

### **ACWWA Halifax Conference Program and Registration**



### **The Value of All Water**

Halifax Marriott Harbourfront Hotel October 19 - 22, 2014 acwwa.ca



Register Online at www.acwwa.ca





### Welcome from the Chair, Margaret Walsh, PhD, PEng

I attended my first ACWWA conference five years ago in Halifax, Nova Scotia. Every year since 2009, I have attended the ACWWA Annual Conference in Saint John, St. John's, Charlottetown and Fredericton. This Fall, I get to complete the circle with what has been a fantastic tour of Atlantic Canada with the 2014 ACWWA Annual Conference returning to Halifax, Nova Scotia. The theme of the conference this year is *The Value of ALL Water*, highlighting the importance of water in our lives and the value it brings to our communities. As professionals working in the water and wastewater industry, our day-to-day work is vitally important to the people we serve, and our annual conference brings us value in so many ways.

Benefits of attending the ACWWA Annual conference include education you need to advance your career with over 45 water and wastewater related technical sessions, the ABEA Tradeshow, opening session and keynote speaker, networking opportunities with other water and wastewater professionals, friendly competition with *Top Ops* and *Best Tasting Water*, recognition of our colleagues with ACWWA Awards and a chance to give back to your profession with *Water For People* Walk/ Run & Silent Auction.

Our conference chairs this year, Rob Gillis and John Eisnor and their committee have put together a fantastic program you won't want to miss. Register today, and join us for the 2014 ACWWA Annual Conference this October 19-22, 2014 in Halifax, Nova Scotia!

**Marg Walsh** 

2014 ACWWA Chair







### Welcome to the 2014 ACWWA Annual Conference

On behalf of the Conference Organizing Committee, we are excited to extend an invitation to you to attend the 67th Annual Conference of the Atlantic Canada Water and Wastewater Association in Halifax, Nova Scotia from October 19 to 22, 2014. As in previous years, the Conference will be held at the Marriott Harbourfront Hotel, which has recently been renovated.

The theme of this year's conference is The Value of ALL Water. The conference committee has put together a great conference program that ties into this theme. We have also invited Dr. Robert (Bob) Fournier, a well-known interpreter of science to the public, for our Keynote address.

One of the big changes attendees will notice this year is the addition of Wednesday morning technical sessions, which means a bigger and better technical program consisting of 46 top notch papers along with several practical demonstrations and the Awards Breakfast.

Following on the success of Fredericton 2013, Monday night will be Dine on Your Own. This will be a great opportunity to connect with fellow delegates in a non-formal setting as well as to experience the fine dining that Halifax has to offer. Then finish off the evening at the ABEA Hospitality event hosted at Murphy's On The Water. Enjoy a Harbour Cruise followed by entertainment back at their facility on shore.

Once again, the ABEA Trade Show will be a great event to see the latest products and speak with suppliers. Make sure you get there early to see the "Best of the Best" Tap Water Taste Test competition. Finish off the day with the Down East Feast and entertainment from The Mellotones, who are sure to get you out on the dance floor.

Come early or stay late so that you take the time to get out and enjoy downtown Halifax. There is always something fun and exciting happening in the harbor city. We can't wait to see you in Halifax this fall.

John Eisnor and Rob Gillis, 2014 Conference Co-Chairs.







### Keynote Speaker -Robert O. Fournier, Ph.D.

Dr. Robert O. Fournier, born and educated in the United States, is now a Canadian citizen. He received his Master's and Doctoral degrees in Biological Oceanography from the College of William and Mary, and the University of Rhode Island. In addition, Dr. Fournier held fellowships in Norway and England before joining the faculty of the University of Hawaii in 1969.

In 1971 he joined Dalhousie University where he is now a Professor of Oceanography (Emeritus). His research interests have included studies of the physical and chemical processes that contribute to the high biological productivity on continental shelves. From 1985 to 2000 Dr. Fournier served as Associate Vice-President (Research & International Relations), and Executive Director of Ocean Studies and was instrumental in facilitating the acquisition of a number of important research initiatives.

