

MINUTES OF ACZISC MEETING #37

Atlantic Coastal Zone Information Steering Committee

Date: Thursday, 12 September 2002, 0830 - 1630 hrs

Location: Rodd Charlottetown Hotel
Charlottetown, PEI

PARTICIPANTS (¹ indicates ACZISC member; ² indicates Executive Committee member)

Name	Affiliation	Tel. No.
Tim Anderson ¹	Fisheries and Oceans Canada, Oceans and Environment Branch, NF Region	709-772-2852
LCdr Clarke Bedford	National Defence, Meteorological and Oceanographic Centre	902-427-0550
Bill Blight ¹	Public Works and Government Services Canada	902-496-5160
Ghosh Bobba	Environment Canada, National Water Research Institute	905-336-8911
Cdr George Borgal ¹	National Defence, TRINITY, JOSIC	902-427-0550
Paul Boudreau	Fisheries and Oceans Canada, Maritimes Region, Habitat Management Division	902-426-7464
Michael Butler ^{1,2} , Chair	International Oceans Institute of Canada	902-494-1977
Shawn Clarke	OCIPEP	902-566-7048
Norval Collins ¹	Private sector - Champlain Inc	902-425-4802
Gary Frail	RCMP	902-458-2237
Michel Goguen	Public Works and Government Services Canada	506-851-6784
Leslie Grattan ¹	Government of Newfoundland and Labrador, Environmental Planning and Management Projects	709-729-3782
Larry Hildebrand ¹	Environment Canada, Sustainable Communities and Ecosystems Division	902-426-2131
Justin Huston ^{1,2}	Government of Nova Scotia, Agriculture and Fisheries	902-424-2996
Marianne Janowicz ¹	Government of New Brunswick, Department of the Environment and Local Government	506-444-4391
Martin Kaye	Bay of Fundy Marine Resource Centre	902-638-3044
Claudette LeBlanc	ACZISC Secretariat	902-494-1977
Ed Light ¹	Government of Nova Scotia, Service Nova Scotia and Municipal Affairs	902-424-0173
Dick MacDougall ¹	Fisheries and Oceans Canada, Canadian Hydrographic Service	902-426-3497
Barry MacPhee	PEI Department of Fisheries, Aquaculture and Environment	902-569-7710

PARTICIPANTS (cont'd)

Don Maynard	Public Works and Government Services Canada	902-566-7533
Julie Norton	Government of New Brunswick, Service New Brunswick (for David Finley ¹)	506-457-4856
Kathryn Parlee	C-CIARN Coastal Node	902-426-8988
Jim Ramsay ¹	Government of Prince Edward Island, Taxation and Property Records	902-368-4075
Carol Ann Rose ^{1,2}	Fisheries and Oceans Canada, Oceans and Environment Branch, Maritimes Region	902-426-2065
Brent Rowley ²	Private sector - Champlain Inc	902-420-1435
Andy Sherin ¹	Natural Resources Canada, Geological Survey of Canada – Atlantic	902-426-7582
Herb Sooley	Health Canada	902-426-5575
Rob Thompson ¹	Parks Canada, Atlantic Service Centre	902-426-3281
Cameron Wilson ¹	Natural Resources Canada, GeoConnections Secretariat	613-996-6377

1. ***WELCOME and INTRODUCTION OF PARTICIPANTS***

Mike Butler, ACZISC Chair, called Meeting #37 to order at 0830 hrs. He welcomed members and observers and thanked Jim Ramsay for making the meeting arrangements, and for providing the meeting room and the lunch.

Carol Ann Rose, A/Regional Director, Oceans and Environment Branch, DFO Maritimes Region, was introduced. She will be replacing Faith Scattolon on the ACZISC and the Executive Committee for the next six months while Faith is attending French language training. Carol Ann also agreed to co-chair the ICM Working Group, along with Leslie Grattan. A roundtable introduction of all participants followed.

2. ***ADOPTION OF AGENDA, and REVIEW AND APPROVAL OF MINUTES FOR MEETING #36***

The provisional Agenda for Meeting #37 was reviewed. Mike Butler stated that the presentation on the Confederation Bridge would be moved to 1100 hrs due to Don Maynard's schedule. The agenda, as amended, was approved (attached).

The draft minutes of ACZISC Meeting #36 were reviewed and approved as distributed. The minutes will be posted on the ACZISC website at <http://www.dal.ca/aczisc/docs>.

3. ***STATUS OF ACTION ITEMS***

The Action Items from Meeting #36 were reviewed. All Action Items were carried out or are in progress. They will be reported on under the relevant agenda item.

4. ***SCHEDULE OF UPCOMING ACZISC MEETINGS***

The schedule of upcoming ACZISC meetings was discussed. The following dates were provisionally selected:

ST. JOHN'S, NL:

ACZISC Meeting #38: Wednesday, 29 January and Thursday, 30 January 2003
Back-up dates: 5-6 February 2003

FREDERICTON, NB:

ACZISC Meeting #39: Wednesday, 21 May and Thursday, 22 May 2003

George Borgal suggested that members take advantage of their travel to NL and consider extending the ACZISC meetings in St. John's. He suggested that the Secretariat and NL members prepare a provisional agenda for circulation to members.

ACTION 37.1: Secretariat and Newfoundland/Labrador members to prepare a draft 2-day agenda for the ACZISC meetings in St. John's on 29-30 January 2003

5. **ACZISC ADMINISTRATION**

ACZISC EXECUTIVE COMMITTEE: Mike Butler stated that the ACZISC Executive Committee consists of a representative from each of the following sectors: Federal (Carol Ann Rose); First Nations (Ken Paul); Private (Brent Rowley); Provincial (Justin Huston); and the Secretariat (Mike Butler). The Executive Committee provides advice to the Secretariat.

As per an Action Item from ACZISC Meeting #36, the possible incorporation of the ACZISC was discussed by the Executive Committee on 27 August at BIO. Justin Huston, Brent Rowley, Carol Ann Rose and Mike Butler were in attendance. They were joined by David Copp, Barrister and Solicitor, who briefed them on the incorporation process. Mike Butler reported that Mr. Copp had recommended the following to the Executive Committee:

- An incorporated body named ACZISC Inc should be created ASAP.
- ACZISC Inc. would be governed by a Board of Directors and would act as the fiscal agent for the ACZISC Committee.
- Federal incorporation would cost approximately \$1500. This may be the preferred option because of membership by the four Atlantic Provinces on the ACZISC. However, provincial incorporation is also an option.
- There would be a requirement for ACZISC Inc. to be audited on a yearly basis.
- An MoU could be developed between the Secretariat and ACZISC Inc. for the operation of the ACZISC Secretariat.

Discussion:

Bill Blight stated that government employees would not be allowed to serve on the Board because of liability and accountability concerns.

Norval Collins added that the terms of incorporation could limit activities and therefore liabilities for the Board of Directors.

Dick MacDougall suggested that Randy Gillespie be contacted to discuss the model used for the incorporation of the CCMC.

Jim Ramsay stated that it was important to produce a document that outlines the reasons for and benefits of incorporation. He added that another option to creating ACZISC Inc. is to identify an existing incorporated body that could serve in that capacity. Mike commented that the Oceans Institute of Canada (OIC) had fulfilled that role.

ACTION 37.2: Secretariat to arrange for a document to be prepared on the possible incorporation of the ACZISC, including pros and cons, for distribution to members by 30 November 2002

ACZISC SECRETARIAT: Mike Butler reported the following:

- The ACZISC Secretariat is staffed on a full-time basis by two personnel: the ACZISC Chair (himself) and Claudette LeBlanc, the Project Officer/WebMs. It is supported by a part-time financial officer.
- The Secretariat is located at the International Oceans Institute of Canada (IOIC), 1226 LeMarchant Street in Halifax where it is provided with rent-free offices, access to the Dalhousie University computer network, etc.
- Recently the IOIC temporarily suspended its daily business operations while it reorganizes. This was precipitated in part by the death of Elizabeth Mann Borgese earlier this year. The Secretariat will remain at the IOIC during this restructuring phase and beyond if possible but an alternate 'home' will be identified. The announcement of the IOIC restructuring was circulated.

Discussion:

Marianne Janowicz enquired if the IOIC was likely to continue to exist. Mike replied that the probability was reasonably good because there is a need for a national institute with a strong marine focus and key players in this sector are involved in the reorganization. In order to survive and prosper, the IOIC must have a full-time president and project development officer. Norval Collins suggested that core funding for the IOIC might be available from ACOA if a private sector link with the IOIC could be established.

ACZISC MEMBERSHIP: Mike Butler reported that the Secretariat had been communicating with three potential new members: Health Canada, the Office of Critical Infrastructure Protection and Emergency Preparedness (OCIEPP) and the RCMP. Representatives of each of these organizations are attending today's ACZISC meeting as observers.

Herb Sooley indicated that potential membership by Health Canada and the benefits and responsibilities associated with membership would be discussed with his Director and RDG.

Gary Frail indicated that the RCMP was interested and that membership is being considered.

