

ACZISC



ATLANTIC COASTAL ZONE
INFORMATION STEERING COMMITTEE

MINUTES OF ACZISC MEETING #73

LOCATIONS

Wednesday, 17 September 2014

Boardroom 1 (main floor, 'fishbowl')
Regis and Joan Duffy Research Centre (Building 28)
University of Prince Edward Island, Charlottetown, PEI

Thursday, 18 September 2014

Charlottetown & Greenwich, PEI

UPCOMING ACZISC MEETINGS

- **14-15 January 2015:** ACZISC Meeting #74, St. John's, NL
- **6-7 May 2015:** ACZISC Meeting #75, Fredericton, NB
- **16-17 September 2015:** ACZISC Meeting #76, Halifax, NS
- **3-4 February 2016:** ACZISC Meeting #77, Charlottetown, PEI

PARTICIPANTS ^(1 ACZISC member; 2 Advisory Committee member; 3 ACZISC Association Director)

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PARTICIPANTS (continued)

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Andy Sherin	ACZISC Secretariat	a.sherin@dal.ca	902-494-6184

Additional contact information for ACZISC Members is available on the ACZISC's [website](#).

1. WELCOME and INTRODUCTIONS

Andy Sherin, Director, ACZISC Secretariat, called ACZISC Meeting #73 to order at 0900 hrs on Wednesday, 17 September 2014. He welcomed members and guests. A roundtable introduction of all of the participants followed.

2. **AGENDA and MINUTES**

The provisional agenda for ACZISC Meeting #73 was approved. The draft minutes of ACZISC Meeting #72 (7-8 May 2014, Halifax, Nova Scotia) were reviewed and approved. The final [minutes](#) are posted online.

3. **STATUS OF ACTION ITEMS and DATES of UPCOMING MEETINGS**

- The action items from Meeting #72 were reviewed by Andy Sherin. All of the action items have been completed or are in progress.
- **ACZISC Meeting #77** was scheduled for 3-4 February 2016 in Charlottetown, PEI.

4. **PRESENTATION and DISCUSSION**

- **Cost-benefit Analysis of Coastal Adaptation Options for Atlantic Coastal Infrastructure under a Changing Climate**, Peter Nishimura, Government of PEI.
- **Assessment of the Risk to Prince Edward Island's Coastal Residences, Infrastructure and Heritage from a Changing Climate**, Adam Fenech, UPEI.
- **COINAtlantic Data Accessibility Benchmark Tool**, ACZISC Secretariat
- **Nutrient regime, climate change and mussel aquaculture interactions in St. Peter's Bay, PEI**, Thomas Guyondet, DFO Gulf.
- **Enhancements to the COINAtlantic Web-based Tools**, ACZISC Secretariat.

The meeting presentations are posted [online](#).

* **PRESENTATIONS** from the Coastal Classification Mapping meeting the day before (16 September 2014) that included PDF presentation files are in the list below and posted [online](#):

- **PEI's Changing Coasts**, Adam Fenech, UPEI.
- **CanCoast: a tool for national coastal mapping and The Coastal Information System: it's detail-oriented older cousin**, Gavin Manson, Natural Resources Canada.
- **Coastal Classification Mapping in Prince Edward Island**, Peter Nishimura, PEI Department of Environment.
- **Coastal Classification Mapping in New Brunswick**, Dominique Bérubé, New Brunswick Department of Energy and Mines.
- **Mapping Human Activities and Ecological Layers in the Maritimes Region of DFO**, Jana Aker, DFO Maritimes.
- **Data Accessibility Benchmark Organizational Self-Assessment Tool**, Andy Sherin, ACZISC Secretariat.

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

Andy Sherin invited participants to provide an overview of programs and activities within their jurisdiction related to ICOM, geomatics and coastal mapping. He requested that notes be provided to the Secretariat to assist with the preparation of accurate minutes. Minutes will be posted in the [Meetings](#) section of the website.

ACTION: *Participants to email notes re their roundtable presentation to Alexi Baccardax Westcott at ACZISC@dal.ca.*

NATURAL RESOURCES CANADA: Vladimir Kostylev, Coastal and Shelf Studies, reported the following:

- Working on geoscience for decision support in the arctic coastal zone: collecting data, generating models etc. Tracking coastal erosion, shoaling and ice impact projections in three harbours: Tuktoyaktuk, Qikiqtarjuaq and Iqaluit. Work with Transport Canada. There are some plans for building a long term mapping program, having discussions with stakeholders (parks, industry etc.). There is a possibility that the section will start doing more environmental geoscience in the next 3-4 years as has been done in the past.

