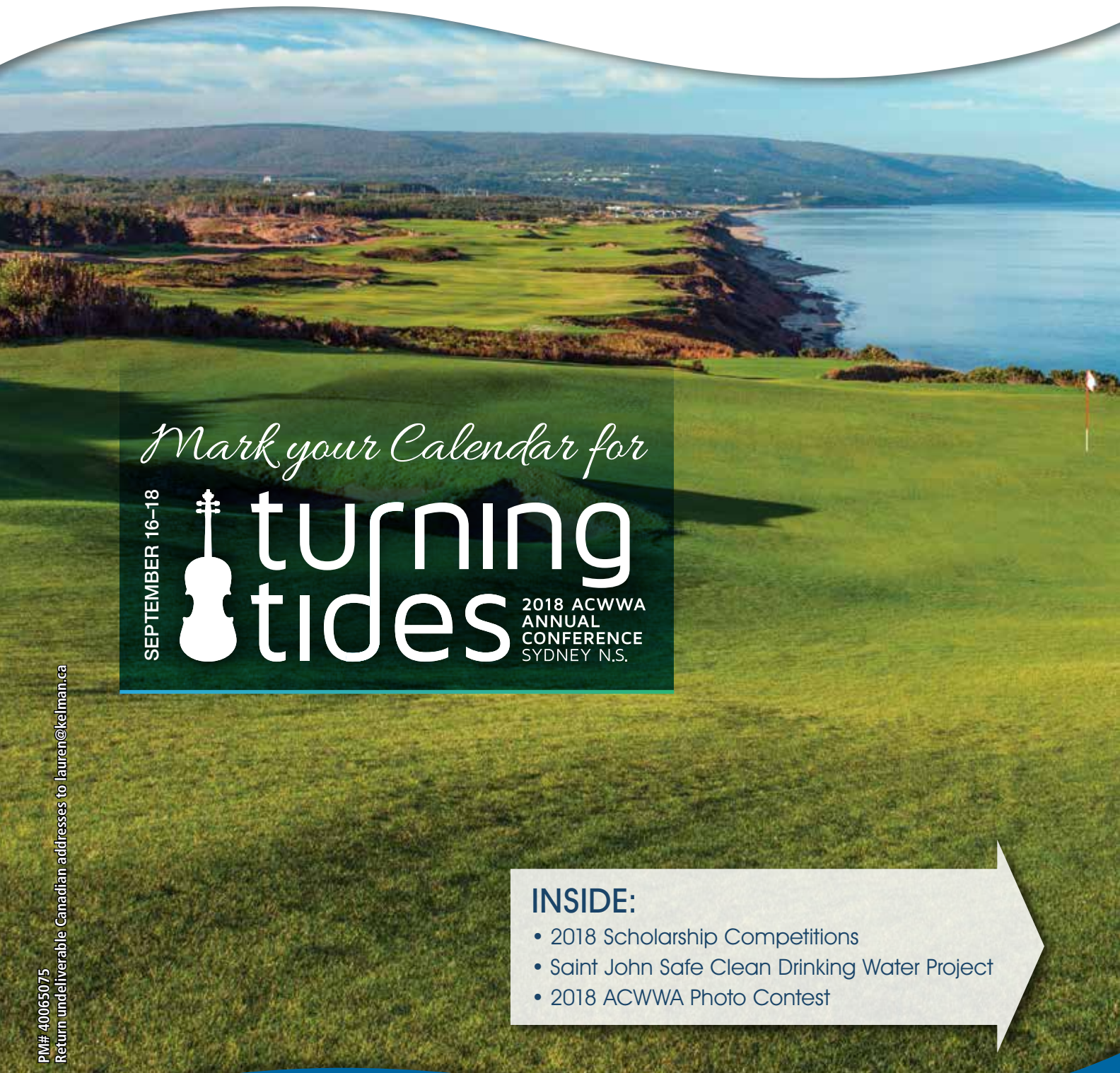


GO with THE FLOW

THE OFFICIAL PUBLICATION OF THE ATLANTIC CANADA WATER AND WASTEWATER ASSOCIATION



Mark your Calendar for

SEPTEMBER 16-18



turning tides

2018 ACWWA ANNUAL CONFERENCE SYDNEY N.S.

INSIDE:

- 2018 Scholarship Competitions
- Saint John Safe Clean Drinking Water Project
- 2018 ACWWA Photo Contest

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



ATLANTIC CANADA WATER & WASTEWATER ASSOCIATION



American Water Works Association
Atlantic Canada Section



Water Environment Federation
the water quality people®

Question today *Imagine tomorrow* Create for the future

At WSP, that means engineering innovative solutions to the challenges the future will bring, while seizing opportunities to safeguard and protect precious water resources. Can we design a place where our communities can thrive?

We think we can.



wsp

wsp.com

Mission is Simply More Intelligent

Advanced Monitoring • Low Cost • Managed SCADA



Proactive Notifications

- Alarms dispatched to all your devices—phone, tablet, computer, fax, pager
- Customize notifications to be simple or sophisticated
- Convenient alerts



Secure Data

- Defense-in-depth security policies
- Multiple security measures layered to protect your system
- Securely access your data in the office or field
- State-of-the-art web portal features live data, multiple windows, and more



Purpose-Built Hardware

- Standardized RTUs are economical to buy, install, and operate
- Advanced remote-control business logic
- New MyDro RTU—smart and expanded I/O, LCD screen, enhanced electronics



Convenient Support

- All resources for no charge
- U.S.-based technical support 24-7-365
- Live weekly webinars, newsletters, instructional videos
- Audit trail for accountability



Mission-Managed

- Comprehensive reports that display your data at a glance
- No software or cellular carrier relationships to maintain
- Continual system enhancements
- Everything necessary is included—no hidden fees



(877) 993-1911 | 123mc.com | sales@123mc.com

MISSION
COMMUNICATIONS

Offering Cost Effective Leak-Free Alternatives for Your Chemical Handling Systems

Flexible ChemFlare™ (PFA)



1/4" to 1"

Rigid ECTFE (Halar®)



1/2" to 4"

Chem Proline® (Advanced PE)



1/2" to 12"

- Choice of ChemFlare™ (PFA), ECTFE (Halar®) or Chem Proline® (Advanced PE)
- For chemical feed of sodium hypochlorite and other difficult chemicals
- Leak and maintenance-free, replaces leaking PVC piping
- Systems include valves, fittings and tubing/piping; single or dual containment systems available

Chemline Type 21 Ball Valves are a Key Component in all our Leak-Free Systems



- Canada's #1 brand of thermoplastic ball valve for waste & water treatment plants
- A long history of leak-free service on chemical lines in Canadian plants
- Connect to all materials of piping and ChemFlare™ • 1/4" to 4"
- Specified by Engineers, requested by Operators
- Actuation and control options are available
- CRN and NSF Standard 61 Certified

50 Years
1968-2018

CHEMLINE  **PLASTICS**

SUPERIOR FLOW SOLUTIONS

CALL FOR MORE INFO: 1.800.930.CHEM | chemline.com |

They both do the
same thing...



*but one
does it better..*

endura[®]
GREASE MANAGEMENT



**Prevent grease blockages
and replace traditional steel
or concrete traps with the robust,
modern performance of Endura[®]**

ARCAT.com



BIM



CAD



SPECS



www.aecdaily.com
AECDAILY
online education for CEU's

canplas[®]

EnduraInterceptor.com | 1-800-461-5300

Need technical support? tech-support@endurainterceptor.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
Amy Winchester, M.A.Sc., P.Eng.
amyw@cbcl.ca
506.633.6650 F: 506.633.6659

Past Chair

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

First Vice-Chair

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

Second Vice-Chair

Brent McGovern
brent.mcgovern@saintjohn.ca
506.658.4455

Secretary-Treasurer

Rob Gillis, P.Eng.
robg@halifaxwater.ca
902.497.1740

WEF Delegate (2017-2020)

Dave Galbraith
dave.galbraith@sansom.ca
902.895.0252 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



Managing Editor: Monique Doyle
Design/Layout: Tracy Toutant
Marketing Manager: Darrell Harris
Advertising Co-ordinator: Jenna Matthes



TABLE of CONTENTS

FEATURES

2018 Scholarships Competition	17
Project Profile: Saint John Safe Clean Drinking Water	21
2018 Annual ACWWA Conference – Sydney, NS	23
Cole Harbour Students Learn About the Water Cycle	37
2018 Canadian Biosolids & Residuals Conference	41
2018 ACWWA Photo Contest	42
ACWWA Upcoming Courses	43



DEPARTMENTS

Message From the Chair	6
AWWA Director's Report	8
WEF Delegate's Report	10
Membership Corner	13
ABEA News	15
Tapped In	38
News & Notes	39
Operator Certification Exam Prep Resources	44
Professional Directory	45
Reach Our Advertisers	46



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®).




