

# GO with THE FLOW

THE OFFICIAL PUBLICATION OF THE ATLANTIC CANADA WATER AND WASTEWATER ASSOCIATION

## YOUNG PROFESSIONALS SEMINAR

Coming Soon at the ACWWA Annual Conference



PW# 40065075  
Return undeliverable Canadian addresses to lauren@kelman.ca

**INSIDE:**

- Why Should You Hire a Civil Engineering Technologist?
- AWWA One Operator Scholarship



# PROVEN PERFORMANCE. NATIONWIDE AVAILABILITY.

Dulux® Paints now carries PPG Protective and Marine Coatings (PMC) products including Amercoat® branded products across Canada.

To learn how Sigmaglide 890 can eliminate down time on your wastewater clarifiers please call us on 1-888-9PPGPMC or go to [www.ppgpmc.com/infrastructure/Waste-Water.aspx](http://www.ppgpmc.com/infrastructure/Waste-Water.aspx)

With more than 250 locations, Dulux Paints is the largest company-owned stores network in Canada. PMC products are now available at store and dealer locations nationwide. Technical experts are available to understand your needs assist with specifications, and provide comprehensive sales support across Canada. Our wide distribution network and highly experienced staff allows us to deliver consistent, reliable service.



**PPG Protective & Marine Coatings**  
Bringing innovation to the surface.™



© 2016 PPG Industries Inc. All Rights Reserved. Dulux is a registered trademark of AkzoNobel and is licensed to PPG Architectural Coatings Canada Inc. for use in Canada only. The PPG Logo and Amercoat are registered trademarks of PPG Industries Ohio, Inc. Bringing innovation to the surface is a trademark of PPG Industries Ohio Inc. Sigma Coatings is a registered trademark of PPG Coatings Nederland B.V.

[www.ppgpmc.com](http://www.ppgpmc.com) | 1-888-9PPGPMC | [PMCMarketing@ppg.com](mailto:PMCMarketing@ppg.com)

# YSI ProSample

User-Friendly Design. Unmatched Technology.

Fully automated portable sampler for wastewater, surface water and industrial treatment markets



5001 Wiped Turbidity Sensor

9800 Pressure Transducer

SQ Waste Water Sensor

AV Sensor

TB3 Rain Gauge



[www.hoskin.ca](http://www.hoskin.ca)

Vancouver | Burlington | Montréal



CANADA



For over 55 years Gorman-Rupp Canada has manufactured high performance, high quality pumps and pumping systems required for lasting service in the municipal, water, wastewater, sewage, industrial, construction, petroleum, fire and OEM markets.



A proud distributor of Gorman-Rupp product for more than 55 years.

100 Upham Drive  
Truro, NS B2N 6W8  
TEL (902) 895-2885

1475 Woodstock Road  
PO Box 1263  
Fredericton, NB E3B 5C8  
TEL (506) 444-0344

38 Dundee Avenue  
Mount Pearl, NL A1N 4R7  
TEL (709) 726-4344

13A Gatehouse Road  
Deer Lake, NL A8A 1L4  
TEL (709) 726-4344

# PACKAGED FILTER SYSTEMS

## Optimize your filter performance

Granular media filtration is a specialized process. A site-specific approach to filter design is critical to ensure sustainable filter performance.

AWI's packaged filter systems are custom engineered to suit the unique requirements of each project. Our stainless steel *Phoenix Underdrain System* guarantees uniform backwash and air scour distribution, increasing the service life of your filter media bed. Following installation, our operator training and technical support helps you maintain your filters in optimum condition.

Contact one of our knowledgeable filtration specialists to learn how AWI's approach to filter optimization can help you reach your filter performance goals.



Phoenix Underdrain System



Filter Assessments & Pilot Studies



Filter Media Design & Supply



Canada **403-255-7377**  
USA **801-566-1700**  
[awifilter.com](http://awifilter.com)



## Atlantic Canada Water & Wastewater Association

Box 28141, Dartmouth, NS B2W 6E2  
Phone: 902.434.6002 Fax: 902.435.7796  
contact@acwwa.ca www.acwwa.ca

### Section Office

**ACWWA Executive Director**  
Clara Shea contact@acwwa.ca  
902.434.6002 F: 902.435.7796

### Board

**Chair**  
Mike Chaulk, P.Eng  
mikec@cbcl.ca  
902.223.6683 F: 902.423.39384

### Past Chair

John Eisnor, M.A.Sc., P.Eng.  
john.e@halifaxwater.ca  
902.490.1930 F: 902.490.1584

### First Vice-Chair

Amy Winchester, M.A.Sc., P.Eng.  
amyw@cbcl.ca  
506.633.6650 F: 506.633.6659

### Second Vice-Chair

Jennie Rand, PhD, P.Eng.  
jennie.rand@acadiau.ca  
902.585.1519 F: 902.585.1067

### Secretary-Treasurer

Rob Gillis, P.Eng.  
rob.g@halifaxwater.ca  
902.497.1740

### WEF Delegate (2014–2017)

Gary Chew  
gary.chew@sansom.ca  
902.895.2885 F: 902.893.7584

### AWWA Director (2017–2020)

Graham Gagnon, Ph.D., P.Eng.  
graham.gagnon@dal.ca  
902.494.3268 F: 902.494.3108

 www.kelmanonline.com  
Tel: 866-985-9780  
Fax: 866-985-9799

Managing Editor: Monique Doyle  
Design/layout: Kiersten Drysdale  
Marketing Manager: Darrell Harris  
Advertising Co-ordinator: Jenna Matthes



# TABLE of CONTENTS

## FEATURES

<a href="#">Coming Soon: 2017 Annual Conference in Charlottetown</a>	17
<a href="#">Why Should You Hire a Civil Engineering Technologist?</a>	22
<a href="#">YP Committee Update</a>	25
<a href="#">AWWA One Operator Scholarship</a>	27
<a href="#">Upcoming ACWWA Courses</a>	29
<a href="#">Reminder: ABEA 'Annual ACWWA Conference' Attendance Grant</a>	33
<a href="#">Utility News – Halifax Water</a>	35



## DEPARTMENTS

<a href="#">Message From the Chair</a>	6
<a href="#">AWWA Director's Report</a>	8
<a href="#">WEF Delegate's Report</a>	10
<a href="#">Membership Corner</a>	12
<a href="#">ABEA News</a>	15
<a href="#">News &amp; Notes</a>	31
<a href="#">Professional Directory</a>	37
<a href="#">Reach Our Advertisers</a>	38



**Magazine Chair:**  
Lindsay Wilcott  
506.633.6650  
lwilcott@cbcl.ca



This document is printed on paper certified to the standards of the Forest Stewardship Council® (FSC®).



## See you in Charlottetown

Across Atlantic Canada, the 2017 construction season has included a large number of water and wastewater infrastructure projects. These projects have included features such as linear works, reservoirs, pumping stations, and treatment facilities – many of which are a direct result of the Clean Water and Wastewater Fund. With the benefits of these projects in place or underway, our industry and the public benefit. This includes benefits that can be taken in at the ACWWA Annual Conference

“With new projects come new technologies, applications, products, research, and overall industry knowledge that combines in a local perspective only at the annual conference.”

in Charlottetown from October 15 to 18. With new projects come new technologies, applications, products, research, and overall industry knowledge that combines in a local perspective only at the annual conference. Beyond a diverse

technical program, and thanks to the ABEA, the conference includes the largest industry trade show in the region, which is a chance to catch up on trends and changes in the industry.

The conference in Charlottetown will mark the end of my term as ACWWA Chair. It’s been a great experience and I’m proud of our section and the people that keep it running. I’d like to offer my sincere thanks for the opportunity and look forward to continuing to help out in the future.

When fall returns and vacation season is over, it can be like the beginning of a new year. I would like to encourage our membership to use that time to think about starting something new, like joining an ACWWA committee or volunteering in any way. The association exists only because of the strength of our volunteers. We provide critical services to the industry like education and training, but we’re always looking for new people to get involved to help in the development of many initiatives that require extra time. From things like membership coordination, Young Professionals, media and marketing, there are many different ways to get involved with ACWWA. If you would like to contribute to the section, or see an area that needs improvement, please contact the section to get involved. 



## Find your BLANKET!

**with Markland’s Automatic Sludge Blanket Level Detector**



- Helps you:**
- Operate de-sludge pumps only when necessary
- Prevent carryover
- Optimize feed density
- Reduce Energy Use

**Contact Markland today.**  
 Call **905-873-7791 • 1-855-873-7791** in NA  
[markland@sludgecontrols.com](mailto:markland@sludgecontrols.com)

---

**MARKLAND**  
Specialty Engineering Ltd.

A half century of service to the water and wastewater industry

[www.sludgecontrols.com](http://www.sludgecontrols.com)



Certified to  
NSF/ANSI 61

# Filtration Media

The only NSF certified producer of  
silica filtration media in Eastern Canada



To learn more, contact  
**Travis Richard, P.Eng**  
[trichard@shawresources.ca](mailto:trichard@shawresources.ca)

**902-717-3847**  
[shawresources.ca](http://shawresources.ca)



## Looking forward to contributing to the section as AWWA Director

Welcome to the Fall 2017 edition of the ACWWA *Go With the Flow* magazine. I am pleased to have an opportunity to make a contribution to this excellent publication that continues to help connect you with the Atlantic Canada water and wastewater industry.

