Photo of Peggy's Cove by Paul Illsley

A Report on

The Maritime Water Resources Symposium:

Watershed Health, Planning and Management

August 21-23, 2008

Hosted by:

The Nova Scotia Branch of the Canadian Water Resources Association

in partnership with:

Applied Geomatics Research Group, *Nova Scotia Community College*,

The Province of Nova Scotia, Department of Environment

Halifax Regional Municipality,

Sackville Rivers Association.

Symposium report compiled by Dr. Chris Hopkinson,

Past president, CWRA Nova Scotia Branch

Contributions from Doug Stiff, Cathy Conrad, Laura Chasmer, Cameron Deacoff and Larry Bell

September 6th, 2008

Table of contents:

Introduction

THE SYMPOSIUM OBJECTIVE was aimed at those with an active interest in the sustainable management, protection, monitoring, research, development and regulation of watersheds and water resources in Eastern Maritime Canada. There were two days of presentations and break out discussions dealing with current water resources topics within the Atlantic Canada context. The intent of the meeting was to: a) provide CWRA with data to support recommendations for a National Water Strategy; b) assist the Province of Nova Scotia in developing a Provincial Water Strategy; and c) assist the Nova Scotia academic community in focusing its watershed research and curriculum towards the needs of Atlantic Canadian communities and businesses.

KEYNOTE SPEAKERS provided international and national perspectives on water resources policy and management. Our opening Keynote Speaker was Dr. Gordon Young, a highly respected water resources researcher since 1968 and presently the President-elect of the Int. Assoc. of Hydrological Sciences. Gordon has taken a leading role in several international initiatives, and in his talk he provided a global perspective from his most recent position as Co-ordinator, United Nations World Water Assessment Programme. Our second keynote speaker was Sonya Meek, the National President of the Canadian Water Resources Association and Manager of the Watershed Planning Group in the Toronto and Region Conservation Authority's Ecology Division. Sonya presented on the CWRA collaborative initiative that has led to recommendations for the development and implementation of a National Water Strategy for Canada. The two keynote papers were followed by presentations from leading figures in the Nova Scotia water resources community detailing current Provincial, Municipal and Community-based efforts to improve policy, management and development practices within the region.

VENUE The symposium was held at the new Nova Scotia Community College, Waterfront Campus in Dartmouth, Nova Scotia. This recently completed campus looks out over the spectacular Halifax Harbour and incorporates many 'green' environmental and sustainable technologies in its modern construction. Social events were organized to introduce out of town participants to some of the history and culture of Halifax, the Annapolis Valley and the local Sackville River trails.

Summary of registration and financials

In total 112 people registered for the symposium. Approximately 30 of these were students. There were over 80 new members added to the CWRA National and Nova Scotia branch database. This takes the Nova Scotia branch membership from approximately 30 to almost 120. A broad cross section of the community was represented from provincial, federal and municipal government employees, to academics and educators, to members of community NGOs and to the private sector. The three institutions that were most well represented (i.e. between 10 and 20 attendees from each institution) were Nova Scotia Environment, Nova Scotia Community College, and Dalhousie University.

Membership and symposium registration income was dealt with through the CWRA National online registration site and through on site registrations. These registration fees and all symposium costs have not been completely reconciled. However, a rough calculation indicates that the Nova Scotia branch will have approximately $500 left in its bank account after this event; i.e. while the intention was to break even, the symposium actually provided a small operational budget for the Branch. This was significantly due to sponsorship of various aspects of the event by partners such as the Applied Geomatics Research Group, Nova Scotia Community College.

Awards

There were two prizes awarded at the symposium: two best student papers and one best poster award. Hany Abdelhady and Kevin Garroway, both Dalhousie University students. Prize money was generously donated by the Sackville Rivers Association.

Schedule

The two tables below list the talks presented over the two days of the symposium. The third table illustrates the poster presentations and the final table the branch executive at the time of the symposium and the organizing committee. The CWRA NS branch AGM was held at the end of the symposium on Friday evening. AGRM minutes were recorded by Dr. Rafael Garduno.