A leading resource

Hello summer! Our annual Photo Contest is in full swing. Make sure you get out, enjoy the water with family and friends, and start snapping! We love seeing all the pictures. The Board has been busy over the past few months. Our Education committee continues to offer many courses across the region and is always looking to understand the needs of the Association. We want to continue to be a leading resource for technical development for our membership.

Our relationship with ABEA continues to be strong so we can offer an ever-growing trade show at the fall conference. We are looking this fall at a trade show with more than 85 booths. Have you registered for the conference? The Sydney team has been working hard to offer a strong technical and networking program. We want our membership to make and grow their network of peers, while having a pretty rocking time enjoying Cape Breton hospitality.

This past year, our Executive Director, Clara Shea, has spent many afternoons with a local grade 5/6 classroom working on a special project to celebrate the value of water. The kids were excited to learn that their poster would be on display at our conference this fall. (For more details, see page 37 in this issue.) This was a new outreach initiative that we supported this year and hopefully one we will continue.

Finally, I want to thank my colleagues who volunteer their time with ACWWA. Our Board of Directors and committee volunteers spend hours behind the scenes working to bring value to our membership. If you are interested in volunteering with our Association, please do not hesitate to reach out to our Membership Director, Julie Stokes.

If ever you have a question, or a suggestion, please be in touch. I look forward to hearing from you (amyw@cbcl.ca). 

KOHLER. Generators

Back Up Power Solutions For Industrial Size Problems



A proud distributor of Kohler for over 20 years.

1475 Woodstock Road
Fredericton, NB E3C 1P2
506-444-0344

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

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

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



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 }



Smith & Loveless Inc.



“Solution Providers, Backed by Service”

We look forward to providing you with custom industrial control solutions ranging from:

- CSA Certified Panel Shop
- PLC Programming
- SCADA Designs & Implementation
- Water and Waste Water Control Panels



Contact

James Dickie PTech, General Manager
james.dickie@shadcomm.com
P: 506.627.6407 | TF: 888.388.8800



Off to the AWWA Annual Conference

“For Young Professionals just learning about the water industry, ACE has a lot to offer.”



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.



Toll Free: 800-311-3311 • PennValleyPump.com



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

As I write this, the AWWA Annual Conference & Exposition (ACE) is ready to go in Las Vegas, NV.

Leading into Las Vegas, the AWWA has prepared a full agenda filled with outstanding technical and networking experiences. I am confident many new ideas and relationships will be fostered at this conference.

Each year, a number of students from my research lab join me in attending this conference. For Young Professionals just learning about the water industry, ACE has a lot to offer. I attended my first ACE as a student in 1994 when it was last in New York City – what an experience! Needless to say AWWA ACE was very special in 1994.

Now, in 2018, Carolina Ontiveros is one of my students who will be attending ACE for the first time. She politely reminded me that she was a one-year old when I went to my first ACE! While it does make me feel very old, it also reminded how impactful AWWA ACE has been in my career.

The breadth of the water industry is on display at ACE – from the amazing trade floor, the TopOps competition, the AP Black lecture, many technical talks, and committee meetings. Of course, one of the highlights for my group is the Canadian Water Forum – there may be more than 10,000 people at ACE, but all the Canadians are at the Water Forum.

The Canadian Water Forum is very important for our Section, as each year Clara tirelessly puts in some extra hours so that I can enjoy meeting old friends like Helene or hopefully welcome new professionals like Carolina into the water community.

I hope that you have also taken the time to enjoy ACE this year, and if not, take time to follow it virtually through your favorite social media outlet.

Viva Las Vegas! 🎉

WE ARE
BiMaxx
ENVIRONMENTAL



THE SINGLE-SOURCE SOLUTION
FOR ALL YOUR WATER AND
WASTEWATER NEEDS

WE ARE BIOMAXX ENVIRONMENTAL

- Flow Metering
- Instrumentation
- PLC Panels
- Smoke Testing
- Package Treatment Plants
- Leak Detection
- Odour/Corrosion Control

BiMaxx
ENVIRONMENTAL
The Evolution of Wastewater

TEL: **604-940-5556**
TOLL FREE: **1855.940.5556**
#1-7163 Vantage Way,
Delta, B.C. V4G 1N1
www.biomaxx.ca



WEFTEC and other member benefits

The Water Environment Federation (WEF) is the not-for-profit organization that brings you WEFTEC, the largest conference/exhibition of its kind in North America.

WEFTEC 2018 – www.weftec.org

91st Annual Technical Exhibition & Conference

Conference: September 29 – October 3

Exhibition: October 1–3

Core Hours: 8:30 am – 5:00 pm daily

New Orleans Morial Convention Center

New Orleans, Louisiana USA

WEF Members save \$\$\$ on 2018 Full Conference registration.



Leadership. Passion. Collaboration. Scholarship. Service.

These are the core values that guide the Water Environment Federation (WEF) and its members in fulfilling our mission of protecting public health and the environment.

The Water Environment Federation (WEF) is a not-for-profit technical and educational organization of 34,000 individual members and 75 affiliated Member Associations representing water quality professionals around the world. Since 1928, WEF and its members have protected public health and the environment. As a global water sector leader, our mission is to connect water professionals; enrich the expertise of water professionals; increase the awareness of the impact and value of water; and provide a platform for water sector innovation.

Previously called the Federation of Sewage Works Associations (1928), the Federation of Sewage and Industrial Wastes Associations (1950), and the Water Pollution Control Federation (1960); the name was changed to the Water Environment Federation in 1991 to reflect an expanded focus of non-point and point sources of pollution.

WEF and its global network of members and Member Associations

(MAs) provide water quality professionals around the world with the latest in water quality education, training, and business opportunities. WEF's diverse membership includes scientists, engineers, regulators, academics, utility managers, plant operators, and other professionals. WEF uses this collective knowledge to further a shared goal of improving water quality around the world.

Become a WEF Member – www.wef.org

Join the Water Environment Federation, the not-for-profit group that produces WEFTEC, to take advantage of Member benefits.

There are several types of memberships available:

Professional – Any individual, working or interested in water quality, may join WEF as a Professional Member.

Executive – The Executive package provides access to a comprehensive suite of WEF member benefits, designed to supply senior level professionals with access to water knowledge, the ability to stay current in the field, and the tools needed to make sound decisions.

Professional Operator – Operators and technicians directly involved in water reuse, wastewater treatment, collection systems, or laboratory operations may join as Professional Operator Members. Utility managers, engineers, consultants, manufacturer representatives, attorneys, academics, etc., do not qualify for this category.

Young Professionals – Emerging leaders within the water quality profession who are either new to WEF membership or making a transition from being a student member to a Professional member, may become Young Professional Members. Eligibility requires up to five years' work experience in the industry and less than 35 years old. Valid for the first three years of WEF membership.

Academic – Instructors/Professors interested in subjects related to water quality may become Academic Members.

Corporate – Corporate membership is available to companies that support the water environment profession and wish to affiliate their organization with the leaders of the water quality field. WEF also welcomes any organization that supports the preservation and enhancement of

the global water environment. One corporate contact, from the Corporate member organization, is entitled to all Corporate member benefits.

Student – Students who are enrolled in a minimum of six (6) credit hours at an accredited college or university and provide written documentation, verifying their student status, may join as a Student Member. A faculty or advisor must provide signed verification of the member’s student status on official school letterhead, within 30 days of joining.

e-Global – e-Global Professional membership is available to any individual, living outside of the United States, U.S. Territories, and Canada. This membership package includes Global Professional membership benefits that are available in electric and online format.

