

'Infrastructure Renewal' Rebuilding the Basics



Maritime Provinces Water & Wastewater Association 34th Annual Training Seminar (CEU Value: 1.5)

> April 13th - 16th, 2014 Halifax Marriott Harbourfront Hotel Halifax, Nova Scotia



Todd Richard MPWWA Chair

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Craig Gerrior Seminar Chair

WELCOME FROM MPWWA CHAIRPERSON

On behalf of the Board of Directors for the Maritime Provinces Water & Wastewater Association, I am proud to invite you to attend the 34th Annual MPWWA Training Seminar to be held April 13th to 16th, 2014 at the Marriott Harbourfront Hotel located on the waterfront in downtown Halifax. Our seminar has proven to be the premier event for water and waste water operators/managers and those involved in the industry.

Please register early so you don't miss out on a great opportunity to network with your peers and take in the many training workshops being offered. Find solutions to some issues you may be having, as many operators are willing to provide advice and help in trouble-shooting as they most likely have experienced the same issues.

View the latest products and cutting edge technologies in your industry as our suppliers exhibit their products to help find solutions to your issues at the MPWWA Suppliers Equipment Display and Trade show.

I look forward to seeing you all in April and enjoying some great Halifax hospitality!

Todd Richard



MESSAGE FROM THE SEMINAR CHAIRPERSON

Hello everyone. I would like to present to you the 34th Annual Training Seminar. This year's theme is 'Infrastructure Renewal – Rebuilding the Basics.'

As everyone in the industry is realizing, our treatment, distribution, and collection systems are in decline and the ability to properly fund their maintenance and replacement is becoming ever more difficult. With that said we have tried to provide some training that touches upon these issues.

We are back in Halifax this year at a new location, the Halifax Marriott Harbourfront Hotel. This is a newly renovated conference facility and the Marriott staff is really looking forward to showing us a good time.

To help you find your way most of the seminars' events will occur on the second floor. The biggest change you will notice this year is that the supplier's hospitality suites will be located all together on the main floor just down from the lobby. This is a new direction conference facilities are taking and it works very well for everyone staying at the hotel. Also be aware that parking at the Marriott will only accommodate a 6 foot high vehicle which means many of our municipal vehicles won't fit. There is oversized parking available at Purdy's Wharf in the building just to the left of the Marriott.

I am looking forward to seeing everyone there and hope you enjoy the program we have assembled.

Craig Gerrior

COMPANION PROGRAM

Sunday, April 13th:

7:00 - 9:00 PM: Registration 7:00 - 10:00 PM: Meet and Greet

Monday, April 14th:

7:30 - 9:00 AM: Registration 8:30 - 9:00 AM: Official Opening 9:00 AM - 5:00 PM: Annual Charity Silent Auction in Aid of Supportive Housing for Young Mothers 10:00 AM: Meet in Lobby for Pier 21 Tour 10:30 AM - 12:00 PM: Pier 21 Tour and Shopping 12:00 - 1:15 PM: Lunch at the Red Stag, Alexander Keith's Brewery 1:30 - 3:00 PM: Alexander Keith's Brewery Tour 3:00 PM: Return to Hotel

Tuesday, April 15th:

8:00 - 9:30 AM: Annual MPWWA General Meeting and Breakfast 9:30 AM - 4:00 PM: Annual **Charity Silent Auction** 10:00 - 11:00 AM: Yoga at the Hotel (Sable A, main floor off lobby) 12:00 -1:30 PM: Lunch and Gift Exchange (Sable A, main floor off lobby) 2:00 - 3:00 PM: Nova Scotian Crystal Tour (meet in Marriott lobby) 6:00 - 7:00 PM: Reception 7:00 - 10:00 PM: Banquet and Entertainment

Wednesday, April 16th:

11:00 AM - 12:00 PM: Checkout 12:00 - 1:30 PM: Stay-Till-The -End Luncheon

SEMINAR AGENDA

Sunday, April 13th

1:00 - 1:45 PM: F/N TAG Meeting 2:00 - 4:00 PM: Board of Directors Meeting 7:00 - 9:00 PM: Delegate Registration - *Ballroom Foyer/Halifax Ballroom* 7:00 - 10:00 PM: Meet & Greet - *Ballroom Foyer/Halifax Ballroom*