Members recommended that the following organizations be contacted re membership: the Canadian Food Inspection Agency, the Canada Newfoundland Offshore Petroleum Board and the Province of Québec.

Discussion:

Larry Hildebrand commented that there would be a requirement for the ACZISC to become a bilingual organization if the Province of Québec became a member.

Marianne Janowicz stated that there may be an opportunity for translation services to be provided by the Provinces and the federal departments.

Gary Frail added that the bilingual requirements of the ACZISC's client base be considered and that bilingual documents be provided as much as possible.

It was suggested that the Secretariat prepare a document outlining the pros and cons of providing bilingual services for review at the next meeting.

ACTION 37.3: Secretariat to prepare a document outlining the implications of implementing full or partial bilingual services for review at the next meeting

ACTION 37.4: Secretariat to continue contacting agencies identified as potential members of the ACZISC

An up-to-date list of ACZISC members and Executive Committee members is attached.

BUDGET / FUNDING: Mike Butler distributed copies of the updated ACZISC Budget/Financial Statements for 2002-2003 and revenue summaries. Copies are attached. The statements were reviewed.

Mike reported the following:

- 2001-2002 was the last fiscal year in which funds were contributed to the ACZISC by the Council of Maritime Premiers on behalf of the Maritime Provinces. The termination of funding support was in part due to the lack of support for the ACZISC by the provincial Intergovernmental Affairs (IGA) departments and a change in focus by the CMP.
- Efforts are being made to identify alternate provincial funding for 2002-03 as an interim measure. Nova Scotia has contributed \$25K and Newfoundland and Labrador has committed \$10K.
- The federal members of the ACZISC have signed an MoU amongst themselves for federal funding for the ACZISC.
- The ACZISC will receive \$10K from the Ocean Management Research Network (OMRN) in exchange for 10% of Mike's time as Associate Director of the OMRN National Secretariat.
- Mike and private sector representatives (Norval Collins, Brad Fay and Brent Rowley) made a presentation to ACOA for bridging funds for the ACZISC in 2002-2003. The private sector reps took the lead, making several statements re the benefits derived by the private sector from membership in the ACZISC. However, the request for funds was denied because ACOA felt that the ACZISC did not make 'significant' contributions to the private sector.
- A proposal will be prepared and submitted by the Secretariat, with the assistance of provincial reps, to the Council of Atlantic Premiers (CAP) for long-term funding for the ACZISC beginning in 2003-04.
- Ed Cramm, former Deputy Minister of Service Nova Scotia and Municipal Relations, has been appointed as Secretary to CAP.

Discussion:

Leslie Grattan stated that key points made by the private sector reps during the presentation to ACOA would be of assistance to members when seeking support for the ACZISC within their jurisdiction. She suggested that these be documented. Leslie also stated that the provincial reps on the ACZISC should assist the Secretariat in obtaining support for the ACZISC from CAP via the IGA departments in their province. Mike added that meetings are being scheduled with the IGA department in each province.

Jim Ramsay added that the provincial reps should also assist the Secretariat by obtaining support for the ACZISC from the other relevant departments in their province. He suggested that the Secretariat prepare an outline of benefits derived from the ACZISC to assist them in doing so.

George Borgal suggested that the Secretariat obtain a copy of the CAP Workplan to assist with the preparation of a funding proposal to CAP.

ACTION 37.5: Brent Rowley and Norval Collins to document ASAP the key points of their presentation to ACOA NS on 31 May re the ACZISC request for bridging funds in 2002-03

ACTION 37.6: Secretariat to obtain a copy of the Council of Atlantic Premiers (CAP) Workplan ASAP so that the proposed ACZISC funding submission to CAP can be prepared to conform with CAP objectives

ACTION 37.7: *Secretariat to prepare a brief outline of benefits derived from the ACZISC by 31 October 2002 for use by provincial reps in submissions to other provincial departments*

ACTION 37.8: *On behalf of the ACZISC, provincial representatives to seek ASAP the support of other departments within their province, which have a mandate or interest in coastal and marine issues, for the funding submission to CAP by the ACZISC*

ACTION 37.9: *Secretariat, in collaboration with provincial representatives, to arrange meetings with the provincial Intergovernmental Affairs personnel ASAP to seek their support for the proposed ACZISC funding submission to CAP*

ACTION 37.10: *Secretariat, in collaboration with the provincial members, to prepare the funding proposal for submission to CAP by 15 November 2002*

ACTION 37.11: *Secretariat to submit the funding proposal to CAP by 30 November 2002*

It was suggested that the Secretariat contact the Oceans Task Group of the Canadian Council of Ministers of Fisheries and Aquaculture to seek their support in principle for the funding submission to CAP.

ACTION 37.12: *Secretariat to continue discussions with the Oceans Task Group with regard to obtaining their support in principle for the proposed ACZISC funding submission to CAP*

COMMUNICATIONS WORKING GROUP: The ACZISC Communications Working Group is chaired by Mike Butler. He stated that, based on the Strategic Planning sessions held to date, ACZISC communication tools would continue to include:

- ACZISC monthly Coastal Updates distributed by email mid-month.
- ACZISC website, updated on a regular and frequent basis.
- Coastal Zone Info, a 2-page information sheet on ACZISC activities distributed at appropriate workshops and conferences. Issues were prepared and distributed at the Bay of Fundy Science Workshop on 13-16 May in Wolfville; the OMRN/MACO meeting on 19 July in Halifax; and the CZC 2002 Conference held on 24-28 June in Hamilton. Members requested that issues be prepared for Geomatics Atlantic, 25-27 September in St. John's; the CGDI Technical Workshop, 3 October in Dartmouth; and the OMRN Conference, 25-27 October in Ottawa.
- Minutes of ACZISC meetings distributed to the participants and made available in the 'Documents' section of the ACZISC website.
- ACZISC PPT Deck: As actioned at the last meeting, a generic ACZISC PPT deck was prepared by the Secretariat and distributed to members for use at appropriate events. The deck will be revised as a result of yesterday's strategic planning discussions and redistributed to members.

ACTION 37.13: *Secretariat to prepare a CZ Info information sheet for upcoming conferences and workshops*

ACTION 37.14: Secretariat to revise the ACZISC PPT deck and distribute to members ASAP for comment

Mike distributed copies of a 2-pager on the ACZISC (copy attached) prepared by Larry Hildebrand as a briefing document for the Meteorological Service of Canada – Atlantic. Mike suggested that it could serve as an example for other members requiring such a document.

DATABASE DIRECTORY WORKING GROUP: The ACZISC Database Directory Working Group (DDWG) is chaired by Claudette LeBlanc. She and Cameron Wilson reported the following:

- The Atlantic Coastal Database Directory (ACDD) was initiated by the ACZISC when it was formed in 1992. Available online at <http://www.dal.ca/aczisc/acdd>, the Directory contains metadata descriptions for over 500 databases of relevance to ICM in Atlantic Canada. The ACDD has been updated on a regular basis by the Secretariat with the assistance of members.
- The GeoConnections Discovery Portal (GDP) is the prime discovery and access component of the Canadian Geospatial Data Infrastructure (CGDI). The GDP enables users to discover, evaluate, order and obtain geospatial products or services via the web at <http://geodiscover.cgdi.ca/>
- The ACZISC DDWG has previously recommended that the ACDD be integrated into the GDP and that a GDP 'sub-portal' be created for Atlantic Canada with a coastal/marine focus, *i.e.* the Atlantic Coastal Information Portal. This approach was recommended to:
 - eliminate duplication of effort between the ACZISC and GeoConnections
 - capitalize on resources, both expertise and funding, available from/through GeoConnections
 - reduce the workload of the database managers responsible for producing and maintaining metadata
 - promote the connectivity of databases by making them searchable and available online.
- The integration of the ACDD into the GDP was initiated through a secondment agreement with the NSGC last year. A similar agreement being negotiated with SNB should be in place by April 2003.
- Two unplanned meetings of the DDWG were held yesterday (11 September) to discuss the process of integrating the ACDD into the GDP. It was suggested that the ACZISC consider submitting a project proposal to GeoConnections with regard to these activities. Andy Sherin volunteered to initiate this task. Paul Boudreau stated that he would provide a list of documents related to user needs.

ACTION 37.15: Paul Boudreau to provide ASAP a list of historic and current studies to the Secretariat which identify users and user needs with regard to coastal data and information

ACTION 37.16: Andy Sherin to prepare a draft letter of interest with regard to a project submission to GeoConnections re:

- ***the identification and implementation of improvements to the Atlantic Coastal Information Portal***
- ***user and user needs***

Andy to send the letter to the Secretariat ASAP for distribution to the ACZISC Database Directory Working Group for comment.

