



Climate Change Adaptation in the Tantramar Region Action Planning Workshop

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Mount Allison University, Sackville, NB

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Workshop Report by
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Contents

1. Welcome	3
2. Setting the Context and Background	3
3. Climate Change Projects in Tantramar	3
4. What needs to be done to adapt to climate change in Tantramar?	4
5. Bringing Actions Together	5
6. Tantramar Climate Change Adaptation Action Plan	6
7. Formation of Tantramar Climate Change Adaptation Working Group	7
8. Formation of the Gateway Flood Protection Working Group	8
9. List of Participants	9

1. Welcome

Joni Fleck Andrews, Executive Director of EOS Eco-Energy and Amanda Marlin, Climate Change Adaptation Project Coordinator, welcomed the group. They introduced the facilitators – Lynn Duplessis and Raissa Marks of the New Brunswick Environmental Network. A quick roundtable of introductions by all participants followed. The complete list of participants is provided at the end of this workshop report.

2. Setting the Context and Background

Sabine Dietz, New Brunswick Regional Adaptation Collaborative (RAC) coordinator, provided a brief overview of the research that has taken place through the NB RAC program on climate change impacts, scenarios and adaptation options in the Tantramar region. The summary included a look at our main challenges (the dykes, sea level rise, drainage issues, impacts on infrastructure and agriculture, wanting to know the timing and severity of future storm events, etc.). We now have a considerable inventory of information and tools, including LiDAR data, maps, different scenarios, the economic costs of damages, priority areas, and how to use visuals to convey climate change messages to the public.

3. Climate Change Projects in Tantramar

At small tables participants discussed climate change projects they have been involved with in the Tantramar Region (both sides of the NB-NS border). One project from each table was shared with the larger group. Projects included:

- Roberta Clowater (Executive Director, CPAWS) – Protected area corridor project through the Chignecto Isthmus.
- Margaret Tusz-King (Councillor, Town of Sackville)– “Local Government, Sustainability and Climate Change: A Resource for Elected Municipal Officials in New Brunswick, 2012” (available at atlanticadaptation.ca/reports)
- Penny Henneberry (Planning Director, Cumberland County, NS) – Moving forward in Cumberland County with their Climate Change Adaptation Plan (part of Integrated Community Sustainability Plans in NS)
- Eric Mallet (Director of Public Works, Village de Memramcook) – Used LiDAR data to identify size, shape, etc. of all culverts in the village to determine risk with runoff, storm surges, etc. Information collected allows him to better adapt and plan for future risks.
- Lori Ann Roness (Lori Ann Roness Consulting) – Co-wrote a report with Dr. David Lieske about how to use visuals to inspire climate change action (available at atlanticadaptation.ca/reports)
- Claude Robichaud (Manager Marshland Maintenance, NB Department of Agriculture) – Dyke Strategy for New Brunswick
- Dr. David Lieske (Dept of Geography and Environment, MTA) – Looking at long range planning, what partners need to improve dykes, obtain funding, employ other strategies, etc.



4. What needs to be done to adapt to climate change in Tantramar?

In small groups the above question was discussed and priority ideas were recorded on flip chart paper at each table. Individual groups were given stickers to identify the easiest and most important ideas. Groups were then given the chance to place stickers on ideas generated at other tables. All priorities were then shared with the larger group, they included:

- **Public awareness** (to create action, for decision making, use leaders and experts, different approaches for schools /general population/ high risk residents, how people will be affected personally, communication with other municipalities – best practices, etc.)
- **Funding** (to maintain infrastructure, programs, incentives, for at risk residents, etc.)
- **Economic justification**
- **Influence political will to act** (at all levels of government, will result in funding)
- **Insurance issues** (risks, costs)
- **Land use planning, policies, and enforcement** (where to build, need to move, social aspects, communication with general public, need provincial policy, integrate government levels, explore adaptation as part of planning process)
- **Create a cross border working group** (CN, Transport Canada, NS and NB, federal government needs leadership)
- **EMO plans** (establish responsibility, plan development and communication)
- **Maintenance of dykes** (who should be responsible now, not just about maintenance but improvement/alteration/raising, etc., beyond the scope of one municipality and more than an agricultural issue)
- **Maintenance of environmental infrastructure** (how to maintain resiliency of natural areas/buffers)

- **Conserve green spaces** (how to maintain natural infrastructure, conserve green spaces, what to protect, more than just agricultural spaces are important, land use planning)

5. Bringing Actions Together

The above priorities were grouped into five main action areas by participants:

1. Working Together
2. Policy and Planning
3. Education and Outreach
4. Funding
5. Infrastructure and Dykes

Workshop participants chose which area they wanted to work on. Although everyone agreed that funding is crucial to moving forward, no one wanted to work on this issue. Groups worked together on their issue to discuss:

- What to do?
- Who is going to do it?
- When will they do it?

With the use of sticky notes, the ideas were then grouped together into one timeline and a climate change adaptation action plan for Tantramar was created.