Exhibitor – Exhibitor membership is designed for firms and organizations that are suppliers and service providers to the water environment field and who decide to partner with the water quality community to do business more

effectively. Exhibitor Members are typically companies that exhibit at WEF conferences and WEFTEC.

WEF Life – Individuals who have been a member of WEF and one or more WEF Member Association for 35 or more consecutive years, and are at age 65 or older, are eligible to apply for WEF Life Membership.

Utility Partnership Program – The WEF Utility Partnership Program (UPP) consolidates all WEF members within your organization into one account, streamlining the renewal process and maximizing your resources. 

“As a global water sector leader, our mission is to connect water professionals; enrich the expertise of water professionals; increase the awareness of the impact and value of water; and provide a platform for water sector innovation.”

THOUSANDS OF POSSIBILITIES, ONE SOLUTION – BELZONA *IT*

Clean water is essential to everyday life. This makes the job of water and wastewater (WWW) treatment plants, both municipal and industrial, extremely important and the maintenance of their facilities, machinery and equipment even more important. The harmful materials, chemical compounds and microorganisms removed from the water during the treatment processes create extremely harsh environments for the operating equipment and structures.

For decades, Belzona has been providing the WWW industry with technologically advanced repair composites, materials approved for contact with potable water and protective coatings designed to withstand the effects of the harsh environments. Belzona solutions for the WWW industry provide maintenance crews with the materials to address emergency and routine repairs, to extend the operating life of equipment by protecting it from abrasion and corrosion, and to ensure safety and environmental compliance, and most importantly, an uninterrupted clean water supply to the communities!



POTABLE WATER TANKS



WATER FILTERS



SEDIMENTATION TANKS



PIPEWORK



CLARIFIERS



AERATORS



SLURRY PUMPS



SCREW CONVEYORS



SHAFTS

For more information please contact Belzona Atlantic Canada

Brock Hopkins, P.Eng. | Technical Services Engineer

bhopkins@belzonaatlantic.com
902.789.0479



www.belzonaatlantic.com



Septic Tanks • Water Cisterns Pump Tanks • Holding Tanks Rain Water Harvesting

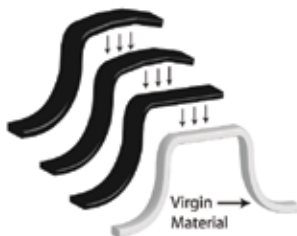
Multi Usage

Multi Layer

Multi Coverage

- Inner layer of FDA approved virgin HDPE, two inside layers of PE for improved stability, plus one outer layer of black and UV-stabilized PE
- Lifetime* corrosion protection and 5 years of labor insurance
- Strongest & heaviest poly tank on the market
- No water for backfilling required
- Low profile
- 100% watertight

Our multi-layered tank construction, consisting of virgin material surrounded by 3 layers of protection.



*see warranty for details

PREMIER TANK. OUTSTANDING WARRANTY. REMARKABLE SYSTEM.

Roth Global Plastics
www.rothmultitank.com

866-943-7256



Summer membership update

Welcome new members!

A warm welcome to our new members who have joined over the last few months:

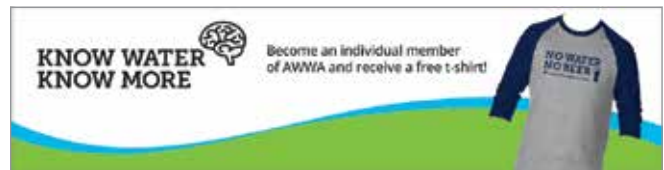
Name	Company	
Rod Gillis		AWWA
Jessica Bernett	Dalhousie University	AWWA
Allison Mackie	Dalhousie University	AWWA
Charles Kelly	Kingswood Ventures	AWWA
Kayla Freeman	NSCC	AWWA
Garrett Murray	UPEI	AWWA
Bridget Campbell	MUN	AWWA
Sarah Gilbert	UNB	AWWA
Jeff LeBlanc	City of Moncton	AWWA
Jason Melanson	City of Moncton	AWWA
Garrett Beatons	County of Inverness	AWWA
Ben Macinnis	Cogsdale Corporation	AWWA
Mark Fortier		AWWA
Darren Squires	Town of Old Perlican	AWWA
Robert Oulton	Village of Port Elgin	AWWA
Joshua Burgess	Crandall Engineering Ltd.	AWWA
Brian Harper	City of Moncton	AWWA

Name	Company	
James Maker		AWWA
Lindsay Anderson	Dalhousie University	WEF
Clayton Macdougald	Pure Technologies	WEF
Tom Harz	Walker Environmental	WEF

As of May 25, 2018:

Total AWWA members: **442** | Total WEF members: **113**

To learn more about individual membership promotions, visit www.awwa.org/membership/membership-promotion.aspx



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.

exp.com



We Do It All

Anti-Corrosion Systems & Sealants You Can Depend On



Extend Structure Life, Reduce Maintenance & Repair Costs For Steel, Concrete & Road Surfaces

Petrolatum Systems are cold applied, require minimal surface prep, are flexible and offer long-life for underground and surface protection of piping, valves, fittings and steelwork. **Bitumen Systems** are cold applied offering applications for pipes, welded joints, bends and fittings and are resistant to cathodic disbonding. **Protal Pipeline Coatings** are designed for protection of girth welds, valves, fabrication and road and river crossings. **Mastics** offer excellent sealing and molding properties and are self-supporting, cold applied and flexible. **Road Products** are cold applied and designed for new road construction, road maintenance programs, airport construction and bridge repair. **SeaShield Marine Systems** offer application for bridge structures, production platforms, marine jetty pilings and wharf structures.

DENSO is known around the world for quality anti-corrosion and sealing systems and offers a full line of products for corrosion protection, sealing and waterproofing. Contact **DENSO NORTH AMERICA INC.** for a complete literature package.
A member of Winn & Coales International



www.densona.com

Toronto • Edmonton • Houston • Philadelphia

Denso North America Inc. 90 Ironside Cres. Unit 12, Toronto, ON M1X 1M3 Tel: 416.291.3435 Fax: 416.291.0898

Does the ABEA have something for you...?

The ABEA continues to bring added value to the ACWWA with its many initiatives.

ACWWA Annual Attendance GRANT Applications are being accepted (visit www.ABEA.biz for full application). We look forward to hosting qualifying individual(s) at the 2018 ACWWA Conference, to be held in Sydney, NS, September 16–18.

The ABEA offers four x **\$1,000 Academic SCHOLARSHIPS** to deserving individuals who meet the application criteria (visit www.ABEA.biz). Maybe not this year, and not in your house, but there must be someone in the office who could benefit from this opportunity. Please feel free to share this information. The ABEA is preparing for the Annual Golf Tournament to

be held at The Lakes Golf Club, Ben Eoin (www.thelakesgolfclub.ca) on Sunday, September 16 starting at 10:00 am, shotgun format. Your \$75 fee will cover green fees and a shared cart – don't forget to register early, and if you have a team or playing mate, please contact Cathy Cameron (scotiatech.main@ns.sympatico.ca). Transportation will be provided by the Conference Committee.

As we get closer to this year's ACWWA Annual Conference (September 16–18) in Sydney, NS

we are completing last-minute preparations for the ever-popular ABEA Common Hospitality Event to be held on Monday evening at The Fiddle, with the sounds of the Andrew Doyle Band to keep the mood bubbly and jovial, and lighter fare to accompany the suds.

Tuesday morning will allow our Monday evening ABEA Host Suppliers the opportunity to share their industry knowledge and latest offerings at the Annual Tradeshow – we look forward to seeing you there! 🍷



www.abea.biz



Powerful perspective and market insight from our strong network of sourcing professionals.

Wide product portfolio including pH Adjustment, Flocculants & Coagulants, Dechlorination, Disinfection, Filter Media, Corrosion Control, Membrane Cleaners/ Antiscalant and more.

Unparalleled scale and connectivity across geographies.