DAY 1 – Thursday, August 21

8:00	**to**	**9:00**	**Registration**	
		9:00	**Introductions** **Chris Hopkinson & Joan McArthur-Blair** **Keynote** **Gordon Young, IAHS President-elect** Assessing, moni toring and setting targets: the work of the United Nations in fresh water. **Maureen Ryan, HRM** Watershed Planning; the Halifax Regional Municipality perspective	
		9:15		
		9:55		
10:20	**to**	**10:40**	**BREAK**	
10:40	**to**	**12:00**	**Concurrent Sessions**	
			#1 **Governance and Sustainable Watershed Development (Chair: Doug Stiff)**	**#2** **Water Quality Issues, Stewardship and Outreach (Chair: Larry Bell)**
		10:40	**Raymond Parker** The Avon peninsula as a lens on watershed management in Nova Scotia: A community view	**Lee Hynes** An investigation of bacterial persistence and transport within the subsurface environment in the Thomas Brook Watershed
		11:00	**Andy Sharpe** A watershed under stress: Planning for change in the Annapolis Valley	**Andrew Sinclair** Investigation of nutrient Loading in a post-agricultural watershed: municipal and rural impacts on water quality
		11:20	**Laura Cervoni** Implementing integrated water resources management: The importance of cross-scale considerations and local conditions	**Hany Abdelhady** Role of mature intracellular forms (MIFs) of *Legionella pneumophila*, a water-borne pathogen, in the transmission of Legionnaires' Disease (LD).
		11:40	**Denis Parent (Margaret Burke)** Automated water quality monitoring in Atlantic Canada – Applications of this innovative monitoring technique	**Sarah Haverstock** Quantifying the kinetics of dissolved organic carbon photo-oxidation in freshwater lakes
12:00	**to**	**1:00**	**LUNCH**	
1:00	**to**	**2:00**	**Concurrent Sessions**	
			#3 **Governance and Sustainable Watershed Development**	**#4** **Water Quality Issues, Stewardship and Outreach (con't)**
		1:00	**Fred Baechler** Defining hydrological regions and districts to aid water management within the Bras D'Or lakes	**Walter Scott** Sackville River Fish Friends and River Rangers experimental stewardship education programs
		1:20	**Hans Peterson** The biology of drinking water	**Walter Regan** Sackville River Watershed; 20 years of Restoring a Dead Watershed to A Sustainable Healthy Watershed
		1:40	**Scott Lister** Annapolis Valley surface water withdrawal pilot project outcomes	**Tracy Webb (Larry Bell)** Educating about water; SDWF experiential water outreach programs (Grades K-12)
2:00	**to**	**2:20**	**BREAK**	
			Concurrent Discussions	
2:20	**to**	**3:30**	**Discussion A:** **Policy, Planning, Management in Atlantic Canada**	**Discussion B:** **Stewardship, Education and Outreach**
3:30	**to**	**6:00**	**Poster Session and Reception**	

