

MPWWA



# 'Knowing Our Systems'

*Knowledge is Power*



**Maritime Provinces  
Water & Wastewater Association  
36th Annual Training Seminar  
CEU Value: 1.5**

**April 17th - 20th, 2016  
Delta Brunswick  
Saint John, New Brunswick**

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## Rob Hamilton

MPWWA Chairperson &  
2016 Seminar Chairperson

**“Knowledge has to be improved, challenged and increased constantly or it vanishes.”**

*~Peter Drucker*



## WELCOME FROM MPWWA CHAIRPERSON & 2016 SEMINAR CHAIRPERSON

April 17th, 18th, 19th & 20th, 2016. Mark these dates on your calendar! These are the dates that the 36th Annual Maritime Provinces Water and Wastewater Association Training Seminar is being held at the Delta Brunswick Hotel in the Loyalist City of Saint John, NB. The Seminar Organizing Committee has been hard at work putting together a program that will have something for everyone. The theme of this year’s training seminar is “Knowing Our Systems – Knowledge is Power” and is meant to reflect the knowledge that you as operators have attained over your years of service in the industry while at the same time illustrating that knowledge and gaining knowledge is never ending. In my job with Saint John Water, I have the opportunity to train Co-op students taking the Chemical Technology Program at NBCCSJ about the sampling and testing methods used in a water and wastewater laboratory. I jokingly tell them that whenever approached by a manager and asked “How are things going?” to reply with “Good, great, learning something new every day.” When you stop to think about it, isn’t this the case in both our professional and personal lives...continually gaining knowledge? Operators are exposed to new ideas, concepts and technologies on an ongoing basis and must adapt by becoming knowledgeable and proficient in them. The gaining of knowledge can be as complicated as the most sophisticated piece of equipment or as easy as networking with fellow operators. The MPWWA Seminar offers up the opportunity for us as operators to discuss the workings of our systems while at the same time learning about different or related systems in the Atlantic region.

The Seminar Organizing Committee has again this year assembled a varied lineup of workshops that cover both drinking water and wastewater topics. One of the highlights of the training seminar for both operators and suppliers will be the Equipment Display and Trade Show. This event, considered to be the premier event of its kind for our industry in Atlantic Canada, gives operators the opportunity to gain knowledge on up to date products, equipment and services available in our industry. All too frequently communications with our suppliers involving equipment or parts takes place via email or over the telephone and the Trade Show offers up the chance to put a “face to the name” that we have been dealing with. Consider this a must to take part in!

Once again this year, the MPWWA will be offering support to a local charity by means of our 7th Annual Charity Silent Auction. As was the case at our inaugural event in 2010, the Community Autism Centre Inc. (CACI) families will be the beneficiary of the generosity of the membership. CACI provides education, guidance and support to children and families living within the Autistic Spectrum Disorder (ASD) in Saint John and the surrounding area. Being the parent of an autistic child and having had many dealings with Deb McDonald and the staff at CACI, I truly admire their dedication to each and every child and family. In sitting around our Board of Directors meetings, the Board is totally blown away by the support that our membership and suppliers have provided to these charity auctions. Over the past 6 years, the MPWWA membership has turned over in excess of \$25,000 to worthy charitable organizations in Nova Scotia, Prince Edward Island and New Brunswick. Please make it a point to look over the variety of items that have been donated and bid - often.

As you can see by the information in this brochure, whether it be taking in the informative workshops, going on 1 of the 3 offered tours, learning about the latest in technology at the Trade Show or networking with fellow operators, the 2016 Annual MPWWA Training Seminar has something for everyone.

I strongly encourage you to book your spot and register early!

See you in Canada’s oldest incorporated city, Saint John in April!



## COMPANION PROGRAM

### Sunday, April 17th:

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

### Monday, April 18th:

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 'Community Autism Centre Inc.'  
10:00 - 12:30 PM: Crafting/ Art Session  
12:30 - 1:45 PM: Lunch  
1:45 - 3:00 PM: Guided Tour of Historic Saint John  
3:00 PM: Return to Hotel

### Tuesday, April 19th:

8:00 - 9:30 AM: Annual General Meeting and Breakfast  
9:00 AM - 5:00 PM: Annual Charity Silent Auction  
10:00 - 11:00 AM: Belly Dancing Lessons  
12:00 - 1:30 PM: Lunch on Your Own  
2:00 - 4:00 PM: "Live Life Beautifully" - a Dione Cosmetics Experience & Gift Exchange  
6:00 - 7:00 PM: Reception  
7:00 - 10:30 PM: Banquet and Entertainment

