact.

Phil MacAulay, Canadian Hydrographic Service - Atlantic, reported the following:

- In the coming year CHS Atlantic will be continuing ongoing bathymetric survey work in the Bay of Fundy, Labrador and the South Coast of Newfoundland. Additional work will also be started in the Northumberland Strait this spring. Definitive statements regarding CHS Atlantic's survey plans for the coming year should be obtained from the CHS Director, Steve Forbes, or from Gerard Costello, presently acting for Steve.
- The CHS Atlantic tidal section is starting a project to reassess existing vertical control and transform information associated with the Atlantic tide station network. Starting in February 2009, as part of this work, improved GPS data will also be collected over a network of pre-selected tide station sites distributed throughout the Atlantic Provinces. The data reassessment and collection activities are preliminary tasks associated with the planned development of 2D continuous datum surfaces from CHS Atlantic's existing 1D station-specific vertical control and transform data.

**PUBLIC WORKS AND GOVERNMENT SERVICES CANADA:** William Blight, Geomatics and Spatial Technology, reported the following:

- PWGSC is preparing for the federal budget to be tabled on 27 January. A significant amount of business activity is expected as a result of the anticipated announcement of an infrastructure renewal program in the budget.
- The press is reporting that discussions are occurring at this time to amend the Canadian Environmental Assessment Act (CEAA). If changes are made, it is hoped that these would assist in streamlining current processes as they relate to the Act and thereby shorten approval times, etc.
- The Department is experimenting with software to create 3DM (3 dimensional model) pictures of 'below' and 'above' the water.
- PWGSC is working closely with several ACZISC members, including CHS and the CCG, particularly in harbour surveys; DFO Gulf Region with regards to the Northumberland Strait ecosystem overview and assessment; and universities in monitoring activities.
- The Department is interested in the impact of high winds on coastal structures generated as a result of the rapid and large temperature differentials associated with climate change.

**PARKS CANADA:** Rob Thompson, Atlantic Service Centre, reported the following:

- The Mi'kmaq Confederacy of Prince Edward Island (MCPEI) and the Province of PEI together have submitted a proposal to Parks Canada regarding the natural and cultural significance of the Hog Island-Barrier Island chain (The Sandhills) in PEI. The area is located along the north coast west of Malpeque Bay.
- Parks Canada has agreed to assess the significance in cooperation with the Province and MCPEI. Initial discussions have occurred and a field trip took place in the fall of 2008. Further analysis is required to assess the area's potential as a protected heritage area.
- The lead for Parks Canada is Jewel Cunningham, Field Unit Superintendent on the Island.

**ROYAL CANADIAN MOUNTED POLICE:** Neil Parnell, Coastal watch Program, reported the following:

- **Coastal Watch Program:** The community-based program was introduced to NS in the 1980s as a tool to address the increasing flow of illegal drugs into Canada via the Province's coast. The success of the Program relies on reports of suspicious activity from the public and police partner agencies. Information on what to look for with such organized crime activity is made available. The Program is now an integral part of the RCMP's Border Integrity Program.
- **Border Integrity Program:** The Program uses similar roles as Coastal Watch to detect activity of concern to Canada's National Security throughout the coastal border. The RCMP has introduced specialized units to address this concern:
  - o The Marine Security Operations Centre (MSOC) is comprised of National Defence, RCMP, DFO /Coast Guard, USCG, Transport Canada, and the Canada Border Service Agency. The unit, located at CFB Halifax, monitors all vessel traffic within the Atlantic coastal waters.
  - o The National Port Enforcement Team (NPET) is located on the Halifax waterfront and is a joint agency operation involving Halifax Regional Police,

- Canada Border Service Agency and is hosted by the RCMP. It is responsible for investigations/enforcement of organized crime activity at NS ports.
- The Integrated Border Enforcement Team (IBET) is an RCMP-led unit located in Yarmouth, NS to address cross US coastal border illegal activity. The Unit's staff works closely with its US partners and other federal Government departments and agencies.
  - The RCMP has dedicated Customs & Excise (C&E) units around the Province to address cross border smuggling.
  - The RCMP Immigration & Passport (I&P) unit handles illegal immigration cases within Atlantic Canada.
  - The newly formed Federal Enforcement Section (FES) within NS RCMP is located in Halifax. This unit handles all federal statute investigations including marine related offences under the Canada Shipping Act.
  - The Marine Security Enforcement Team (MSET) units, comprised of RCMP and DFO officers, conduct coastal patrols on Coast Guard/RCMP vessels. The closest unit to Atlantic Canada is located in Québec; discussions are underway to establish similar units in Atlantic Canada.
- The NS RCMP Marine Program is responsible for patrolling with vessels of various sizes and for the training of personnel.

**BAY OF FUNDY ECOSYSTEM PARTNERSHIP:** Peter Wells reported the following:

- BoFEP was formally inaugurated as a multi-partner organization in 1997. Its purpose is to create, share and use knowledge about the Bay of Fundy. The BoFEP Secretariat is located at the Acadia Centre for Estuarine Research, Acadia University in Wolfville, NS. Peter is the chair of BoFEP.
- BoFEP has 3 major programs – Communication, Workshops, and Working Groups:
  - Communication includes the website, the Fundy Issues Fact Sheet Series, and the Fundy Tidings e-newsletter.
  - There have been seven workshops to date. The 8<sup>th</sup> BoFEP Science Workshop is scheduled for 26-29 May 2009, in Wolfville. The theme is “Resource Development and Its Implications in the Bay of Fundy and Gulf of Maine” - <http://www.bofep.org/workshop2009.htm>
  - The active BoFEP working groups are: Biosphere Reserve; Corophium and Mudflat Ecology; Eelgrass; Eutrophication and Nutrients; Fundy Informatics; Marine Energy; Minas Basin; Outreach; Salt Marsh and Restricted Tidal Systems; Stress and Cumulative Effects; and Sublittoral Ecology and Habitat Conservation.
- Peter, retired from EC Atlantic, is an Adjunct Professor at Dalhousie University and a Senior Research Fellow with the International Ocean Institute. His interests at Dalhousie focus primarily on the impact and influence of information, in particular gray literature, on decision making, policy making, etc.

**CANADIAN PARKS AND WILDERNESS SOCIETY and ECOLOGY ACTION**

**CENTRE:** Rodrigo Menafrá represented both CPAWS and EAC and their interest in the organization and planning of the Coastal Zone Canada 2010 Conference. CPAWS, EAC, and potentially other ENGOs, would be interested in participating in the Conference by hosting and organizing a specific theme/topic workshop or panel session. This was discussed with Kelly Cantelo, co-chair of the CZC 2010 Organizing Committee.

**CONESTOGA-ROVERS & ASSOCIATES:** Jeffrey Parks, Geomatics Project Manager, reported that CRA is a consulting firm (<http://www.craworld.com>) offering a wide range of services, including environmental site assessments and remediation, risk assessments, etc. There are offices throughout Canada, The USA and elsewhere. Jeffrey is an alumnus of the ACZISC.

Jeffrey reported that Geomatics Atlantic 2009 was scheduled for 8-10 June 2009 in Wolfville, NS. The deadline to submit abstracts is 27 February - for information, email James Boxall ([james.boxall@dal.ca](mailto:james.boxall@dal.ca)). The event is being held in conjunction with the annual conferences of the Canadian Cartographic Association and the Association of Canadian Map Libraries and Archives.