At the AWWA Annual Conference and Exposition (ACE) in June 2017, I had the opportunity to be officially welcomed as an AWWA Director representing our Atlantic Canada section. I am honoured to serve our section in this capacity. Over the

“Over the past few months, I have had the opportunity to shadow Jamie Hannam at various AWWA events in preparation for this Directorship.”

past few months, I have had the opportunity to shadow Jamie Hannam at various AWWA events in preparation for this Directorship. While I gained a great deal of AWWA insight, I was also able to see firsthand what a tremendous individual and resource Jamie is to our drinking water community. I am truly

humbled by Jamie's leadership in AWWA and would like to thank him for his service and leadership to our water community here in Atlantic Canada.

I have attended ACE on many occasions in my capacity as a Professor at Dalhousie University. I often attend these meetings to present new findings from our research program, attend technical sessions and committees, or to network with colleagues in the industry. Now as a Board member, I am starting to appreciate the tremendous resource that AWWA offers its members. For example, the **Water Equation** is a new program that offers Water Operators financial resources to receive training and propel their careers in new directions. As the new AWWA slogan states, “No Operator, No Water!”, I would encourage operators to consider this program to see how AWWA can help your career grow.

I am looking forward to seeing you this fall at the ACWWA Annual Conference in beautiful Charlottetown, PEI. I look forward to learning in our technical sessions and from our exhibitors. I will be hosting AWWA Vice President Kevin Bergschneider at our conference and we would both welcome the opportunity to network with our AWWA colleagues and find ways to help you grow with our organization.

Again, I am honoured to serve our section and I look forward to seeing you in PEI! ☺

**NEMO® Progressing Cavity Pumps**  
Designed for Full Service in Place!



- Full Service in Place
- Service with out removing the pump from the system
- Rapid disassembly and assembly
- Easy maintenance and cleaning
- Upgradeable and compatible with existing NEMO® pumps
- Long service life
- Economical

**NETZSCH**

NETZSCH Canada, Incorporated  
500 Welham Road  
Barrie, ON L4N 8Z7  
705-797-8426  
ntc@netsch.com  
www.pumps.netzsch.com



# WE ARE **Bi**Maxx ENVIRONMENTAL



- Sanitary, Storm & Industrial Flow Monitoring
- Smoke Testing
- Leak Detection
- Automatic Wet Well Washing Equipment
- Package Wastewater Treatment Equipment

## ASK US ABOUT OUR FLOW MONITOR LEASING PROGRAM

**Wet Well Washer System Before, During and After Processing...**



# BiMaxx ENVIRONMENTAL

**709.221.3701**  
 13 Sycamore Drive, Mount Pearl, NL A1N1P4  
[www.biomaxx.ca](http://www.biomaxx.ca)



## Is all grit created equal?

Conventional design guidelines specify that treatment plants target removal of solids larger than 210 µm, but wastewater grit can be as small as 50 µm. If you're not removing fine grit then you're paying for it in abrasion damage, clogging and increased maintenance.

**Challenge convention:** visit [hydro-int.com](http://hydro-int.com) or call 866.615.8130

Hydro International is represented by **Sansom Equipment**





## A fond farewell

This month, I wanted to do a reprint of a WEF member association article on a program that WEF and some of its partners have started to encourage and build green infrastructure. I am thinking if there is enough interest, we can encourage WEF to do a Canadian format of this program and have it as one of our MA programs. Give it a read and if you wish, send me some feedback.

Also, on another note, this will be my last newsletter as WEF Delegate for ACWWA. I have done 10 years in total of this position and am pleased to say that after the ACWWA conference in Charlottetown, PEI in October, Dave Galbraith will be taking the wheel to carry forward as your WEF delegate. Thanks for a lot of great years and the support of all the ACWWA and the water/wastewater community. 🙏

From **wefhq** Leading-edge updates from the Water Environment Federation

# Building better water quality one job at a time

National Green Infrastructure Certification Program celebrates a first year of successes

By Pallavi Raviprakash

The National Green Infrastructure Certification Program (NGICP) has two main purposes: to encourage water quality improvements via green infrastructure (GI) projects and to create jobs for those who know how to build them. NGICP took several major steps in the past year toward achieving these goals and has several more in the works.

Initiated under the leadership of DC Water and the Water Environment Federation, NGICP sets certification standards for green infrastructure (GI) construction, inspection, and maintenance workers. The program takes a different tone than most GI and water quality programs. It focuses on the “how” of GI. The program’s certification establishes green workforces to give utilities and private customers confidence in their choice of landscape and construction providers.

It also provides a credential to certified workers that meets international best practice standards. And because the program is national in scope the same certification will apply from coast to coast, providing a “portable” credential that will expand beyond the U.S. eventually.

### Major development

During the development phase of the program in 2016, NGICP took several major steps to carefully conceive a nationally relevant certification program. WEF convened 14 founding partners to create the necessary governance and foundational materials.

Representatives from the founding partner organizations participated in the Technical Advisory Group (TAG) and the Strategic Advisory Group (SAG). The TAG oversees the development of the program’s technical components, while the

SAG develops the vision and the implementation plan for the national rollout of the NGICP. A separate Certification Council oversees the program’s governance elements.

First, these groups conducted a job task analysis survey to determine what components the program needed to cover. They fed these survey results into an exam blueprint, which led to an official curriculum. Training support materials came next as the first exam was developed.

### First exam

This progression led to the inaugural NGICP exam on Dec. 13, 2016. Seven locations – corresponding to many of the founding partners – hosted the exam for more than 90 applicants.

Exam locations included:

- Washington, D.C
- Baltimore, Md.
- Rockville, Md.

- Harrisburg, Pa.
- Pittsburgh, Pa.
- Fairfax County, Va.
- Milwaukee, Wi.

The three-hour exam tested applicants on their knowledge of entry-level green infrastructure fundamentals, construction methods, inspection techniques, and maintenance procedures in accordance with the Exam Blueprint.

### First class and continued improvement

On Jan. 26, 2017, NGICP announced its first class of 62 certified individuals who passed the exam.

Now, NGICP will use this year to refine policies and procedures and continue to build the exam database.

For 2017, training and exams will be available only through the NGICP founding partner organizations. Plans are underway to offer additional NGICP training sessions and exams in the spring and fall. The first exam date in 2017 was set for June 6 and the second in November (specific date TBD).

### National debut

In 2018, NGICP will celebrate another milestone: the national launch of the program. This expansion will broaden the partnership and enable other utilities and municipalities to join. Affiliate partners could include nongovernmental organizations, workforce centers, government entities, trainers, and training providers who share a common goal of developing a of GI workforce.

Through this nationwide program certified individuals can set foot on long-term and sustainable path for living wage jobs – often in dense, urban areas where such opportunities can be scarce. By design, these are the same communities where utilities are investing in GI projects.

NGICP will help to ensure a beneficial cycle of employment, water quality improvement, and community development. The workers benefit from employment. The utilities benefit from low-impact, distributed stormwater management. The community benefits from the ancillary advantages of GI such as more green spaces and neighborhood beautification as well as air quality and habitat improvements.

For more background on NGICP as well as the latest news, visit [www.ngicp.org](http://www.ngicp.org).

**Pallavi Raviprakash**, Technical Programs Manager at WEF has provided technical support on several stormwater initiatives at WEF. She has been involved with the development and management of the NGICP. She has over ten years of experience working in the water resource field, both in the private consulting and non-profit worlds, and holds a bachelor's and master's degree in Environmental Engineering.

The information provided in this article is designed to be educational. It is not intended to provide any type of professional advice including without limitation legal, accounting, or engineering. Your use of the information provided here is voluntary and should be based on your own evaluation and analysis of its accuracy, appropriateness for your use, and any potential risks of using the information. The Water Environment Federation (WEF), author, and the publisher of this article assume no liability of any kind with respect to the accuracy or completeness of the contents and specifically disclaim any implied warranties of merchantability or fitness of use for a particular purpose. Any references included are provided for informational purposes only and do not constitute endorsement of any sources.



### Solving your toughest wastewater challenges.

Clogging and “ragging” are systems problems. KSB takes these on with an end-to-end approach that covers pump station design, solids separation, hydraulics and automation.

Each wastewater plant is unique, every clog is different. KSB solves these system-wide problems with experience, perspective, and innovative technologies that minimize downtime and improve operational efficiency.



Next generation AMAREX KRT now available

**Conquer the Clog today. Contact Us at:**

[info@ksbcana.com](mailto:info@ksbcana.com) ■ [www.ksb.ca](http://www.ksb.ca)

➤ **Our technology. Your success.**

Pumps ■ Valves ■ Service





## Fall update

### Welcome new members!

A warm welcome to our new members over the past few months:

Name	Company	
Meghan Rafferty	Town of Mahone Bay Water Utilities	AWWA
Melissa Healey	Halifax Regional Water Commission	AWWA
Marinko Pavlovic	Connors Bros.	AWWA
Kevin Gray	Halifax Regional Water Commission	AWWA
Elizabeth Casey	Exp Services	AWWA
Steven Stewart	Charlottetown Water & Sewer Utility	AWWA
Mark Feener	Halifax Regional Water Commission	AWWA
Michael Pigott		AWWA
Dave Redden	Dalhousie University	AWWA
Greg Pope	UA Local 56 Training Centre	AWWA
Gerald Martin		AWWA
Upper River Valley Hospital		AWWA
Bill Russell	Upper River Valley Hospital	AWWA
Charles Henderson		AWWA
Gilles Richard	Université de Moncton	AWWA
Cedric Williams	Halifax Water	WEF
Michael Edgar	Halifax Water	WEF



Congratulations to **Gino Pace** (NSCC) for winning a \$50 gift card of choice for referring a new member! 🎉

As of August 11, 2017,  
 Total AWWA members: **435**  
 Total WEF members: **106**



# BIBBY-STE-CROIX

from concept to completion

Design by Robert Scullion







**BIBBY-STE-CROIX** 1757 Burlington Street East, Hamilton, Ontario L8H 3L5  
 T: 905.312.4776 • Toll Free 1.800.982.5682 • F: 905.312.1434 • [www.bibby-ste-croix.com](http://www.bibby-ste-croix.com)

Made in Canada.