DAY 2 – Friday, August 22

8:00	**to**	**9:00**	**Registration**	
		9:00	**Introduction** **Larry Bell**	
		9:10	**Keynote** **Sonya Meek, CWRA President** National context for watershed management	
		9:50	**Jessica Paterson, NSE** Towards a water resources management strategy for Nova Scotia	
10:20	**to**	**10:40**	**BREAK**	
			Concurrent Sessions	
10:40	**to**	**12:00**	**#5** **Emerging and Advanced Water Resources Technologies** **(Chair: Chris Hopkinson)**	**#6** **Watershed Health – Monitoring Issues** **(Chair: Cathy Conrad)**
		10:40	**Larry Bell** Utilizing Biomimicry & Natural Processes to Process Wastewater & Decontaminate Water / Soil	**Cathy Conrad** Environmental stewardship and watershed monitoring in Nova Scotia: A review of community-based monitoring
		11:00	**Leah Boutillier** Performance of constructed wetlands used for domestic wastewater treatment in a cold climate	**Doug Stiff** Development of a surface water budget, for a high-density agricultural watershed, in NS and its application to monitoring and compliance
		11:20	**Koreen Millard** Assessing impacts of barriers to American eel in the Maritimes: a GIS approach	**Jocelyne Rankin** The role of community-based watershed monitoring groups on decision-making in Nova Scotia
		11:40	**Kevin Garroway** Assessing model accuracy of high resolution topographic indices for soil saturation mapping	**Annette Tobin** Emerging technologies using real-time water quality monitoring in Newfoundland and Labrador
12:00	**to**	**1:20**	**LUNCH**	
			Concurrent Sessions	
1:20	**to**	**2:00**	**#7** **Emerging and Advanced Water Resources Technologies**	**#8** **Watershed Health – Lakes and Coastal Environments**
		1:20	**Chris Hopkinson** Adoption of LiDAR for water resources research in Atlantic Canada	**Tony Bowron** Rapid Recolonization of Halophytic Vegetation Following Restoration of an Upper Bay of Fundy Salt Marsh
		1:40	**Tim Webster** High resolution DEMs for landscape evolution and water resources studies	**Ian Spooner** The Effect of Climate Change on the Thermal Regime of Stratified Lakes in Nova Scotia
		2:00	**Alexandre Vorobiev** Water quality assessment using hyperspectral lidar	**Bruce Hatcher** Land-ocean interactions of Canada's inland sea
		2:20	**Robert Maher** A proposal to develop watershed quality management tools	**Brenda Kelly** Protecting Canadian Lakes from Mine Waste
2:40	**to**	**3:00**	**BREAK**	
			Concurrent Discussions	
3:00	**to**	**4:00**	**Discussion C:** **Watershed Assessment Technology - Atlantic Canada Opportunities**	**Discussion D:** **Monitoring Watershed Health**
4:00	**to**	**5:00**	**Wrap Up**	

Poster Presentations	
Katie Campbell	Nitrate Fate and Transport in the Thomas Brook Watershed
Janice Wilson	Field Scale Assessment of Sloping Sand Filters for On-Site Wastewater Treatment
Celia Lima	Packing a powerful punch: The interaction of *Legionella* and *Tetrahymena* in water systems.
Megan Henley	Groundwater-surface water interactions; a key component in watershed health
Michael Haverstock	Initial assessment of a wetland-reservoir drainage water treatment and reuse system in Nova Scotia
Erica Underwood	Saltwater intrusion effects in a coastal aquifer, Wolfville Nova Scotia
Laura Chasmer	An applied approach to locating hydro-meteorological instrumentation in varying landcover types
Raymond Jahncke	Analysis of the McIntosh Run watershed characteristics
Koreen Millard	Application of LiDAR in a Bay of Fundy salt marsh environment
Tony Bowron	Learning to crawl before learning to walk - Macro- & meso-tidal wetland restoration in Nova Scotia.

43 presentations (34 oral/9 poster) + 4 discussion sessions

CWRA NOVA SCOTIA BRANCH EXECUTIVE & SYMPOSIUM ORGANIZING COMMITTEE

Dr Chris Hopkinson, Branch President [1]

Larry Bell, Vice President and committee chair[1]

Dr Rafael Garduno, Secretary

Dr Bob Pett, Treasurer

Dr Laura Chasmer, Students / Young Professional chair

Lynn Baechler, director

Terry Hennigar, director

Denis Parent, director

Dr Cathy Conrad, Saint Mary's University

Kevin Garroway, Dalhousie University

Dr Rob Jamieson, Dalhousie University

Koreen Millard, Nova Scotia Fisheries & Aquaculture

Nerissa Mulligan, Nova Scotia Environment

Jessica Paterson, Nova Scotia Environment

Maureen Ryan, Halifax Regional Municipality

Doug Stiff, Nova Scotia Environment

Note 1: Since the symposium Chris Hopkinson has moved to Past President and Larry Bell has stepped up to President.

Discussion Sessions

Discussion A: Governance

Moderator, Doug Stiff, Nova Scotia Environment, Kentville

The governance session of the CWRA conference was conducted on the afternoon of August 21. There were approximately 45 people in attendance. Four small break-out groups of about 10 to 15 people were created and asked to discuss and take notes within their groups on issues they see of importance surrounding the National Water Strategy, the Nova Scotia Provincial water strategy, and issues surrounding Research and Education. After half an hour in the small break out groups, the entire group re-assembled and brought forth their ideas. The following notes are taken from the overall discussion of each of the issues.