Norval Collins enquired re the status of the CGDI interoperability model. Cameron replied that a lot of progress was being made in developing a CGDI interoperability model focussing on data, services and applications. Compusult, based in NF, is playing a major role. Interoperability will be a topic of discussion at the upcoming CGDI meeting scheduled for 3 October in Halifax. The meeting report will be available on the CGDI website at http://www.cgdi.gc.ca/workshopsIndex.cfm?lang=en&pgm_id=25

COASTAL MAPPING WORKING GROUP: Mike Butler reviewed the coastal high-resolution data collection projects undertaken for the Annapolis Valley, Bras d'Or Lakes and PEI and the subsequent analysis of the data. The Centre of Geographic Sciences (CoGS), Champlain Institute and ACZISC played a coordinating role for the projects, including initial negotiations and costing re the sensors, the aircraft and helicopter mobilization and some of the subsequent groundtruthing. Bob Maher (CoGS) and Brent Rowley (Champlain Institute/EIT) will be preparing an overview document on the project. The paper will include benefits resulting from the collaboration and the lessons learned.

Paul Boudreau reported that he was a member of a U.S. Academy of Sciences committee that is identifying and suggesting mechanisms for addressing national needs for spatial information in the coastal zone. He would like to bring the NS Coastal Mapping Series and the report being prepared by Maher and Rowley to the attention of the Committee as examples of 'success stories'. The committee will be reporting in March. Its recommendations could be instrumental in generating business opportunities.

ACTION 37.17: Brent Rowley, Bob Maher and Secretariat to complete the overview paper on the High Resolution Coastal Mapping Program by the next meeting

Mike Butler stated that the CMWG had been tasked to determine if there was sufficient interest in holding a workshop on marine boundaries. He invited comments from the participants.

Discussion:

Larry Hildebrand reported that the requirement for marine boundaries had been discussed by the federal Interdepartmental Committee on Oceans. Examples include: large ecosystem management areas, MPAs, NMCAs, etc. The ACZISC could play a role by bringing the departments together to discuss this issue and facilitating the meeting.

Marianne Janowicz indicated that the provinces would also be interested in participating in a workshop to discuss marine boundaries. NB has recently completed an exercise in which seven ecosystems have been identified for Southwest NB.

Cameron Wilson added that such a workshop would be of interest to GeoConnections as a 'framework activity', and to the CCOG (Canadian Council on Geomatics) and CISE (Canadian Information System for the Environment).

Andy Sherin stated that Sue Nichols and her students at UNB were carrying out a number of research projects on marine boundaries.

Ghosh Bobba reported that a number of marine boundary initiatives had been carried out for the Great Lakes region.

George Borgal added that such a workshop could be used as an example to demonstrate the role of the ACZISC in support of a funding submission to CAP.

Norval Collins stated that the workshop should focus on large ecosystems.

Rob Thompson added that Parks Canada would be interested in a workshop on boundaries for large ecosystems.

Paul Boudreau added that a series of workshops could be held over the next five years, moving from large ecosystems to smaller ecosystems. He stated that the workshops could address the system and information need of managers for a holistic overview of ecosystem

issues. He volunteered to begin documenting this and the requirements for a workshop.

ACTION 37.18: Paul Boudreau to prepare ASAP a short report on the system and information needs of managers for a holistic overview of ecosystem issues

ACTION 37.19: Paul Boudreau to submit a 2-page document to the Secretariat ASAP with regard to the need for an Ecozone Boundary Workshop

DATA EXCHANGE AND STANDARDS WORKING GROUP: The Data Exchange and Standards Working Group is chaired by Andy Sherin, Geological Survey of Canada. The following was reported:

- Two events being held in Atlantic Canada in the near future will provide opportunities to review the status of interoperability:
 - Geomatics Atlantic scheduled for 25-27 September in St. John's. Cameron Wilson will be presenting on this topic, a key theme of the conference
 - A Technical Workshop of the CGDI Development Network scheduled for 3 October at the Bedford Institute of Oceanography in Dartmouth.
- Members agreed with the suggestion that the Working Group meet following the BIO workshop to discuss interoperability and to consider the requirement for a workshop on this topic in conjunction with an upcoming ACZISC meeting. It was mentioned that Compusult, based in Mount Pearl, was a leading Canadian company in this field. In the absence of Mike Butler, Norval Collins agreed to represent the ACZISC on the panel at the BIO meeting.

ACTION 37.20: Data Exchange and Distribution Working Group to meet at the upcoming "Technical Workshop of the CGDI Development Network" to consider the requirement for a workshop on interoperability

INTEGRATED COASTAL MANAGEMENT WORKING GROUP: The ACZISC ICM Working Group is co-chaired by Leslie Grattan, Government of NL and Carol Ann Rose, DFO. An ICM Working Group meeting was held from 1500-1700 hrs yesterday (11 September). Leslie Grattan reported on discussions at the ICM WG meeting:

New Brunswick (Marianne Janowicz)

- Both the NB Wetlands Policy and the Coastal Areas Policy are in place. Approval has been given to continue work on a Marine Policy; efforts are continuing to obtain support for the policy.
- Marianne co-produced a paper with Bob Rutherford, DFO, entitled "Coastal Zone Management and Integrated Ocean Management: Where do the Concepts Meet?" The paper was prepared for the 5th BOFEP Workshop held last May in Wolfville. A copy of the paper will be provided to the Secretariat for circulation to members.
- NB is working on a number of pilot projects with DFO that are related to community engagement and planning.
- NB is also participating in an indicators project in the St. Croix River Estuary. The findings may apply to other estuarine areas.

Nova Scotia (Justin Huston)

- The interdepartmental Provincial Oceans Network (PON) was initiated in June 2002 to respond to Canada's Oceans Strategy. It will gradually expand beyond COS.

- An aquaculture pilot project is under way in Guysborough County. The project has a mapping component.
- The NS Government is working on a water strategy (freshwater, surface water, groundwater) and a sewage strategy.

Newfoundland and Labrador (Leslie Grattan)

The Province is:

- co-chairing the Canadian Council of Fisheries and Aquaculture Ministers' Oceans Task Group (Mike Warren, DFA).
- considering the establishment of a specific group to work on oceans matters.
- participating with DFO in their engagement process regarding COS.
- working with three community groups towards their MPA status.
- is presenting concerns to federal ministers re the continuing incidence of oil pollution along the south coast.
- is participating in a National Programme of Action - regional meeting in October.

The Province has presented views on custodial management and foreign overfishing to the National Round Table on the Environment and Economy (NRTEE) and to the Minister's Advisory Committee on Oceans (MACO).

Prince Edward Island (John Burka, University of PEI)

- Concerns are being expressed re the environmental stress caused by mussel farming.
- The Atlantic Innovation Fund is supporting UPEI/DFO/private industry research in husbandry/health of shellfish.
- PEI is hosting the Aquaculture Canada conference next week (17-20 September) in Charlottetown.

Fisheries and Oceans (Carol Ann Rose, Tim Anderson, Joe Arbour and Paul Boudreau)

- Over 65 groups or individuals will be contacted by end of October as part of a national effort to get feedback on COS. The 1st feedback will be at the September 26th CCFAM meeting.
- DFO is working on an MoU with three NS departments on issues related to no net loss of habitat. This should be completed by November.
- The Sable Gully MPA, now in the draft regulation stage, should be announced in the spring. The Musquash Area MPA is also moving forward with a draft management plan.
- Consultation and implementation measures are ongoing to protect deep sea corals.

Concern was raised by Larry Hildebrand that the implementation of COS will require resources from other departments but none have been assigned as yet. The provincial reps reiterated the same point. A federal Deputy Ministers committee is in place to address this issue.

Natural Resources Canada (Andy Sherin)

- An interdepartmental effort re sustainable development strategies is ongoing in response to direction provided by Auditor General.
- Indicators (for ecosystem and human well being) are being developed for the mining industry.
- Geoscience for oceans management will be within the Geological Survey of Canada.

Additional details are available in the Roundtable portion of the minutes (page 12).

6. **PRESENTATION: CONFEDERATION BRIDGE**

Bill Blight provided participants with a brief overview of the history of Confederation Bridge, including the 8-year preparatory phase, the 4-year construction phase and the recent 5-year

anniversary of its opening in 1997. He introduced Don Maynard who heads the PWGSC group in PEI that monitors the environmental effects of the Bridge.

Don reported on the environmental status of the Bridge; copies of his overheads are attached. He stated:

- Transport Canada is the custodian of the Bridge.
- Biophysical data was collected prior to Bridge construction to establish a baseline of information. Monitoring has been carried out to determine the effects of construction and the initial presence of the Bridge.
- Environmental monitoring is ongoing re the long-term effects of the presence of the Bridge, including: marine plants, shorelines, the scallop fishery, the lobster fishery, and ice and temperature.
- The Canadian Wildlife Service is responsible for monitoring seabirds.

Michel Goguen made a presentation on the engineering and technical aspects of the Bridge, including the information systems that support monitoring.

Norval Collins enquired if the monitoring data was available on the web. Don replied that it was not available on the web due to lack of resources but that that it was available from libraries in PDF format.