# Get Rewarded

## Tell a Colleague About AWWA



**American Water Works  
Association**

*Dedicated to the World's Most Important Resource®*

You know AWWA provides the best technical resources and networking opportunities in the water sector. Refer a colleague and get rewarded for each person who joins. More members mean more connections and resources for you!

Learn more at [www.awwa.org/getrewarded](http://www.awwa.org/getrewarded)



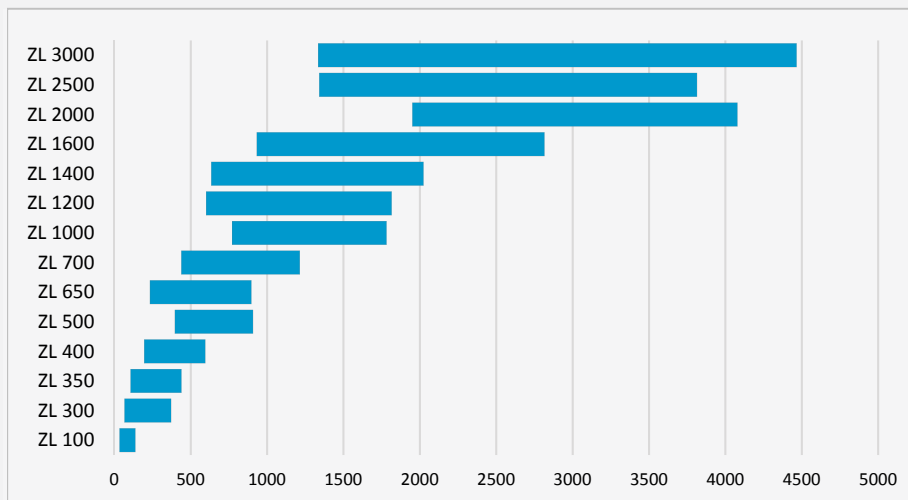
## THERE'S A NEW KID IN TOWN!

### Atlas Copco introduces its new ZL Positive Displacement lobe blower Series.

Atlas Copco's ZL Series – positive displacement lobe blower joins one of the most diverse blower and low-pressure compressor product portfolio available on the market today.

Design to operate in various pressure or vacuum applications, Atlas Copco's new ZL lobe blowers series will not only supply cost efficient solutions to your air supply needs but is also backed the quality and manufacturing experience of one of the largest, reputable compressed air manufacturer in the world.

Available Product Range (Flow Range: m<sup>3</sup>/h):



## POSITIVE DISPLACEMENT LOBE BLOWER

Atlas Copco's **positive displacement blower** is a century long proven, reliable technology. Designed to suit any space, the ZL Series offers a cost effective, silent lobe blower alternative for any new or replacement project.

- Flow range < 4,500 Nm<sup>3</sup>/h
- Pressure range: < 100 kPa(g)
- Sound Levels: <77 dbA @ 1m
- CSA/UL Certified



## COMMITTED TO SUSTAINABLE PRODUCTIVITY

We stand by our responsibilities towards our customers, towards the environment and the people around us. We make performance stand the test of time. This is what we call – Sustainable Productivity.

For more information in regards to our Blowers or Low pressure compressors, please contact Mrs. Marie-Josée (MJ) Quessy at 514.464.7095 or via email at [marie-josée.queissy@ca.atlascopco.com](mailto:marie-josée.queissy@ca.atlascopco.com)

Atlas Copco

## Recognizing your support

As we prepare for the 2017 ACWWA Conference to be held in Charlottetown, PE, we would like to take this opportunity to recognize, and thank, our current ABEA members – without whose continued support we would not be able to contribute to the annual conference in such a meaningful way.

ADS	Canada Pipe	Itron	Neptune	ShadComm
Anthrafilter	Chemline	Integrity Pipeline	NatPro	Shaw Resources
APS	Clow	Products	Novatech	SIGMA
Aqua Data Atlantic	Coastal Controls	Ipex	Nulantic	Soleno
Aqua Rehab	Concord Supply	John Brooks Co.	Omnitech	Source Atlantic
Armour Valve	Denyg Mechanical	K&D Pratt	Opus	Star Pipe
Armtec	EEP	Kemtag	Panel Shop/Pennecon	Sulzer
Avensys	Ford Meter Box	KSB	Pure Technologies	TEKK
Bibby-Ste-Croix	Greatario Engineered	Landmark Structures	Rehau	Urecon
BioMAXX	Storage Systems	Maritime Infrastructure	Royal Building Supplies	Veronics
BirkscoAqualoader	H2Flow	McLennan	Sansom	Veolia
Cambridge Brass	Honeywell	Mueller	Scotia Tech	Wolseley
Chloratech	Hetek	Marathon	Sensus/KTI	Xylem

The annual ABEA AGM will be held Monday, October 16 at 10:00am at the conference facility – we look forward to seeing you there.



[www.abea.biz](http://www.abea.biz)



## WE ARE BiMaxx ENVIRONMENTAL



- Sanitary, Storm & Industrial Flow Monitoring
- Smoke Testing
- Leak Detection
- Automatic Wet Well Washing Equipment
- Package Wastewater Treatment Equipment

### ASK US ABOUT OUR FLOW MONITOR LEASING PROGRAM

**Wet Well Washer System Before, During and After Processing...**



**709.221.3701**  
13 Sycamore Drive, Mount Pearl, NL A1N1P4  
[www.biomaxx.ca](http://www.biomaxx.ca)

# ProSeries-M<sup>®</sup>

## PRECISION CHEMICAL METERING

FOR THE TREATMENT OF MUNICIPAL WATER & WASTEWATER.

PERISTALTIC METERING PUMP

# ProSeries-M<sup>®</sup>

# M-2

PERISTALTIC PERFORMANCE  
AT AN EXCELLENT PRICE POINT

ProSeries-M<sup>®</sup> peristaltic chemical metering pumps can handle the challenges associated with metering the tough often viscous or gaseous chemicals used in the treatment of municipal water and waste water.

#### M-2 Benefits Include:

- **ACCURATE, DEPENDABLE CHEMICAL FEED**  
200:1 Turndown Ratio, up to 17.2 GPH (65.1 LPH). Varies by model.
- **INTEGRATED CONTROLS / USER INTERFACE**  
Local and remote configuration and connectivity to external devices (ie. SCADA).
- **STRAIGHTFORWARD, ALL INCLUSIVE PRODUCT ORDERING**  
Controls, interface, and motor are all built-in. A single model includes all necessary components for installation.
- **BUILT-IN PATENTED TUBE FAILURE DETECTION (TFD)**  
When a conductive chemical is detected, the pump automatically shuts down and energizes an alarm or relay. No false triggering with wash down.
- **ROBUST MOTOR**  
Quiet, Variable Speed, DC drive.
- **MAINTENANCE ALARMS**  
Tube count display & alarm for tube maintenance.
- **RUGGED ENCLOSURE**



## Multi-Tube Technology

### HEAVY-DUTY PERISTALTIC PUMP TUBING

Multi-Tube is a multichannel pump tube assembly designed by Blue-White<sup>®</sup> exclusively for ProSeries-M<sup>®</sup> and Flex-Pro<sup>®</sup> Peristaltic Metering Pumps. Multi-Tubes are engineered for optimum performance, including up to four times longer service life than other pump tube assemblies.



Reminder -  
Coming Soon!

# SERVING



ACWWA Annual Conference  
Charlottetown, PEI

# OUR NATION



PRINCE EDWARD ISLAND CONFERENCE CENTER

October 15 - 18  
2 0 1 7



ATLANTIC CANADA  
WATER & WASTEWATER ASSOCIATION

American Water Works Association  
Atlantic Canada Section





# NOTHING EVEN COMES CLOSE. FOR TOTAL PUMPING COSTS.

S&L Above-ground EVERLAST™ Pump Stations are never submerged—in sewage or the associated pit of submersible pump O&M costs and requirements. EVERLAST™ stations eliminate confined space burdens, pump stocking and replacement, and inconvenient pump clogs several feet underground. These systems feature superior wire-to-water pump efficiencies, operator-convenient QUICKSMART™ touch-screen controls, and the industry's longest pump life and warranty protection. This translates to real savings in O&M labor time and costs—and it's not even close.

✓ **TRANSLATING TO REAL SAVINGS IN PUMP O&M**

{ **Represented Locally by:** Atlantic Purification Systems Ltd. }

{ **Phone:** 902-469-2806 } { **Email:** sales@aps.ns.ca }

{ **FOR MORE INFO VISIT:** [SmithandLoveless.com](http://SmithandLoveless.com) }



**Smith & Loveless Inc.**



## Maximize efficiency in your water application with Danfoss AC Drives

Danfoss VACON® 100 Flow and VLT® AQUA Drives are designed to meet the specific requirements of the water industry. The system independence offered by Danfoss Drives means you can have your drive your way, with no compromise. Our team of water experts is available to help select the best drive solution for your application.

