

MPWWA

Growing Our Industry

'Environment, Technology, Your Future'



Maritime Provinces Water & Wastewater Association
40th Annual Training Seminar
CEU Value 1.5

April 19th - 22nd, 2019
Marriott Harbourfront
Halifax, Nova Scotia

A NOTE FROM THE MPWWA CHAIRPERSON, JERRY VILLARD



“Growing Our Industry - Environment, Technology and your Future”

Looking forward to welcoming all members to the 40th Annual MPWWA Training Seminar in Halifax NS at the Marriot Harbourfront hotel on April 19th. There will be lots of learning opportunities for you from our 12 Workshops, motivational speaker, Equipment Tradeshow participants or networking with other operators. This is an excellent opportunity to obtain 1.5 CEUs towards recertification and gain knowledge that you can put to use at work supporting your community needs.

There is another excellent Equipment Tradeshow with over 80 booths on Monday afternoon, something for everyone! New products, new services, and many of your current suppliers as well. Take time to walk around and talk to as many of the booth workers as possible, you may be surprised at what you find. There will be tours of a Water Treatment facility, a Wastewater facility and an analytical laboratory on Tuesday afternoon. Check on the website to see if safety boots are required for any of these tours.

Our Charity Auction will be going on during Monday and Tuesday of the Seminar. The beneficiary of this year’s auction is “Dreams Take Flight Halifax” which provides the trip of a lifetime to deserving children. Each year, the Halifax chapter accompanies over 140 children from Nova Scotia, New Brunswick, PEI, & Newfoundland to Disney World in Orlando Florida. Their mission is to provide these deserving children one magical day, regardless of the challenges they face in their everyday lives.

Our Annual General Meeting will be held on Tuesday morning where we will conduct necessary Association business and elect our Zone Directors for the coming year. Tuesday night will be our banquet with entertainment and awards presentations. We are looking for nominations of our Operator Excellence Award, see our website at mpwwa.ca for details and see if any of your fellow operators may be candidates.

Reserve April 19-22, 2020 to attend this conference and meet friends you only see once a year or make some new ones!

A MESSAGE FROM THE SEMINAR CHAIRPERSON, KEVIN KELLOWAY

On behalf of MPWWA as conference chair, I would like to welcome all delegates and companions to the 40th Annual MPWWA Training Seminar and equipment trade show. This year’s theme is ***“Growing Our Industry - Environment, Technology, Your Future”***.

All operators in the Maritime provinces provide an essential service to all the towns and cities they represent and are key to their growth and development. Operators attending this year’s conference will gain tremendous value and education from all presentations with the help of training and discussions with other operators. With this newly found knowledge operators can return home with new skills and information while receiving continuous education units for operator certifications.

I hope this year’s conference will provide a great learning environment as well as having the opportunity to meet fellow operators within the field, all while having a great experience. As a resident of Halifax, I am pleased to welcome you to this beautiful city and the Halifax Marriott hotel. Have a great stay, wonderful time and enriching experience.

Kevin Kelloway, 2020 Seminar Chair

COMPANIONS PROGRAM

Sunday, April 19th

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

Monday, April 20th

7:30 - 9:00 am - Registration
8:30 - 9:00 am - Official Opening
9:00 am - 5:00 pm - Annual Charity Silent Auction
8:50 am - Meet in Lobby
9:00 am - Paint Project
10:50 am - Meet in Lobby
11:00 am - Keith's Brewery Tour
12:00 - Lunch at Red Stag Tavern
1:30 - 3:00 - Keith's Room

Tuesday, April 21st

8:00 - 9:30 am - Annual General Meeting and Breakfast
9:00 am - 4:00 pm - Annual Charity Silent Auction
9:00 - am - Meet in Lobby
1:30 am - 12:00 pm - Shopping at Dartmouth Crossing / MicMac Mall
12:00 - 1:00 pm - Lunch on Your Own
1:00 - 4:00 pm - Gift Exchange (\$10-\$15 Gift Exchange Between Companions, Enjoy a Mani or Pedi and good company).
6:00 - 7:00 pm - Reception
7:00 - 10:30 pm - Banquet and Entertainment