National Water Strategy

- Overall there seemed to be strong support for the need for a CNWS
- A CNWS shouldn't only address water quality and quantity, but should also recognize links to other ecosystem services
- Several issues somewhat unique to Nova Scotia should be addressed by a CNWS: e.g. acid rain, coastal mixing zones of freshwater and saltwater
- Have to have a plan (good/bad, doesn't matter, need a plan)
- Challenge – different provinces are at differs stages in watershed development
- Clear roles for federal, provincial and municipal
- Shared boundaries (international borders, provincial borders)
- Remember – reality – Canada doesn't have as much water available as we think
- Fisheries and navigational roles
- Different regulations in different provinces
    - Minimum standards (consistency)
    - Already for wastewater
- Will vary across the country
- Governance and jurisdiction varies
    - Framework that incorporates the jurisdictional issues (federal, provincial and municipal governments) – resource management, etc.
    - Decision making process in each of the regions
- DFO – why are we deferring to fisheries when water is a provincial resource?
- Involve the province more in land use issues
- Developed by stakeholders
- Invasive species
    - International joint commission water use on the great lakes
- Give municipalities the ability to require hydrotechnical studies before subdivisions are developed – used to happen until 1985 – reinstate that, or give municipality regulatory authority.
- Don't work from scratch- a federal water policy already exists

- Legislation is there – adjusted a fit provincial management- like on site septic

Nova Scotia Water Strategy

- NS, PEI, NL different from other provinces – units on there own (hydrologically)
  - Big coastlines compared to their areas
  - Linkage between inland waters and coastal waters
  - Watersheds smaller than ones in Ontario
    - Harder to have motivation to work at the watershed scale
    - Groups and homeowners that are v. attached totheir watershed
- Scale: hydrological unites decision making and management
- Remember – on reason NS rivers are not adequate for salmon is pollution from other parts of North America
- ½ strategy elements are of a regulatory nature

- Partition responsibility by ecological units and not political boundaries
- Each community loves their watershed think "watershed act local"
- Appropriate scaling of nested systems (wastershed, counties, municipalities)

- National policies don't do very well, (energy policy – didn't work?)
  - That's why water strategies are safer (the don't actually make you do anything)

- Conservation of water!
- Value of water
  - How do you make people aware of what they are using?

Research and Education

- Education key element
  - Value of water
  - Know how much water you have – how much you are using
- Flooding hazards has motivated a lot of research
- Research collaboration with university - all government levels
  - Partner more with universities (government)
  - HRM+COGS – LiDAR project: This close partnership has enabled university to identify new issues
- Recycling – maybe we can have the same thinking around water conservation
  - Very effective in Nova Scotia – strong campaign
- Public awareness
- Do people know how much water we use a day – esp. compared to other pars of the world

- Climate change
- Public school education
    - Need to keep the linkage between earth, atmosphere and water

- Many people are collecting data – community groups, 3 levels of government, universities. How can we best share data?
- Monitoring
    - science based measurements of how much water we have
- Crises generate money!

Discussion B: Stewardship, education and outreach

Moderator: Larry Bell, Water Associates Ltd., Sackville

The main message that came out of the stewardship session was the importance of watershed education in the high school curriculum.

Discussion C: Advanced and Emerging Technologies

Moderator: Dr Chris Hopkinson, Applied Geomatics Research Group, NSCC, Middleton

The advanced and emerging technologies discussion session was conducted near the end of the day on Friday August 22nd. Consequently many people had left the symposium by this time and there were never more than 20 people in the session. During the one hour period allotted, a round table discussion was held where a number of questions were posed to the group and various ideas explored. Much of the discussion focused on:1) the needs for, access to and sharing of technical data; 2) on developing strategies for identifying funding opportunities to tackle critical water resources issues and mobilizing the right mix of team members drawn from various sectors to address the established need; and 3) researching a policy development architecture. The discussion did not fit neatly into the three pre-defined categories but rather hit on high level issues that relate to all three. Following is a summary of the general chronological thread of the discussion.