Learn how to maximize your system's potential at [www.danfossdrives.com](http://www.danfossdrives.com)



ENGINEERING TOMORROW



# Conference Highlights

**10.15.17**

SUNDAY

**10:00am** ABEA Golf Tournament at Glasgow Hills Resort and Golf Club  
**1:00pm - 4:30pm** Young Professionals Seminar  
**2:00pm - 5:00pm** Charlottetown - Great Things Happen Here Tour  
**5:00pm - 7:00pm** Young Professionals Mixer  
- Merchantman Fresh Seafood & Oyster Bar  
**7:30pm** Meet and Greet Reception

**10.16.17**

MONDAY

**7:30am** Breakfast available - Continental  
**8:30am** Conference Opening  
- Fuller/Bedell/MacNab Awards ceremony  
- Keynote Address: Speakers Dr. Edward MacDonald & Dr. David Sabapathy  
**10:00am - 11:30am** Technical Sessions  
**11:00am** Companion Program (Lunch/East Coast Art Party) – meet in hotel lobby  
**12:00pm (noon)** Annual General Meeting Luncheon  
**1:30pm - 3:00pm** Technical Sessions (Demos)  
**3:30pm** Top Ops Competitions (Water & Wastewater)  
**5:00pm** Water for People Fun Run Walk  
**5:00pm** Dine on your own – Enjoy the restaurants of Downtown Charlottetown  
**9:00pm** ABEA Hospitality Night at The Old Triangle Pub with Raglan Road Band

**10.17.17**

TUESDAY

**7:30am** Breakfast available - Continental  
**8:00am** ACWWA Best of the Best Taste Test  
**9:00am - 1:00pm** ACWWA / ABEA Tradeshow / Luncheon  
**11:00am** Companion Program (Rum Runner Tour/Lunch) – meet in hotel lobby  
**1:30pm - 4:30pm** Technical Sessions  
**6:30pm** Down East Feast and Entertainment

**10.18.17**

WEDNESDAY

**8:00am** Awards Breakfast - Buffet  
**9:30am - 11:00am** Technical Sessions

# ACWWA Conference Registration

## PART 1 – CONFERENCE ATTENDEE GENERAL INFORMATION

FIRST NAME		LAST NAME		ORGANIZATION				
MAILING ADDRESS				CITY				
PROVINCE	COUNTRY	POSTAL CODE		AWWA MEMBERSHIP NUMBER				
PHONE		FAX		WEF MEMBERSHIP NUMBER				
REGISTERED COMPANION/SPOUSE			EMAIL ADDRESS					
Check box if you would like to be added to the ACWWA email list <input type="checkbox"/>								
Sector	<input type="checkbox"/> Utility	<input type="checkbox"/> Supplier	<input type="checkbox"/> Contractor	<input type="checkbox"/> Consultant	<input type="checkbox"/> Student	<input type="checkbox"/> Academic	<input type="checkbox"/> Regulator	<input type="checkbox"/> Other

## PART 2A – DELEGATE REGISTRATION

Full Conference Delegate – Includes all Meals On or Before Sept. 15, 2017	<input type="checkbox"/> Member – \$475	<input type="checkbox"/> Non-Member – \$525	\$
Full Conference Delegate – Includes all Meals After Sept. 15, 2017	<input type="checkbox"/> Member – \$575	<input type="checkbox"/> Non-Member – \$625	\$
Companion/Spouse Program – Includes all Meals	<input type="checkbox"/> Member/Non-Member – \$275		\$
Student (Includes Meet & Greet, Lunches, Awards Breakfast and Trade Show)	<input type="checkbox"/> Member/Non-Member – \$100		\$
Monday Full Day Pass (Includes AGM Lunch and ABEA Hospitality Reception)	<input type="checkbox"/> Member – \$250	<input type="checkbox"/> Non-Member – \$275	\$
Tuesday Full Day Pass (Includes Trade Show & Lunch and Down East Feast)	<input type="checkbox"/> Member – \$250	<input type="checkbox"/> Non-Member – \$275	\$
Tuesday 1/2 Day Trade Show Pass (Includes Trade Show Lunch)	<input type="checkbox"/> Member – \$125	<input type="checkbox"/> Non-Member – \$150	\$
<b>Register before September 1 and be entered for the early bird draw</b>			<b>Part 2 – Subtotal</b>
			\$

## PART 2B - DELEGATE MEALS & ACTIVITIES NOT INCLUDED WITH REGISTRATION

<b>Sunday, October 15</b>		<b>Please indicate attendance by checking box</b>	
Golf (transportation not included)	Shirt: S__ M__ L__ XL__ XXL__	___ @ \$70 =	\$
Tour – Charlottetown – Great Things Happen Here; Birth of the Nation, Water Supply & Resource Recovery		___ @ \$15 =	\$
Honorary Islander		___ @ \$10 =	\$
YP Workshop – Registration is free – please indicate if you are attending		Yes	No
<b>Tuesday, October 17</b>			
Down East Feast – <b>Included in Delegate/Companion</b> Registration Fees	Additional Tickets ___ @ \$100		\$
Please indicate meal choice for Down East Feast for Delegate/Companion	Lobster ___	Chicken ___	Beef ___
Please describe any dietary restrictions or other special needs you may have		<b>Part 2 – Subtotal</b>	\$

## PART 3A – TRADE SHOW BOOTH RENTAL & EXHIBITOR REGISTRATION

Booth Rental (Max 3 Booths & 2 People/Booth)	ABEA Member – ___ Booths @ \$500	Non-Member – ___ Booths @ \$850	\$
EXHIBITOR'S NAME	EXHIBITOR'S NAME	EXHIBITOR'S NAME	
EXHIBITOR'S NAME	EXHIBITOR'S NAME	EXHIBITOR'S NAME	
Extra Booth Exhibitor Registration (includes Meet & Greet, ABEA Hospitality Reception and Trade Show Lunch)	ABEA Member – ___ @ \$75	Non-Member – ___ @ \$100	\$
EXHIBITOR'S NAME	EXHIBITOR'S NAME	EXHIBITOR'S NAME	
<b>Part 3 – Subtotal</b>			\$

## PART 3B - EXHIBITOR MEALS & ACTIVITIES NOT INCLUDED WITH REGISTRATION


<b>Sunday, October 15</b>			
Golf (transportation not included)	Shirt: S__ M__ L__ XL__ XXL__	___ @ \$70 =	\$
Tour – Charlottetown – Great Things Happen Here; Birth of the Nation, Water Supply & Resource Recovery		___ @ \$15 =	\$
<b>Exhibitor Booth registration <u>does not</u> include the full conference or meals. To attend full conference, register as a Delegate in Part 2</b>			

Monday, October 16			
Pick-up Continental Breakfast	Exhibitor ___ @ \$25		\$
Annual General Meeting Luncheon	Exhibitor ___ @ \$60		\$
Tuesday, October 17			
Pick-up Continental Breakfast	Exhibitor ___ @ \$25		\$
Down East Feast	Exhibitor ___ @ \$100		\$
Please indicate meal choice for Down East Feast	Lobster ___	Chicken ___	Beef ___
Wednesday, October 18			
Awards Breakfast	Exhibitor ___ @ \$35		\$
Please describe any dietary restrictions or other special needs you may have		<b>Part 3 – Subtotal</b>	\$

PART 4 - TOP OPS COMPETITION REGISTRATION				
Top Ops Team Registration	<input type="checkbox"/> Water	<input type="checkbox"/> Wastewater	___ Team @ \$50.00	\$
To complete team registration contact Trent Brewer at (506) 460-2066 or trent.brewer@fredericton.ca			<b>Part 4 – Subtotal</b>	\$


PART 5 – FEES	
	<b>Subtotal</b> \$
	Life Members deduct \$100.00 \$
	<b>HST 15% (869 924 910 RT2)</b> \$
	Water for People Fun Run/Walk _____ @ \$25.00 \$
	<b>Total Amount Due</b> \$

PART 6 - PAYMENT OPTIONS			
Choose payment method. Complete as appropriate.			
<input type="checkbox"/> Cheque	<input type="checkbox"/> Money Order	<input type="checkbox"/> Visa	<input type="checkbox"/> Mastercard
Please make cheque or money order payable to "ACWWA Conference", Box 28142, Dartmouth, NS B2W 6E2			
CARD HOLDER NAME			
CARD NUMBER			EXPIRY
SIGNATURE			
Fax: 902-435-7796 or Email: contact@acwwa.ca		EMAIL ADDRESS	
<b>WHEN PAYING WITH A CREDIT CARD AN EMAIL ADDRESS IS REQUIRED FOR A RECEIPT TO BE ISSUED</b>			



## Complete Design-Build Storage Solutions

With experience that spans 30 years and more than 400 installations, we have established ourselves as the premier company for the water storage and wastewater market across eastern Canada



# GREATARIO

Engineered Storage Systems

www.greatario.com 519-469-8169

# Why should you hire a Civil Engineering Technologist?

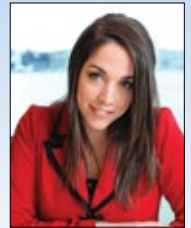


Photo credit: NSCC Photography

By Krista Taverner, P.Eng.  
Faculty – Civil and Building Technology Department, NSCC School of Trades and Technology

**The fall is an exciting time** for students of all levels of education as they begin a new year of studies. It seems the perfect time to highlight the talents of our civil engineering technologist graduates and let you know how they could fit within your organization.

## Civil Engineering Technology

The Civil Engineering Technology (CETG) program has been offered at NSCC for the past ten years. CETG is an intense, two-year diploma program and covers five main competencies: municipal design, geotechnical, surveying, construction management,



and structural design. Students get a lot of one-on-one attention from the faculty and benefit from their real-world experience and advice.

The program is accredited with the Canadian Technology Accreditation Board (CTAB) as a “technologist” level program. The main difference between a “technologist” and

a “technician” program is that civil engineering technologists must take calculus, and complete a year-long, technical research project.