Wednesday, April 22nd

11:30 am - 1:00 pm - Stay 'til the End Luncheon

SEMINAR AGENDA

Sunday, April 19th

2:00 - 4:00 pm - MPWWA Board of Directors Meeting
7:00 - 9:00 pm - Registration
7:00 - 10:00 pm - Meet and Greet

Monday, April 20th

7:30 - 9:00 am - Registration
8:30 - 9:00 am - Official Opening, Greetings from *Mayor Mike Savage*
9:00 am - 5:00 pm - Annual Charity Silent Auction in Support of *'Dreams Take Flight Halifax'*
9:00 - 10:00 am - Keynote Speaker - *Dr. E. Kevin Kelloway, PhD*
10:00 - 10:30 am - Health Break
10:30 am - 12:00 pm - Updates and Incorporation of Climate Resilience into the Atlantic Canada Water and Wastewater Design Guidelines. Danker Kolijn, Mike Chaulk and Mike Abbott, CBCL
12:00 - 1:00 pm - Lunch
12:00 - 4:30 pm - Equipment and Supply Show

Tuesday, April 21st

8:00 - 9:30 am - Annual General Meeting and Breakfast
9:00 am - 4:00 pm - Annual Charity Silent Auction
9:30 - 10:30 am - Choose Workshop A, B, or C
10:30 - 10:45 am - Health Break
10:45 - 11:45 am - Choose Workshop D, E or F
12:00 - 1:00 pm - Lunch on Your Own, Directors Meeting/Election of Officers
1:00 - 3:00 pm - Tour of Halifax Wastewater Treatment Facility, Lake Major Water Treatment Plant or AGAT Laboratories
6:00 - 7:00 pm - Reception
7:00 - 10:30 pm - Banquet with Entertainment by Magician Michael James

Wednesday, April 22nd

8:30 - 9:30 am - Choose Workshop G, H or I
9:30 - 10:00 am - Health Break
10:00 - 11:00 am - Choose Workshop J, K or L
11:00 - 11:30 am - Check Out Time
11:30 am - 1:00 pm - Stay 'til the End Luncheon, Closing Speaker and Charity Auction Cheque Presentation

HOW TO REGISTER FOR THE SEMINAR

Register and pay online at mpwwa.ca
Or

Fax, email or mail a completed registration form to: MPWWA c/o Clara Shea, Executive Secretary, PO Box 28142, Dartmouth, NS, B2W 6E2
Fax (902)434-8859 Email: contact@mpwwa.ca

**KEYNOTE SPEAKER
DR KEVIN KELLOWAY**



E. Kevin Kelloway is the Canada Research Chair in Occupational Health Psychology and Professor of Psychology at Saint Mary's University, Halifax, Nova Scotia. He received his Ph.D. in Organizational Psychology from Queen's University in 1991 and began his career in the Department of Psychology at the University of Guelph.

In 1999 he joined the Faculty of Commerce at Saint Mary's University as Professor of Management and Psychology. In 2006 he was appointed as a Senior Research Fellow at the CN Centre for Occupational Health and Safety. Dr. Kelloway was the founding Ph.D. Program Director for the Saint Mary's Faculty of Commerce (2000 – 2003), the founding Director of the CN Centre for Occupational Health and Safety and a founding principal of the Centre for Leadership Excellence. In 2009 he was appointed as the Tier I Canada Research Chair in Occupational Health Psychology.

Dr. Kelloway is a prolific researcher having published over 200 articles, book chapters, and technical reports in addition to 14 authored/edited books. Active in several professional societies he is Past-Chair of the Canadian Society for Industrial/Organizational Psychology and in 2016 was President of the Canadian Psychological Association – Canada's national association for psychology. As a consultant, Dr. Kelloway maintains an active practice consulting to private and public sector organizations on issues related to leadership, occupational health psychology and human resource management.