Dr. Fournier is a former member of the Science Council of Canada, the National Advisory Board on Science and Technology, which reported directly to the Prime Minister, and chaired the Nova Scotia Council of Applied Science and Technology, which advised the Nova Scotia government on science and technology policy. At the request of the Premier of Nova Scotia, he chaired the Halifax Harbour Task Force, and also served as a member of the Northern Cod Review Panel that reported to the Federal Minister of Fisheries. Subsequently, he chaired the Joint Public Review Panel for the Sable Offshore Energy Project, the Electricity Marketplace Governance Committee, and the Joint Review Panel for the proposed Whites Point Quarry on Digby Neck. He is presently active in marine-related projects in Uruguay and Nunavut.

Dr. Fournier is a well-known interpreter of science to the public, and has been a regular contributor of science commentaries to many local and national CBC radio and television programmes since 1974. He has delivered more than 2000 weekly science commentaries on local radio (Information Morning, 1978 - present) and national television (Midday, 1985-2000). In addition, during the mid 1980s he was science columnist on This Country in the Morning for five years, hosted a one-hour TV documentary, Iceberg Alley, and has been involved in a large number of diverse speaking engagements, both locally and nationally, usually on contemporary science issues.







# **Conference Schedule Highlights**

### Sunday, October 19th

- 10:00 AM ACWWA Golf Tournament at Lost Creek Golf Club
- 1:00 PM Technical Tours
  Eastern Passage Wastewater Treatment Facility
  N-Viro Biosolids Facility
- 5:30 PM Young Professionals Mixer
- 7:30 PM Meet and Greet Reception

### Monday, October 20th

- 7:00 AM Water for People Fun Run / Walk
- 8:30 AM Conference Opening
- Fuller/Bedell/MacNab Awards Ceremony
- Keynote Speaker Dr. Robert (Bob) Fournier, PhD
- 12:00 PM Annual General Meeting Luncheon
- 3:30 PM Top Ops Competitions (Water & Wastewater)
- 5:00 PM Dine on Your Own Enjoy the restaurants of Halifax
- 8:00 PM ABEA Hospitality Night (Murphy's on the Water Harbour Cruise)

### Tuesday, October 21st

- 8:00 AM "Best of the Best" Tap Water Taste Test Event
- 9:00 AM ABEA Tradeshow
- 6:30 PM Down East Feast and Entertainment

### Wednesday, October 22nd

• 7:30 AM – ACWWA Awards Breakfast





# **Technical Program - Monday**

Monday, Oct 20	10:15 - 10:45	10:45-11:15	11:15-11:45
Technical Session: A1	Energy efficiency at Halifax Water - an overview of energy reduction opportunities Jeff Knapp - Halifax Water	Experiences of a First Nation's water utility using SCADA for managing day- to-day operations and an asset management plan for long-term infrastructure renewal Stephen Pyke - Opus International	Halifax Water - Kearney Lake Road water transmission main renewal Jamie Hannam - Halifax Water
Technical Session: A2	Development of a wet weather management strategy for Halifax Water	Upgrading lagoons to remove ammonia, phosphorus and nitrogen	18 PS overflow detection and monitoring
	Shawn Rowe - Halifax Water	Todd Latchaw - Nelson Environmental	Alexander Wilson - CBCL
Technical Session: A3	The role of drinking water treatment factors on iron particle characteristics and water quality	Application of advanced oxidation processes for controlling natural organic matter in drinking water	The use of tubular nanofiltration technology for treatment of DBP's in small drinking water plants
	Safiur Rahman - Dalhousie University	*Sean MacIssac - Dalhousie University	Dr. Lyle Henson - Membrane Specialists LLC

Monday, Oct 20	1:45-2:15	2:15-2:45	2:45-3:15
Technical Session: B1	Partnering for success: Partnership for Safe Water brings water quality improvements and recognition to utilities	Monitoring, mitigating and managing lead in drinking water: Halifax Water's successes and challenges	Why study water? Challenges and opportunities facing water professionals
	Barbara Martin - American Water Works Association	Alisha Knowles & Krysta Montreuil - Halifax Water	Graham Gagnon - Dalhousie University
Technical Session: B2	The Environmental risk assessment process, as applied to the Greater Moncton Wastewater Treatment Plant	Implementation of fixed-film BioCord Reactors in existing lagoons and treatment plants	Anti-clogging lime milk preparation and injection system
	Vincent Balland - Natech Environmental Services Inc.	Don Bishop - Bishop Water Technologies	Frederic Noel - CON-V-AIR Solutions
Technical Session: B3	Halifax Water asset management roadmap and implementation Valerie Williams - Halifax	Discovering actual wall-thickness in a 12" steel pipe in British Columbia; a 22 hour journey William Jappy - PICA Corporation	Hydraulic performance assessment and floodplain analysis: Halifax case study Mike Gregory -AECOM
	Water		