Hopkinson provided a brief overview of the previous session of talks on new technologies and asked Bob Maher to provide a summary of AGRG's approach to leveraging new geomatics technologies to bring stakeholders together under a proposal umbrella.

The first high level question posed to the group by Hopkinson was: How can we engage stakeholders to inform and implement better water resources policy?

Discussion was opened up by a suggestion that there is a need to coordinate group around economic needs – perhaps look at opportunities through ACOA

It was then suggested there was a need for a compelling story with any such proposal

e.g. St Margaret's Bay

Risk – sea level rise

Need for community coastal planning

Link to regional coastal management strategy at provincial level

Need for data / info on coastal risks from seal level rise

Need to investigate and communicate issues / risks to stakeholders and decision makers

Need to better understand margin of error on predictions

In order to generate info and uncertainties associated with risks, we need data; e.g. elevation data (lidar is standard tool around the world for this; Atlantic Canada lagging behind)

There is inherent value in data and information and making it accessible

How do we do this?

There are different scales of interest for policy and management and differing data needs associated with each

The question "*How do we inform policy and strategy?*" was raised again.

Challenges – 1) defining the need for policy and 2) apriori defining the need for information / data availability to inform the policy

There is a need for a policy development architecture; i.e. research on how to best inform, develop and implement water resources policy.

This idea might not be new but it is needed in the Atlantic Canada context. There is a need for a multi stakeholder proposal for the creation of a policy architecture that addresses data

collection, archival, retrieval, access through to information creation, scenario / model building, policy development and implementation.

There was follow up discussion of currently existing geospatial data portals such as Geonova and Geoconnections, NLWS, MLS etc. General sense that these mechanisms do not meet needs of the community for research and policy development.

Such a proposal may need to go direct to higher levels of government rather than through traditional funding channels.

Stakeholders need to be engaged at proposal stage; not afterwards.

General discussion:

Specifics of data needs at different scales of problem; local management to provincial policy.

Users need to better understand data availability / capabilities and thus define what they need to answer their questions and inform the decision making process.

Discussion of proactive commercial data collection based on service providers anticipation of development, management and policy needs; e.g. Alberta province wide lidar data collection by commercial providers was conducted ahead of the provincial commitment to purchase the data; i.e. given the data were there and thus available to private sector developers, the province had little choice but to purchase the data, otherwise, other entities would have better information than the province on issues that were well were within the provincial mandate. This illustrates that proactive private sector initiative can directly impact provincial level action and ultimately policy and management decisions.

It was noted that Atlantic Canada and Nova Scotia may be geographically small but the region is very diverse, with differing geographies, different coastal and inland issues, varying scales of process and human interaction, and all of this diversity needs to be explicitly incorporated into any policy initiative; i.e. it is impossible to develop sweeping policies that adequately address all of this diversity.

There is a rationale to focus data collection and policy research in areas of most economic need; i.e. private sector or other non governmental entities can start the ball rolling by being active in areas where market forces will almost certainly ensure that their activity is profitable in the long term; e.g. data licensing to any party wiling to pay once data are collected or in terms of consultancy type activities, this activity could be viewed as an investment in

knowledge base for the inevitable future time when such knowledge will be of value to the appropriate govt entities.

Academics should engage stakeholders and focus proposals on:

- what is needed
- what is possible
- what we are capable of doing
- ensuring those who have the need are part of the team

A final point that came up was the issue of the value of water and how important statistics are on the 'true' monetary value of water (past, present, future). Future and often invisible costs (e.g. infrastructure maintenance several years down the road) need to be considered when conducting policy research and evaluating the commercial aspects of policy/strategy implementation.

Discussion D: Monitoring Watershed Health

Moderator: Dr Cathy Conrad, Saint Mary's University, Halifax

National Water Strategy

- Standardized monitoring protocols
- Focus in this session on a provincial water strategy but this could complement a national water strategy.