### Wednesday, April 20th:

9:00 AM - 12:00 PM: Self-guided tour of NB Museum  
12:00 - 1:30 PM: Stay-Till-The-End Luncheon

## SEMINAR AGENDA

### Sunday, April 17th

2:00 - 4:00 PM: Board of Directors Meeting  
7:00 - 9:00 PM: Delegate Registration  
7:00 - 10:00 PM: Meet & Greet

### Monday, April 18th

7:30 - 9:00 AM: Delegate Registration  
8:30 - 9:00 AM: Official Opening of the Seminar,  
9:00 - 10:00 AM: Keynote Speaker, *Jason Cyrus*  
9:00 AM - 5:00 PM: Annual Charity Silent Auction in aid of 'Community Autism Centre Inc.'  
10:00 - 10:30 AM: Health Break  
10:30 AM - 12:00 PM: Discussion, *André Chenard*  
12:00 - 1:00 PM: Lunch  
12:00 - 4:30 PM: Equipment and Supply Display (draws and prizes; must be present to win)

### Tuesday, April 19th

8:00 - 9:30 AM: Annual General Meeting and Breakfast  
9:00 AM - 5:00 PM: Annual Charity Silent Auction  
9:30 - 10:30 AM: Choose Workshop A, B, or C - *Information on workshop topics is provided on pages 5 and 6*  
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 (Board of Director's Meeting/Election of Officers)  
1:00 - 4:30 PM: Facility Tours  
6:00 - 7:00 PM: Reception  
7:00 - 10:30 PM: Banquet and Entertainment - *Lucien, Comedian*

### Wednesday, April 20th

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 AM - 12:00 PM: Check Out Time  
12:00 - 1:30 PM: Stay-Till-The-End Luncheon, Closing Speaker, *Representative of NB Department of the Environment*, Charity Auction Cheque Presentation

## HOW TO REGISTER FOR THE SEMINAR

You can use our **ONLINE REGISTRATION** and payment option at [www.mpwwa.ca](http://www.mpwwa.ca)  
(Click on '2016 Annual Seminar' near top right of page)

**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](mailto:contact@mpwwa.ca)



## Jason Cyrus

Speaker, Stage Hypnotist  
and  
Clinical Hypnotherapist



## André Chenard

Director of the Community  
Funding Branch of the NB  
Department of  
Environment and  
Local Government

### KEYNOTE SPEAKER

#### Achieve the Unthinkable

Can one keynote really improve your sales or performance? Absolutely! For the past decade, Jason Cyrus, a world class stage hypnotist, speaker and clinical hypnotherapist, has been teaching audiences how to get and stay motivated.

Personally or professionally, we all set goals. We all want to reach our goals to succeed in our lives. Whether it be meeting a monthly quota, losing 20 pounds, quitting a nasty habit or furthering our training and education, we all want to improve. We know the path, we know how to get there. We have the desire. We have the passion. We want to do it. What is standing in the way of reaching our goals? In this entertaining and engaging keynote, Jason shares personal experience and insight as he explains what's holding most people back from accomplishing their dreams - along with scientifically proven ways to overcome them. The truth is, there is a way to reach our goals, accomplish our dreams.

Some people think that getting what we want, getting what makes us happy is reserved for the highly talented and highly educated men and women. This is simply untrue. However, successful people are unique. What sets them apart from everyone else is their ability to practice visionary thinking. Those who can imagine happiness, success and a better world are free to shape the future. Those who cannot only wonder what it would be like. Find out why corporate companies, major universities, and non-profit groups alike are calling his presentation "life-changing!" If you can dream it, you can achieve it!

### DISCUSSION

#### Improvement of Knowledge in the Water and Wastewater Industry - Past, Present and Future

The 36 years of the Maritime Provinces Water and Wastewater Association improving knowledge – where is it going?

André Chenard will take the Association membership back to the 1970's and paint the picture of the situation in the water and wastewater industry at that time, which you can well imagine was significantly different than what it presently is. Andre has 35 years of experience with the New Brunswick Department of the Environment and has had involvement with the MPWWA since 1987, having served as the New Brunswick provincial representative for over a decade. His presentation will outline the need at that time for the creation of an association that was designed to impart knowledge to operators in Atlantic Canada through training workshops, seminars and networking opportunities and how it has progressed over the past 36 years. The advancement of technologies, the increased stringency of regulations and their enforcement in both the water and wastewater sectors have dictated that operators in our region must continually gain knowledge to keep up with these changes. This presentation will be a historical review of the success stories of the Association when it comes to training and improving knowledge in the water and wastewater industry in Atlantic Canada. When you take a step back and look at where the industries were then and where they are now, we have come a very long way. Operator certification, the advancement of automation, technology, increased levels of accountability & reporting criteria to name a few, have all evolved over the course of the existence of the MPWWA. With the increasing levels of environmental awareness & public safety consciousness, the water and wastewater industry will need to change and adapt to the needs of its users, requiring operators to advance their knowledge to meet the needs. Drawing on his 35 years of experience, Andre will speculate on what both the Maritime Provinces Water and Wastewater Association and the industry will face in the future.