### **Technical Program - Tuesday**

Tuesday, Oct 21	1:00-1:30	1:30-2:00	2:00-2:30
Technical Session: C1	Halifax Water integrated resource plan	Integrating declining water demand trends into municipal water supply master planning	City of Moncton Tower Road Dam project
	Valerie Williams - Halifax Water	Leigh McDermott - Stantec	Ensor Nicholson - City of Moncton & Bruce Buchanan - RV Anderson
Technical Session: C2	Safe but smelly: Halifax Water deals with geosmin	The use of UV / peroxide for taste and odor treatment	Treatment alternatives for algae related to taste & odor
	Krysta Montreuil - Halifax Water	Terry Keep - Trojan Technologies	Simon Breese - AECOM
Technical Session: C3	Eastern Passage wastewater treatment facility expansion and upgrades	Membrane bioreactors – are they in your future?	Optimization of residuals management at a drinking water treatment facility
	Louis Tasfi - Dillon Consulting Limited	Steve Murphy & Nick Cooper -AECOM	*Holly Sampson - Dalhousie University

Tuesday, Oct 21	2:45-3:15	3:15-3:45	3:45-4:15
Technical Session: D1	Maintaining value of water infrastructure - moving from reactive to proactive models of funding for water assets through asset management plans in small municipalities	Watershed studies in Halifax Regional Municipality to support development planning	From bench-to pilot-scale: Maximizing the returns from drinking water treatability studies
	*Kevin Coffey & Abra Ens - AECOM	*Timothy Bachiu - AECOM	*Julie DiCicco - Dalhousie University
Technical Session: D2	Benefits of a high-fibre diet: A retrospective and forward look at membrane filtration in Canada Martin Gravel - AECOM	Nutrient removal at small community and decentralized wastewater treatment facilities Justin Hebner - ECOfluid Systems Inc.	What is the service life of granular filter media? David Hambley - AWI
Technical Session: D3	Pump performance & energy efficiency testing: the Ontario experience Djordje (George) Radulj - HydraTek & Associates Inc.	Booster station refurbishment in the Arctic Eric Bell - exp Services	Condition assessment - pipe wall thickness measurements for small diameter potable watermains Piero Salvo - GAME Trenchless Consultants

\* Fresh Ideas presenters are a first time Young Professional participant at the ACWWA section conference presenting a water related topic, and will be considered for the Fresh Ideas program that has been developed through AWWA's Manufacturers/ Associates Council and the Young Professionals Committee. The top presentation selected from this group of presenters will be given the opportunity to compete in the Fresh Ideas poster competition at the AWWA Annual Conference and Exposition (ACE 2015) in Anaheim, California, representing the Young Professionals of ACWWA. Along with complimentary conference registration provided by the ACE 2015 organizing committee, ACWWA will provide the winner with a stipend to assist with travel costs to the conference.





# **Technical Program - Wednesday**

Wednesday, Oct 22	9:00-9:30	9:30-10:00	10:00-10:30
Technical Session: E1	Condition assessment of AWWA C300 reinforced concrete cylinder pipe - Montreal case study	S.M.A.R.T. Flushing Technology: advances water quality management, conserves natural and financial resources	
	Cameron White - Pure Technologies Ltd.	Jeff Jensen - Mueller Canada	Boris Allard - exp Services
Technical Session: E2	Establishing minimum free chlorine residual concentration for microbial control in a municipal drinking water distribution system	Investigating biological treatment for manganese removal from drinking water	The science of mixing and improving water quality in water storage tanks
	Graham Gagnon - Dalhousie University	Daniel Wesley - Dalhousie University	Michael Duer - Tideflex Technologies
Technical Session: E3	Technical Demonstra	ation - To be announced	

Wednesday, Oct 22	10:45-11:15	11:15-11:45
Technical Session: F1	Water reuse trends in the State of Florida	Getting in the driver's seat with AMI
	David Ammerman - AECOM	Ben Van Mierlo - Neptune Technology Group (Canada) Ltd.
Technical Session: F2	A novel solution to flushing optimization through rapid microbiological field testing	Development and evaluation of a flow-through solar photocatalytic membrane reactor for disinfection and NOM degradation
	Dave Tracey - LuminUltra Technologies Ltd.	Stephanie Gora - University of Toronto
Technical Session: F3	Technical Demonstra	ation - To be announced