Nova Scotia Water Strategy

- Need a "home-grown" model as opposed to a "cut and paste" of the conservation authority model
- Integration of community monitoring into some structured system? Make use of community initatives: better linkages between community work and decision-makers.
- Funding of long-term monitoring
- Database of minimum of parameters
- Standardized monitoring protocols
- Need for a variety of indicator species

- Provincial" Regional Advisory Boards based on primary watersheds or harbourshed units: for land, water and air issues with a focus on impacts on water: forum for discussion and solutions; data and info. exchange
- In terms of management entities? How many and formed on what basis? What functional management entities do we have? Have existing community organizations involved in the initiation of the watershed management structures. Organized from the ground-up: start with existing watershed groups.
- What are the essential attributes required to be a Conservation Authority? (or similar type of entity?) Happens more effectively when there are dedicated resources: will be a challenge to have three levels of government "buy in" to something that is not necessarily going to be fundamentally a gov program or authority.
- Should be arms-length from gov programs. Safeguard autonomy of community organizations: could address this through "terms of reference".
- Would want to review pros and cons of existing models (e.g. watershed advisory boards in HRM; Bras D'Or model)
- Have to have accountability written into the legislation or by-laws of the entity (whether it be a conservation authority or watershed advisory board, etc.)
- Need for "generosity of resources" and see money go to groups that they have little control over (how realistic that this will occur?)
- Collaborative environmental initiatives have been a challenge: will need mechanisms to overcome these in a meaningful and realistic way.
- Public education is key
- "Big stick" method is not successful: messaging is important.
- Include people who utilize and recreate in the watershed but may not necessarily physically reside in the area (stakeholders).
- How do you engage stakeholders? How to educate enough people and get more inclusion? –watershed community groups can assist with this: through local newsletters and community lists. Bring in public participants from the grass-roots organizations.
- Incorporate connections from other provincial organizations (e.g. Nova Scotia Environmental Network; Clean Nova Scotia) or other non-NGO or environmental associations like the snowmobile associations, fishermen's associations etc.

Other:

- Concerns related to reductions in funding programs like the closure of "EMAN"
- Loss of data and early warning signs associated with the closure of monitoring programs.

Summary of Symposium reviews: Laura Chasmer and Cameron Deacoff

This is the first symposium hosted by the existing CWRA Nova Scotia branch and we are hoping to put in a bid for the National conference within the next couple of years. Consequently, we wish to learn from our experience with this event. Review forms were generated by Cameron Deacoff, HRM, and distributed to attendees for their feedback. A summary of the important and typical issues raised was compiled by Laura Chasmer and is provided below.

Questions: of 32 respondents. Main comments brought up by the attendees have been underlined.

1. Are you satisfied with the conference registration procedure? Were you able to attend the sessions of interest to you?

Satisfied: 24

Somewhat Satisfied: 5

Not Satisfied: 1

#NA: 2

Comments regarding sessions:

Attended everything of interest: 15

Had to leave (reasons?): 8 – main problem was that concurrent sessions meant that they missed some presentations that they were interested in. Some had to leave due to other commitments.

A number didn't answer 2nd part of question

General comments

- Too much material overlap in the sessions
- Require more payment options
- Did not like concurrent sessions because it limits what people can see.
- Please add a map of how to get to the conference.
- Would have been good to have had a session on outreach

2. Are you satisfied with the advertisement for and communication leading up to the symposium? What aspects were most and least helpful?

Satisfied: 13

Somewhat satisfied: 16

Not Satisfied: 3

General Comments:

- Several really liked emails pre conference stating logistical information.
- Many only heard about it via word of mouth. Needs more advertising to all sectors and all maritime provinces.
- One person thought it was going to be held in the recommended hotel (not at the NSCC)
- Earlier release of schedule and fewer last minute changes (e.g. banquet) would have been good.
- Put a link for the symposium on main CWRA website homepage.
- Best paper competition was not well advertised, confusing, and not enough time to prepare anything.
- Website update was too slow

3. Did the conference provide significant opportunities for Networking? How could these be improved?

Satisfied: 25

Somewhat satisfied: 6

Not Satisfied: 0

General Comments

- Poster session was ideal for networking. Perfect length, snacks, etc.

- long lunches ideal for networking

- Several wanted Thurs evening pub event – would have been better than a Friday event.

- Glad to see that lunch was paid for. Kept everyone in the building and able to network.