7. **ACZISC STRATEGIC PLAN**

Mike Butler reported on the results of the meeting held yesterday in Charlottetown to review the draft Strategic Plan and Workplan. He stated that discussions had been constructive and very positive. Both documents will be further revised by the Secretariat based on the discussions. The Action Items pertaining to the Strategic Plan and the Workplan follow:

ACTION 37.21: *Secretariat, with the assistance of Working Group co-chairs, to review the Working Group requirements and structure and to make recommendations to members at the next meeting*

ACTION 37.22: *Secretariat to prepare the 5th draft of the ACZISC Strategic Plan based on discussions in Charlottetown on 11 September and distribute it to members by 8 October 2002*

ACTION 37.23: *Task group (George Borgal, Leslie Grattan, Cameron Wilson and Secretariat) to review the 5th draft of the Strategic Plan at a meeting to be held at the International Oceans Institute of Canada on Wednesday, 9 October 2002*

ACTION 37.24: *Secretariat to revise the 5th draft of the Strategic Plan based on the deliberations at the task group meeting and distribute the 6th draft to ACZISC members for comments by 31 October*

ACTION 37.25: *Secretariat to prepare a summary 2-page ACZISC Strategic Plan for use in presentations to senior personnel and CAP*

ACTION 37.26: *Secretariat to schedule discussions on the ACZISC Strategic Plan during ACZISC Meeting #38 in St. John's, NL*

ACTION 37.27: Secretariat to revise the ACZISC 2002-2003 Workplan based on discussions on 11 September in Charlottetown and distribute to members for feedback by 31 October

8. *ROUNDTABLE REVIEW OF COASTAL ZONE ACTIVITIES and UPDATES ON ACZISC RELATED PROGRAMS*

NATIONAL DEFENCE: LCdr Clarke Bedford reported on Trinity's Meteorology and Oceanography Centre (MetOc). Copies of his overheads are attached. He reported:

- MetOc operates on the basis of a service provider/client relationship between EC and DND.
- EC forecasters produce the products and DND meteorological technicians disseminate them.
- The products are available to DND via a dial in server, unclassified and classified web-based IM, LF/HF broadcasts, and fax.
- The products are available to others via LF/HF broadcast. This is subject to change.
- Opportunities exist to take advantage of the MetOc products.

Cdr George Borgal, TRINITY JOSIC, reported the following:

- Surveillance Update: Recent additions to the Recognized Maritime Picture (RMP) promise to provide greater accuracy, credibility, reliability and currency to the service being provided to Government departments through CANMARNET. One example is the 15-minute in flight reporting of shipping received through the Provincial Airlines (PAL) contract with DFO; this is yielding near real time local observation and identification of merchant and fishing vessels along surveillance flight paths. PAL figured prominently in the detection of the pollution incident this past weekend, which led to the arrest of MV TECAM SEA. Another example is the project to access CCG's INNAV system databases. This collaboration between DND and CCG and improvements in operational connectivity among the Operation Centres in Halifax, Dartmouth and Québec City will improve the collective situation awareness. Each AIS transponder fitted ship will be able to be monitored real time, and information pertinent to various government regulatory mandates can be obtained. The benefit to Search and Rescue is one very significant bi-product.
- CANMARNET: The Interdepartmental Maritime Security Working Group has approved funding for a government-wide study to identify the national requirement for a CANMARNET-like system, referred to as CANNET. In principle, CANNET features could include full intranet functionality for all participating departments including posting, retrieval and privacy. Information could also be hosted within a security domain such as 'secret', and the net could potentially become the common desktop work environment across government. For now, CANMARNET will continue to provide the limited service to Atlantic Region users. Access to CANMARNET can be negotiated with Departments.
- Data Fusion: Several departmental, national and international initiatives are addressing this issue. TRINITY will be hosting an informal data fusion workshop next week for interested organizations within Maritime Forces Atlantic and the Air and Maritime Staffs in NDHQ to focus on the operational requirement for data fusion and how to achieve it. The issues and solutions are both technological and human.

Operations updates of interest since the last meeting:

- Seaway Survey: This past June, the Route Survey Department of TRINITY completed an extensive survey of the St. Lawrence River from Cap Brulé, East of Isle d'Orléans to the St Lambert Lock West of Montréal. The Department now has precise and current 3D data on the navigation route and various anomalies and obstacles along the way. The site of the

Québec Bridge collapse of 1908 was surveyed and as was the wreck of the Empress of Ireland and two others previously uncharted. This information will be used by the CHS and as part of the background needed for environmental and security awareness and risk management.

- DRDC's Atlantic Cruise Plan for CNAV QUEST, Q- 269: Defence Research and Development Canada, in collaboration with Dalhousie University, will be conducting a research cruise using CNAV QUEST in the Bay of Fundy from 9 to 20 September to meet several objectives related to the behaviour of the North Atlantic right whale population: vocalization, sound source levels and processing algorithms related to sound propagation in the Bay, zooplankton demographics, and internal wave formations.
- Assistance to DFO's Environmental Impact Study on the Gully: Maritime Forces Atlantic has agreed to provide available shipping data to DFO to assist in their assessment of environmental vulnerability posed to the Gully by shipping crossing the area. The Gully may be granted protected status.

Leslie Grattan enquired if TRINITY had vessel traffic information for the south coast of Newfoundland. George replied that a specific request could be accommodated.

NATURAL RESOURCES CANADA: Andy Sherin, Geological Survey of Canada, reported the following:

- GSC Open File 4428 for Pictou County, NS has been released. It is the first analysis of coastal change interpreted from two videos flown, the first in 1988 and the latest in 2000.
- The Sustainable Communities Initiative of NRCAN has several projects at various stages of implementation in Atlantic Canada. For information on SCI, access <http://www.sci.gc.ca>
- Earth Science Sector Program development is proceeding. Programs of interest to the ACZISC are: Groundwater (Program Manager, Alfonso Rivera, arivera@nrcan.gc.ca); Geoscience for Ocean Management (PM Jacob Verhoef, jverhoef@nrcan.gc.ca); Climate Change (PM Paul Eggington, pegginto@nrcan.gc.ca); Metals in the Environment (PM Andy Rencz, arencz@nrcan.gc.ca); and Connecting Canadians (PM Jeff Labonte, labonte@nrcan.gc.ca). ACZISC members are welcome to contact any of the Program Managers. For more information, access the new ESS website <http://www.nrcan.gc.ca/ess/>
- Dr. Mike Parsons (miparson@nrcan.gc.ca) has recently joined the staff at GSC Atlantic. His research deals mainly with metal-contaminated sediments and mine wastes, and is focused on understanding processes that control the distribution, cycling, and biological availability of inorganic contaminants in marine environments. Refer to attachment for details on the projects.
- A new GEOIDE National Centre of Excellence project will in part address coastal erosion assessment using geomatics technology (videogrammetry, in combination with LIDAR) in southern Gaspé, Québec. Project participants include GSC researchers Don Forbes (GSCA) and Didier Perret (GSCQ and INRS-ETE). The project leader is Bernard Long (INRS-ETE) and includes other researchers from York University and Laval University. The project will span 2002-2005. The project title is: Tailored geomatic applications for geohazards and georesource exploration.
- Under an MOU with Environment Canada, GSC Atlantic has conducted a multibeam survey and sampling at Amherst Cove, the dump site for dredge spoils from the excavations conducted for the construction of the Confederation Bridge.
- GSC Atlantic has made application to the Geomatics Professional Development Program for resources to enhance the Coastal Information System (CIS). If successful, work will begin in November. Potential users of the system are welcome to contact Andy Sherin (sherin@nrcan.gc.ca) or Steve Solomon (ssolomon@nrcan.gc.ca) to give suggestions for their requirements for information from the CIS.

Cameron Wilson, GeoConnections, reported the following:

- A new map server and interface for the Atlas of Canada available at <http://atlas.gc.ca> will be officially released on 20 October. The Atlas now features 20 OGC layers of vector data in English and French; the data is accessible through a web mapping service. The Atlas is a good example of interoperability. GeoConnections is in negotiation with other data providers for additional data layers for the Atlas.
- GeoGratis is a web and file transfer protocol (ftp) site that distributes geospatial data of Canada without charge (<http://geogratis.cgdi.gc.ca>). It continues to be made available with the cooperation of the provinces and the Centre for Topographic Information in Sherbrooke. Over 1000 GB of data is currently available via GeoGratis. One of the products available is Landsat 7 imagery: corrected and orthorectified, 3 files per scene depending on resolution and seamless.
- Access financial agreements are in place with the National Forest Information System (NFIS), Agriculture and Agri-Food Canada (AAFC) and DFO. Agreements are being negotiated with Health Canada, the Canadian Information System for the Environment (CISE) and the provinces of NS, ON and BC.
- An Access/GeoInnovations RFP to build demand and communities of practice will be announced in November.
- The GeoInnovations 2002 RFP to industry to solicit projects for commercial tools and services for CGDI will be announced by October.
- A hydrology pilot project with the NSGC will be contributing to the Framework component of the CGDI.
- Summary reports and workshop material for the National Road Network (NRN) workshops held in the Maritimes in June can be accessed at <http://www.geoconnections.org/geobase>. To access the site, enter username: geomember - password: geomember

George Borgal enquired if the data available from the National Atlas could be manipulated. Cameron replied that it could not.