Graduates also have the ability to continue their studies through various university agreements.

## Where are they hired?

Over the past decade, our CETG graduates have been hired by consultants, municipal and provincial government agencies, contractors and material suppliers. They are hired for many roles including design, laboratory analysis and materials testing, project management, sales, construction inspection, estimating, surveying, and detailing.

## Employment-ready skills

Employers who have hired CETG graduates in the past tell us they have many job-ready skills. As with any new graduate, on-the-job training is expected, however, the CETG students gain many practical skills which enable them to hit the ground running after graduation. These skills are developed through work on engineering design projects and labs, using industry-standard software, equipment, and procedures.

## Engineering Solutions

**Civil.  
Mechanical.  
Electrical.**

1077 St. George Blvd. Suite 400  
Moncton, NB E1E 4C9  
Tel: (506) 857-2777

133 Prince William st. Suite 703  
Saint John, NB E2L 2B5  
Tel: (506) 693-5893

564 Prospect Street, Suite 101  
Fredericton, NB E3B 9M3  
Tel: (506) 451-4400

**Municipal**  
Water / Wastewater  
Transportation  
Land Development  
Building Services

**Toll Free: 1 866 857-2777 • [www.crandallengineering.ca](http://www.crandallengineering.ca)**



### Real-world projects

Here are a few examples of the practical projects students complete that help prepare them for the workforce:

- Detailed design of two residential subdivisions, including water, sanitary, and storm systems design. Results are summarized in technical reports prepared by the students.
- Quantity estimate, construction cost estimate, construction schedule, and tender document preparation for residential subdivision design.
- Surveying labs involving construction layout and topographical survey using GPS and Total Station with data collectors.
- Geotechnical labs including concrete mix design and testing project, as well as soil classification, gradation analysis, Atterberg limits, and others.
- Structural design of a low-rise commercial steel building. This design is completed using the steel, wood, and concrete design handbooks.

Throughout the program, students learn and apply state-of-the-art software such as AutoCAD, Civil 3D, EPANET water model, PCSWMM, MS Project, Forte, Excel spreadsheets and others.

### Where to start

Knowing where to start when tasked with a project is challenging, however, our CETG graduates are instructed on government rules and regulations. Their project and lab work must conform to all pertinent guidelines, specifications, codes, regulations, as well as local requirements. They complete an Engineering Regulations

course, requiring them to spend time interpreting and applying these standards.

Civil technologists learn to apply safety standards from day one, and besides reinforcing safe work practices, complete safety awareness courses in Introduction to Confined Space, Fall Arrest/Fall Protection, Hazard Identification, Lock Out/Tag Out, and Respiratory Protection. They also complete Standard First Aid and CPR, and they explore several Nova Scotia OH&S regulations.

### Industry partners for senior projects

Over the past ten years, we have seen some impressive senior projects developed by our students. We thank the many industry partners who have provided mentoring to support their work.

If you have an idea for a student project, would like to mentor a student project, or would like to find out more about our graduates, please email me at [krista.taverner@nssc.ca](mailto:krista.taverner@nssc.ca). If you want to know more about the College's CETG program, go to [nssc.ca](http://nssc.ca).

Happy hiring!

**Are you forced to do more with less?  
So, when do you find time for pump servicing?**

**PVP Pumps save Time  
and Money. Here's how.**

PVP Double Disc Pumps™ operate up to 10 times longer and cost up to 70% less to maintain. When you factor in the total life cycle expense (labor costs, maintenance and repair), you will find PVP's Double Disc Pumps are a better value. Our pumps offer...

- PVP pumps operate at lower speeds with no sacrifice in performance: Lower wear rate = Longer life.
- Our *Maintain-in-Place* design reduces downtime and lowers maintenance costs.
- Seal-less, gland-less, oil-less design lowers operating costs.
- PVP pumps can run dry indefinitely without damage.
- Fewer moving parts means less need for repairs or maintenance.

**The PVP Life Cycle Cost Advantage**

Are you operating rotary lobe or progressive cavity pumps? Then you are familiar with their repair and maintenance costs. Learn the facts. Contact us today and discover how PVP's positive displacement pumps are your most cost-effective, long-term value.

**Represented by:**

Deer Lake, Newfoundland    Mount Pearl, Newfoundland  
Truro, Nova Scotia    Fredericton, New Brunswick

Phone: (800) 565-2885  
Web: [www.sansom.ca](http://www.sansom.ca)

Toll Free: 800-311-3311 • [PennValleyPump.com](http://PennValleyPump.com)



- Fabricated Ductile Iron Pipe
- Fittings oversized for C.I.
- Specialty fittings – drilling, tapping
- Stainless Steel Pipe Spools



- AWWA Fittings – Flanged, MI, Push On
- Municipal Castings
- Pipe Restraint
- Trench Drain Products
- Extended Range Products – Pipe wrap, Hydraulic cement, Flange-Pak access.



- AWWA Grooved Products
- "Refuse to Fuse" HDPE System
- Grooved Spool Pieces
- AGS Large Diameter System
- Valve Chamber Specialties



## CONCORD SUPPLY

*"In tune with your requirements for today. We are always on the lookout for new innovative products to fit your needs for tomorrow. That's what we're all about and what our name implies. People and products – in harmony."*  
 ~ F.D. (Del) Sweet, February 1982

What was our father's vision in 1982 remains unchanged today...



- Hymax Wide Range Couplings
- Hymax Grip – Wide Range Restraint
- Hymax – Versa Repair Coupling
- Flange Adapters
- End Caps



- Uni-Flange Products
- Brass Line
- Meter Setters
- Couplings & Clamps
- Tapping Sleeves, Service Saddles



- Triple Tap T3 Service Saddles
- Triple Tap Tapping Sleeves
- Triple Tap Line Stops
- Quick Cam Repair Clamps

2353 Bowman Street, Innisfil, ON L9S 3V6  
 Tel: 877-436-3800 Fax: 888-745-6666

## Atlantic Purification Systems Ltd.

  
Smith & Loveless Inc.



  
Be Right™





























*Proud supporters of the 70th annual ACWWA Conference in Charlottetown, PEI*

**New Brunswick**  
**Office/Warehouse:**  
 695 Malenfant Blvd.  
 Dieppe NB  
 (506) 857-2880  
 ryan@aps.ns.ca



[www.aps.ns.ca](http://www.aps.ns.ca)

**Nova Scotia**  
**Office/Warehouse:**  
 10 Ferguson Road  
 Dartmouth NS  
 (902) 469-2806  
 sales@aps.ns.ca



*Don Shaddick, Owner, President (left)  
 James Dickie, General Manager (right)*



ShadComm is proud to announce their upgraded CSA rating from 400 Amps to 1500 Amps.

Call **James Dickie** for your custom panel and SCADA requirements.

1-888-388-8800

[james.dickie@shadcomm.com](mailto:james.dickie@shadcomm.com)

" SOLUTION PROVIDERS, BACKED BY SERVICE "



## We welcome you to join us

The Young Professionals (YP) Committee is excited to invite YPs attending this year's ACWWA Annual Conference to join us for the Young Professionals Seminar, which is being held from 1:00 pm to 4:30 pm on the opening day of the Conference, Sunday, October 15, 2017. The half-day event will feature presentations by industry leaders on a range of topics related to career development in the water and wastewater industry, and it will include several networking and professional development activities. It will also provide an excellent opportunity to meet other YPs before the YP Mixer, later in the evening. As a bonus, all seminar attendees will receive a ticket for a complimentary drink at the Mixer.

**The seminar will feature the following speakers:**

**Amy Winchester – Process/Environmental Engineer – CBCL Limited**

Amy Winchester has more than 13 years of experience as a Process/Environmental Engineer. Ms. Winchester has completed design work and distribution system modelling for a number of water and wastewater systems, and recently completed an extensive review of the City of Saint John's water supply system. Ms. Winchester is actively involved with the ACWWA. She presently serves on the Executive Board as First Vice Chair and previously served as Membership Director. Ms. Winchester will be speaking about the opportunities and rewards of volunteering with the ACWWA, and how the organization has played a role in her career.

**Sam Arsenault – Wastewater Treatment Supervisor – City of Summerside**


Sam Arsenault has a diverse range of experience in the water

and wastewater field. As the Wastewater Supervisor for the City of Summerside, he is responsible for managing the City's tertiary biological nutrient removal (BNR) wastewater treatment facility. Previously, Mr. Arsenault was the City's Assistant Operations Supervisor, where he assisted with the operations of the water supply and distribution systems, as well as the City's wastewater collection system. Mr. Arsenault will be speaking about his experiences and the various opportunities for YPs in the water and wastewater sector.

**Ramona Doyle – Sustainability Officer – City of Charlottetown**

Ramona Doyle is the Sustainability Officer for the City of Charlottetown

and previously served as the City's Utility Projects Officer. In her current role, Ms. Doyle is responsible for integrating sustainability into City operations and increasing public awareness of important environmental issues. Ms. Doyle has developed and implemented a diverse range of community and corporate sustainability programs and initiatives, including wellfield and watershed protection, water conservation, and greenhouse gas reduction programs. Ms. Doyle will be speaking about implementing sustainability in municipal operations.

This seminar is a free event for all YPs attending the Conference in Charlottetown. Be sure to sign up for the seminar when you are registering for the Conference. 



### Chemical Injection Systems

Marathon Fluid Systems offers chemical delivery systems for a variety of processes including:

- Chlorination
- Reagents
- Cleaning
- pH balance
- Defoaming
- Sanitizing
- Flocculation
- Etc.



Marathon has a commitment to excellence, to provide product quality and the highest standards of service with experience in delivering and servicing clients worldwide.