SOUTHERN GULF OF ST. LAWRENCE COALITION ON SUSTAINABILITY: Angela Douglas, Executive Director, reported the following:

- Southern Gulf of St. Lawrence Coalition on Sustainability (Coalition - SGSL) currently has an application for funding to bring the 'Living Shorelines' program to Prince Edward Island. This program was developed by the Ecology Action Centre in Halifax to prevent shoreline erosion by using 'soft' shoreline protection methods instead of 'hard' methods such as rock walls.

- Coalition - SGSL is also working on starting an eelgrass working group to bring together a number of people/ NGOs /researchers that are working in this area. The Coalition is also evaluating the Community Monitoring Program (CAMP) and has a Master of Science student analyzing the data.

GOVERNMENT OF PRINCE EDWARD ISLAND:

David MacEwen, Department of Fisheries, Aquaculture and Rural Development reported the following:

- Picked up industry marine debris this past year in Riverside (eastern PEI) during four days. Department Staff, volunteers, mussel aquaculture businesses, and aquaculture alliance were involved. A project looking at the oyster fishery at Foxley River has been initiated with the oyster industry.

Peter Nishimura, Department of Environment, Labour and Justice, reported the following:

- Continuing work on two ACASA (Atlantic Climate Adaptation Solutions Association) projects, scheduled for completion in December 2015. These projects are similar to the ones described for Nova Scotia: 1) Cost-benefit analysis of adaptation options for coastal infrastructure and, 2) decision support tool for coastal communities.
- See Peter's presentation [online](#): **Cost-benefit Analysis of Coastal Adaptation Options for Atlantic Coastal Infrastructure under a Changing Climate**.

GOVERNMENT OF NOVA SCOTIA: **Chantel Nixon**, Department of Natural Resources reported the following:

- The Department of Fisheries and Aquaculture is developing a Coastal Data and Atlas Initiative (currently in the concept development stage). Upon completion, civil servants will have ready access to the Province's collection of location-based coastal data in the form of an online mapping tool that layers information about coastal hazards, economic activities, sensitive ecosystems, demographics, shipping lanes, fishing grounds etc. It will be achieved through GeoNova's digital infrastructure. The Coastal Atlas may eventually be made public.
- Nova Scotia Environment is the Nova Scotia lead agency for the Atlantic Climate Adaptation Solutions Association (ACASA). Two ACASA projects of note include:
 - *Cost-benefit Analysis of Atlantic Coastal Infrastructure and Property in a Changing Climate*. The objectives of this study are to:
 - Add an economic layer of analysis to existing climate change impacts and adaptation work along the Atlantic coastline that focused on coastal erosion, sea level rise scenarios, coastal flooding and infrastructure and property vulnerability.
 - Quantify the economic costs from potential damage impacting Atlantic coastal infrastructure and property under a future changing climate and the economic benefits of appropriate adaptation options.
 - *Developing Flexible and Effective Guidance on Long Term Coastal Adaptation Options in Atlantic Canada*.
 - The project is divided into three related components - creating criteria for selecting appropriate coastal adaptation strategies and instruments; developing guidance for implementing appropriate infrastructure design, placement and maintenance instruments; and developing local planning recommendations.
- The Department of Natural Resources has:
 - Embarked on setting up coastal erosion monitoring stations around the province.
 - Received funding from the Canadian Security and Protection Program to fund an emergency coastal flooding decision support system.

- The goal of this project is to build an internet mapping website where officials from the emergency management community and other interested parties can obtain information about the possible extent of coastal flooding inundation as a result of a predicted high water event (storm surge or tsunami), assess what critical infrastructure may be at risk, assess transportation closures and alternative routes, assess possible mass evacuation of people at risk and enhance situational awareness of the pending event. This project is being done with Tim Webster.
- The Department of Municipal Affairs is in the process of analyzing the Municipal Climate Change Adaptation Plans (MCCAPs) for themes and trends.
 - Each municipality in NS was required to prepare and submit a Municipal Climate Change Action Plan (MCCAP) by December 2013. A MCCAP identifies a municipality's vulnerabilities and risks in relation to climate change and sets priorities for adaptation. This program provides useful local information and proposed actions as well as serving as a valuable resource for provincial efforts.