## EQUIPMENT AND SUPPLY SHOW

Monday April 18th, 2016  
12:00 - 4:30 PM

The MPWWA Equipment and Supply Show continues to be the premier show of its kind in Atlantic Canada. Monday afternoon at the seminar will again find our members taking the opportunity to meet face-to-face with industry providers, enthusiastically checking-out the new and/or improved technologies and supplies that may assist them in their day-to-day work.

The Equipment and Supply Show is an extremely popular and critically important part of our annual seminar. The registration fees paid by the companies for booth space significantly offset the overall cost of hosting the seminar, which allows for reduced delegate registration fees. In appreciation of their participation, please take the time to not only check-out their products, but also thank them for their continued support.

So, attend the show, have fun, and “Talk Business”. . . That is what it’s all about!



### WHAT MEMBERS HAVE TO SAY

***“The trade show provides a great opportunity to put a face to a name that we primarily know as an email address or phone number. It’s also a great place to learn of new innovations and products which can make our jobs as operators more efficient and cost effective. Every conference trade show has something for somebody.”***

*Rod Comeau, Water Operator, Saint John Water*

***“Attending the trade show is a great learning experience to meet new vendors. As an operator, the majority of our communication with suppliers is done over the phone and the trade show offers an opportunity to put a face to a name and see equipment that each vendor has to offer. The MPWWA Seminar provides an opportunity to meet with your peers, discuss different or similar work practice issues and share ideas.”***

*Bruce Slovitt, Wastewater Pumping Operator, Saint John Water*

***“Hands on decision makers from all corners of the Maritimes fill the show every year. I always try to make this one.”***

*Jeff Jensen, Mueller Canada, MPWWA Member/Volunteer since 2002*

***“It is one thing to email or talk to someone on the phone about a piece of equipment and in this world of instant communication, we lose the one on one face to face contact. The organizing committee has always made the face to face contact possible between operator and supplier at the conference. Seeing what’s new or improved helps us achieve higher standards and keeps us moving forward in our field. It is always a highlight of the conference.”***

*Mike Montgomery, Operator, Eastern Wastewater Treatment Plant, City of Saint John*

## FACILITY TOURS

**IMPORTANT:** Safety footwear is required for all facility tours.



### Rothesay Water Treatment Plant

The first of its kind for municipal drinking water treatment in Canada, the Town of Rothesay's GE ZeeWeed® microfiltration plant, commissioned in 1996, continues to service the community today. The 2,300 m<sup>3</sup>/day ZeeWeed groundwater treatment plant, located on McGuie Road, includes an iron oxidation (aeration) step followed by potassium permanganate injection for the oxidation of manganese. This is followed by the microfiltration stage which retains the oxidized particles in the membrane process tank. The plant pumps water through 2 storage reservoirs to the distribution system.



### Eastern Wastewater Treatment Facility

The Eastern Wastewater Treatment Facility, commissioned in August 2011, is the cornerstone of the Saint John Harbour Clean-up initiative, and was designed to treat raw sewage from outfalls that discharged directly into the Bay of Fundy. The EWWTF is a conventional activated sludge wastewater treatment facility and is the largest secondary wastewater treatment facility in Atlantic Canada. It is designed to treat an average daily wastewater flow of 35,000 m<sup>3</sup>, with a peak daily flow of 80,000 m<sup>3</sup>.



### Clow Canada Inc.

Clow Canada manufactures fire hydrants, iron body valves, steel valves and AWWA gate valves. Touring this plant will give MPWWA members exposure to the manufacturing of these pieces of equipment encountered, daily, in their work environments.