+1 855 888 8648 | www.univar.com

© 2018. Univar Inc. All rights reserved. Univar, the hexagon, and the Univar logo are registered trademarks of Univar Inc.

Blue-White
Is Now
ISO 9001:2015
Certified

ProSeries-M[®]



**PRECISION
CHEMICAL METERING**
FOR THE TREATMENT OF MUNICIPAL
WATER & WASTEWATER



MD-3

HYBRID DIAPHRAGM METERING PUMP

MD-3 DELIVERS A NEW LEVEL OF PERFORMANCE
AND FUNCTION IN CHEMICAL METERING.

PRECISE TURNDOWN	✓ 2,000:1
VARIABLE FLOW RATE	✓ .03-58 GPH (.11-219.6 LPH)
VARIABLE WORKING PRESSURE	✓ Up to 145 psig (10 bar)
SMOOTH CHEMICAL DOSING	✓ No Pulsation Dampener Needed
EASY ORDERING	✓ Single Model Number Handles All Your Needs
DIAFLEX [®] EQUIPPED	✓ A Blue-White [®] Exclusive
PATENTED	✓ Multiple U.S. and International Patents Pending



M-3 PERISTALTIC METERING PUMP

BUILT RUGGED ENOUGH TO HANDLE THE MOST DEMANDING
MUNICIPAL WATER AND WASTEWATER TREATMENT ENVIRONMENTS.

PRECISION TURNDOWN	✓ 10,000:1 with High Resolution Motor Speed Adjustment
VARIABLE FLOW RATE	✓ .0002 to 33.3 GPH (.0007 to 126 LPH)
INPUT	✓ 4-20mA, 0-10Vdc, and Pulse inputs for remote external or batch control and 0-30 VDC/ contact closure remote start/stop
OUTPUT	✓ Scalable 4-20mA or Pulse, one 250V/3A relay and three 115V/1A contact closures assignable to monitor various pump functions
PATENTED	✓ Exclusive Built-in Tube Failure Detection System



IP66



Flex-A-Prene[®] Multi-Tube Technology

HEAVY-DUTY PERISTALTIC PUMP TUBING: Multi-Tube is a multi channel pump tube assembly designed exclusively for ProSeries-M[®] Peristaltic Metering Pumps. Multi-Tubes are engineered for optimum performance, including up to four times longer service life than other pump tube assemblies.

PRECISION CHEMICAL METERING FOR OVER 60 YEARS

Blue-White[®] www.proseries-m.com • www.blue-white.com

5300 Business Dr., Huntington Beach, CA 92649 USA • 00+1-714-893-8529 • sales@blue-white.com

The Atlantic Canada Water and Wastewater Association (ACWWA) established this scholarship in 2010 in recognition of dedicated service rendered by long-time member and tireless ACWWA supporter, Lloyd Douglas. ACWWA is a 'Section' of the American Water Works Association (AWWA) and a 'Member Association' of Water Environment Federation (WEF). ACWWA is comprised of more than 550 water professionals from Atlantic Canada representing the water and wastewater industry from a number of disciplines including System Design & Consulting, Utility Management & Operations, Academia & Students, and Service Providers & Contractors. The goals of the association under its Strategic Plan are to:

- Support industry best practices
- Provide our industry with an education for the future
- Promote information exchange in the water and wastewater industry
- Conduct annual conferences
- Enhance government relations
- Increase/optimize membership
- Improve our Association's effectiveness

Number and value:

Up to five awards with a value of \$1,000 each plus a one-year student membership to the American Water Works Association (AWWA) and ACWWA (one winner for each Atlantic Canadian province: NB, NL, NS, and PEI, and one available to the next strongest applicant).

Tenure: One year (non-renewable)

Eligibility:

An applicant shall

- be registered as a full-time student at a university in Atlantic Canada;
- have successfully completed at least one year of postsecondary education; and
- intend to pursue a career related to the water or wastewater industry.

Fields of study: University degree in engineering/science

Assessment criteria:

- Academic record after at least one year completion of postsecondary education (30%);
 - Statement/essay (60%); and
 - Work experience and extracurricular activities (10%).
- Preference will be given to a candidate with a demonstrated interest in working in the water or wastewater treatment sectors.

Application:

The application shall include

- a short biography, a recent photo, and contact information including name, phone number, mailing and email addresses;
- a 500-word statement or essay of the applicant's interest, knowledge and future goals in the water/wastewater industry together with applicable work experience or extracurricular activities;

- a description/list of planned future studies; and
- supporting documents including i) an official transcript completed to date, and ii) a copy of passport (the page showing your name, nationality, and place of birth).

The Scholarships Committee **accepts only electronic applications** which should be received via email by **October 19, 2018**. Scanned copies of the supporting documents are required.

Apply to:

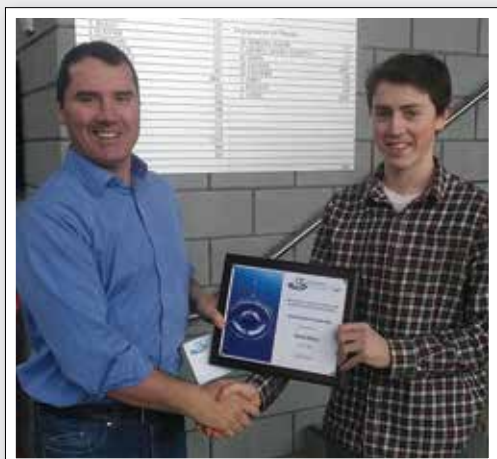
Dr. Bing Chen, Chair of ACWWA Scholarships Committee
Faculty of Engineering and Applied Science
Memorial University of Newfoundland
St. John's, NL, Canada, A1B 3X5
Email: bingchen05@gmail.com

Selection: Selection will be based on the principle of open and equal opportunity and carried out by the Scholarships Committee. The award winners will be announced in the following February. 🇨🇦

2017 Lloyd Douglas Scholarship Winner: Garrett Murray

Congratulations to Garrett K. Murray of PEI, the recipient of the 2017 Lloyd Douglas Scholarship! Garrett is currently studying Sustainable Design Engineering at the University of Prince Edward Island.

Garrett says his future goals are to create designs that are sustainable, environmentally friendly, and that help to improve water quality.



Bill Butler was a lifelong contributor to the water and wastewater industry in Atlantic Canada and a very active member of ACWWA and AWWA. Bill spent much of his career at the Saint John City's Water and Sewerage Department, but ended his legacy as the Commissioner of Community Services in Saint John. Two of Bill's biggest interests were people and water, which combined in his appointment as President of Water For People – Canada from 1994 until retirement. In whatever area Bill worked he showed enthusiasm, professionalism and, above all, a true interest in the people he worked with. He gave those working in the water and wastewater sector a sense of team pride in providing such essential services to citizens. Bill Butler passed away in 2018 and in his honour, ACWWA has established a yearly educational scholarship of \$1,500, where \$1,000 is awarded to the successful applicant and \$500 is donated to Water For People.

Number and value: One yearly cash award with a value of \$1,000 plus a one-year membership to the American Water Works Association and ACWWA. A \$500 donation to Water For People will be simultaneously given in the name of the ACWWA Bill Butler Scholarship.

Tenure: One year (non-renewable)

Eligibility: An applicant shall

- be registered as a student in an Atlantic Canadian community college, institute of technology, or other institution in a water/wastewater operations program; and
- intend to pursue a career related to the water or wastewater industry.

Assessment criteria:

- Academic record in last year of study (20%);
- Statement/essay (60%); and
- Work experience and extracurricular activities (20%).

Preference will be given to a candidate with a demonstrated interest in working in the water or wastewater treatment, collection or distribution sectors.


Application: The application shall include

- a short biography, a recent photo, and contact information including name, phone number, mailing and email addresses;
- a 500-word statement or essay of the applicant's interest, knowledge and future goals in the water/wastewater industry together with applicable work experience or extracurricular activities;
- a description/list of planned future studies; and
- supporting documents including i) a transcript showing courses completed in the last year of study, and ii) a copy of passport (the page showing your name, nationality and place of birth).

The Scholarships Committee **accepts only electronic applications**, which should be received via email by **October 19, 2018**. Scanned copies of supporting documents are required.