6. Tantramar Climate Change Adaptation Action Plan

Action	Lead and Partners	Timeline
Planning and Policy		
Interprovincial Strategy (an Atlantic-Canada wide strategy exists and could be revisited)	NB and NS governments	Early 2013
NB provincial policy and regulations enabling adaptation	<ul style="list-style-type: none"> • ENGOs • Gov. staff • Regional Service Commissions • Municipalities • Insurance Bureau of Canada 	Early 2013 to 2015
Municipal planning for climate change – incorporation of adaptation	<ul style="list-style-type: none"> • Municipal councils • Planning authorities • Municipal engineering depts. • Researchers • Community groups • ENGOs 	Early 2013
Start regional planning on climate change	<ul style="list-style-type: none"> • Regional Service Commission NB • EMOS • Planning Review Committee • NGOs • Community groups 	2013
Identify levels of government responsibilities	<ul style="list-style-type: none"> • Universities • ENGOs • Emergency management 	Early 2013
Human resource capacity is needed to inform the public and build awareness (a sustainable development mandate could be built into the role of an Economic Development officer in Sackville)	<ul style="list-style-type: none"> • Town of Sackville 	Mid 2013
Increase political support (how to engage politicians, information and awareness of the issues, ID key political players, concerns for public safety, present cost-benefit analysis or cost of doing “nothing”, use past examples to compel politicians)	<ul style="list-style-type: none"> • Public • Education institutions • NGOs • EMO 	Early 2013
Explore options, adaptation planning, how to frame the message and issues, etc.	<ul style="list-style-type: none"> • David Lieske 	ongoing
Infrastructure		
Categorize dykes (look at land uses behind the dyke, critical areas, etc)	<ul style="list-style-type: none"> • NB Dept of Agriculture (using RAC) • NS counterpart 	Early 2013
Transition plan for dyke management based on categories (NB)	<ul style="list-style-type: none"> • Stakeholders 	2014
Identify stakeholders	NB, NS, municipalities, CN, farmers, gov. agencies, etc	Early 2013

Create standards specific to categories based on crop land, public safety, transportation, infrastructure, etc. (work with standards being developed by the Canadian Dam Association)	Stakeholders	Early 2014
Identify critical areas for dyke management	<ul style="list-style-type: none"> • Dept of Agriculture • Planning Commission • James Bornemann (lead) 	Early 2014
Integrate infrastructure roles and authority over dykes (who should have authority since it is more than an agricultural issue now)	<ul style="list-style-type: none"> • Identified stakeholders (NB, NS, municipalities, CN, farmers, gov. agencies, etc) 	Early 2013
Communications/Education/Outreach/Engagement		
Form Communications Committee	<ul style="list-style-type: none"> • EOS, RCE, MTA, CPAWS, etc. 	ASAP Early 2013
Present Climate Change Film	<ul style="list-style-type: none"> • EOS/town • Ian Mauro and team • Fundy Biosphere 	Early 2013
First Annual Climate Change Week (or weekend)	<ul style="list-style-type: none"> • Georgia's climate change class • Communications Committee • Sustainable Sackville • Amanda, Emily, Mike, Roland, Joni, Dave L., Lori Ann 	Early 2013
-host workshops, etc.	<ul style="list-style-type: none"> • NGOs, EOS, MTA 	
Develop communications pieces to inform the public (PSAs, etc)	Communications Committee, Sustainable Sackville/Town of Sackville	Ongoing
Identify existing groups working on/interested in climate change (easy access points)	Communications committee/community members	Early 2013
Work with local schools	Roland; Georgia and Mike and their MTA classes	Early 2013
Climate change activism	Georgia and her class; EVERYONE	ongoing
Funding		
Need funding for actions/programs		
Incentives needed to make hard decisions		
Support for at-risk community members		
Funding to maintain infrastructure		

7. Formation of Tantramar Climate Change Adaptation Working Group

Goal: This working group will endeavour to coordinate work around adaptation in the region, including the priority areas identified by workshop participants.

The following people/groups agreed to be part of the newly formed working group:

- Sabine Dietz (NB RAC)
- Mike Green (NB Dept of Agriculture)
- Amanda Marlin (EOS)
- Will Green (NS Dept of Environment)
- Collette Lemieux?? (NB Environment/Climate Change Secretariat)
- Jana Cheverie and/or Nic McLellan (Ducks Unlimited)
- Craig Bowser (Sackville EMO)
- Jim Hannon (Cumberland EMO)
- Margaret Tusz-King (Town of Sackville)
- Tracey Wade (Planner, Regional Service Commission 7)
- Steve Ferguson (Municipality of Cumberland County)
- David Lieske (MTA)

Next step: Amanda and/or Sabine will contact members of the working group for their first meeting soon.



8. Formation of the Gateway Flood Protection Working Group

Goal: This working group can be considered a sub-group of the Tantramar Working Group. It will be a high level working group, but including stakeholders impacted by the issue. The goal will be to address dyke, CN rail and Trans Canada Highway issues as they relate to protecting the “Atlantic Gateway” from flood interruptions, as well as to their role for flood protection for NS/NB and municipal infrastructure.

Background:

- CN rail acts as part of the dyke system protecting infrastructure (TCH, municipalities, agricultural lands);
- Addressing this portion of the dykes needs to be concurrent with work in either province on upgrading dykes and on dyke maintenance;
- Resources and tools are in place to facilitate this process.

Participants in ad-hoc working group:

- Sabine Dietz (NB RAC) - lead
- Will Green (NS RAC) - lead
- CN Rail
- Transport Canada
- NB/NS government departments (infrastructure, agriculture, transportation, economic development, etc.)
- EMO services
- Municipalities & planning professionals
- Cross-border ENGO's

Next steps:

- Sabine Dietz will work with Will Green to identify individuals that need to participate in this ad-hoc working group.
- A meeting with CN/Transport Canada and the ad hoc working group will be set up as soon as possible.

9. List of Participants

(Alphabetical by first name)

Name	Affiliation	E-mail
Amanda Marlin	EOS/Amanda Marlin Consulting	amandamarlin@hotmail.com
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