**MONDAY PRESENTATION
10:30 am to 12:00 pm**

***Updates and Incorporation of Climate Resilience into the
Atlantic Canada Water and Wastewater Design Guidelines.
Danker Kolijn, Mike Chaulk and Mike Abbott, CBCL***

ACWWA has recognized the effects of climate change on existing and future water and wastewater infrastructure, and in late 2018, secured funding to incorporate the consideration of climate resilient infrastructure into the updates of the existing "Water Supply Guidelines (2004)" and "Wastewater Guidelines (2006)". The presentation will provide background information on development of the project, outline the major components of the project, define climate resilient infrastructure, provide examples of global climate change events, and provide examples of recent climate related impacts on water and wastewater infrastructure in Atlantic Canada. The presentation will also discuss some of the proposed changes to both Guidelines based on the latest drafts.



EQUIPMENT AND SUPPLY SHOW

Monday, April 20th, 12:00 - 4:30 PM

Everyone looks forward to the Equipment and Supply Show as a major highlight of the MPWWA Annual Training Seminar. It is a great opportunity for equipment suppliers to meet with operators to discuss equipment performance and to showcase new technology. Every year brings with it advancements in science and technology, improvements and new features being added to equipment and new products being introduced into the marketplace that may make our lives easier or help us to better comply with water and wastewater regulations. The Equipment and Supply show is a great opportunity for operators and suppliers to get together in a fun and informal way and for new operators to put a face to the names they may not have met before.

The Equipment and Supply Show is an important part of our Annual Training Seminar in other ways you might not think of. The fees paid by suppliers for the booth space help to significantly offset the cost of hosting the seminar. This allows us to offer a reduced registration fee for our delegates. Please take some time to meet with the suppliers and show them our appreciation for their continued support.

So make sure to attend the Equipment and Supply Show, have some fun and enjoy a nice lunch. Spend some time talking to the suppliers and use the opportunity to think of ways you can build on the best and support growth in your community.

Your MPWWA board representatives are always floating around during this event as well. So be sure to introduce yourself and take advantage of the draws that take place during the trade show. There is also the opportunity to support the charity 'Dreams Take Flight Halifax' by purchasing a few 50/50 tickets for the big draw at the Banquet coming up on Tuesday night.





CHARITY AUCTION

Members of the Maritimes Provinces Water & Wastewater Association (MPWWA) provide water and wastewater services to our communities every day to protect the public health and the environment. We strive to support our communities in any way we can and this year we are proud to hold our 11th Annual Charity Auction in support of *Dreams Take Flight Halifax*.

Dreams Take Flight stretches children's minds. As poet Oliver Wendell Holmes once wrote, "One's mind, once stretched by a new idea, never regains its original dimensions."

In 1989, several Air Canada employees in Toronto planned a trip-of-a-lifetime. They held bake sales to raise the thousands needed. Many cupcakes, cookies and healthy ingredients later, they flew 70 special needs children on a DC-9 aircraft to Walt Disney World in Florida.

The trip changed the children's lives. For the first time, they understood that possibilities exist. Possibility without limitation.

By 1997, the Dreams Take Flight charity had expanded across Canada to eight cities: Vancouver, Edmonton, Calgary, Winnipeg, Ottawa, Toronto, Montreal and Halifax. The trajectory continues. Once a year, each chapter replicates the inaugural 1989 flight.

For a very long and exciting day, deserving children have an adventure in a world-renowned theme park in California or Florida. All expenses paid—thanks to sponsors and volunteers. These children aren't accustomed to mind-stretching ideas. They have challenges that might be medical, mental, physical, social or emotional. They understand the word, "no."