# ABEA Hospitality Reception

www.abea.biz

The Atlantic Branch Equipment Association is pleased to invite all delegates to the "7th Annual ABEA Common Hospitality Reception" on Monday evening beginning at 8:15pm. This event has become one of the premier events of the conference as it allows for social interaction between delegates and the equipment suppliers whom they deal with on a daily basis. This year's event will begin with a chartered Halifax Harbour Cruise aboard the ships "Harbour Queen" and "Haligonian III" – both vessels are double decker, weather sheltered and offer full bar service and washroom facilities. Further boat cruise information can be found at www.mtcw.ca/CharterVessels.php

Upon completion of the scheduled 1.5 hour boat cruise, delegates are invited to continue the evening with their colleagues and ABEA member companies at a private function at "Murphy's on the Water" bar and restaurant. Conveniently located on the harbour front in Downtown Halifax and only minutes from the Marriott Harbourfront, the Murphy's venue is directly adjacent to the docks where both tour boats are birthed allowing for an easy transition from land to sea to land. As always, snacks, music and drinks will be plentiful at the Annual ABEA Reception – you won't want to miss out on the ABEA member hospitality!!!











### **Companions Program 2014**

Welcome to Halifax, Warden of the North, home of the Bluenoser's, the world's largest ice free harbour, and the second largest natural harbour in the world, the second-most bars per capita of any city in Canada , tons of excellent restaurants, and of course the famed Citadel Hill. Sounds like the perfect recipe for a great visit.

For those of you who are golf enthusiasts, our annual event will begin Sunday, October 19th with a Shot Gun start, 10:00 at the Lost Creek Golf Course in Lower Sackville. The "Meet and Greet" will be held Sunday evening where you will have an opportunity to catch up with past acquaintances.

Monday we will start our day with a ten o'clock departure to Gaspereau Vineyards, considered our prettiest winery, with the friendliest staff and fantastic wines, making for a great experience. Then we'll head to the famed Luckett Vineyards to take in the stunning view of the Annapolis Valley in all its glory. After a wine tasting, we are free to wander into the vineyard and call a friend from the genuine British Phone Box in the vineyard, or snap a great picture of the view, while our bistro-style lunch is prepared. A glass of wine is included with our lunch (of course!). Finally, we end the day at Grand Pre Wines, Atlantic Canada's oldest winery, with a vine-yard tour and a tasting of their unique wines in their beautiful tasting room. We will return to the Marriott by four o'clock (approximately) in time to prepare for our dine-around-town supper, prior to the ABEA Hospitality event being held at Murphy's-on –the-Water.

Tuesday morning we will gather in the lobby entrance for another ten o'clock start. We will be met by Mr. Andy Smith (a seasoned tour guide, as well as a professional actor) of TattleTours of NS - "This is such a fun tour. Andy is a pro - smooth as silk, engaging and funny. Full of detailed facts and little known tidbits of Halifax history, past and present, this tour is a relaxing way to explore the downtown and have a great bit of fun. As a local, I loved the Halifax trivia I didn't already know and this is a mustdo at least once for anyone looking for the full Halifax experience." Tripadvisor

We will wrap up the morning entertainment with lunch at the Waterfront Warehouse – located on the historic Halifax Waterfront – where we will experience Nova Scotia's maritime tradition in a relaxed, warm restaurant atmosphere. Good food and good friends, what more could we ask for!

The rest of the day is yours to enjoy. Make certain you take an opportunity to stop by the Water for People silent auction tables before heading to your room for preparations for the all-important DownEast Feast and entertainment.

We look forward to hosting you in Halifax – see you there!