Apply to:

Dr. Bing Chen, Chair of ACWWA
Scholarships Committee
Faculty of Engineering and
Applied Science
Memorial University of
Newfoundland
St. John's, NL, Canada, A1B 3X5
Email: bingchen05@gmail.com

Selection: Selection will be based on the principle of open and equal opportunity and carried out by the *Scholarships Committee*. The award winners will be announced in the following February. 



**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

FORD 

As the publisher of *Go With the Flow*, the official publication of the Atlantic Canada Water and Wastewater Association, Craig Kelman & Associates has a deep appreciation for the readers and members of ACWWA whose task it is to ensure that water taken from and put back into our precious mother earth is clean and safe for the people, animals and plants whose very existence depends upon it. To demonstrate their admiration and respect for the association, its members and the water industry as a whole, they have established a yearly educational scholarship of \$500 to be funded through a percentage of advertising sales generated in *Go With the Flow*.

Number and value: One yearly cash award with a value of \$500 plus a one-year membership to the American Water Works Association and ACWWA.

Tenure: One year (non-renewable)

Eligibility: An applicant shall

- be registered as a student in an Atlantic Canadian community college, institute of technology or other institution in a water/wastewater operations program; and
- intend to pursue a career related to the water or wastewater industry.

Assessment criteria:

- Academic record in last year of study (20%);
- Statement/essay (60%); and
- Work experience and extracurricular activities (20%).

Preference will be given to a candidate with a demonstrated interest in working in the water or wastewater treatment, collection, or distribution sectors.

Application:

The application shall include

- a short biography, a recent photo and contact information including

name, phone number, mailing and email addresses;


- a 500-word statement or essay of the applicant's interest, knowledge and future goals in the water/wastewater industry together with applicable work experience or extracurricular activities;
- a description/list of planned future studies; and
- supporting documents including i) a transcript showing courses completed in the last year of study, and ii) a copy of passport (the page showing your name, nationality and place of birth).

The Scholarships Committee **accepts only electronic applications**, which should be received via email by

October 19, 2018. Scanned copies of supporting documents are required.

Apply to:

Dr. Bing Chen, Chair of ACWWA
Scholarships Committee
Faculty of Engineering and
Applied Science
Memorial University of
Newfoundland
St. John's, NL, Canada, A1B 3X5
Email: bingchen05@gmail.com

Selection: Selection will be based on the principle of open and equal opportunity and carried out by the *Scholarships Committee*. The award winners will be announced in the following February. 

Atlantic Canada... We've Got You Covered!

As the exclusive provider of Cla-Val products in Newfoundland and Labrador, New Brunswick, Nova Scotia and Prince Edward Island, KEMTAG Enterprises has provided extensive industry expertise and fluid control solutions throughout the region for two generations.

Automatic Control Valves



Pressure Reducing



Pump Control



Electronic Pilots & Controllers



Pressure Relief



Air Release & Check Valves



INNOVATION • PERFORMANCE • RELIABILITY

Kemtag Enterprises Limited

170 Millennium Blvd.

Moncton, NB E1E2G8

506-852-4004 • sales@kemtag.com

visit www.cla-val.com

E P I C LEARN.
GROW.
SUCCEED.

- 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 covers a wide range of disciplines, visit our website to learn more.

FREE WEBINAR
HIGH IMPACT
PRESENTATION SKILLS
FOR CAREER
ADVANCEMENT

[EPICTRAINING.CA/
SKILLS](http://EPICTRAINING.CA/SKILLS)

1.855.908.3688 epictraining.ca/gf



Certified to
NSF/ANSI 61

Filtration Media

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

SHAW
RESOURCES

To learn more, contact
Travis Richard, P.Eng
trichard@shawresources.ca

902-717-3847
shawresources.ca

0418NS5G002

August 2017

Saint John Safe Clean Drinking Water Project

The Safe, Clean Drinking Water Project (SCDWP) consists of the design, construction, operation, rehabilitation, and financing of a drinking water treatment plant, water storage reservoirs, transmission and distribution system upgrades in the City of Saint John, New Brunswick. The Net Present Value for the project is \$217 million.

The SCDWP includes:

- Renewal of part of the water distribution system and a new drinking water plant with a capacity of 75 million liters per day with a storage capacity of 33 million liters
- Improvements to the existing water distribution, disinfection, and pumping systems, including the

- replacement of 20 km of piping and 10 km of pipe rehabilitation
- New groundwater system in West Saint John
- Dam upgrades



Expected substantial completion date: End of 2018

Founding companies for the project: Brookfield, ACCIONA, and NAC

Government funding partners: Saint John, New Brunswick, and PPP Canada 

For webcam and more information available on this project, please visit www.saintjohn.ca/en/home/cityhall/sjwater/drinkingwater/safecleandinkingwater/default.aspx



Photo credit: Project/construction photos by Dean Price, May 2018 (dean.price@saintjohn.ca)



SOLENO

Mastering Storm Water

1ST
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



turning tides

2018 ACWWA
ANNUAL
CONFERENCE
SYDNEY N.S.

SEPTEMBER 16 -18, 2018
MEMBERTOU TRADE AND CONVENTION CENTRE



Welcome from the Conference Co-Chairs



GREG CAMPBELL, P. ENG.
2018 Conference Co-Chair



MATT VIVA, P. ENG.
2018 Conference Co-Chair

Please join us in Sydney, September 16–18, for the 2018 ACWWA Annual Conference. We promise this will be a conference you will not soon forget! The conference organizing committee has been busy working to make this an event that utilities, suppliers, consultants, regulators, operators, and students alike will be sure to enjoy.

We are extremely pleased to have the opportunity to host the Annual Conference in Sydney at the Membertou Trade and Convention Centre, the first time the conference has been hosted in a Mi'kmaw community. Located minutes from downtown Sydney, Membertou offers a rich history

of indigenous culture that conference attendees are encouraged to explore. The conference committee has put together an itinerary that seamlessly connects downtown hotels with conference amenities, providing transportation to associated hotels and offsite events at regular intervals.

As always, a high-quality technical program will be offered at this year's conference with technical sessions running from Monday morning until Tuesday afternoon. This year's conference program will be filled with all kinds of favorites including golf at The Lakes Golf Club at Ben Eoin, a technical tour of the former Tar Ponds site, ABEA Hospitality night at the Joan Harriss Cruise Pavilion the 'Big Fiddle', ACWWA/ABEA Tradeshow, Water For People Fun Run/Walk, Young Professional's Mixer at Kiju's, Water Tower Building Competition, hands-on technical demonstrations, and our very own version of the Down East Feast – where our entertainment lineup promises to give you the full experience of Cape Breton culture!

Whether it's working to meet ever changing regulatory requirements, modifying operations to adapt to seasonal variations, or shifting organizational focus and direction to improve operational efficiencies – as Water & Wastewater Professionals, the 'Tides are always Turning'.

Please join us in Sydney, NS in 2018 to share your experiences and to enjoy some of Cape Breton's world famous hospitality. We look forward to seeing you!