Air Canada donates planes. Volunteers raise money throughout the year. Donors give to cover all the expenses—aircraft fuel, park admission, spending money, plus cash for souvenirs and gifts. Each child and their escort are clad in signature clothing to set them apart in the park.

By the end of 2018, more than 35,000 children had known a trip-of-a-lifetime.

When they land back home, the idea of "yes," is in their thoughts. Their minds are stretched to new dimensions. They see new possibilities, and they have the memories to prove it for a lifetime.

<https://dreamstakeflight.ca/>



2016 Charity Auction in support of
Community Autism Centre
Saint John, NB



Cheque presentation to
Brain Injury Association of PEI
Charlottetown, PEI, 2018



Cheque presentation to
Boys and Girls Club of Moncton
Moncton, NB, 2019

FACILITY TOURS - 1:00 PM TUESDAY



Halifax Wastewater Treatment Facility

Photo and info credit - Halifax Water

The Halifax Wastewater Treatment Plant is an Advanced Primary Treatment Plant built in 2007. Walk to this tour.



Lake Major Water Supply Plant

Photo and info credit - Halifax Water

The Lake Major Water Supply Plant was acquired in 1999 and supplies drinking water to 103,000 people in several Dartmouth area communities. A bus is provided for this tour.



The third tour choice is AGAT Laboratories. Take the bus provided to AGAT Labs in Dartmouth and see how your water and wastewater samples are tested.

WORKSHOPS

Tuesday, April 21st

9:30 - 10:30 AM: Choose Workshop A, B, or C

Workshop A: Actuator Technologies and Control in Water/Wastewater

Driven by both environmental regulations and the need to have more efficient and reliable operations, actuator technology can play a key role in plant performance. In this presentation, we will identify the most common actuator technologies used in the Water/Wastewater industries, gain a better understanding of available technologies, and make more informed decisions when upgrading or retrofitting applications. Presenter: Bill Fox, Beck

Workshop B: Lagoons and Ammonia: Meeting Federal and Provincial Toxicity Requirements.

Ammonia management is an increasing concern within the wastewater industry. In this presentation, we will explore the background, methodology, merits and suitable applications of two options – the submerged attached growth reactor (SAGR), and the moving bed biofilm reactor (MBBR). Presenter: Francis Bordeleau, Nexom

Workshop C: Understanding SCADA Communications Using Digital Radio (GE Orbit) - English.

Presenter: Marcel Belanger, Belanger Electric

10:45 AM - 11:45 AM: Choose Workshop D, E or F

Workshop D: Disinfection Discovered Amid Post-Lagoon Nitrification

This presentation will focus on the lagoon-based wastewater treatment plant (WWTP) in Doaktown, New Brunswick, where engineers chose to implement SAGR fully-aerated inground horizontal flow rock media beds for cold climate post-lagoon nitrification. The system has already proven at more than 70 full-scale installations, that it can reduce ammonia to <1 mg/L in water temperatures as low as <1°C. Presenter: Francis Bordeleau, Nexom

Workshop E: Sampling Strategies to Ensure Data Quality – How You Sample can Affect Your Results.

Presenter: TBA, AGAT Labs

Workshop F (French): Understanding SCADA Communications Using Digital Radio (GE Orbit) - French

Presenter: Marcel Belanger, Belanger Electric

MPWWA BOARD OF DIRECTORS

The Board of Directors of the MPWWA is an elected administrative body. It includes four provincial Department of Environment representatives and one federal representative.

The provinces are divided into 12 zones, each having one representative. Each Atlantic province has one director at large and DND and First Nations are also represented.