# **Conference Registration**

#### Register Online at www.acwwa.ca

PART 1 – GENERAL INFORMATION											
FIRST NAME	FIRST NAME LAST NAME OR				ORGANIZ	ORGANIZATION					
MAILING ADDRESS						СІТҮ					
PROVINCE		COUNTRY		POSTAL CODE				AWWA/WEF MEMBERSHIP NUMBER			
PHONE	·			FAX							
REGISTERED COMPA	ANION EMAIL ADDRESS										
Sector 🗌	tility	□ S	upplier	□c	ontractor	□ Consultar	ıt	£ Student	□ Academic	□ Regulator	Other

PART 2 – REGISTRATION						
Full Conference Delegate – On or Before October 3, 2014	🗆 Member –	\$475	🗆 Non-Member – \$525	\$		
Full Conference Delegate – After October 3, 2014	🗆 Member –	\$575	🗆 Non-Member – \$625	\$		
Companion Program 🗆 Member/Non-Member – \$250						
Student (Includes Meet & Greet, Lunches, Awards Breakfast and Trade Show)						
Monday Full Day Pass (Includes AGM Lunch and ABEA Hospitality Reception)	□ Member – \$250 □ I		🗆 Non-Member – \$275	\$		
Tuesday Full Day Pass (Includes Trade Show & Lunch and Down East Feast)	🗆 Member –	\$250	🗆 Non-Member – \$275	\$		
Tuesday 1/2 Day Trade Show Pass (Includes Trade Show Lunch)						
Wednesday Half Day Pass (Includes Award Breakfast)						
Full Day and Half Day passes include Pick-up Breakfast on the day of the pass			·			
Register before August 15 and be entered for the early bird draw			Part 2 – Subtotal	\$		

PART 3 – TRADE SHOW BOOTH RENTAL & EXHIBITOR REGISTRATION							
Booth Rental (Max 3 Booths & 2 People/Booth)	ABEA Membe	r – Booths @ \$500	Non-Me	ember – Booths @ \$850	\$		
Extra Exhibitor Registration (includes Meet & Greet, Reception and Trade Show Lunch)	ABEA Hospitality	ABEA Hospitality ABEA Member –@ \$75 N		Non-Member – @ \$100	\$		
Exhibitor registration does not include the full confer	ence. To attend full	conference, please register as	a Delegat	e in Part 2			
EXHIBITOR'S NAME	EXHIBITOR'S NAME EXHIBITOR'S NAME		EXHIBITOR'S NAME				
EXHIBITOR'S NAME EXHIBITOR'S NAME			EXHIBITOR'S NAME				
EXHIBITOR'S NAME EXHIBITOR'S NAME		EXHIBITOR'S NAME					
Part 3 – Subtotal \$							

PART 4 - MEALS & ACTIVITIES							
P	ART4-						
Sunday, October 19					Please indicate Attend	lance by checking box	
Golf Shirt:	S M L_	XL :	XXL		@ \$60 =	\$	
Technical Tour – Eastern Passage Wastewater Treatment Facility					@ \$10 =	\$	
Technical Tour – N-Viro Biosolids Facility					@ \$10 =	\$	
Young Professionals Mixer (Included)	🗆 De	legate	Com	panion	Exhibitor		
Meet & Greet (Included)	🗆 De	legate	Com	panion	Exhibitor		
Monday, October 20					•		
Pick-up Breakfast	🗆 De	legate	Com	panion	Included		
Annual General Meeting Luncheon (Included for Delegate)	0	Delegate		ΠE	khibitor @ \$60	\$	
Companion's Luncheon (Included with Companion Program)		Companion		Companion			
ABEA Hospitality Reception (Included)	🗆 De	Delegate  Compare		panion	Exhibitor		
Tuesday, October 21					•		
Pick-up Breakfast	Deleg	gate		anion	Included		
Trade Show Luncheon (Included)	🗆 Deleg	Delegate  Delegate		anion	Exhibitor @		
Down East Feast	🗆 Deleg	gate	Companion		Included		
Down East Feast		Extra Tickets			@ \$85	\$	
Please indicate meal choice for Down East Feast	@	Lobster	r	@ Chic	ken @ Beef		
Wednesday, October 22							
Average Development		legate	e 🗆 Companion		Included		
Awards Breakfast	🗆 Exh	hibitor	@\$40	)		\$	
Please describe any dietary restrictions or other special needs you may h	nave	ive			Part 4 – Subtotal	\$	

PART 5 - TOP OPS COMPETITION REGISTRATION									
Top Ops Team Registration 🗆 Water 🖾 WastewaterTeam @ \$50.00 \$									
To complete team registration contact Trent Brewer at (506) 460-2179 or trent.brewer@fredericton.ca Part 5 - Subtotal \$									

PART 6 – FEES	
Subtotal	\$
Life Members deduct \$100.00	\$
15% HST (869 924 910 RT2)	\$
Water for People Fun Run/Walk@ \$25.00	\$
Total Amount Due	\$