We help you disinfect your water

Serving Atlantic Canada for 20 years

- Gas chlorination system maintenance & overhaul
- Factory trained on Wallace & Tiernan equipment
- Components repair
- Training
- Modifications
- Parts



UV Disinfection and Chlorination

 **Chloratech**
Equipment Sales and Services

(418) 801-8439
www.chloratech.ca

Conference Highlights

DAY 1 9.16.18 SUNDAY

10:00 am – 3:30 pm
1:00 pm – 3:00 pm
1:00 pm – 4:30 pm
5:00 pm – 7:00 pm
7:30 pm – 10:00 pm

ABEA Golf Tournament at The Lakes Golf Club
Technical Tour – ‘Turning the Tides on the Tar Ponds’
Young Professionals Technical Session
Young Professionals Mixer
Membertou Trade and Convention Centre
Meet & Greet Reception,
including Water Tower Building Competition

DAY 2 9.17.18 MONDAY

7:30 am – 8:30 am
8:30 am – 10:00 am
9:30 am
10:00 am – 12:00 pm
10:15 am – 11:45 am
12:00 pm – 1:30 pm
1:30 pm – 4:45 pm
5:00 pm – 6:00 pm
6:00 pm – 9:00 pm
6:00 pm – 9:00 pm

Pick up breakfast
Conference Opening, including Awards Ceremony
and Keynote Speaker Jeremy White
Companions Program – meet in Membertou Trade
and Convention Centre reception area
ABEA Annual General Meeting
Technical Sessions
ACWWA Annual General Meeting Luncheon
Technical Sessions
Water For People 5km Fun Run/Walk
Dine on your own – Enjoy all that Sydney has to offer
CB Tavern Tour – The Old Triangle/Crown & Moose/Governors

DAY 3 9.18.18 TUESDAY

9:00 pm – 1:00 am
7:45 am – 9:00 am
9:15 am – 10:00 am
10:00 am – 2:00 pm
2:00 pm – 5:15 pm
6:30 pm

ABEA Hospitality Night at The Big Fiddle
with the Andrew Doyle Band
Awards Breakfast
‘Best of the Best’ Water Taste Test
ACWWA/ABEA Tradeshow
Technical Sessions
Down East Feast and Entertainment

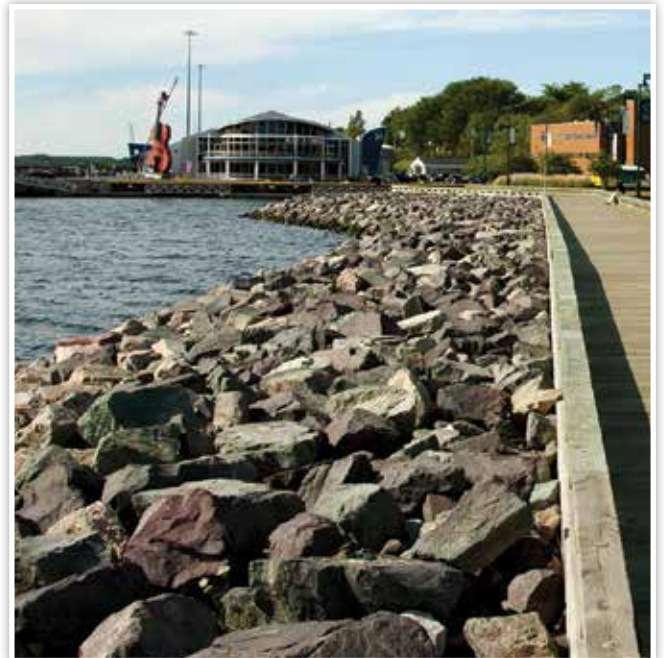
	<p>SINCE 1976 ANTHRACITE FILTER MEDIA</p>	<p>ANTHRACITE FILTER MEDIA Now available with LOW SPECIFIC GRAVITY (1.35-1.45) NSF CERTIFIED Filter Sands & Gravel Carbon Garnet Greensand REMOVE DISPOSE SUPPLY INSTALL</p>	
		<p>Brantford, ON Phone: 519-751-1080 Fax: 519-751-0617 WWW.ANTHRAFILTER.NET</p>	

Welcome | Pjila'si | Fáilte | Bienvenue

This special island resting on the edge of our continent earns large accolades such as National Geographic's one of "20 Must See Places in 2013" and Forbes Magazines' "Hottest Island in Golf." Cape Breton Island is rich and full with experiences such as Canada's only true links golf course, Cabot Links, the world-renowned Cabot Trail, and home to phenomenal historic sites such as the Fortress of Louisbourg and Alexander Graham Bell Museum.

Take advantage of your visit to the island by allowing time to explore and unwind before or after your conference. Cape Breton Island is alive with vibrant culture and bound by its rugged coastline. We hold our traditions close and it's a tradition to share what we have with our visitors... So plan to come early or stay later!

Here are few ideas to help you explore beyond the venue and make your trip memorable! We know 'your heart will never leave.'



More Than a Walk in the Park!

All Walks Should be Like This!

Begin your walk in the park by stepping back to the 18th century at Parks Canada's Fortress of Louisbourg. French soldiers are marching down dirt roads, ladies are dancing in formal parlours, muskets are at the ready, and rum is the drink of choice. Then visit the Alexander Graham Bell National Historic site, and discover the depths of the man's genius. Even throw on some "White Gloves" and comb through some of Bell's personal memorabilia that reveals even more about one of the most influential figures in human history. Hike a trail, plant a tree, have some great meals, and you'll know why this tour is more than a walk in the park.

Sample itinerary

Fortress of Louisbourg National Historic Site

Re-live the 1740s (www.parkscanada.gc.ca/louisbourg)

Lunch on property at Fortress of Louisbourg

Beggar's Banquet for dinner

Overnight at Point of View in Louisbourg

Sample itinerary

Travel to Baddeck, NS

Visit Alexander Graham Bell Museum for walkabout,

White Glove tour & Tetra-kite making

(www.pc.gc.ca/lhn-nhs/ns/grahambell/index.aspx)

Lunch in Baddeck

Travel to Cape Breton Highlands National Park

(www.pc.gc.ca/capebreton)

Beach-side lobster boil at la Bloc

Overnight in a TENTik at Cape Breton Highlands

National Park Cheticamp, NS

Sample itinerary

Travel to Ingonish, NS

Enjoy some beautiful hikes in the Cape Breton

Highlands National Park (www.pc.gc.ca/capebreton)

Dinner in the Purple Thistle Dining Room

Overnight at Keltic Lodge Resort (www.kelticlodge.ca)

Cruising Cape Breton

Sea Legs Anyone?

Enjoy the views and vistas of Cape Breton from a completely different perspective. Sail and explore Cape Breton's waterways from St. Peters Canal to the Bras d'Or Lakes, Louisbourg Harbour, and beyond. Eskasoni's Goat Island, The Cabot Trail, Margaree River Valley, and Iona's Highland Village, 42-acre "living museum" of Gaelic culture are just a few of the gems dotting this tour. During the first two days, you'll be connecting the dots via our spectacular waterways on board a catamaran, complete with chef-prepared meals while on board. Whales, puffins, and eagles are a natural part of Cape Breton waters and they're sure to pay a visit on this excursion. Also, enjoy the sights and sounds of the land as you overnight in some of our magical small ports and enjoy even more local specialty meals.

Day 1

Travel to Sydney, NS

Overnight in a Sydney hotel

Day 2

Breakfast

Travel to Ben Eoin

Charter a boat for a cruise around the Bras d'Or Lakes

Lunch on the boat

Return to Ben Eoin Marina

Check in to The Birches at Ben Eoin

Supper at Malcolm's Dining Room

Overnight at The Birches at Ben Eoin

Day 3

Breakfast

Travel to North River Bridge

Embark on a kayaking adventure

Travel to Baddeck, NS

Partake on a tour on the Schooner Amoeba

Supper at Baddeck Lobster Suppers

Overnight at a Baddeck hotel

Day 4

Depart Cape Breton and plan your next trip to the Island

Technical Program

Monday, Sept. 17	10:15–11:00	11:00–11:45
Technical Session: A1	Managing & Motivating Millennials <i>Robyn Tingley, GlassSKY Inc.</i>	Why Diversity Matters <i>Randy Newman, Department of Psychology, Acadia University</i>
Technical Session: A2	Long-Term Monitoring for Ecosystem-based Management of CBRM Water Supply Areas: Forest Soil Chemistry <i>Thomas Bouman, Cape Breton University and Anthony Mazzocca, Cape Breton Regional Municipality</i>	Evaluating Long-Term Reservoir Water Quality Trends Using Sediment Chemistry & Historical Invertebrate Abundance at CB <i>Dewey Dunnington, Dalhousie University</i>
Technical Session: A3	Northwest Arm Sewer Rehabilitation and Sullivans Pond Storm Sewer System Replacement <i>David Ellis, Halifax Water</i>	Valve Solutions for Best Performance and Longest Life of Pumping Systems <i>John Skalla, DeZurik</i>