Monday, April 14th

7:30 - 9:00 AM: Delegate Registration - *Coat Check* 8:30 - 9:00 AM: Official Opening of the Seminar, *Mayor Mike Savage - Halifax Ballroom* 9:00 - 10:00 AM: Opening Speaker, *Carl Yates, General Manager, Halifax Water - Halifax Ballroom* 9:00 AM - 5:00 PM: Annual Charity Silent Auction in Aid of *'Supportive Housing for Young Mothers' - Atlantic Suite* 10:00 - 10:30 AM: Health Break - Ballroom Foyer 10:30 AM - 12:00 PM: Key Note Speaker, *Dr. Graham Gagnon, Full Professor, Department of Civil and Resource Engineering, Dalhousie University - Halifax Ballroom* 12:00 - 1:30 PM: Registration - *Coat Check* 12:30 - 1:30 PM: Buffet Lunch - *Halifax Ballroom* 12:00 - 4:30 PM: Equipment and Supply Display - *Nova Scotia Ballroom/Ballroom Foyer*

Tuesday, April 15th

8:00 - 9:30 AM: Annual General Meeting and Breakfast - Nova Scotia Ballroom
9:30 AM - 4:00 PM: Annual Charity Silent Auction - Atlantic Suite
9:30 - 10:30 AM: Choose Workshop A, B, or C - Information on workshop topics and locations is provided on pages 5 and 6
10:30 -10:45 AM: Health Break - Ballroom Foyer
10:45 - 11:45 AM: Choose Workshop D, E or F
12:00 - 1:00 PM: Lunch on Your Own/Board of Director's Meeting
1:00 - 4:30 PM: Facility Tours - Meet in front of Marriott Hotel
6:00 - 7:00 PM: Reception - Ballroom Foyer
7:00 - 10:30 PM: Banguet and Entertainment - Nova Scotia Ballroom

Wednesday, April 16th

8:30 - 9:30 AM: Choose Workshop G, H, or I 9:30 - 10:00 AM: Health Break - *Ballroom Foyer* 10:00 - 11:00 AM: Choose Workshop J, K or L 11:00 AM - 12:00 PM: Check Out Time 12:00 - 1:30 PM: Stay-Till-The-End Luncheon/Charity Auction Cheque Presentation/ Closing Speaker, *Honourable Randy Delorey, Nova Scotia Minister of the Environment or Delegate - Halifax Ballroom*

HOW TO REGISTER FOR THE SEMINAR

Online: www.mpwwa.ca (Click on '2014 Annual Seminar' near top right of page) Fax or mail completed registration form Or contact Clara Shea, Executive Secretary at 902-434-8874



Carl D. Yates General Manager, Halifax Water



Dr. Graham Gagnon, Full Professor Department of Civil and Resource Engineering , Dalhousie University

OPENING SPEAKER

Carl Yates has extensive experience in the water utility profession having served as Project Engineer, Chief Engineer and General Manager of the Halifax Water Commission. In 1996, he was appointed General Manager of the Halifax Regional Water Commission which assumed a regional mandate after the municipal amalgamation of the greater Halifax area in 1996. In 2007, Mr. Yates oversaw the formation of the first regulated water, wastewater and stormwater utility in Canada with the transfer of wastewater/stormwater assets from the Halifax Regional Municipality. Halifax Water is a body corporate municipal utility, generating approximately 110 million dollars in annual revenue with assets of over \$2 Billion.

Mr. Yates obtained a Bachelor of Engineering degree from Memorial University of Newfoundland in 1984 and a Masters of Applied Science from the Technical University of Nova Scotia in 1992.

Mr. Yates is Past Chair of the Potable Water Committee for the National Research Council Infra-Guide project, Past Chair of the Security and Emergency Management Committee of the Canadian Water and Wastewater Association, Past Chair of the Research Strategy Committee of the Water Research Foundation, a Board member of the Canadian Water Network, a member of the National Association of Corrosion Engineers, the American Water Works Association Water Utility Council, the International Water Association, and a member of the Board of Directors of Special Olympics Nova Scotia.