PART 7 - PAYMENT OPTIONS						
Choose payment method. Complete as appropriate.						
Cheque	🗆 Money	y Order	🗆 Visa		□ Mastercard	
Please make cheque or money order payable to "ACWWA 2014 Conference", Box 28141, Dartmouth, NS, B2W 6E2.						
CARD HOLDER NAME						
CARD NUMBER					EXPIRY	
SIGNATURE						
Fax: 902-435-7796 or Email: contact@a	cwwa.ca	EMAIL ADDRESS				
WHEN PAYING WITH A CREDIT CARD AN EMAIL ADDRESS IS REQUIRED FOR A RECEIPT TO BE ISSUED						

### **Conference Information** Full conference has a 1.5 CEU value.

#### trade show questions contact Ian Thompson at ian@aps. ns.ca.

#### **ACWWA Cancellation Policy**

Cancellations must be received in writing, on company letterhead, and faxed, mailed or emailed to the ACWWA Office. Phone cancellations are not accepted. All cancellations postmarked/fax-dated 14 days in advance of the

conference start date will receive a full refund, minus a 10% administrative fee. Cancellations between 7 and 14 days of the conference start will receive a 50% refund. Cancellations less than 7 days in advance of conference will not be refunded. Please note that substitutions or cancellations to (902) 435-7796 or email to contact@acwwa.ca.

#### **Trade Show Information**

Each booth measures 8' x 10'. Booth selection will be online and first come first serve. ABEA members will have exclusive access for three weeks prior to general public. To learn more about becoming an ABEA member and for





### **Top Ops Competitions**

The Top Ops competition will mark its 10th anniversary at the 2014 ACWWA Annual Conference. The event has grown into a must see event at the conference. Enter a team to test your knowledge and get in on the fun in a fast paced, *"Reach for the Top"* style contest for operators.

Spectators can expect to see some of Atlantic Canada's best water and wastewater operators match wits as they compete for the water and wastewater Top Ops championships. If you have ever watched Top Ops from the sidelines in previous years, but thought to yourself, *"I could do that"*, why not enter a team in this year's event?

For further information, or to register a team in either the water or wastewater Top Ops competitions, please contact Trent Brewer at **trent.brewer@fredericton.ca** or **(506) 460-2179.** 













# ACWWA – "Best of the Best": Water Taste Test Fun Event

This will be the second year for the ACWWA "Best of the Best" Taste Test competition. Atlantic Canadian municipal water utilities are invited to submit a water sample to be judged by a panel of media and water taste professionals. Samples will be judged on appearance, smell, taste and overall impression. The competition will take place at the start of the ABEA tradeshow Tuesday, October 21st, 2014. The first place winner will have the opportunity to represent ACWWA at the AWWA Annual Conference and Exposition (ACE) "Best of the Best" Taste Test in Anaheim in 2015.

Come out and find out who has the best tasting water in Atlantic Canada.

Entry forms, rules and judging criteria are available on the ACWWA Conference Website. Entry forms are due by September 13, 2014. For more information, please contact Krysta Montreuil at **(902) 869-0171** or **krystam@halifaxwater.ca**.



### Young Professionals Mixer at the 2014 ACWWA Conference

The ACWWA Young Professionals Committee is a very active group, with technical tours, educational and social events organized throughout the region each year to encourage participation through educational and networking opportunities for newer members of ACWWA, and our industry.

Everyone is encouraged to stop by The Beer Market on Sunday afternoon and join our Young Professionals for some light refreshments and conversation with newer members of our industry. The Beer Market is located on the second floor of the Lower Deck Pub, right next door to the Marriott Hotel.







### ACWWA/ABEA Tradeshow – "New Time"

The 2014 ACWWA/ABEA Tradeshow will be held on the morning of Tuesday October 21, 2014 at the Halifax Marriott Harbourfront Hotel on the second floor in Nova Scotia ballrooms A, B, C and D as well as the ballroom foyer - allowing for upwards of 70 booths! Following the "Best Tasting Water" competition in the adjoining Halifax Ballroom, the tradeshow will kick off at 9:00am and run until 1:00pm. This is a new time slot for the tradeshow which has been historically held on the Tuesday afternoons. We hope that all delegates can set aside their entire morning and into lunch chatting with the suppliers and manufacturers whom they deal with on design work, consulting and equipment supply.