**MARATHON**  
FLUID SYSTEMS

88 Albert Street  
Moncton, NB E1C 1B1  
Canada

T 1 506.860.7867  
F 1 506.867.8826  
[www.mfsl.ca](http://www.mfsl.ca)

Focus | Commitment | Experience | Performance

## Intelligent Solutions For WASTEWATER TREATMENT

### Online and Portable Instrumentation

- Multi Parameter Single – Dual – Multi-Channel-Wireless
- Optical Fluorescence Dissolved Oxygen
- Near Infra Red Total Suspended Solids
- pH, ORP
- Microwave Density
- Ultrasonic Interface Level
- Spectrophotometric Online
- Spectrophotometric Laboratory



### Flowmetering

- Ultrasonic Doppler – Transit Time
- Insertion/Immersion/Clamp-On
- Venture/Flume Partially Filled Conduit



### Wastewater Samplers

- Indoor or Outdoor
- Refrigerated or Non-Refrigerated
- Portable or Stationary



### Septage Receiving Systems

- Fully Automated Control and Data Collection
- Integrated Billing System



### Additional Solutions For:

- Flow – Level – System Integration – Field Service



Mississauga, Ontario (800) 595-0514  
 Montreal, Québec www.cancoppas.com  
 controls@cancoppas.com



**HUNTLEY'S**  
SUB AQUA CONSTRUCTION

### WHY CLEAN RESERVOIRS



### Improve Water Quality

Lower THM's  
(Trihalomethanes)

Lower HAA's  
(Haloacetic Acid)

Lower Organic Carbons

Extend Service Life [WWW.HUNTLEYSSUBAQUA.CA](http://WWW.HUNTLEYSSUBAQUA.CA)

### POTABLE WATER TOWER

INSPECTION • CLEANING • REPAIR

### WASTE WATER TREATMENT

LAGOON SERVICES

TOLL FREE: 1-877-678-DIVE (3483)



## OUR PEOPLE.

Proven. Reliable. Responsive.

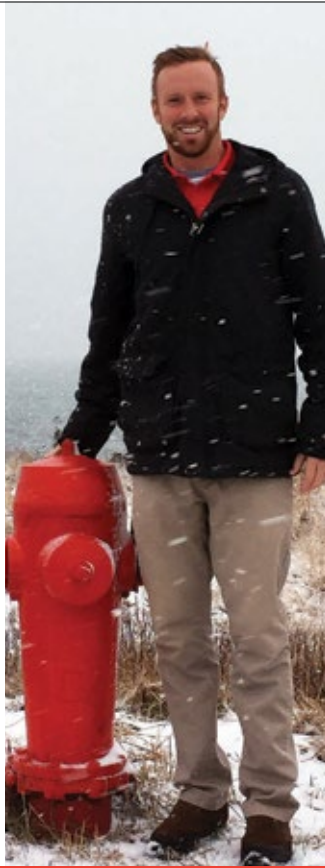
- Valves
- Hydrants
- Pipe Repair
- Service Brass
- Machines & Tools
- Automated Flushing Systems
- Remote Pressure Monitoring

Need help? Call your  
Technical Representative:

**Jeff Jensen**  
902.222.4206  
jjensen@muellercanada.com



Copyright 2017 Mueller Canada, Ltd. All Rights Reserved.



**McLennan Sales**

*Division of Emco Corporation*

**Servicing the Waterworks Industry  
for Over 40 Years**

Supplier of:

Water and Sewer Pipe and Fittings  
Hydrants & Valves  
Digesters & Aerators  
Geotextiles, HDPE Culvert  
Stormwater Management

### 3 Locations to Serve You:

111 Wright Ave Dartmouth, NS 902-468-1500 (P) 902-468-2721 (F)	303 Golden Grove Rd. Saint John, NB 506-634-3112 (P) 506-634-0480 (F)	40 Loftus St Moncton, NB 506-857-1082 (P) 506-857-9006 (F)
---	--	---

[www.mclennansales.com](http://www.mclennansales.com)

# AWWA One Operator Scholarship




Congratulations to Luc Richard, the first recipient of the AWWA One Operator Scholarship. Luc has received \$1,000 to support his pursuit of education in the Power Engineering Technology Program at the NSCC Akerley campus in Dartmouth, NS. The One Operator Scholarship is co-funded by AWWA and ACWWA, and is available to operators and students who are individual or utility members of ACWWA.

This is an exciting opportunity that can be used for various professional development initiatives such as purchasing books, attending a conference, funding certification, training programs, and so on. Up to \$2,000 is available annually, and ACWWA will accept and review applications



Photo caption: (L to R) Melissa, Luc, and Todd Richard

as received. You can easily and quickly apply online or by email, and all related information is posted

on the ACWWA website ([www.acwwa.ca/scholarshipcommittee/82-acwwa-scholarship.html](http://www.acwwa.ca/scholarshipcommittee/82-acwwa-scholarship.html)). 



a xylem brand

## IQ SensorNet Process Monitoring Solutions

### PARAMETERS

- Dissolved Oxygen
- Total Suspended Solids
- Nitrate
- Nitrite
- Phosphorus
- Ammonium
- pH/ORP
- COD/BOD
- UVT-254
- Sludge Level



IQ SensorNet  
2020 XT  
Controller

[YSI.com/IQ](http://YSI.com/IQ)

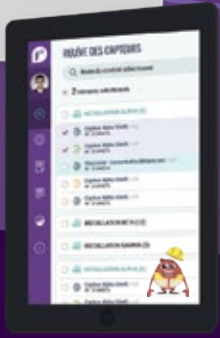
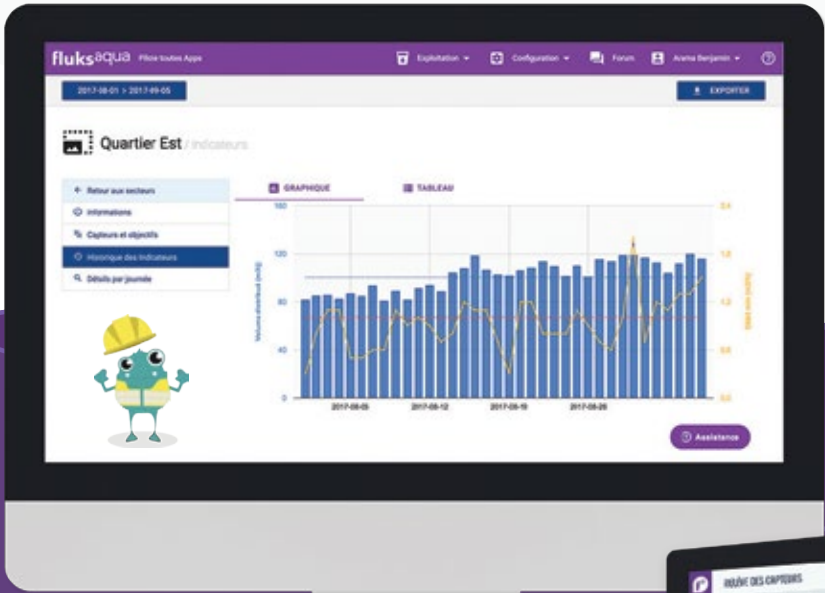
## NULANTIC WATER

WATER SOLUTIONS. CLARIFIED

nulantic.ca  
sales@nulantic.ca  
902-861-4710



# PROVIDING VISIBILITY & CLARITY THROUGH EASY ACCESS TO ESSENTIAL DATA FOR WATER & WASTEWATER UTILITIES



PERFORMANCE OPTIMIZATION



PRIORITIZATION + EFFICIENCY



DATA SECURITY

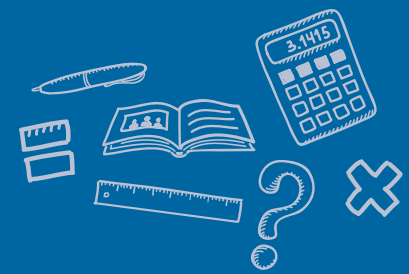
Increase your leverage with the FluksAqua Apps for Water & Wastewater Networks & Systems



Contact us: [sales@fluksaqua.com](mailto:sales@fluksaqua.com)  
Learn more: [www.fluksaqua.com](http://www.fluksaqua.com)  
Dare to Share on the FluksAqua Forum

Follow us on:





# Register today for upcoming ACWWA courses

The following is a list of the ACWWA 2017 fall courses. Please check our website for online registration, course details, and additional courses. [www.acwwa.ca](http://www.acwwa.ca)

September 26-29, 2017	<b>Water Treatment CBCL</b>	Halifax, NS
October 3-4, 2017	<b>Emergency Chlorine Repair</b>	Sydney, NS
October 19, 2017	<b>SCADA</b>	Halifax, NS
October 24-25, 2017	<b>Water &amp; Wastewater Fundamentals</b>	Halifax, NS
October 26-27, 2017	<b>Chlorine Disinfection</b>	Charlottetown, PE
October 27, 2017	<b>Lift Station and Force Mains</b>	Sydney, NS
November 6-9, 2017	<b>Wastewater Treatment Lorne</b>	Moncton, NB
November 10, 2017	<b>Lift Station and Force Mains</b>	Corner Brook, NS
November 20-23, 2017	<b>Water Distribution Lorne</b>	Moncton, NB
November 28, 2017	<b>Lift Stations and Force Mains</b>	Halifax, NS
November 28, 2017	<b>Basic Lab Procedures for Water Operators</b>	St. John's, NL




- Meter Sales, Testing & Repairs
- Meter Installation & Reading
- Hydrant Repairs & Parts
- Training Courses

*Distributor for:*




#9-50 Thornhill Drive  
Dartmouth, NS B3B 1S1  
Office: 902.468.2777  
Fax: 902.468.2090  
[scotiatech.tom@ns.sympatico.ca](http://scotiatech.tom@ns.sympatico.ca)

**WASTEWATER IS OUR SPECIALTY**

- CCME Municipal Risk Assessments
- Water Quality Testing and Modeling
- Effluent Treatability Studies
- Lagoon Depth & Sludge Surveys
- Design of Treatment Plants & Outfalls
- Tracer Studies and Flow Monitoring
- Mixing Zone Studies
- Assimilative Capacity Assessments
- Design of Commercial Septic Systems and Engineered Wetlands

**NATECH** Environmental Services Inc.  
2492 Route 640, Hanwell, NB E3E 2C2  
Phone: (506) 455-1085 Fax: (506) 455-1088

Website: [www.natechenv.com](http://www.natechenv.com) Email: [admin@natechenv.com](mailto:admin@natechenv.com)  
"Serving Municipalities and Industry since 1993"

# INTERACTIVE EDITION *available online*

With print and electronic communication operating hand-in-hand you can take advantage of the fact that *Go With the Flow* is also available online in a highly interactive format.