KEYNOTE SPEAKER

The water treatment industry continues to seek greener, innovative ways to treat water for human consumption. The challenge is to develop treatment technologies that are friendly to the environment but still meet increasingly strict water quality regulations. Dr. Graham Gagnon is working with the water industry to develop just such technologies. He holds the NSERC/ Halifax Water Industrial Research Chair in Water Quality and Treatment.

Dr. Gagnon also serves as the Director for the Centre for Water Resources Studies. He and his team are investigating new processes, such as biofiltration, for monitoring and removing pathogens from drinking water. The researchers are using a pilot plant to test these new processes to make sure that they meet all the criteria for water treatment that is safe for people and for their environment. This testing will build a knowledge base on applications of green technology to water treatment. The results from this research is being used by the water industry to create sustainable water treatment infrastructure throughout North America. Dr. Gagnon's team has held research partnerships with First Nation communities, federal and provincial agencies, private industry and municipal agencies like Halifax Water.

Students are trained to have solution-based goals while understanding engineering processes and phenomena. Ultimately, Dr. Gagnon's research program allows student researchers to quickly transition from the lab to the water industry and have impact in their field.

"The research we do is highly valuable. Engineers can provide solutions that can be applied to a diverse range of communities and industries. Ultimately these solutions can have tangible benefits to public health and the environment, which leaves me with a very positive feeling on the impact our research can have," says Dr. Gagnon.





EQUIPMENT AND SUPPLY SHOW

Monday April 14, 2014 12:00 - 4:30 PM

Plan to spend Monday afternoon touring the 'Equipment and Supply Show' at our Annual Training Seminar. It is a great opportunity for the equipment and supply providers to meet face-to-face with operators to discuss past and potential purchases or to discuss specific issues with equipment and/or technologies as they relate to facility operation. Every year brings with it some advancement in the technology available, as well as improvements to equipment and products that we use daily in our work. The Equipment and Supply Show is a fun and informal way for us to say "Let's talk business!"

The Equipment and Supply Show is a critically important part of our Annual Training Seminar. The registration fees paid by the companies for the booth space help to significantly off-set the enormous cost of hosting the seminar. This allows for affordable registration fees for our members.

The Association is extremely thankful for the continued support provided by the equipment suppliers and service providers who participate in the trade show. They treat our operators with respect and kindness when chatting with them. The 'freebies' are always welcomed by the operators as they stroll by the display booths – items such as pens, notepads, bags, candies, and a host of other neat treats. And let's not forget about the door prizes - tools, jackets, hats, toys, etc., generously donated by the Equipment and Supply Show companies. In the past few years their item and/or financial contributions to the charity auction has helped us raise over \$13,000 for various charities.

To thank the many companies who participate in the Equipment and Supply Show, and play such an important role in the success of the MPWWA, please take some time to meet with as many as you can and show them your appreciation for their continued support.

So, be sure to attend the Equipment and Supply Show, have some fun, and "Talk Business." It is sure to help you in your plans for infrastructure renewal as you strive to deliver high-quality water and wastewater services for your communities.

"Having the chance to talk to the top companies in the water and wastewater industry, in one afternoon, at the Equipment and Supply Show is one of the main reasons I attend the Seminar every year. The contacts I've made have helped me to do my job more effectively, and I have made a lot of friends along the way also!"

> Trevor Douthwright Village of Salisbury, NB

FACILITY TOURS

IMPORTANT: Safety boots are required for ALL tours. Hard hats and safety glasses are also required for the Tufts Cove tour.



HRM Wastewater Plant Upper Water Street

The Halifax Wastewater Treatment Facility (WWTF) officially opened in February 2008. The plant was able to meet the goal of greatly improved water quality, reaching objectives for the Halifax Harbour as set out by residents.



HRM Water Treatment Plant Lake Major

Halifax Water operates three large water supply plants, one being the Lake Major Water Supply Plant. These facilities are operated by certified water treatment plant operators, produce water that meets or exceeds the requirements of the Guidelines for Canadian Drinking Water Quality.



NS Power Tufts Cove Generating Station

Constructed in 1965, it's a 415 MW generating station which was built to operate on oil then converted to use natural gas in 2000. It uses the heat exhaust of the plant's two combustion turbines and additional natural gas duct firing to generate 50 MW of electricity.