Zone 1: Nicolas Legere (NB counties of Madawaska, Victoria, Restigouche & Gloucester)

Zone 2: Troy Atkinson, Seminar Coordinator (NB counties of Kent, Northumberland, Westmorland & Albert)

Zone 3: Jeff Rogers, Training Coordinator (NB counties of Kings, Saint John & Charlotte)

Zone 4: Rick Larlee, MPWWA Co-chair, Trade Show Coordinator., Webmaster (NB counties of Sunbury, York, Queens & Carleton)

Zone 5: Nancy Llewellyn-Rafuse (NS counties of Yarmouth, Shelburne, Queens & Lunenburg)

Zone 6: Bill Cannon (NS counties of Digby, Annapolis, Kings & Hants)

Zone 7: Kevin Kelloway (Halifax Regional Municipality)

Zone 8: Nicola Anderson, Secretary (Cape Breton)

Zone 9: Jerry Villard, Chairperson (The Province of Prince Edward Island)

Zone 10: Craig Gerrior, Treasurer (NS Counties of Cumberland, Colchester, Antigonish Guysborough and Pictou)

Zone 11: Stephen Knockwood (NB & PE Director-at-Large, First Nations)

Zone 12: Tim Henman (NS & NL Director-at-Large, DND)

Clara Shea: Executive Secretary

Rob Hamilton: Past Chair

Paul Klaamas, Environment Canada

Denis Chenard, New Brunswick

Deneen Spracklin, NL and Labrador

Krysta Montreuil, Nova Scotia

Ben Lanigan, Prince Edward Island

Andre Van der Velden, Commercial Rep

Melanie MacKinnon, Commercial Rep

Wednesday, April 22nd

8:30 - 9:30 AM - Choose workshop G, H, or I

Workshop G: How air valves are critical to your piping network. Knowing the correct Air Valve to use in a piping network is critical to the stability and longevity of your piping network. We all know we need to control the air going in and out of the piping network to ensure the piping, pumps, and other equipment is protected but not everyone knows what type to select and where it needs to be located. Choosing the correct style of air valve for each application, sizing it correctly and knowing its limitations is critical. Presenter: Darren McMullen, Omnitech

Workshop H: Modern SCADA Reporting – New tools make data analytics and reporting easier for the average user. Increase your confidence in your reports, improve the impact of your presentations, and advance your team's effectiveness. Learn to use modern tools to easily export data from your SCADA history as well as to visualize and interrupt the data with Excel and other software products. Examples will include both ad-hoc and scheduled reporting templates designed to be created without the need to be a programmer. We will, however, introduce the benefit of more advanced data processing and where to learn more about it. Presenter: Dave Spencer, Trihedral

Workshop I: Nitrogen and Phosphorus Removal. This presentation will speak to innovative methods of nitrogen and phosphorus removal and the differentiators/considerations between available technologies on the market. Specifically, we will outline key differentiators in attached-growth biological systems for ammonia and organics reductions, using the BioCord™ Reactor as an example to illustrate differences in CAPEX/OPEX, maintenance and energy requirements, customizability, footprint, and oxygen transfer capabilities, amongst other considerations for operators and municipalities. Presenter: Kevin Bossy, Bishop Water Technologies

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

Workshop J: NSE Regulatory Updates. Updates to the Nova Scotia Guidelines for Monitoring Public Drinking Water Supplies. This presentation will review the recent changes to the Nova Scotia Guidelines for Monitoring Public Drinking Water Supplies and how those changes will impact approval holders in the province. Presenter: Krysta Montreuil, NSE

Workshop K: Emergency Response Plan (ERP) vs Emergency Action Plan (EAP). Does your organization have one and do you know the difference? This seminar will highlight the fire & life safety hazards specific to water and wastewater facilities and will discuss code compliant and industry best practices solutions to help your facility efficiently implement risk mitigation measures. Presenter: Blayne Buckler, CC Safety & Compliance Services.