PRIVATE SECTOR/CHAMPLAIN INC: Norval Collins reported the following:

- At the upcoming Geomatics Atlantic Conference in St. John's, discussions will take place re forming an Atlantic Geomatics Partnership involving Champlain Inc and NATI. ACOA and Industry Canada will be involved in discussions. A draft MoU between CI and NATI has been prepared. The emphasis is on collaboration for international exports.
- Champlain Inc has completed a trends analysis of wetlands in New York Adirondacks State Park and is awaiting acceptance of the final report. The study examined causal factors in wetlands change.
- A user needs analysis has been completed for the Maine Atlantic Salmon Commission, and a pilot GIS management application has been constructed, along with a terms of reference for creation of an overall GIS system for the Salmon Commission.

Participants requested copies of the final user needs analysis prepared for the Maine Atlantic Salmon Commission, if appropriate. Norval indicated that he would provide a copy to the Secretariat for distribution when available.

ACTION 37.28: Norval Collins to provide the user needs analysis prepared for the Maine Atlantic Salmon Commission by Champlain Inc to the Secretariat for distribution when available

Norval indicated that the private sector would like a closer working relationship with the ACZISC and that members could benefit from the wide range of experience available from the private sector. He suggested that a presentation be made at an upcoming ACZISC meeting.

PUBLIC WORKS AND GOVERNMENT SERVICES CANADA: Bill Blight reported that PWGSC staff had held meetings last week with personnel from Sweden on the remediation process. Documents will be provided for circulation when available.

FISHERIES AND OCEANS CANADA: Carol Ann Rose, Oceans and Environment Branch, DFO Maritimes Region, reported the following:

- The Eastern Scotian Shelf Integrated Management (ESSIMS) Advisory Committee, composed of federal and provincial representatives, will be meeting on 16 October. Topics of discussion will include corridors for cables and pipelines. An ESSIMS workshop for all stakeholders will be held in February. The objective of the Workshop will be to come up with a governance framework for the Eastern Scotian Shelf.
- There have been positive developments re the Global Program of Action Coalition (GPAC) for the Gulf of Maine. These will be discussed at the next meeting.
- DFO is continuing to support the Fundy Forum.

Martin Kaye commented that the Bay of Fundy Marine Resource Centre (BFMRC) had approached DFO (Dave Duggan) to take over and expand the Fundy Forum.

Tim Anderson, Oceans and Environment Branch, DFO NF, reported the following:

- Updates on the Community Coastal Mapping projects in Newfoundland and Labrador were provided to the Secretariat in July for posting on the ACZISC Inventory of Coastal Mapping Projects. Claudette confirmed that the information had been posted on the ACZISC website – <http://www.dal.ca/aczisc/czmproj>
- Canada's Oceans Strategy (COS) was released mid-July, along with the Policy and Framework for Integrated Management. In Newfoundland and Labrador:
 - DFO is meeting on a bilateral basis with 65 associations, agencies, educational institutions, etc. throughout the Province. 45 meetings have been held to date. Generally support has been expressed with questions raised about the next steps and how to become involved in implementation.
 - Plans are developed in collaboration with provincial officials who have participated in selected meetings.
 - The process will be completed within the next few weeks and the results will be discussed at a meeting of the Ocean Task Group of the Canadian Council of Ministers of Fisheries and Aquaculture.
- The three MPA Areas of Interest (AOI) in Newfoundland and Labrador are: Eastport, Gilbert Bay and Leading Ticks. Recommendations to the Minister are being developed for the three sites. The next steps include the development of management plans, drafting of regulations, etc.
 - Eastport: Seabed mapping is taking place around 2 islands in the Eastport region. The intent is to systematically collect geo-referenced video images to allow classification of the seabed, using a Seabed Imaging and Mapping System developed in BC. The System utilizes a camera towed by a boat along transects. The results are groundtruthed by SCUBA divers. The results will include a geology database of up to nine substrates, including information on substrate type, sediment class and gravel content. It will also include a biotic classification, including both vegetation and fauna. The product will be a CD-ROM of habitat mapping with representative video clips.
 - Gilbert Bay: CHS is undertaking the collection of multibeam acoustic data next month. The information will be used to identify boundaries and zones within the proposed MPA.
 - Leading Ticks: In 2001 CHS collected multibeam acoustic data at Leading Ticks. The data was later processed to provide a detailed bathymetric map and a QT scanner was used to identify seven different substrate types. In addition, in

partnership with the provincial Surveys and Mapping Division, mapping of the terrestrial/marine interface was completed and a digital elevation model at 1:10,000 was developed. The results of this initiative will be presented at Geomatics Atlantic later this month in St. John's. The information will be used in the development of a digital ecosystem model and a habitat classification scheme for use in determining boundaries and zones in the proposed MPA.

- DFO is working with the local ACAP group on coastal planning and integrated management in the Bay of Islands in Western NF. Activities include: determination of the need to revise/update the existing comprehensive Environmental Management Plan for the Bay of Islands; and a review of existing information on the biophysical and socio-economic status of the project area and update as needed.

Dick MacDougall, Canadian Hydrographic Service, reported the following:

- CHS is continuing to convert old charts to the North American Datum 1983 so that their grid reference system can be used to plot GPS positions directly.
- A hydrographic survey has been completed between Notre Dame Bay and St. Anthony that accurately positions the Horse and Grey Islands. CHS is now surveying corridors in Labrador, north of Nain.
- In June CHS mapped scallop areas in Southwest NS for DFO Fisheries Management. NRCan created the imagery and a week after the survey ended colour multibeam imagery was made available to the fishermen. This mapping was done in advance of opening the area to fishing and will become part of the DFO/industry conservation management plan for the scallop fishery in the area. The industry has funded incremental costs and additional areas will be done next year.
- This fall CHS will be in Bras d'Or Lakes in support of SIMBOL (Study for Integrated Management of the Bras d'Or Lakes), in St. Georges Bay, NL in support of DND, and in Gilbert Bay, NL for multibeam mapping of the proposed Marine Protected Area.
- The status of SeaMap remains unfunded to date. The SeaMap partners are proceeding with demonstration projects such as the scallop industry project in Southwest NS and a DFO/NRCan internally funded project to do benthic classification maps of the eastern Scotian Shelf using existing data. Sub-elements include access to data, refinement of classification sub-division, etc. In parallel, funding is being sought from the GeoConnections Framework Data node to expand this demonstration effort.
- CHS is contributing to the funding of Newfoundland aerial photography in Notre Dame Bay. It has submitted a proposal for 2003-04 funding to the Search and Rescue Secretariat for a new shoreline for northern Labrador - Nain to Cape Chidley - using Landsat and Radarsat. At present the charts in this area are too inaccurate to allow CHS to add new data which increases risk to users and to Search and Rescue.
- There are no developments re Canada ratifying the UNCLOS (United Nations Convention on the Law of the Sea).

GOVERNMENT OF NEW BRUNSWICK: Marianne Janowicz, Environment and Local Government (DELG), reported the following:

- Since the last update, the Coastal Areas Protection Policy has received approval from the NB Government to begin the process of amending and writing regulations. It is envisioned that this will involve some adjustments to the Clean Environment Act as well as the Community Planning Act. Also, a consultative process will begin with Planning Commissions and municipalities on implementation, and their roles and capacity.
- The NB Government has also supported the continuing development of a marine policy involving ongoing consultation with stakeholders, and other federal and provincial government agencies.
- DELG has initiated an interagency committee on Marine Issues. This committee is intended to provide agencies with a forum to better understand each others activities and

policies related to the coastal zone so that overall policy objectives of government are met and to minimize duplication of effort. This will be the avenue for consultation in NB by the Oceans Task Force. So far the group has met three times.

Julie Norton, Service New Brunswick, reported the following:

- UNB Study on Marine Boundary Information: The project is wrapping up. The DELG and others involved in the proposed Policy for Coastal/Marine Strategy for NB were interested in a presentation on the group's findings. A presentation was made in early August.
- Administrative Boundaries Project - Landward Administrative Boundaries: The project is progressing well. Boundaries of interest have been identified and prioritized. A contractor is now investigating and making recommendations on how they should be structured and maintained and by whom. Opportunities to partner with federal departments on this framework information will be pursued.
- Contours Alternative Project: The project is wrapping up. Provincial departments had indicated an interest in having a ready-made contour layer derived from the provincial DTM coverage. Various software packages for automated contour generation were investigated. The impact of human interactions and their associated costs were considered - introduction of breaklines, interactive contour smoothing, customized labelling, etc. Again opportunities to partner with federal departments on this framework information will be pursued.
- Digital Orthophotos: The aerial photography is almost complete and aerial triangulation will begin early this fall.
- SNB/NRCan Secondment Agreement: SNB sees this as an opportunity because of its interest in metadata and making information and services easier to find and more accessible. The terms of the agreement with NRCan are being finalized.