WORKSHOP TOPICS

Tuesday, April 15th 9:30 - 10:30 AM: Choose Workshop A, B, or C

Workshop A: *Promoting Compliance in Wastewater Systems Effluent Regulations.* Environment Canada is promoting compliance with the Wastewater Systems Effluent Regulations and helping wastewater system owners and operators to report required information about their systems. That information will provide a better understanding of which systems pose high, medium and low risks to fish, fish habitat, and human health. Through the Maritime Provinces Water and Wastewater Association Conference, Environment Canada plans to engage the regulated community to promote compliance with the Regulations and to answer any questions that may arise. Presenter: Susan McKay. Halifax Ballroom A.

Workshop B: Disinfection Alternatives - On-Site Generation is No Longer Simply Disinfection. This workshop will look into alternatives that can solve hazard complications or solve multiple chemical challenges while reducing operating and maintenance budgets. OSG offers the owner/operator the power of chemical independence and the safety of a nonhazardous solution to the plants problem(s). Presenter: Tony Edwards, Product Specialist, Parkson Corporation. Halifax Ballroom B.

Workshop C: Getting in the Driver's Seat with AMI. Advanced Metering Infrastructure (AMI) continues to be a trending topic for many water utilities: How do you know if an AMI system is the right technology for your water utility and will it deliver your desired outcomes? Can you effectively integrate AMI to benefit operations, customer service, billing and water efficiency? This session also will speak to implementation feasibility, system deployment, and read success rate. Presenter: Tom Orpana, Regional Sales Manager, Neptune Technology Group (Canada) Ltd. Halifax Ballroom C.

11:00 AM - 12:00 PM: Choose Workshop D, E or F

Workshop D: *PVC- Proper Use in Sustainable Infrastructure.* The workshop will cover the topic of good practices when it comes to the handling, storage and installation of PVC pipe and fittings for use in water and wastewater projects. The PVC pipe and fittings industry is growing as this material's use continues to increase due to the numerous benefits from using a light weight material that is resistant to corrosion and chemical attack. Understanding the attributes of this plastic pipe material will help the audience in future interaction with PVC products. Presenter: Presenter: Rowena Patenaude, P.Eng. QC/Atlantic. Halifax Ballroom A.

Workshop E: *Infrastructure Funding.* A 3-part panel will provide delegates with an overview of how major water and wastewater infrastructure projects are funded and administered. Nova Scotia provincial government representatives will detail how funding programs are determined and delivered, as well as illustrating how the funded projects must meet regulatory requirements and industry standards. A municipal Chief Administration Officer will discuss the many challenges related to prioritizing municipal projects, how the infrastructure funding is applied for and deliverables that need to be met. Presenters: Ramesh Ummat, CAO, Colchester County, Hardy Stuckless, Service Nova Scotia and Municipal Relations and Stefan Furey, P.Eng, Science Division, Nova Scotia Environment. Halifax Ballroom B.



WORKSHOP TOPICS, continued from Page 5

Workshop F: A New Approach to De-Sludging Wastewater Lagoons. The cost of sludge buildup and lagoon upkeep is especially problematic for communities that are exhibiting an aged population or limited population growth. In recent years new technologies have been employed in rural waste lagoons that have proven to actually de-sludge the lagoons with a minimum of cost outlay. This workshop provides an overview of these new technologies, especially how they work together. Presenter: Jim Dartez - Reliant Water Technologies. Halifax Ballroom C.

Wednesday, April 16th 8:30 - 9:30 AM: Choose Workshop G, H or I

Workshop G: Browser-based Application Trends in the SCADA Industry. With the explosive proliferation of Internetconnected mobile devices, municipalities can now deliver secure, real-time and historical data access to users regardless of location. While the potential applications are vast, successful and cost effective implementation requires selecting appropriate technology and data usage plans that will enhance, rather than hobble, the SCADA system. This speech provides examples of how users are implementing mobile technology in the water and wastewater industry and where this trend is expected to head. Presenter: Blair Sooley, B.Eng, MBA, Trihedral Engineering Inc. Nova Scotia Ballroom AB.