Monday, Sept. 17	1:30–2:00	2:00–2:30	2:30–3:00
Technical Session: B1	Jones Lake Spillway & West Main Street Culvert Renewal Project <i>Lisa Grasse and Darryl Bonhower, Crandall Engineering Ltd. and City of Moncton</i>	Management of a Watermain Rehabilitation Program: City of Toronto Case Study <i>Stewart Dickson, WSP Canada Inc.</i>	Peninsula Halifax Transmission Main Renewal <i>Kevin Healy, Halifax Water</i>
Technical Session: B2	*Working Towards a First Nations Owned & Operated Water Utility in Atlantic Canada: Atlantic First Nations Water Authority <i>James MacKinnon, Atlantic Policy Congress of First Nations Chiefs Secretariat</i>	Drinking Water Security – Bras d'Or Lakes First Nations <i>Andrew Lafford, NSCC</i>	Understanding Water Mgmt. Risks & Challenges in Atlantic First Nations Communities Using a Water Safety Planning Tool <i>Kaycie Lane, Dalhousie University</i>
Technical Session: B3	UV LEDs for Point Use Drinking Water Treatment, A Pilot Study in Pond Inlet <i>Stephanie Gora, Dalhousie University and Tim Anaviapik Soucie, Hamlet of Pond Inlet</i>	Manganese Treatment in Groundwater Supplies – Case Studies <i>Mike Chauk, CBCL Limited</i>	Filter Assessment Techniques for Water Utilities & Case Studies <i>Devin MacAskill, Cape Breton Regional Municipality</i>

Monday, Sept. 17	3:15–3:45	3:45–4:15	4:15–4:45
Technical Session: C1	*Investigating Drinking Water Lead Concentrations at the Tap Using Proposed Health Canada Guideline for the Province of Nova Scotia <i>Javier Locsin, Dalhousie University</i>	Design & Implementation of Lead Sampling Program for Drinking Water & Corrosion Control Mon. Programs <i>James MacDonald, AGAT Labs</i>	*Bench-Scale Evaluation of Silicate-based Corrosion Inhibitors on Lead Release Control & Water Quality <i>Bofu Li, Dalhousie University</i>
Technical Session: C2	Future Ready: Considering Trends in Climate, Society, Technology & Resources in the Design of Infrastructure <i>atrick Lewis and Anna Robak, WSP Canada Inc.</i>	*Climate Change and Floodplain Mapping: A Case Study on the Waterford River <i>Lindsay Wilcott and Jennifer Burse, CBCL Limited</i>	Forming a Vulnerability to Climate Change Framework <i>Megan Blackburn, GM BluePlan Engineering Limited</i>
Technical Session: C3	Rapid Assessment of Chemical Oxygen Demand in Water and Wastewater: A Technical Demonstration <i>Justin Dickerman, Mantech Inc.</i>		

Tuesday, Sept. 18	2:00-2:30	2:30-3:00	3:00-3:30
Technical Session: D1	What You Need to Know About Health Canada's Upcoming Guideline Changes: Lead, Manganese, and Cyanobacterial Toxins <i>Krysta Montreuil, Nova Scotia Environment</i>	Do Not Consume – How Prepared is Your Utility <i>Julie Stokes, City of Moncton</i>	Assessment of Cyanobacteria Treatment Options: An Atlantic Canada Water Treatment Plant Perspective <i>Melissa Fraser, CBCL Limited</i>
Technical Session: D2	CBRM Enjoying the Good Things Efficiency Brings <i>Kaelan Keys, Efficiency Nova Scotia</i>	Charlotte Water Biosolids Masterplan and Market Analysis <i>Jacqueline Jarrell, Charlotte Water</i>	Municipal Asset Data Collection & Data Management Best Practices <i>Kelsey Green and Don Partington, WSP Canada Inc.</i>
Technical Session: D3	Long-Term Benefits of Preventative Maintenance and Record Keeping <i>Trudy Gillis, Village of Baddeck</i>	Halifax Water Customer Assistance Programs <i>Cathie O'Toole, Halifax Water</i>	Cyber Security – What You Don't Know Will Hurt You <i>Carl Yates, Halifax Water</i>

Tuesday, Sept. 18	3:45-4:15	4:15-4:45	4:45-5:15
Technical Session: E1	Get the Lead Out: Lessons Learned from the Early Days of Implementing a Comprehensive Lead Service Line Replacement Program <i>Wendy Krkosek, Halifax Water</i>	Dealing with Water Quality Issues at Water-Storage Tanks <i>John Eisnor, Halifax Water</i>	Sustaining Success: Management of a Water Loss Reduction Program in CBRM <i>Greg Campbell, Cape Breton Regional Municipality and Ken Brothers, Hydrotech Consulting</i>
Technical Session: E2	Glace Bay Water System Master Plan <i>Holly Sampson, CBCL Limited and Greg Campbell, Cape Breton Regional Municipality</i>	Pugwash Central Water Supply <i>Patrick Lewis and Anna Robak, WSP Canada Inc.</i>	City of Charlottetown Miltonvale Water Supply Project <i>Richard MacEwen, City of Charlottetown</i>
Technical Session: E3	Inflow & Infiltration Reduction in a Small Wastewater Collection System <i>Glenn Woodford, DesignPoint Engineering & Surveying</i>	Your Flow Monitoring Program is Established; Now What <i>Bryan Bortolon, GM BluePlan Engineering Limited</i>	Key Issues for Water & Wastewater Systems at Parks Canada <i>Dwayne Doucette, Parks Canada Agency</i>

* Fresh Ideas presenters are first-time Young Professional participants at the ACWWA Section conference presenting a water-related topic, and will be considered for the Fresh Ideas program that has been developed through AWWA's Manufacturers/ Associates Council and the Young Professionals Committee. The top presentation selected from this group of presenters will be given the opportunity to compete in the Fresh Ideas poster competition at the AWWA Annual Conference and Exposition (ACE 2019) in Denver, Colorado representing the Young Professionals of ACWWA. Along with complimentary conference registration provided by the ACE 2019 organizing committee, ACWWA will provide the winner with a stipend to assist with travel costs to the conference.



Environment Solutions Through Quality and Commitment
Island Owned and Operated

SERVICES INCLUDING:

- Phase I & II Environmental Site Assessments (ESAs);
- Remediation Services and Risk Assessments including development of Remedial Action Plans (RAP) and Risk Management Plans (RMP);
- Groundwater Monitoring; Hydrogeology;
- Hazardous Materials Survey; and Geotechnical Investigation, etc.

Contact: Peter H. Joostema, P.Eng., CESA, FEC Tel: (902) 316-2493
pjoostema@jooseenv.com | www.jooseenv.com



- 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

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

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

Golf was Invented for Places like Cape Breton

The Challenge of the Place

There are 35,000 golf courses around the world. Only a selection of these embrace the true spirit of the game. Cape Breton is one of those places. Canadian Golf Magazine's Best You Can Play Top 50 golf courses in Canada rates Cabot Links as #1 and Cabot Cliffs as #2 and Highlands Links #5. SCOREGolf rates Cabot Cliffs #1 and Links #3, and Highlands Links #5.



Lucky for you, we have celebrated two significant milestones: Highlands Links celebrated its 75th Anniversary in 2016. This Stanley Thompson masterpiece has grown in stature to be regarded as a national treasure; and Golf Digest names Cabot Cliffs as North America's Best New Course in 2015. Last year marked the first year in full operational mode. Find out why Cabot Cliffs is golf, redefined, reshaped and reimagined.

Day 1

Travel to Baddeck, NS

Overnight at The Inverary Resort & Spa

Day 2

Breakfast

Tee off Bell Bay Golf Course, OR

Travel to Ingonish, NS

Tee off at Highlands Links Golf Course

Supper at The Purple Thistle Restaurant

Overnight at Keltic Lodge

Day 3

Breakfast

Travel to Inverness, NS

Tee off at Cabot Links or Cabot Cliffs

Dinner at Cabot Public House

Overnight at Cabot Links Lodge

Day 4

Depart Cape Breton and plan your next trip to the Island...