GOVERNMENT OF NEWFOUNDLAND AND LABRADOR: Leslie Grattan, Environmental Planning and Management Projects, reported the following:

- The Province is considering the establishment of an inter-agency entity for coastal and ocean issues. Issues include the reporting structure, its name, etc.
- A joint presentation by personnel of the Departments of Environment and Fisheries and Aquaculture was made to the Minister's Advisory Council on Oceans (MACO) and the national Round Table on the Environment and Economy to promote custodial management beyond the 200-mile limit. This has been recommended by the House of Commons Standing Committee on Fisheries.
- There is continuing concern over 'mystery' illegal discharges which have resulted in large seabird kills. One case has been successfully prosecuted. The province will lobby for improved response.

Larry Hildebrand stated that CWS has reallocated funds to deal with the problem. Tim Anderson added that a recent 120 km discharge had been identified with Radarsat.

HEALTH CANADA: Herb Sooley reported that the main mandate of Health Canada (HC) was the health of First Nations and Inuit and the health of federal employees. The health of the Canadian general public is a provincial concern. HC provides advice, develops guidelines and standards for provincial use, e.g., drinking water.

Herb reported that coastal issues which relate to human health include:

- Potential for development to impact food fish
- Occupational and health issues related to seabed oil and gas development
- Agricultural and urban run-off and its impact on drinking water, the fishery, aquaculture and seaweed
- The health impacts of pesticides, fungicides and disinfectants on aquaculture, air quality,

- fisheries, etc.
- Potential health impacts of tributyltin (TBT) in coastal sediments (from anti-fouling paint on vessels). TBT is an endocrine disruptor.
- Coastal dredging and mining operations and their potential to stir up, and result in the transport of, heavy metals from place to place
- Litter and tourism and their effects on the coastal communities and the people who live there
- Climate change and its potential effects on water quality due to extreme weather
- Radiation emission from Point Lepreau
- Installation and upgrading of sewage treatment facilities along the coast

RCMP: Gary Frail, Coastal Watch Program, reported that Program staff had been updating information on airports in NS. 55 airports have been identified. Errors were found in the old data. Photos were taken from every angle. The photos will be made available to the NSGC, the Province of NS, military partners and AVCAN.

Discussion:

George Borgal enquired if new airfields had been identified. Gary answered yes and gave examples of tracks used as airfields: old train track, tracks for pipelines, and an 1800 ft landing strip in the Cape Breton Highlands used for spruce budworm spraying.

Dick MacDougall enquired if accurate positions of wharves and ports were being obtained. Gary replied yes but that not all of the data had been entered yet. The data can be shared.

GOVERNMENT OF PRINCE EDWARD ISLAND: Jim Ramsay, PEI Provincial Treasury, reported the following:

- The report entitled *The Value of the Ocean Sector to the Economy of Prince Edward Island* has been completed and will be available shortly. Mike Butler added that the PEI study contains a chapter on environmental economics.
- The PEI Government has undergone a workforce adjustment program. The Department will begin to replace staff cut on 1 April.

Barry MacPhee, PEI Department of Fisheries, Aquaculture and Environment (DFAE), reported the following:

- The Province has had significant problems with fishkills associated with pesticide runoff.
- DFAE now has two full time Ministers: Greg Deighan, Minister of Fisheries and Aquaculture and Chester Gillan, Minister of Environment. Lewie Creed is the DM and Diane Griffin the ADM.
- Fisheries and Aquaculture staff was not cut as a result of the workforce adjustment program; however, there was a cut in Environment staff.

Ghosh Bobba enquired if changes in groundwater were being monitored. Barry replied that he would enquire and would then respond.

GOVERNMENT OF NOVA SCOTIA: Justin Huston, Agriculture and Fisheries, reported the following:

- Provincial Oceans Network: In response to DFO's recent release of Canada's Oceans Strategy, the NS Department of Agriculture and Fisheries initiated a Provincial Oceans Network (PON) to coordinate and facilitate the Government of Nova Scotia's role in implementation of the Oceans Strategy. The Network is a simple structure through which communication and discussion can take place between participating departments. These include: Agriculture and Fisheries, Environment and Labour, Service Nova Scotia and Municipal Relations, Petroleum Directorate, Natural Resources, Aboriginal Affairs, Transportation, Economic Development, Intergovernmental Affairs, and the Oceans

- Branch of DFO. PON members can be called upon for input to specific provincial issues and concerns arising from the implementation of the Oceans Strategy.
- Nova Scotia Petroleum Directorate: The Directorate is looking at how offshore oil and gas activities can impact coastal communities. It is willing to make a presentation to the ACZISC.
 - Non-resident Land Ownership in Nova Scotia: The Voluntary Planning Task Force produced a report last winter which highlighted two main issues of concern to Nova Scotians: 1) the amount of public vs. private coastal land, and 2) public coastal access. This fall Service Nova Scotia and Municipal Relations will begin to actively purchase coastal lands and secure public access.
 - Minas Basin Working Group: The Working Group, under the Bay of Fundy Ecosystem Partnership (BoFEP), has existed since 1998. Its goals are to maintain and enhance environmental quality in the Minas Basin and its watershed, and to allow for sustainable resource use by existing and future generations. The Working Group is currently revising its Strategic Plan, Operational Guidelines, and Work Plan. Its main project is organizing community forums to initiate action toward sustainable management in the Minas Basin and watershed and the identification of issues of concern for the communities and potential leaders. Forums have already taken place in Wolfville, Truro, and Parrsboro; one is scheduled for Noel Shore next month. A summary of the outcomes of these community forums will be available this fall. In addition, the Working Group will soon be releasing a Minas Basin Profile, which will be a resource document for communities, government agencies, NGOs, etc. to glean detailed information about the resources of the Basin and watershed, and the people who live and work there.

ENVIRONMENT CANADA: Larry Hildebrand, Sustainable Communities and Ecosystems Division, reported the following:

- The Atlantic Coastal Action Program (ACAP) has completed ten years of government-community partnership and locally-based action in support of environmental improvements and overall community sustainability. The 14 ACAP organizations throughout Atlantic Canada are multi-stakeholder organizations that build diverse partnerships and lever resources from many sources.
- In order to assess the full value of ACAP, EC commissioned Gardner Pinfold Consulting Economists Ltd to evaluate the economic impacts of ACAP to the Atlantic economy and to calculate what it would have cost EC to obtain these results through departmental delivery instead of through community-based delivery.
- For the five-year period 1997-2001, the report demonstrated that: the 14 ACAP organizations spent \$13.5M on purchased goods, business services, wages and benefits to implement and administer over 250 projects; they generated 482 person-years of employment in communities across Atlantic Canada, or almost 100 person-years on an annual basis. The GDP impact in Atlantic Canada over this five-year period was \$22M (\$9.9M direct and \$12.1M spin-off); and a total tax impact of \$8.03M was generated (55/45 fed/prov split).
- Alternative delivery cost analysis indicates that if EC had attempted to undertake the same set of projects and activities as delivered by the ACAP organizations, it would have cost the Department almost \$15M per year, or over \$71M for the five-year period, over 12 times as much as was invested in the ACAP sites.

Dick MacDougall enquired about the mechanism for transferring funds from EC to the ACAP sites. Larry responded that this is done through a Letter of Agreement between EC and each ACAP site.

On behalf of John Parker with the Meteorological Service of Canada, Larry reported that a Letter of Interest (LOI) submitted to the CCAF had been accepted for a project entitled

“Impacts of Sea-Level Rise and Climate Change on the Coastal Zone of southeastern New Brunswick”. The goal of the project is to quantify impacts of climate change and more specifically sea-level rise, storm surge and coastal erosion on the Gulf of St. Lawrence coastal zone of southeastern New Brunswick, in support of sustainable management, community resilience and the development of adaptation strategies. A full proposal is to be submitted by mid-October. Support in principle is being sought from the ACZISC for the proposal. Mike Butler suggested that the LOI be distributed to members for comment.

ACTION 37.29: Secretariat to distribute to ACZISC members ASAP the Climate Change project proposal with a view of obtaining “ACZISC support in principle” for the proposal

ACTION 37.30: Members to communicate with the Secretariat with their response to the Climate Change proposal by 4 October 2002

ACTION 37.31: Secretariat to respond to John Parker, MSC by mid October

Ghosh Bobba, with EC’s National Water Research Institute in Burlington, reported that he had become aware of the ACZISC when he attended the BoFEP Science Workshop held last May in Wolfville. He reviewed his professional experience, including his experience related to climate change, remote sensing, acid rain and groundwater. He is interested in collaborative work on saltwater/groundwater interactions and contaminants. He will provide copies of documents for circulation by the Secretariat.