- Make conference 3 days so that people could talk more.

- Several wanted an ice breaker on Wednesday night. Banquet would have been good as a social event on Thursday evening, but most preferred something less formal (i.e. pub crawl).

- Snacks at the beginning of the day would have encouraged people to come for early morning sessions.

- Additional seating during poster session (i.e. tables with seats).

- Invite more people from private sector

4. Were you satisfied with the nature of the sessions presented? Did the quality of presentations and posters meet your expectations?

Satisfied: 21

Somewhat satisfied: 10

Not Satisfied: 2

General Comments:

- Enjoyed the discussion

- Posters on the floor was unfortunate

- Suggest having federal/provincial presentations on day 1 to provide context

- Many were very happy with the program, presentations, etc.

- Many state that some presentations went WAY overtime and needed to be kept in better check. Facilitators needed to have signs with 5 min on them (etc.).

- In one of the sessions, presentations were not managed well by facilitators and were not very professional (by presenters).

- Most state that presentations were of good quality. However, some people state that some presentations were very poor and had little relevance to water resources.

- Want more advertisement and presentations from engineering firms, etc.

5. Are you satisfied with the facility's ability to provide for the Symposium (i.e. parking, accessibility, multimedia, acoustics, room capacity, catering, etc.)

Satisfied: 23

Somewhat satisfied: 8

Not Satisfied: 0

General Comments

- Most really liked venue
- 1 suggests hosting it in a smaller venue (CARP location or in SW biosphere reserve to keep people more contained.
- Water pitchers and glasses next to room openings would have been good.
- Parking was a bit confusing.
- Fan in theatre was too loud.
- Make wifi internet more available via a guest password.

- Classroom too small.
- Microphone for questions in both rooms would have been good.
- People wanted a snack on Friday afternoon.
- One person said that catering was sub par and too far away from the meeting rooms (plus didn't like the use of disposable cups).
- Few didn't like that there was so much packaging and waste.
- Needed labeled vegetarian options and sandwiches.
- Shuttle to and from hotel very good, but needed to be advertised that they were going from NSCC back to hotel.
- Suggest having fruit during breaks
- Suggest having decaf coffee as well

6. What did you like most about the symposium?

General Comments:

- Discussion was very good. Many really enjoyed the interactive sessions.
- Good variety of people and agencies. Good sessions of interest.
- Liked that the sessions generally ran on time.
- Enjoyed the breaks
- Very well organized
- Student registration price was very good.

7. What did you like least about the symposium?

General Comments

- Not very good / no public transit
- A few talks were much too long. Facilitators did not enforce times.
- Cancellation of some presentations.
- Social activities should have been interspersed throughout the conference, not at the end.
- Provide a list of participants on website beforehand so that people could plan who they wanted to talk to.
- Some individuals had agendas and provided too much biased and scientifically unsound commentary. This commentary took place, before, during, and after presentations, and especially during one discussion session when they were supposed to be discussing something entirely different. This really lowered the professionalism of the event.
- Need more time for questions and shorter presentations.
- Need better facilitation of discussion.
- Catering, waste, and labeling of food could have been improved.
- Small classroom should have been larger
- Conference was too short
- Concurrent sessions meant that people could not attend everything that they wanted to attend.
- Wanted more food

8. Are you likely to attend future events hosted by the NS CWRA?

Likely: 29

Unlikely: 2

Reasons:

- Some people would not be back because they live in other provinces and may not have the funding to come again.

9. Please provide further comments:

- Have microphones in rooms for questions
- Have this conference every year.
- Have a technical field trip.
- Partner with other maritime CWRA branches.
- Very well organized.
- Very nice venue
- Would have liked hard copies of presentations, and some would have been eager to pay for them.
- A few were very disappointed with the facilitation of the event. They felt it very biased, unscientific and unprofessional. Those biased presentations lowered the level of professionalism, quality and networking opportunities of the event. One person states that, if these presentations are to be shown at a National CWRA conference hosted by NS CWRA, than they highly recommend that the NS branch does not host it.
- Very NS biased with little representation from the other maritime provinces.
- Put name tags on a string around the neck instead of using pins.
- Put media clips on the website