To experience *Go With the Flow* online, visit [www.acwwa.ca](http://www.acwwa.ca)



experts in the design and delivery of  
**water, wastewater, and solid waste  
infrastructure projects.**

from water resources planning and storm-water management, to treatment and distribution of potable water supplies, to the collection and treatment of wastewater.

Call +1.506.452.9000 to reach an **exp** representative in your area.



## Upcoming CCC surveyors course

### Course objectives

- Analyze theoretical components by identifying the appropriate method of preventing backflow for isolation and containment.
- Understand the purpose and the intent of cross-connection control (CCC) programs.
- Identify the legal and health aspects of serving as a CCC surveyor.
- Review new construction plans to eliminate cross connections.
- Review existing building as-built construction plans to eliminate cross connections.
- Conduct practical field surveys to identify cross connections and make recommendations for corrective measures.

### Course objectives certification

A performance of 80% minimum on the written examination and successful completion of a supervised building survey constitutes a passing mark and a Certificate of Achievement will be issued by ACWWA. A Certificate of Attendance will be issued to those completing the course but not meeting the above requirements.

### Registration information

Seating is limited to 12 participants.

To register, please contact NSCC Admission at 1-902-491-4911 and reference class number 5289.

### Tuition

\$1,200.00 – taxes and exam fees included.

### Course location

Four Points Sheraton  
40 Lady Ada Boulevard,  
Moncton, NB, E1C 8P2




Room reservations –  
please call: 1-506-852-9600

### Dates

Wednesday, October 4 to Friday  
October 6, 2017

Times: 8:00 am to 4:30 pm  
Lunch: Participants are required  
to provide their own lunch.

### Course information inquiries

Please email: [geno.pace@nssc.ca](mailto:geno.pace@nssc.ca) 



**CBCL LIMITED**  
Consulting Engineers

[f](#) [t](#) [v](#) [in](#)  
[www.CBCL.ca](http://www.CBCL.ca)

## Solving today's problems with tomorrow in mind

**HALIFAX, SYDNEY, CHARLOTTETOWN,  
FREDERICTON, MONCTON, SAINT JOHN,  
ST. JOHN'S, HAPPY VALLEY-GOOSE BAY**





**WATER AND WASTEWATER | MUNICIPAL SERVICES  
BUILDINGS | ENVIRONMENTAL | MARINE | MINING  
OIL AND GAS | ENERGY AND POWER | TRANSPORTATION  
AND BRIDGES | INDUSTRY AND MANUFACTURING**

## Canadian Water and Wastewater Association Presents **National Water and Wastewater Conference** November 5-8, 2017

in conjunction with the Canadian Association for Water Quality's National Symposium on Water Quality Research  
St. John's Convention Centre, St. John's Newfoundland

**Bringing utility leaders, researchers, policy makers and technology providers together.** This will be the third in our National Water and Wastewater Conference series. Merging all aspects of water management – from wastewater to drinking water to water and wastewater research to utility and infrastructure challenges, this event is a truly unique event that fosters national dialogue on the most important national water issues.

The 2016 event hosted nearly 500 delegates, with up to six parallel sessions, several keynote presentations, and amazing social and networking events. Be sure to mark your calendar and plan to attend.



### **Program updated – Utility Leadership Stream now updated**

Our program has been updated to include the climate change, security and our utility leadership stream. Be sure to check it out, and register today.

### **Online registration now open**


Register for the conference online at <https://www.nwwc2017.ca/registration>.

### **Preliminary program available**

The preliminary program is now

available online. We're still working on completing some sessions, but we're excited to share the program with you! Go to <https://www.nwwc2017.ca/program>.

### **Reserve your room**

We've negotiated a fantastic rate at the Delta St. John's. Attached to the St. John's Convention Centre, it offers not only great value, but also convenience for our delegates. Don't wait, book your room today. 



**WATER WORKS BRASS  
AND PIPELINE PRODUCTS**

**THE FORD METER BOX COMPANY, INC.**  
P.O. Box 443, Wabash, Indiana USA 46992-0443  
260-563-3171 • FAX: 260-563-0167  
[www.fordmeterbox.com](http://www.fordmeterbox.com)



**Send your  
news items to:**  
**Lindsay Wilcott,**  
ACWWA Magazine Chair  
[lwilcott@cbcl.ca](mailto:lwilcott@cbcl.ca)



Reminder:

## ABEA 'Annual ACWWA Conference' Attendance Grant

(est. 2016)

The ABEA is a body made up of 40+ members (suppliers) who have, as their joint goals, the desire to:

- Promote understanding and goodwill
- Encourage and stimulate the exchange of ideas
- Acquire and disseminate information
- Provide funding
- Foster relationships amongst members and between associations
- Encourage fair and ethical ventures
- Promote member products/services

With these goals in mind, the ABEA has challenged itself to establish a platform to continue supporting the ACWWA, and those members who would benefit most from the Annual Conference, but are limited due to economic challenges.

### Eligibility:

Each applicant must be a full-time employee of a utility located

within Atlantic Canada, or an organization which has an interest or supports/maintains the necessary infrastructure to qualify as an ACWWA member.

### Review process:

All applications will be reviewed by a committee of volunteers.

### Application:

- Resume (to include, but not limited to, name, business address, contact information – phone, email, and fax)
- Membership record with ACWWA (AWWA/WEF)
- Past participation in the Annual ACWWA Conference
- Status of infrastructure, and expected outcomes from attendance
- Personal goals for attendance
- Financial need (what portion are you looking for the Grant to provide? Explain.)



Submit applications via email to: [scotiatech.main@ns.sympatico.ca](mailto:scotiatech.main@ns.sympatico.ca)

Confidentiality shall be exercised with regard to all submissions.

All information must be verifiable. Grants are non-transferable, and have no cash value.

Notification of award shall be by email.

ABEA reserves the right to suspend the program. 

# WE DO IT ALL

CORROSION PROTECTION & SEALING SYSTEMS YOU CAN DEPEND ON



Extend Structure Life,  
Reduce Maintenance & Repair Costs

- for industrial steelwork, pipework & road surfaces
- above & below ground pipe, valves, fittings & steel
- offshore marine piling protection
- road, bridge, airport & asphalt applications

A member of Winn & Coales International.



[www.densona.com](http://www.densona.com)

Toronto • Edmonton

Denso North America Inc.

90 Ironside Cres. Unit 12 Toronto, ON M1X 1M3

Tel: 416.291.3435 Fax: 416.291.0898



# For your day-to-day challenges as a water professional, AWWA membership is the solution.

## Keep current on water issues.

- ▶ Get information from AWWA Standards, manuals, books, award-winning DVDs and respected periodicals.

## Earn continuing education credits.

- ▶ Attend in-person or online. AWWA and local Sections host dozens of educational events every year covering all aspects of water and wastewater.

## Support smart water policy.

- ▶ From regulations to innovative financing options, AWWA works on issues that benefit the water community.

## Time-saving resources.

- ▶ Current technical resources provide what you need, when you need it—all at member discounted pricing.



**American Water Works  
Association**

*Dedicated to the World's Most Important Resource™*

**Join or renew today.**  
**[www.awwa.org/membership](http://www.awwa.org/membership)**

# Halifax Water

**O**n August 22, 2017, the Nova Scotia Utility and Review Board released a decision approving a Halifax Water enhanced lead service line repair and replacement program. The decision is a significant step forward in Halifax Water’s ongoing effort to replace lead service lines (the lateral/pipe from the water main in the street to a customer’s home).

This new program includes a funding component, as the financial aspect is often the biggest barrier to homeowners when they’re looking to replace their private lead service. This new program goes a long way in breaking that barrier as the funding component will give Halifax Water the ability to provide financial assistance for 25% of the cost, up to \$2,500.00, to homeowners who

replace the private portion of the lead service. Prior to this program Halifax Water could not offer any form of financial assistance.


This new program makes Halifax Water one of a handful of utilities in North America to institute such a program. The utility, in conjunction with Dalhousie University, is also internationally recognized for its research efforts regarding lead.

It is estimated there are 10,000–15,000 private lead service laterals and approximately 2,500 public (Halifax Water-owned) lead service laterals. These are found primarily in the Halifax peninsula and central Dartmouth in homes built up until mid-1950.

