

New Brunswick Regional Adaptation Collaborative Project

NEWSLETTER

February 2011

The Federal RAC Program

The Regional Adaptation Collaboratives (RAC) Climate Change Program is a three-year (2009-2012), \$30 million, cost-shared federal program aimed at stimulating climate adaptation planning and decision-making. The RAC involves six regional programs across Canada, each organized as partnerships between the federal government, provinces and territories, local governments, communities, industry, business, academia, and Aboriginal and non-governmental organizations. The RAC program is being led by Natural Resources Canada (NRCan). For more information on the RAC program see: http://adaptation.nrcan.gc.ca/collab/abosuj_e.php

The Atlantic Regional Adaptation Project

The Atlantic Climate Adaptation Solutions Association (ACASA) has been established for Atlantic Canada to manage the Atlantic RAC project. All four Atlantic Provinces and their partners are collaborating, and each of the Atlantic Provinces manages its own individual projects. The Atlantic RAC has 3 main activity themes:

- 1 - Integrating adaptation into community planning (coastal land use risk and vulnerability; inland land use risk and vulnerability; infrastructure placement and design).
- 2 - Managing groundwater resources.
- 3 - Building the capacity of adaptation practitioners in Atlantic Canada.

Program Management and Coordination

The Atlantic RAC program is managed by ACASA. A non-profit organization, ACASA was created to coordinate the management, financial administration and reporting of provincial projects in the Atlantic region and act as a point of contact with the federal government. ACASA is headquartered at the Council of Atlantic Premiers' Office in Halifax, Nova Scotia and works closely with each Atlantic province through their Departments of Environment to manage and deliver the projects.

New Brunswick Provincial Lead Department

The Climate Change Secretariat of the New Brunswick Department of Environment is responsible for leading and coordinating New Brunswick's RAC activities, supported by a provincial coordinator managing the projects.

New Brunswick's Projects

Acadian Peninsula Project

Issue: coastal erosion, threat of flooding and property damage.

Communities involved: Bas-Caraquet, Le Goulet, Shippagan

Project Outline: Future erosion and sea level rise will be modeled and infrastructure at risk will be mapped. The

work is being undertaken by the provincial Department of Natural Resources, the University of Moncton (Moncton and Shippagan campuses), and the Coastal Zone Research Institute Inc. in Shippagan.

Contact Person: Sabine Dietz, sabine.dietz@bellaliant.net



*On-site high tide measurements
Photo: Réal Daigle*

Richibucto Saltwater Intrusion Project

Issue: sea water affecting the quality of groundwater used for drinking water supplies.

Community involved: Richibucto

Project Outline: The University of New Brunswick is carrying out a modeling study to evaluate current saltwater intrusion in municipal wells, and provide recommendations for the management of this problem in the future.

Contact Person: Dr. Kerry McQuarrie, UNB, ktm@unb.ca



Electrical Resistivity Tomography (ERT) instrumentation being used in the Richibucto area study. The instrumentation may reveal areas where salty groundwater is present. Pictured is Eric Mott, a MSc student in Geology at the University of New Brunswick.

Greater Moncton Project

Issue: inland flooding and wastewater management problems at times of heavy rain.

Communities Involved: Moncton, Dieppe, Riverview

Project Outline: environmental consultants AMEC have been engaged to evaluate current sewage and wastewater infrastructure based on future sea level rise and climate change scenarios. This will aid the communities in planning appropriately for the future.

Contact Persons: Jacques Paynter, AMEC, jacques.paynter@amec.com; Sabine Dietz, sabine.dietz@bellaliant.net

Grand Falls Project

Issue: erosion and failure of steep bank areas along the Saint John River and associated risk to property and infrastructure.

Community Involved: Grand Falls

Project Outline: engineering consultants GEMTEC have been engaged to evaluate current and future erosion rates in Grand Falls, and provide the community with recommendations regarding their infrastructure as well as identifying high risk areas.

Contact Person: Lise Ouellette, Grand Falls, lisegf@nb.aibn.com, Sabine Dietz, sabine.dietz@bellaliant.net

Lower Saint John River Project

Issue: flooding along the Saint John River system, tidal prediction, and managing land use and development in relation to flood prone and wet areas.

Communities Involved: Saint John, Quispamsis, Rothesay, Hampton, Grand Bay-Westfield

Project Outline: digital elevation modeling and wet areas mapping (WAM) will help the communities in implementing appropriate planning mechanisms to deal especially with flooding issues.

Contact Person: Dr. Paul Arp, UNB, arp1@unb.ca; Sabine Dietz, sabine.dietz@bellaliant.net

Tantramar Dykelands Project

Issue: property and agricultural lands at risk due to inland and marine flooding and erosion, especially in relation to dyke flood protection structures.

Community Involved: Sackville

Project Outline: Digital elevation modeling is being completed for the area and future sea level rise and flooding will be modeled. Infrastructure at risk will be mapped as part of the project. This project overlaps with one of Nova Scotia's projects and will provide planning tools to other stakeholders such as CN, CBC, Parks Canada and various provincial departments. Portions of this work are currently being undertaken by Mount Allison University.

Contact Person: David Lieske (MtA), dlieske@mta.ca; Sabine Dietz, sabine.dietz@bellaliant.net

Other Activities:

Workshop November 24th, 2010

A number of climate change adaptation projects are ongoing in the Province, funded by the Regional Adaptation Collaborative (RAC), the NB Environmental Trust Fund, and/or other funding agencies. These projects are developing tools, conducting research and developing approaches that will assist New Brunswickers in adapting to the changing climate. On Wednesday, November 24, 2010, over 50 climate change practitioners met in Moncton to communicate and exchange information on climate change adaptation projects in the province. The one-day session was to provide opportunities for communication, information exchange and networking.

Contacts:

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New Brunswick Lead Department

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New Brunswick Coordination

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Road infrastructure damage due to flooding, Dec 2010.

Upcoming Conferences of Interest:

Preparing for change: Managing Risk in a Changing Climate

NB Regional Adaptation Collaborative Conference
March 28 - 29; Monday 2 pm (optional training session) to Tuesday 4 pm Future Inn, Moncton NB

For more information about this event and to register, please contact Margaret Tusz-King by March 18th. Second notice with a detailed agenda will come by the end of February. (margarettuszking@gmail.com; 506-536-0597). This event is sponsored by ACASA, NRCan and the NB Departments of Environment and Public Safety.

Advancing Decision Making in Climate Adaptation

ACASA Conference, Sheraton Hotel Newfoundland, St. John's, NL

March 23 -24, 2011

The target audience for this conference is planners, engineers, researchers (and students) and municipalities. For more information regarding details on the conference please see: <http://atlanticadaptation.ca/node/30>. Please contact Sabine Dietz (sabine.dietz@bellaliant.net) if you require financial assistance (NB participants only). Limited subsidies are available.



*Dyklands assessment;
 Mount Allison University,
 Sackville*

| Risk | Criteria |
|------------------|---|
| 1 (highest risk) | Adjacent to open water, no land buffer |
| 2 | Near open water, some land buffer Along major tributary, no/little land buffer |
| 3 | Near open water or major tributary, land buffer |
| 4 | Along smaller tributary |
| 5 (lowest risk) | Away from any waterbody |