Workshop H: Infrastructure Challenges - First Nation Communities. The Abegweit First Nation have been going through a water system renewal program over the past 10 years. The workshop will provide an overview of the community systems and the unique challenges: operating and maintaining systems in three separate communities (Rocky Point, Scotchfort and Morrell), addressing concerns by the residents of chlorinated drinking water and managing community drinking water systems in the absence of legally enforceable regulations and standards on the federal reserve lands set aside for first nations. Presenters: Jacob Jadis, AFN Water Operator, Danny Lanteigne, Circuit Rider Trainer and Andrea Morgan, AANDC Senior Project Engineer. Nova Scotia Ballroom C.

Workshop I: *Wastewater Treatment Alternative for Small Communities.* This presentation will include a discussion regarding Dissolved Air Flotation (DAF) and Moving Bed Biofilm Reactor (MBBR) Package WWT Plants and how they can be a solution for small communities throughout the Maritime Provinces. Presenters: Steve Priestley and Christopher Haley (BioMaxx Wastewater Solutions Inc.) Nova Scotia Ballroom D.

10:00 - 11:00 AM: Choose Workshop J, K, or L

Workshop J: Halifax Water Main and Transmission Replacement. This workshop will be a presentation on the infrastructure and main renewal project on Kearney Lake Rd, Halifax. Presenter: Jamie Hannam, P. Eng, MBA, Halifax Water. Nova Scotia Ballroom AB.

Workshop K: *Energy Efficiency.* This workshop will focus on the energy management program at Halifax Water including energy efficiency, renewable energy generation and the social, technical and economic challenges faced by water and wastewater utilities when trying to implement energy management and reduction programs. Presenter: Jeff Knapp, Manager of Energy Efficiency, Halifax Water. Nova Scotia Ballroom C

Workshop L: *Trenchless Technologies and Relining Laterals*. Trenchless technologies is a term for describing for renewing underground infrastructure without the need for trenching. This workshop will provide an overview of trenchless options including 'Cured In Place Pipe' (C.I.P.P.) which has been around for 30 years now and has proven to be successful and efficient, saving municipalities money on repairing and renewing their aging infrastructure. Presenter: Jay McLeod, Crosbie Industrial Services Ltd. Nova Scotia Ballroom D.





MEET & GREET

After registering for the conference Sunday evening, take some time to network with other operators and seminar delegates. This is a great opportunity to share stories and experiences and perhaps even find or provide solutions to operational problems and issues. Delegates have the opportunity to renew friendships and discover new ones while nibbling on a fine selection hors d'oeuvres and finger foods.

ANNUAL GENERAL MEETING & BREAKFAST

The business of your association matters. Reports from the Board of Directors will be provided and nominations and elections held for Zone Representatives. This is a great opportunity to ask questions, raise concerns and become more informed about the day-to-day operations of the Association. A delicious breakfast buffet is included and along with the meeting helps start our day in a healthy and professional way.

BANQUET & ENTERTAINMENT

There will be a few business-related things to cover, including the presentation of this year's Art Bell Award. However, following a delicious meal and business, the rest of the evening is dedicated to provide delegates with some fine entertainment by Comedy Magician Matthew DiSero. He has opened shows for greats such as Drew Carey and Jerry Seinfeld and performs everywhere around the world. In Matthew's performance the audience not only gets involved, they BECOME the show, which creates a lasting impression on his guests and makes for a truly unique event.

CHARITY AUCTION

This year we are proud to hold our 5th Annual Charity Auction in support of Supportive Housing for Young Mothers (SHYM) – operated by the YWCA, Halifax. SHYM offers supportive housing, parenting and life skills development programs for young mothers ages 16-24 who are independently parenting their child(ren) and who are in immediate need for housing. They deserve our support! Visit them online at http://ywcashymprogram.wordpress.com/

STAY-TILL-THE-END LUNCHEON

Our Stay-Till-The-End Luncheon is a great way to end our seminar. We get to hear from the province on issues, programs and initiatives related to water and wastewater that are of importance to us as operators. We will also be holding prize draws and make an official financial presentation to this year's Charity Auction recipient - *'Supportive Housing for Young Mothers.'* Its also our chance to say "So long, until the next time we meet." See you there!

ACCOMODATIONS

Halifax Marriott Harbourfront Hotel Contact Information

Phone: 902-421-1700 Toll Free: 1-800-943-6760 Fax: 1-902-422-5805 Visit our website for further information: www.mpwwa.ca