It is important to note that drinking water is essentially lead-free in Halifax Water’s distribution system prior to entering water

service lines. Lead enters water (“leaches”) through contact with the service and private plumbing systems. This happens through corrosion, when metal dissolves or wears away due to a chemical reaction between water and pipe or fittings. Sources of lead include lead service pipes, lead solder, brass fixtures and faucets, and fittings.

Halifax Water treats water to minimize lead corrosion and, in most homes with lead components, the level of lead in drinking water is below the level required by Health Canada. However, high levels of lead can be present in homes with lead service lines or in plumbing components in the home.

Over the coming months Halifax Water will be implementing an enhanced public education campaign to raise awareness of this new program. 



**From our beginnings more than 55 years ago,** RPC has become a respected and reliable provider of laboratory-based and technical services within New Brunswick, across Canada, and around the world.

Our clients know the difference quality makes and we set ourselves apart by offering an extensive scope of over 100 services accredited by various organizations including the Standards Council of Canada.

**Analytical Services**  
Inorganic • Organic • Microbiology • Toxicology

**Engineering Services**  
Physical Metallurgy • Mechanical Engineering

**Industrial Services**  
Environmental Technologies

**rpc**  
SCIENCE & ENGINEERING

**Follow Us!**  
 

**Contact Us!**  506.452.1212 • [www.rpc.ca](http://www.rpc.ca)

# WHAT'S THE VALUE OF WATER?

Without clean water, soccer uniforms would never make it through the season.

Most of us never think about how clean water gets to us or where our dirty water goes. Luckily we don't have to. Pumps, treatment plants, and pipes bring us clean water and carry our wastewater away.

But here's a dirty secret about our water systems: They're aging. They need investment so they can continue to deliver life's most precious resource. All day, every day.

Water—Essential. Reliable. Invaluable.

Learn how water works for you. Visit [TheValueofWater.org](http://TheValueofWater.org).



#ValueWater



Presented in cooperation with the Value of Water coalition



## ENHANCE YOUR TECHNICAL KNOWLEDGE

Chemical · Civil · Construction · Electrical · Environmental · Industrial · Mechanical

- EPIC courses provide CEUs/PDHs, and are designed & taught by leading professionals with extensive experience
- EPIC's TECHNICAL EXAM Preparation Courses will get you prepared for your Engineering Exams
- Require team training? Consider EPIC's cost-effective ON-SITE TRAINING program

EPIC

1.855.908.3688 [epictraining.ca/gf](http://epictraining.ca/gf)





Celebrating 10 years as Canada's first regulated water, wastewater and stormwater utility

**Providing world class services for our customers and our environment**

450 Cowie Hill Road  
P.O. Box 8388 Stn A  
Halifax, NS B3K 5M1  
902-490-4820


**Atlantic Backflow Specialists Ltd.**  
Serving Atlantic Canada

Surveys      Installations  
Tests      Repairs / Parts



**Certified Cross Connection Control Specialists**

Kevin S. Jones      Fax (902) 434-3990  
Bus: (902) 499-7745      kevin@atlanticbackflow.com      65 Mt. Edward Rd.  
www.atlanticbackflow.com      Dartmouth, N.S.  
B2W 3K6



- Inspection of hydrants and valves
- Preparation of unidirectional flushing programs and execution
- Leak detection
- AquaCad Suite hydraulic modeling software
- Hazen-Williams Coefficient testing
- Flow pressure and fire flow testing

#9-50 Thornhill Drive  
Dartmouth, NS B3B 1S1  
Tel: (902) 468-9447  
Cell: (902) 499-1965  
aquadata.tom@ns.aliantzinc.ca  
www.aquadata.com

- Aqua Zoom camera diagnosis of wastewater systems
- Manhole inspections with 360 degree camera
- Canalis Wastewater collection software



**PICA**  
Pipeline Inspection and Condition Analysis Corp.

Water and waste water main inspections  
Call 1-780-469-4463, info@picacorp.com

**GO with THE FLOW**



To reach Atlantic Canada's water industry professionals through *Go With The Flow* magazine and its targeted readership, contact **Darrell** at your earliest convenience to discuss your company's promotional plans.



**Darrell Harris**  
Marketing Manager, 1-877-985-9793, darrell@kelman.ca

Company	Page	Phone	Website/Email
Atlantic Purification Systems, Ltd.	24	902-469-2806	www.aps.ns.ca
Aqua Data Atlantic	37	902-468-9447	www.aquadata.com
Atlantic Backflow Specialists Ltd.	37	902-499-7745	www.atlanticbackflow.com
Atlas Copco Compressors Canada	14	800 513-3782	www.atlascopco.ca/caus/
AWI (Antratech Western Inc.)	4	403-255-7377	www.awifilter.com
Bibby-Ste-Croix	12	905-312-4776	www.bibby-ste-croix.com
BioMaxx	9, 15	855-940-5556	www.biomaxx.ca
Blue-White Industries, Ltd.	16	714-893-8529	www.blue-white.com
Cancoppas Limited	26	905-569-6246	www.cancoppas.com
CBCL Limited	31	902-421-7241	www.CBCL.ca
Concord Supply	24	877-436-3800	www.concordsupply.ca
Crandall Engineering Ltd.	22	506-857-2777	www.crandallengineering.ca
Danfoss Drives	18	1-888-DANFOSS	www.danfossdrives.com
Denso North America Inc.	33	416-291-3435	www.densona.com
EPIC Training	36	877-211-9835	www.epictraining.ca
exp Services Inc.	30	506-452-9000	www.exp.com
FluksAqua	28	514-334-4231	www.fluksaqua.com
Greatario Engineered Storage Systems	21	519-469-8169	www.greatario.com
Halifax Water	37	902-490-4840	www.halifaxwater.ca
Hoskin Scientific	3	604-296-5453	www.hoskin.ca
Huntley's Sub Aqua	26	902-678-7234	www.huntleyssubaqua.ca
Hydro International	9	866-615-8130	www.hydro-int.com
KSB Pumps Inc.	11	905-568-9200	www.ksb.ca
LiquiForce Services	40	800-265-0863	www.liquiforce.com
Marathon Fluid Systems Ltd.	25	506-860-7867	www.mfsl.ca
Markland Specialty Engineering Ltd.	6	855-873-7791	www.sludgecontrols.com
McLennan Sales, Division of EMCO Corporation	26	506-634-3112	www.mclennansales.com
Mueller Co.	26	800-423-1323	www.muellercompany.com
NATECH Environmental Services Inc.	29	506-455-1085	www.natechenv.com
NETZSCH Canada Inc.	8	705-797-8426	www.pumps.netzsch.com
Nulantic Water Inc.	27	902-861-4710	www.nulantic.ca
Penn Valley Pump Company, Inc.	23	800-311-3311	www.pennvalleypump.com
Pica Corp.	37	780-468-6800	www.picacorp.com
PPG Protective & Marine Coatings	2	888-9PPGPMC	www.ppg.com
rpc	35	506-452-1212	www.rpc.ca
Sansom Equipment	3	506-444-0344	www.sansom.ca
Scotia Tech Fluid Services Ltd.	29	902-468-2777	
ShadComm Ltd.	24	888-388-8800	www.shadcomm.com
Shaw Resources	7	902-758-2095	www.shawresources.ca
Smith & Loveless Inc.	18	704-844-1100	www.smithandloveless.com
Soleno	39	450-347-7855	www.soleno.com
The Ford Meter Box Company, Inc.	32	260-563-3171	www.fordmeterbox.com

*Go With The Flow* would not be possible without the advertising support of these companies and organizations. Please think of them when you require a product or service. We have endeavoured to make it easier for you to contact these suppliers by including their telephone number and, where applicable, their websites. You can also go to the electronic version of *Go With The Flow* at [www.acwwa.ca](http://www.acwwa.ca) and access direct links to any of these companies.



# SOLENO

Mastering Storm Water

**1<sup>ST</sup>**  
**DEVELOPER**  
OF SUSTAINABLE SOLUTIONS  
FOR MASTERING STORM WATER

## SOLENO DESIGNS EFFECTIVE AND CUSTOM SOLUTIONS FOR THE TOTAL AND SUSTAINABLE MASTERING OF STORM WATER

---

- HDPE and fiber-reinforced composite concrete solutions for water collection.
- Pipes of high-density polyethylene for conveying water.
- Qualitative solution control for treating storm water.
- Underground detention and retention systems with or without replenishment of the groundwater.
- Standard or custom-made accessories in high-density polyethylene.
- Nonwoven geotextiles, agricultural textiles, smart textiles.



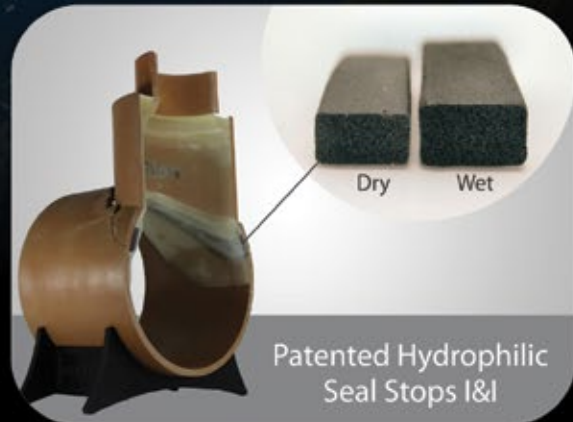
+ 800.325.4242 | [soleno.com](http://soleno.com)



Of  
Trenchless Innovation and Service  
Across North America



Totally Trenchless  
Lateral & Mainline Lining



Patented Hydrophilic  
Seal Stops I&I

# LiquiForce

## GRAVITY

The **proven** trenchless sewer **program** cities trust.

Learn more at [www.liquiforce.com](http://www.liquiforce.com)