Don't forget to come by the Atlantic Branch Equipment Association's desk near the tradeshow area to receive your complimentary bottle of Hope Blooms Salad Dressing, another product showcasing the ABEA's continued support of local business organizations. Also, check out the uplifting story of community change and success and read about their recent appearance on CBC's Dragon's Den at **www.hopeblooms.ca**. While at the ABEA booth, remember to ask your ABEA board member about the ongoing Water for People projects that we are currently funding through our annual donations to this great organization – last year topping \$12,500.00!!! We hope all delegates can show similar support to our ABEA membership by taking the time to visit each and every booth during the 2014 ACWWA/ABEA Tradeshow.

Don't forget - Tuesday AM!!!!!

#### www.abea.biz









### Technical Tours

#### **Eastern Passage Wastewater Treatment Facility**

The Eastern Passage Wastewater Treatment Facility Expansion and Upgrade project is the largest capital project that Halifax Water has implemented since the 2007 merger forming Canada's first fully integrated water, wastewater and stormwater utility. The Project involved a very large, broad and diverse team in order to complete the multidiscipline work involved in the construction of a wastewater treatment facility. The total project cost for Eastern Passage was \$60 million dollars and is a key component of the overall Eastern Passage Wastewater Management Plan.

The Project was initiated by the Halifax Regional Municipality (HRM) with the completion of the EPWWMP in 2006. Based on HRM Council's direction, work continued on the basis of utilizing a Design-Build approach to implement the Project. The Design –Build methodology assembles both the design and construction components of a project on a single team that delivers a full, performance based solution for a fixed fee.

The facility was originally constructed in 1974 with an average annual daily flow treatment capacity of 8,636 m3/day (population equivalent of 18,000). The facility was further expanded in 1987 and the level of treatment was downgraded to primary in anticipation of the then proposed Halifax Harbour Solutions Project's single treatment facility located near McNab's Island. The expansion increased capacity to an average annual daily flow of 18,000 m3/day (population equivalent of 38,000). Ultimately it was decided to utilize three treatment facilities to meet the requirements of the Harbour Solutions Project. As a result expansion was required at the Eastern Passage facility to increase capacity and deliver secondary level of treatment.

Completed on schedule and on budget, the newly expanded and upgraded facility provides secondary level of treatment with a capacity of an average annual daily flow of 25,000 m3/day (population equivalent of 50,000) with a hydraulic capacity of 120,000 m3/day. The newly expanded facility is a conventional activated sludge process complete with primary and secondary clarifiers with Ultra-violet radiation for disinfection. Solids from the facility are dewatered on site by drum thickeners and centrifuges and transported to Halifax Waters Biosolids Processing Facility. The most recent upgrade achieved substantial completion in February of 2014.







# Technical Tours (cont.)

#### **N-Viro Biosolids Processing Facility**

Halifax Regional Municipality approved a \$12-million Biosolids Processing Facility in 2004 as part of the Harbour Solutions Project, a comprehensive waste management strategy that would end the practice of large volumes of human waste entering Halifax Harbour. Halifax Water's Biosolids Processing Facility and wastewater treatment plants are now owned and operated by Halifax Water as part of its core business. N-Viro Systems operates the Biolsolids Processing Facility on contract basis for Halifax Water.

As part of the Harbour Solutions Project, 3 advanced primary sewage treatment facilities were constructed in Halifax, Dartmouth and Herring Cove. The advanced primary treatment facilities remove up to 70 per cent of the particulate material in the sewage. That material is primarily organic material with high nutrient content. The three Harbour Solutions Project WWTF's utilize rotary presses to produce a dewatered cake that is greater than 18 % solids that is transported to the Biosolids Processing Facility.

In addition to the three Advanced Primary WWTF's, Halifax Water owns and operates 10 additional WWTF's that utilize biological processes varying from conventional activated sludge to RBC's. Waste sludge from these facilities is either dewatered on site and transported to the Biosolids Processing Facility or transported to Halifax Waters Sludge Management Facility where they are dewatered by rotary presses and then transported to the Biosolids Processing Facility.

The Biosolids Processing Facility converts solids residuals into Class 'A' biosolids utilizing N-Viros Alkaline Stabilization Process. See attached process schematic.

This tour will start at the Aerotech Sludge Management Facility where visitors will see Rotary Presses produce dewatered cake and then proceed to the Biosolids Processing Facility to overview N-Viro's Alkaline Stabilization Process.