## WORKSHOP TOPICS

**Tuesday, April 19th**

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

**Workshop A: Fire Hydrant Inspection.** Fire hydrant inspection is a vital part of fire hydrant preventative maintenance programs. An informative session will include types of fire hydrants found in Atlantic Canada, uses of the fire hydrants and hands-on step-by-step procedure for suggested fire hydrant inspection. Using a demonstration fire hydrant, a full step by step procedure relative to fire hydrant inspection will be completed. The ability to inspect for leaks with hydrant open and closed will be discussed. Presenter: Jeff Jensen, Mueller Canada

**Workshop B: Multibeam Hydroacoustics.** This presentation will explore the use of cutting edge multibeam hydroacoustics technology to generate accurate 3D maps of sludge volume in lagoons and sediment basins. A brief overview of the technology will be followed by a case study of Stratford, PE where this exciting new technique was used recently to accurately depict sludge digestion of the recently installed Blue Frog system technology. The goal of this presentation is to introduce participants to this new technique and explore the kinds of valuable management information that can be gleaned from the data collected. Presenter: Josh Clark, Terrapin Water & Scott Milne, Milne Technologies

**Workshop C: (Atelier Français) Identification, évaluation et réduction de la toxicité des eaux usées: Les outils écotoxicologiques.** Les réglementations provinciales et fédérales intégrant des normes ou critères chimiques, microbiologiques et toxicologiques afin gérer les risques pour la santé et l'environnement. Ainsi, les analyses microbiologiques et chimiques sont utilisées afin de mesurer la présence de pathogènes et des concentrations des certains contaminants ou agents toxiques qui peuvent présenter un risqué pour la santé ou l'environnement. Les analyses toxicologiques (tests de toxicité) réalisées directement sur les eaux usées mesurent les effets de l'ensemble du mélange. Présentateur: Dr. Pierre Yves Robidoux, B.Sc, M.Sc.A, Ph.D, Operations Manager - Division des services spécialisés, AGAT Laboratories

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

**Workshop D: Better Pump Station Monitoring to Lower Energy Costs, Maintenance and Design Errors.** Lift stations are generally upgraded for two reasons: To improve reliability and to get better information. Reducing the energy bill is yet another reason that should also be considered. This workshop will explore the various aspects of how a pump station could be monitored to maximize both the efficiency and cost of lift station operations. Presenter: Benoit Beaudoin, President, MAID Labs Technology

**Workshop E: The City of Saint John's "Safe, Clean Drinking Water Project" – The Benefits, Challenges, Innovations and Technologies.** Saint John's drinking water project is one of, if not the largest municipal project in the history of New Brunswick with a price tag of approximately \$200 million. The selection of the consortium of companies to carry out the work utilized the "private-public-partnership" (P3) procurement approach. The overall project includes 13 components, including a new groundwater source for West Saint John. The presentation will examine the groundwater exploration and testing for the new well field and the water quality drivers for the project and the methods that will be utilized to meet these goals. We will review some of the more interesting treatment technologies to be used at the new WTP including the mechanical waste treatment system. Presenter: Dean Price, P. Eng., Saint John Water

## WORKSHOP TOPICS, continued from Page 5

**Workshop F:** *The City of Saint John, Eastern Wastewater Treatment Plant.* The Eastern Wastewater Treatment Plant is the cornerstone for the Saint John Harbour Clean-up, which was a major initiative to intercept and treat raw sewage from outfalls that discharged directly to the Bay of Fundy. The Harbour Clean Up initiative also required the construction of 24 new lift stations and forcemains/collector sewers to transport the untreated sewage to the newly constructed wastewater treatment plant. Commissioned in 2011 and designed to treat an average daily wastewater flow of 35,000 cubic meters, with a peak daily flow of 80,000 cubic meters, the EWWTF is a conventional activated sludge wastewater treatment facility that is the largest secondary wastewater treatment facility in Atlantic Canada. The treatment plant provides preliminary treatment in the form of screening and grit collection, sludge dewatering, primary clarification, secondary treatment in the form of aeration and secondary clarification and disinfection via ultraviolet light. This workshop will outline the conditions leading up to construction of the facility, the need for its construction, the gradual introduction of sewage from different areas of Saint John and present day operations. Presenter: Mike Montgomery, Treatment Plant Operator, Saint John Water

**Wednesday, April 20th**

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

**Workshop G:** *Wireless Mesh Networks.* One of the challenges that is the focus for municipalities in many parts of the world is water leak detection, since the loss of water resources can be critical. This presentation will discuss the outcomes and learnings from Acoustic Logger (N-Logger) pilots undertaken with several municipalities using various deployment and data gathering strategies. Presenter: Aryn Bhimani, President, Hetek Solutions Inc.