BAY OF FUNDY MARINE RESOURCE CENTRE: Martin Kaye reported the following:

- The BFMRC is a community based charity institution which offers services facilities and technical support to all sectors of the marine economy and ecosystem, including fishermen’s organization, processors, aquaculture operators, marine eco-tourism operators, First Nations, environmental groups and researchers (“one stop shopping”).
- Its facilities include two buildings at Cornwallis Park in Digby County, NS with 22 offices, a wet lab (in development), a training classroom and a walk in information and referral centre.
- The MRC will take a lead role in developing integrated management in the region, starting with St. Mary Bay and the Annapolis Basin, by bringing together key player from these embayments.
- To date major MRC projects have included: an Oil Spill Readiness program; and working with the Coast Guard’s CAPP Program to initiate a comprehensive GIS based plan for the mobilization of communities in Digby and Annapolis counties in the case of a major oil spill in the Bay of Fundy. This plan will be coordinated with the NB plan, which is already in place.
- See attachment for further details and the MRC website at <http://www.bfmrc.ns.ca/>

C-CIARN: Kathryn Parlee reported the following:

- The Canadian Climate Impacts and Adaptation Research Network (C-CIARN) is a partnership of researchers, stakeholders and decision-makers working together to improve knowledge of Canada’s vulnerability to climate change and to seek solutions to the impacts of climate change in Canada. C-CIARN encourages decision relevant impacts and adaptation research and involves stakeholders in identifying priority climate change impact and adaptation issues, research needs and research priorities.
- C-CIARN Coastal Zone focuses specifically on addressing these issues for Canada’s four coastal zones. C-CIARN Coastal Zone has now been up and running for approximately 8 months. Accomplishments of note during this period are:
 - the production of draft documents outlining the ‘Principal Impact Issues’ and

- 'Stakeholder and Policy Issues' for the coastal zone sector.
- participation at the Coastal Zone Canada 2002 Conference held in Hamilton, ON in June 2002. C-CIARN Coastal Zone hosted a special session at this event, which focused on increasing awareness of coastal climate change issues for the Great Lakes and also asked session participants to help identify knowledge gaps and future research needs.
- the establishment and release of a C-CIARN Coastal Zone website.
- the linking of researchers and stakeholders for collaborative research opportunities, particularly in relation to the recent Climate Change Action Fund (CCAF) Call for Letters of Interest for research in Coastal Zone Management.
- In consultation with an Advisory Committee, C-CIARN Coastal Zone is planning a national coastal climate change workshop. The workshop, tentatively scheduled for February 2003, will focus on the issue of climate change and changing water levels for coastal communities across Canada.
- For more information on C-CIARN or C-CIARN Coastal Zone, access the website at <http://www.c-ciarn.ca>

Leslie Grattan enquired which sectors were represented on the Advisory Committee. Kathryn responded that the Advisory Committee currently had representation from the federal and provincial governments, NGOs and First Nations. Representation from the insurance industry is being sought.

PARKS CANADA: Rob Thompson reported the following:

- Bill C-10, "An Act Respecting the National Marine Conservation Areas of Canada", received Royal Assent on 16 June 2002 and has been in force since that date. The text of the Act is available online at http://www.parksCanada.gc.ca/NMCA/nmca/act/index_e.html
- As per Prime Minister Chrétien's statement at the World Summit on Sustainable Development (26 August-4 September 2002 in Johannesburg, South Africa), the Government of Canada has committed to establishing five new national marine conservation areas and five new land-based parks in the next five years. National marine conservation areas (NMCAs) are marine protected areas that are managed by Parks Canada. Funding has not been identified to date.
- The current thrust for NMCAs is the proposed Gwaii Haanas NMCA on the west coast and Lake Superior NMCA in the Great Lakes.
- Nationally there is an interdepartmental looking at MPAs and NMCAs.

Tim Anderson stated that a report entitled "Towards a National System of Marine Protected Areas" was under preparation.

OCIPEP: Shawn Clarke reported that the Office of Critical Infrastructure Protection and Emergency Preparedness (OCIPEP), created on 5 February 2001, has undergone significant change. It was formerly Emergency Preparedness Canada. New initiatives include: national critical infrastructure assurance; consultations re national disaster mitigation; and a storm surge model developed as a result of the January 2000 storm that caused significant damage in the Maritimes. The storm surge model was developed by Science Applications International.

UPDATES ON ACZISC RELATED PROGRAMS

COASTAL ZONE CANADA ASSOCIATION AND CONFERENCES: Tim Anderson and Leslie Grattan reported that CZC 2004 would be held from 25-29 June 2004 in St. John's, NL. An organizing committee has been established which includes representatives from several sectors. It is chaired by Grant Gardner, Memorial University.

Larry Hildebrand added that CZC 2006 is provisionally scheduled to take place in the Arctic, possibly in Iqaluit and 2008 on the West coast.

GULF OF MAINE COUNCIL ON THE MARINE ENVIRONMENT: Justin Huston reported that the Gulf of Maine Council on the Marine Environment has recently released its new 5-year Action Plan for 2001-2006. The Plan focuses on three major goals: protection and restoration of coastal and marine habitats; protection of human health and ecosystem integrity; and encouraging sustainable maritime activities (e.g., marine research and nature-based tourism). The document is available at http://www.gulfofmaine.org/action_plan2001-06.html.

SOUTHERN GULF OF ST. LAWRENCE COALITION ON SUSTAINABILITY: Marianne Janowicz reported that the Coalition had a successful AGM in Miramichi, NB in April. The Coalition's Steering Committee is being strengthened with the addition of members from all sectors and the four provinces: NB, NS, PEI and Québec. Through NRCan's Sustainable Communities Initiative, it is providing GIS mentoring to six communities in NB and PEI.

Larry Hildebrand added that the Coalition was focusing on core activities such as communications and on ways to understand the state of the ecosystem, including the use of indicators. It is intended that a state of the Gulf report will be prepared.

9. **ANNOUNCEMENTS AND PUBLICATIONS**

Andy Sherin announced that CoastGIS 2003 would be held in Genoa, Italy on 16-18 October 2003 - refer to attached brochure. The CoastGIS 2001 proceedings have been compiled and will be submitted to Taylor and Francis for publication. CoastGIS 2001 was held in Halifax.

Mike Butler reported that:

- A national OMRN Conference entitled "Canada's Oceans: Research, Management and the Human Dimension" is scheduled for 25-27 October 2002 in Ottawa. The OMRN aims to link all those across Canada with an interest in research relating to the management of ocean uses. The OMRN National Secretariat is based at Saint Mary's University. Tony Charles is the Director, Mike Butler the Associate Director and Alison Evans the Program Director (omrn@stmarys.ca).
- A Workshop on Innovation and the Oceans Economy entitled "Linking Canada's Innovation Strategy with Canada's Ocean Strategy" is scheduled for Thursday, 19 September 2002 at the Marine Institute in St. John's, NL.

10. **OTHER BUSINESS**

No new business was discussed.

11. **ADJOURNMENT**

ACZISC Meeting #37 adjourned at 16:30 hrs.

GSC ATLANTIC PROJECTS RELATED TO METAL-CONTAMINATED SEDIMENTS AND MINE WASTES

Three projects in Atlantic Canada that Dr. Mike Parsons, Geological Survey of Canada - Atlantic (miparson@nrcan.gc.ca) has been involved in are:

- **Influence of lead smelter emissions on marine sediments in the Bay of Chaleur (New Brunswick / Quebec):** This four-year study (completed in March 2002), undertaken as part of the GSC's Metals in the Environment (MITE) initiative, examined the distribution and sources of metals in the marine environment surrounding a coastal lead smelter in Belledune, NB. The Bay of Chaleur receives metals from a variety of sources including Noranda's Brunswick Smelter, two thermal generating stations, a mercury-cell chlor-alkali plant, and numerous mined and unmined base metal deposits. Gravity cores and grab samples of marine sediments were collected from 130 sites in the Bay, in water depths of 2 to 95 m and at distances up to 100 km away from the smelter. Metal concentrations in sediment cores suggest that the flux of metals to most areas of the Bay of Chaleur has increased in recent years relative to pre-industrial times. This is especially true for Pb, which is present in surface sediments throughout the entire bay at concentrations that are at least three to four times the background values. Dispersion of smelter emissions by wind and ocean currents has resulted in an area of elevated metal concentrations in surficial sediments within approximately 20 km of the smelter. In harbour sediments adjacent to the smelter, Cd, Cu, Hg, Pb, and Zn concentrations decrease towards the surface from maximum values at about 5 cm depth, reflecting reductions in smelter emissions since the mid-1980s. Comparison of Pb isotope ratios in the sediments with published isotopic data for geogenic and anthropogenic sources suggests that the surface enrichment of Pb throughout most of the bay is mainly derived from smelter emissions and historical combustion of Canadian leaded gasoline.
- **Geochemical characterization of the Saint John ocean dumpsite (New Brunswick):** Over the past several years, we have been participating in a multidisciplinary study of the environmental impacts of ocean dumping in Saint John Harbour, NB. This study, led by Russ Parrott, has used geophysical, geochemical, biological and sediment transport analyses to study the dispersion of dredge spoils dumped off Black Point, near the entrance to the harbour. We analyzed sediment redox chemistry, organic carbon contents, and trace element concentrations to determine sedimentation rates throughout the harbour, and to assess the accumulation, dispersion, and potential biological impacts of the dumped materials. These analyses show that trace element levels are slightly elevated relative to background levels near industrial sources in Saint John and at the disposal site, but are not sufficiently elevated to result in adverse biological effects. Concentrations of Cr, Cu, Pb, V, and Zn in surface sediments within the disposal site are significantly higher than natural background levels. Elevated concentrations also occur in surface sediments extending 2 to 4 km west of the dumpsite. These patterns suggest that metal-contaminated dredge spoils are being transported westward by bottom currents. These chemical tracer methods are now being applied to another ocean dumpsite on Grand Manan Island.
- **Geochemical and geophysical characterization of marine mine tailings disposal sites (Little Bay and Tilt Cove, Newfoundland):** In the summer of 2001, we began a one-year scoping study of the environmental impacts associated with historical disposal of sulfide-rich mine tailings into the ocean near two abandoned copper mines in northern Newfoundland. The main goals of these studies are (1) to determine the volume and