### Down East Feast Entertainment: The Mellotones

The Mellotones are among some of the most skillful and in-demand musicians in the region! This band gives people what they want; and they want to dance! They are a tight ensemble with top-notch vocals and powerful horns backed by solid funky grooves.

From playing sweaty late night dance floors in clubs to weddings, corporate engagements, special events and festivals, in any situation, the Mellotones deliver a 9 piece, high energy show of R&B favorites from classic Motown, Stax, Funk, James Brown, disco and everything in between.

Audiences from across North America have witnessed this band's extreme talent and they are never short of completely impressed. Any Halifax local will tell you, The Mellotones are the best dance band in town!









### ACWWA 2014 Annual Golf Tournament

Join us on Sunday October 19th for a ten o'clock shot-gun start at Lost Creek

All are welcome – and encouraged - to join us for this annual event where you can enjoy the company of old acquaintances and make new ones along the way.

This year's format requires that all participants use carts so the cost includes both the green fee and the cart (\$60).

We will once again have hole sponsors which will allow us to provide a package of items for each participant, so make certain to include your shirt / sweater size on the registration form.

If you have particular requests for playing mates please indicate this by emailing **scotiatech.main@ns.sympatico.ca** upon completion of your registration.

**NOTE:** Due to ordering deadlines for clothing articles only those who register prior to **September 1**<sup>st</sup> will be guaranteed an item in their package.

See you there!



### **Lost Creek**

"Imagine a mature hardwood forest of rolling hills, a crystal lake and a flowing river. A perfect portrait of Nova Scotia. Now imagine all this and a championship 18 hole golf course encompassing 180 acres surrounded in beauty... some say by Mother Nature's design."

Lost Creek Golf Club opened in 1999, and is surrounded by Lost Creek Village. Only 20 minutes from Halifax. Lost Creek has recently joined the Audubon Cooperative Sanctuary System of Canada.







### Water For People -Canada

At the 2013 Annual Conference, \$31,000 was raised for Water For People. These donations from corporate sponsors, individual donors, associations, and generous utilities have gone a long way to making Atlantic Canada stand out as a tremendous donor among AWWA sections. A special thanks goes out to the ABEA (donated \$15,000), the City of Moncton (donated \$10,000), CBCL (donated \$1,000), Michelin Tires (donated set of 4 tires for the auction) and Greatario. Other funds were raised from the conference events (silent auction, 50/50, and Fun Run). Water for People and the ACWWA hope that the water community in Atlantic Canada can continue to provide support at the 2014 conference. Don't forget to sign up for the 2014 Fun Run when registering for the conference.

Since the 2013 conference, the Atlanic Canada Committee of Water For People has hosted the annual Well Tapped event on Friday, March 21, 2014. Over 75 water professionals and staff gathered to celebrate World Water Day. Halifax Water (donated \$500) and CBCL (donated \$500) sponsored the event. A softball tournament is scheduled for June 2014.

For more information about Water For People's efforts, please visit our website. The website contains stories from the field (www.waterforpeople.org/stories/) and up to date news on Water For People's programming (www.waterforpeople.org/news/). In addition, the new Re-Imagine Reporting Platform is a great place to see the growth in all programs. To see where donated funds are contributed and the progress of each program visit reporting.waterforpeople.org/. Any questions about Atlantic Canada's involvement with Water For People can be directed to Matt Follett at Matthew.Follett@ snclavalin.com.







### **Conference Hotel** Information

### The conference will be held at the Halifax Marriott Harbourfront Hotel located at 1919 Upper Water Street in Halifax, NS.

Marked with a 4-star rating, the Halifax Marriot Harbourfront Hotel offers world-class amenities with a harbourfront location that puts you within minutes of the Ferry Terminal, Maritime Museum of the Atlantic, and the World Trade and Convention Center. The 332 air conditioned guestrooms come complete with flat-panel cable televisions, living areas, and coffee/tea making facilities. The hotel also features a steam room, fitness center, indoor swimming pool, as well as a business center and multiple meeting rooms.

A special conference room rate of \$199 + taxes per night is in place beginning October 15, 2014 and ending October 25, 2014.

#### Please reserve your room by September 17, 2014 to receive this rate.

Reserve your room today by calling **1-800-943-6760**, or follow the web link on the ACWWA webpage **(www.acwwa.ca)**.



### Thank you to our Sponsors



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