**Workshop H:** *Activated Sludge Process Optimization through Laboratory Analysis.* The goal of this presentation is to describe typical activated sludge treatment laboratory testing and how it relates to process control parameters. The presentation will focus on process testing and interpreting results. Although regulatory agencies focus largely on final effluent discharge results, without good sample collection techniques, laboratory testing and interpretation of results throughout the treatment process, final effluent quality will be compromised. Presenter: Shawn Taylor, B.Sc., Halifax Water

**Workshop I:** *(Atelier Français) Supervisory Control and Data Acquisition (SCADA).* Le but de cette présentation est d'introduire les opérateurs à l'importance d'avoir un système SCADA bien faites et qui rencontre leur besoin. Présentateur: Marcel Bélanger and Patrick Doiron, Bélanger Electric

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

**Workshop J:** *Supervisory Control and Data Acquisition (SCADA).* This workshop will introduce operators to the importance of having a properly set up SCADA system that meets their needs. It will define SCADA along with illustrating its benefits. The components of the system will also be looked at including data tags (discrete & analog), definitions (PLC, RTU), communication and SCADA host. Presenter: Marcel Bélanger and Patrick Doiron, Bélanger Electric

**Workshop K:** *Protect Your Municipal Collection System with DAF (Dissolved Air Flotation) & MBBR (Moving Bed Biofilm Reactor).* By using DAF & MBBR technologies, clients can meet and in many cases, exceed existing regulatory discharge limits. DAF units are very compact making a retro-fit to an existing manufacturing facility extremely easy, they are manufactured from polypropylene ensuring longevity and corrosion-free operations and they are expandable; as the manufacturing facility grows, so can the DAF unit. DAF units are very economical to operate; require very little electricity, chemistry, and can reduce haulage costs immensely. Presenter: Steven Priestley, Director of Special Projects, BioMaxx Wastewater Solutions Inc.

**Workshop L:** *Wastewater Retention/Detention.* Since most municipalities in the Maritimes are now implying "Run-Off" wastewater bylaws for new development, underground chamber retention/detention systems may be the most innovative cost effective solution. This presentation would be a great opportunity for operators, municipal representatives and contractors to understand the basic technology behind these systems. Presenter: Eric Landry, B.Sc. Eng., ADS Canada.



## MEET & GREET

This is a great opportunity, on Sunday evening, 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 of hors d'oeuvres and finger foods.

## ANNUAL GENERAL MEETING & BREAKFAST

Reports from the Board of Directors will be provided and nominations and elections held for Zone Representatives. This is a great opportunity to 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 entertainment by comedian, 'Lucien,' New Brunswick's Blue-Collar Philosopher, a character created by New Brunswick theatre artist Marshall Button. As a mid-career, suitably disgruntled, low-skilled mill worker, Lucien is the working-class New Brunswick (and Canadian) everyman. A speaker of two languages, he is proficient in neither. Rather, his tongue is an amalgam of wit and slang, frustration and hope, English and French (what he terms "frenchish/franglais"). Staged over 1500 times now for audiences across North America and in 2006 for the troops in Afghanistan, Lucien is an ambassador who is recognized outside the province as a humane champion of the men and women in this country who work in the mills, the mines, and the woods. He has also made a number of guest appearances on national radio and television, where he has been a favourite on *Sounds Like Canada*, *Sunday Morning*, *Morningside*, *Royal Canadian Air Farce*, and *Sportsnet*. With his folksy charm and wit, Lucien is able to provide a snapshot of what is going on in the hearts and minds of many Canadians. Come enjoy a little bit of New Brunswick Pulp Fiction.

## CHARITY AUCTION

This year we are pleased and excited to be supporting 'Community Autism Centre Inc,' (CACI) that provides a safe and inclusive environment for the child with Autism Spectrum Disorder and his/her family, while promoting an individual approach to meet cognitive, social, physical, and spiritual challenges through access to resources, education, community collaboration, advocacy and support. Please consider participating in our 7th Annual Charity Auction and help make it a huge success! Visit CACI online at <http://cacisaintjohn.webs.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 including a cash prize for Staying-Till-The-End. We will also make an official financial presentation to this year's Charity Auction recipient 'The Community Autism Centre Inc. (CACI).' It's also our chance to say "So long, until the next time we meet." See you there!

## ACCOMODATIONS

### Delta Brunswick Hotel Contact Information

(Please ask for the **Maritime Provinces Water & Wastewater Association rate: \$145.00 single/double occupancy (Delta Room); \$165.00 single/double occupancy (Delta Premier Room)**  
**Block of rooms available until March 18, 2016**

Address: 39 King Street, Saint John, NB E2L 4W3  
Phone: 1-506-648-1981 Ext 501 - this will direct the guests to the reservation line  
Toll Free Room Reservations: 1-888-236-2427 (24 hours)

Visit our website for further information: [www.mpwwa.ca](http://www.mpwwa.ca)