FISHERIES AND OCEANS CANADA:

Tim Hall, Oceans and Coastal Management Division, Maritimes Region, reported the following:

- The Scotian Shelf Regional Oceans Plan release date has been delayed, however major initiatives are ongoing: intergovernmental coordination through the Regional Committee on Coastal and Ocean Management (RCCOM), decision support and mapping, ecologically and biologically significant areas (EBSA) profiles, and Marine Protected Area (MPA) Network Planning.
- MPA Network Planning: intergovernmental workshop in late November through the RCCOM. This is Maritime Provinces in scope (Scotian Shelf and Gulf of St. Lawrence). Fishing industry and environmental non-governmental organizations will be the focus in a December 2014 - February 2015 time period.
- The Gulf of Maine Council Coastal and Marine Spatial Planning (CMSP) Committee workshop/ webinar in Portsmouth, NH, 14 October 2014 from 1-4 PM EST. Includes a Canada / United States marine spatial planning initiatives overview and discussion of potential collaborative opportunities. If anyone is interested in participating please let Tim know.
- The Gulf of Maine Council Climate Network brings together planners and scientists from around the Gulf of Maine to raise awareness about climate impacts and inspire effective action in local communities. The Climate Network produces a quarterly e-bulletin with information on regional climate adaptation events and resources, including the *Gulf of Maine Region Quarterly Climate Impacts and Outlook*. Resources are available and sign up for news from the network at the website: <http://www.gulfofmaine.org/2/climate->

[network-homepage](#).

Irené Novaczek, Gulf Region, reported the following:

- Working in the Basin Head Protected Area in Prince Edward Island. This is small MPA at an enclosed estuary which has been affected greatly by eutrophication and nutrient loading and resulting anoxic conditions. Eel grass and Irish Moss algae are almost disappeared from the MPA now. The MPA was established in large part because of the because of the Irish moss, which is particular because it had a very large biomass. Now there are scattered moss beds and restoration is uncertain.

David Cairns, Gulf Region, reported the following:

- Primarily researches the American Eel which has a very large range and have been working on habitat mapping of the eel. Work requires detailed coastal base maps and is currently looking at the east coast of Canada and the United States.

Thomas Guyondet, researcher UPEI / DFO Gulf Region reported the following:

- Working on projects related to climate change and aquatic invasive species.
- Climate change:
 - Modelling the effects of climate change (temperature) on coastal systems sustaining aquaculture - spanning over the range of hydrodynamic forcing (flushing time) found in the Gulf Region.
 - Looking at effects of morphological change of sand barriers in Bouctouche Bay on oyster larvae transport and spat collection potential.
- Aquatic invasive species:
 - Multi-year simulations of *Ciona intestinalis* population dynamics and effects of various treatment regimes in mussel farms on the level of infestation at bay-scale.
 - Comparison of ecosystem structure between a green crab infested bay (St. Mary's Bay, PEI) and a green crab free system (Kouchibouguac National Park).
- See Thomas's presentation [online](#): Nutrient regime, climate change and mussel aquaculture interactions in St. Peter's Bay, PEI.

GATEWAY GEOMATICS: Jeff McKenna, reported the following:

- A FOSS4G conference was held in Portland, Oregon from 8-13 September 2014. The presentations were recorded and are archived on the conference website - <https://2014.foss4g.org>.
- Geoforall Initiative: The motto of ICA-OSGeo (International Cartographic Association - Open Source Geospatial Foundation) Labs initiative is 'Geo For All'. The Mission of the

group is: 'Making geospatial education and opportunities accessible to all'. See website for a map of 91 ICA-OSGeo Labs World-Wide - <http://www.geoforall.org>.

ACZISC SECRETARIAT: **Andy Sherin, Director**, reported the following:

- There will be a summary distributed of the coastal classification mapping meeting held yesterday (16 September 2014). Two potential future topics that arose from the meeting included: volunteer geographic information and a project to nest the Newfoundland Island and Prince Edward Island coastal classifications nested in the Cancoast database.
- The ACZISC Secretariat is working on an Atlantic Ecosystem Initiatives project about petroleum vulnerability in Newfoundland communities with Norm Catto (Memorial University) and a summer student.
- CoastGIS 2015 and ICAN 7 will be held in Cape Town, South Africa in May 2015, (ICAN, 19-21 April and CoastGIS 2015, 22-24 April).

- *Andy Sherin was the roundtable judge and Chantel Nixon was the winner.*

6. COINATLANTIC COASTAL IMPACTS FIELD TRIP

- Coastal Impacts Field Trip to Greenwich adjunct to the PEI National Park, led by Adam Fenech and accompanied by several Parks Canada employees.
- Photos of the Dunes at Greenwich:





7. ADJOURNMENT

- ACZISC Meeting #72 adjourned at 1300 hrs on Thursday, 18 September 2014.