distribution of tailings on the seafloor; (2) to assess the potential for reworking of the tailings by oceanographic processes; and (3) to characterize the geochemical processes that control the mobility and bioavailability of potentially toxic elements (e.g., As, Cd, Cr, Cu, Hg, Pb, Zn) from mine tailings in the marine environment. This study addresses outstanding issues in a recent multi-stakeholder investigation (CANMET, DFO, and MUN), which is assessing contamination of sediments, clams, mussels, and seaweed by metals and metalloids near these mine sites. The GSCA investigation (1) extends the existing multibeam bathymetry data and bottom sampling into deeper water at both sites; (2) updates multibeam coverage for the main areas of tailings deposition; and (3) examines the vertical distribution of metals in sediments and sediment pore waters in gravity cores from the tailings deposits.

BAY OF FUNDY MARINE RESOURCE CENTRE

SUMMARY

The Bay of Fundy Marine Resource Centre (MRC) is a community based charity institution which offers services facilities and technical support to all sectors of the marine economy and ecosystem, including fishermen's organization, processors, aquaculture operators, marine eco-tourism operators, First Nations, environmental groups and researchers ("one stop shopping"). Its facilities include two buildings at Cornwallis Park in Digby County, NS, with 22 offices, a wet lab (in development), a training classroom and a walk in information and referral centre.

The Western Valley Development Authority (WVDA) and the Fundy Fixed Gear Council (FFGC) established the MRC in 1998 in order to give our coastal communities the capacity to take a greater role in the integrated management of its coastal resources, which includes:

- Community-based management
- Aquaculture
- Regional marine tourism promotion and marketing
- Research facilities on innovative marine-related technologies and mythologies
- Digital data storage and retrieval
- Training and Education
- Ecological, market, legal, technological research relating to marine resources

Since the MRC's conception in 1998 we have successfully completed a number of projects and community based activities, enabling us to identify emerging needs and trends related to marine stewardship. In the coming years the MRC'S work will be based on a redefinition and development of the MRC's strategies and roles, drawing on the lessons learned from the past years' work. This development will entail a shift of focus:

- from direct organizational support services to organizational capacity building
- from ad hoc response to marine conservation issues to an integrated public strategy to address issues in a more integrated way
- from ad hoc partnerships with other agencies and organizations to a comprehensive collaborative framework which maximizes complementary and mutual support

BACKGROUND / NEED

1. MRC

The MRC is a community-based civil institution, which provides support to all marine related sectors in the Bay of Fundy, including technical (GIS), organizational, research, educational, and informational support. The underling premise of its work is the belief in the inherent interdependence of healthy coastal communities and healthy marine environments.

The MRC was established in 1998 and has gone through two phases since then.

Phase 1: Setting Up

In its first year and a half the MRC concentrated on establishing its building, a core staff, and key organizational partnerships.

Phase 2: Setting Our Course

Over the last two years the MRC has focused on consolidated its position in the community and setting its strategic direction. This involved taking on more than a dozen major projects, acquiring a second building, establishing a board and committee governance structure, undertaking a strategic and business planning process, and broadening its funding base. This phase also focused on providing direct assistance to local marine related organizations through organizational support (chairing meetings etc), technical support (GIS), research support (designing and coordinating projects). It also established rental incomes, which ensure MRC's long-term sustainability.

Phase 3: Making Change

The MRC is now entering a phase in which it will take its place as a civil institution, which is, rooted in the communities it serves. This will require the MRC building its own capacity to strengthen local community-based organizations, through training, information, networking and project development. A key part of this phase will be building the public awareness and participation in the community so that the MRC has truly "owned" by the community. This phase will also include contributing to wider initiatives that support healthy coastal communities and healthy marine environments, most notably the Saltwater Network.

2. Needs

In its outreach work to date, the MRC has identified some of the key elements of the work needed in order to establish community-based management of local marine resources and environment. At the same time the MRC has identified how it must adapt its own strategies to ensure its ongoing effectiveness and responsiveness in assisting community-based marine organizations to take on a greater role in resource management and stewardship.

Organizational Capacity Building

The need to strengthen the capacities of local marine related organizations is critical to the development of community-based marine stewardship in the region. This aspect of the MRC's work takes a number of forms.

Organizational Support

In the past the MRC has helped local organizations mainly through direct support: chairing and facilitating meetings, assisting planning and management, provision of financial management services. Among groups served in this way are Fundy Fixed Gear Council, Bay of Fundy Fisheries Council, Annapolis Basin Clam Management Board, local harbour authorities, Digby County Sea Urchin Board, Bay of Fund Inshore Fishermen's Association.

Organizational Development Training

There is now a clear need to move from service provision to capacity building, by providing organizational development support, in the form of board workshops and leaderships training.

Community-based Research

In the past the MRC has developed and managed a number of research projects on behalf of local marine related organizations including community-based research in the groundfish, lobster, sea urchins, clam fisheries sectors, as well as marine ecotourism and stream restoration. In the next phase the MRC will focus on assisting the organizations to develop the capacity to design and manage community-based research project, which effectively combines local, and scientific knowledge support of community-based decision making.

Technical Capacity

The MRC has provided direct technical support for GIS mapping for more than ten projects including cod tagging, gaspareau, stream restoration, trail development, fleet profiles, calm

restoration and other projects. In the next phase the MRC will focus on training organizations' staff to become more familiar with GIS so that it can be integrated into their ongoing work.

Public Outreach and Participation

Public participation is key element in establishing community-based marine management. This work is multifaceted and includes 1) public awareness, 2) public participation, 3) public debate and decision-making and 3) public access to informational and referral services.

Public Awareness

To date the MRC has been responding to public needs relating to marine economies and environments, as they emerge, i.e. as they "walk through the door". In order to build a broad and deep public support for CBM, the MRC will need to undertake more comprehensive public awareness campaign.

Public Participation

The MRC will also need to build a strong membership in the region by reaching out to individuals and organizations throughout the community.

Public Debate

In the first phase of its work the MRC has identified a clear need for a forum for civil debate on marine related issues. Some of this work has been started, including the presentations of forums on community-based management, Native/Non-native fisheries, oil and gas exploration and enforcement. The provision of this kind of forum will become a regular part of the MRC's work in the next phase.

Information and Referral

Although it has not advertised this service, to date the MRC has answered many enquiries about all aspects of marine economies and ecologies. In the next phase the MRC will develop the capacity to provide information and referral services. Access to information on marine economies and ecologies, including geographical data accessed through GIS, is fundamental to community-based management.

MRC Initiatives

In addition to the work done by other organizations, there are also projects, which must be developed and managed directly by the MRC itself in response to emerging marine conservations issues. As the only civil institution dedicated to balancing the health of the Bay of Fundy's marine economies and ecologies, the MRC must be prepared to bring an integrated and balanced approach to address these issues. To date these have included

- An Oil Spill Readiness program
- Working with the Coast Guard's CAPP Program, the MRC has initiated a comprehensive GIS based plan for the mobilization of communities in Digby and Annapolis counties in the case of a major oil spill in the Bay of Fundy. This plan will be coordinated with the New Brunswick plan, which is already in place.

Cross-Cultural Issues

The MRC has played a lead role in facilitating discussions between Native and none Native fisheries groups in the wake of the Marshall Decision. This work will continue with support from the Pew Fellowship Program, which has been awarded to Tony Charles of St. Mary's University.

Right Whale Conservation

The MRC currently chairs to the Right Whale/Fishing Gear Working Group of the Right Whale Recovery Team, and is coordinating a sitting network for Right Whales in the Bay of Fundy.

Integrated Management

The MRC will take a lead role in developing integrated management in the region, starting with St. Mary Bay and the Annapolis Basin, by bringing together key players in around these embayments.

3. Strategies

The MRC has developed the following strategies to meet these needs over the next two years:

- development of strategic partnerships with other institutions and agencies with a comprehensive collaboration framework
- broadening the base of support for the MRC by diversifying funding sources
- participation in support initiatives in the wider bioregion
- increased networking locally, regionally and internationally, with a focus on working links with other marine resource centres and organizations working on community-based management.
- increase the MRC's overall capacity to plan, coordinate and evaluate an increasingly diverse and complex work plan, so that it is both stable and adaptive to changing needs.