Workshop L: Climate Change - Mitigating the Effects of Sewer Backups in the Basement. Recent projects focused on mitigation of the potential impacts of climate change on Canada's built environment have significantly raised the profile of I&I and basement flood risk within Canada's code and standards development agencies. The presentation will review recent projects commissioned by federal agencies, and upcoming activities associated with mobilizing resources. Mobilization will include work with multiple stakeholders to develop tools, including costing tools, websites, and other resources, targeted at specific technical and non-technical users of the above-mentioned resources. Dan Sandink, Institute for Catastrophic Loss Reduction



BUSINESS AND PLEASURE

MEET & GREET

Sunday evening, after registering for the conference, join other MPWWA delegates at the Meet & Greet where old friendships are renewed and new ones are made. Delegates have the opportunity to mingle and network while snacking on finger foods, and perhaps sipping on the variety of beverages available. Cheers!

ANNUAL GENERAL MEETING & BREAKFAST

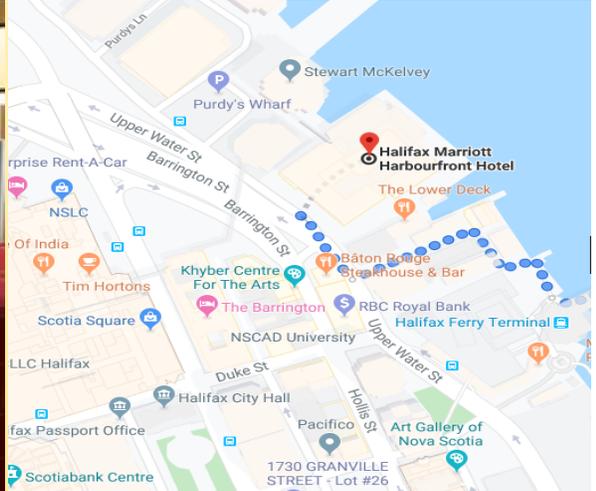
Business Matters! This is your association and the business of the MPWWA needs your participation. Although the Board of Directors deals with much of the day-to-day operations, there are other items that need to be discussed and approved by the General Membership, for example we need to hold elections and address any items brought forward for discussion and reports are also provided to the delegates to keep members informed. A delicious breakfast is included and along with the meeting, helps start the day off right.

BANQUET & ENTERTAINMENT

Just prior to the official start of the banquet, a reception will be held starting at 6:00 PM where friends gather and chat over a drink or two. Then at 7:00 PM, we sit down to some more great food served at the banquet. Throughout the course of the reception and banquet, tickets on a 50/50 draw will be sold with the winning ticket drawn later in the evening. The Art Bell Award will be given out at the banquet in recognition of an individual's dedication toward the aims and goals of operators through the Association. Service pins will also be presented. Once dining and business has been attended to, it will be time to be entertained. Enjoy entertainment by Magician Michael James.

STAY 'TIL THE END LUNCHEON

Well, we've mingled with old and new friends, talked shop, perhaps been on a facility tour, and we've seen some great workshops that will help us in our day-to-day work. The Stay 'til the End Luncheon starts at 11:30 am and is a great way to end the Annual Training Seminar, as it is the final event before we say our 'good byes' and leave to head back home. Again, we eat and deal with any business that is left to attend to. We are pleased to have Cathie O'Toole, General Manager of Halifax Water, as the luncheon speaker this year. Its always good to hear how our work is appreciated by the province in which the seminar is held. We will be making a cheque presentation at the luncheon to *Dreams Take Flight Halifax*, with 100% of the proceeds raised through the Charity Auction. There will also be the \$600 stay 'til the end draw to be one by a lucky delegate in attendance, so try not to miss this. It's a great way to end the training seminar and we sure hope you can make it.



ACCOMODATIONS

Halifax Marriott Harbourfront Hotel

- Clean, modern rooms, smoke free
- Complimentary Hi-Speed Wi-Fi
- picturesque waterfront views
- fully equipped gym

\$159.00 - \$179.00 single/double occupancy

Online hotel booking: Click hotel link on mpwwa.ca
Please advise the hotel that you are with the Maritime Provinces Water & Wastewater Association

Hotel Address

Halifax Marriott
1919 Upper Water Street
Halifax, NS
1-800-943-6760