Down East Feast

This year's Down East Feast Entertainment is something truly special. The organizers of the 2018 ACWWA Annual Conference are proud to invite you to experience some of Cape Breton's most talented and beloved performers. First, you will have chills down your spine as The Men of the Deeps take you back to a time to "When Coal Was King." Then prepare to have some side splitting laughs with performances by members of The Cape Breton

Summertime Revue cast, Bette MacDonald and Jenn Sheppard. If you are lucky, Mary Morrison may even make an appearance. Then put your dancing shoes on and enjoy the music of two of Cape Breton's hottest bands, The Privateers and High Society. This line-up of talented musicians combines Celtic music favorites with modern dance floor hits that are sure to make everyone want to tap their toes or get up and dance!



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		
<input type="checkbox"/> Check box if you would like to be added to the ACWWA email list <input type="checkbox"/> Check box if you are a first time conference attendee					
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 – On or Before August 16, 2018 - Includes all Meals	<input type="checkbox"/> Member – \$475	<input type="checkbox"/> Non-Member – \$525	\$
Full Conference Delegate – After August 16, 2018 - Includes all Meals	<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) Registration is free if the student is presenting a technical session	<input type="checkbox"/> Member/Non-Member – \$50		\$
Monday Full Day Pass (Includes Breakfast, AGM lunch and ABEA Hospitality Reception)	<input type="checkbox"/> Member – \$250	<input type="checkbox"/> Non-Member – \$275	\$
Tuesday Full Day Pass (Includes Breakfast, 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 Breakfast and Trade Show Lunch)	<input type="checkbox"/> Member – \$125	<input type="checkbox"/> Non-Member – \$150	\$
Register before August 1 and be entered for the early bird draw			Part 2 – Subtotal
			\$

PART 2B - DELEGATE MEALS & ACTIVITIES NOT INCLUDED WITH REGISTRATION			
Sunday, September 16		Please indicate attendance by checking box	
Golf – Transportation, Green Fees, Shared Cart and Lunch Included Indicate your shirt sizes: SM ____, MED ____, LG ____, XL ____, XXL ____		___ @ \$75 =	\$
Turning the Tides on The Tar Ponds Tour		___ @ \$15 =	\$
Young Professional Workshop – Registration is free – please indicate if you are attending		Yes	No
Tuesday, September 18			
Down East Feast – Included in Delegate/Companion Registration Fees	Additional Tickets ___ @ \$75		\$
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	Part 2 – Subtotal		\$

PART 3A – TRADE SHOW BOOTH RENTAL & EXHIBITOR REGISTRATION			
Booth Rental (Max 3 Booths & 2 People/Booth)	ABEA Member – ___ Booths @ \$525	Non-Member – ___ Booths @ \$900	\$
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	
Part 3 – Subtotal			\$

PART 3B - EXHIBITOR MEALS & ACTIVITIES NOT INCLUDED WITH REGISTRATION			
Sunday, September 16			
Golf – Transportation, Green Fees, Shared Cart, and Lunch Included Included Indicate your shirt sizes: SM ____, MED ____, LG ____, XL ____, XXL ____		___ @ \$75 =	\$
'Turning the Tides on The Tar Ponds' Tour		___ @ \$15 =	\$

Exhibitor Booth registration <u>does not</u> include the full conference or meals. To attend full conference, register as a Delegate in Part 2			
Monday, September 17			
Pick-up Continental Breakfast	Exhibitor ___ @ \$24		\$
Annual General Meeting Luncheon	Exhibitor ___ @ \$44		\$
Tuesday, September 18			
Awards Breakfast	Exhibitor ___ @ \$30		\$
Down East Feast	Exhibitor ___ @ \$75		\$
Please indicate meal choice for Down East Feast	Lobster ___	Chicken ___	Beef ___
Please describe any dietary restrictions or other special needs you may have	Part 3 – Subtotal		\$

PART 5 – FEES			
Water For People 5 km Fun Run/Walk	Subtotal		\$
	Life Members deduct \$100.00		\$
	HST 15% (869 924 910 RT2)		\$
Indicate your shirt sizes: SM___, MED___, LG___, XL___, XXL___	Water For People Fun Run___ @ \$25.00		\$
	Water For People Fun Walk___ @ \$25.00		\$
	Total Amount Due		\$

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	
WHEN PAYING WITH A CREDIT CARD AN EMAIL ADDRESS IS REQUIRED FOR A RECEIPT TO BE ISSUED By registering for this event, your contact information may be shared with exhibitors and/or sponsors.			

Conference Information
Full conference has a 1.5 CEU value.

Trade Show Information
Each booth measures 8' x 10' and all are on the arena surface. Booth selection will be online and first come first serve. ABEA members will have exclusive access for one week prior to general public. Contact the ABEA to learn more about becoming an ABEA member, Cathy Cameron at scotiatech.main@ns.sympatico.ca. For trade show questions contact Cathy Cameron at scotiatech.main@ns.sympatico.ca.

Booth registrations must be paid with Visa or Mastercard at time of booth selection in order to confirm registration.

ACWWA Delegate Cancellation Policy
Cancellations must be received in writing, on company letterhead, and faxed, mailed or emailed to the ACWWA Office. Phone cancellations are not accepted. All cancellations postmarked/fax-dated 14 days in advance of the conference start date will receive a full refund, minus a 10% administrative fee. Cancellations between 7 and 14 days of the conference start will receive a 50% refund. Cancellations less than 7 days in advance of conference will not be refunded. Please note that substitute registrants are welcome. Fax requests for substitutions or cancellations to (902) 435-7796 or email to contact@acwwa.ca.

ACWWA Tradeshow Cancellation Policy – Payment Options
Cancellations must be received in writing, on company letterhead, and faxed, mailed or emailed to the ACWWA Office. Phone cancellations are not accepted. All cancellations postmarked/fax-dated 31 days in advance of the conference start date will receive a full refund, minus a 10% administrative fee. Cancellations between 14 and 30 days of the conference start will receive a 50% refund. Cancellations less than 14 days in advance of conference will not be refunded. Please note that substitute registrants are welcome. Fax requests for substitutions or cancellations to (902) 435-7796 or email to contact@acwwa.ca.

Conference Hotel Information

Hampton Inn By Hilton

The main conference hotel is the Hampton Inn by Hilton located at 60 Maillard Street, Membertou. The Hampton Inn is conveniently accessible, via pedway, to the conference venue. Features of the Hampton Inn by Hilton include free internet, free parking, exercise facility, mineral pool, and 90-foot water slide. The conference rate of \$159 per night will be available until August 15. Reservations can be made using the link on the ACWWA website or by calling 1-902-564-6555. Be sure to request the ACWWA block rate if booking your room by phone. Overflow hotels are the Holiday Inn Sydney Waterfront and Cambridge Suites Hotel Sydney. Free transportation to Membertou Trade and Convention Centre and other conference-related events will be provided at regular intervals.



Holiday Inn Sydney Waterfront



The Holiday Inn Sydney Waterfront is located at 300 Esplanade, Sydney. The conference rate of \$159 per night will be available until August 1 and includes free internet. Reservations can be made using the link on the ACWWA website or by calling 1-800-315-2621. Be sure to request the ACWWA block rate if booking your room by phone.

Cambridge Suites Hotel Sydney



The Cambridge Suites Hotel Sydney is located at 380 Esplanade, Sydney and features free parking, free buffet breakfast, and free Wi-Fi. The conference rate of \$155 per night will be available until August 3. Reservations can be made using the link on the ACWWA website or by calling 1-800-565-9466. Be sure to request the ACWWA block rate if booking your room by phone. ☁

THE PANEL SHOP

CUSTOM CONTROL PANELS

Celebrating 20+ Years



NEWS FROM THE PANEL SHOP

- The Panel Shop would like to welcome Anthony Giberson to our team as Production Manager
- The Panel Shop would like to congratulate Kevin Drapeau on his new position as Service Manager

- Agriculture Site Service & Support
- Control System Maintenance and Upgrades
- Instrumentation Solutions
- PLC Programming
- Lift Station Protection and Control Panels
- Water and Wastewater SCADA Systems
- Alarm Systems Sales, Installation & Programming

For further information please contact:

Mr. Michael Hickey, Branch Manager, The Panel Shop
506-455-1325 Michael.Hickey@Pennecon.com

Mr. Mark Whalen, Manager Controls & Automation, Pennecon Energy
Technical Services mwhalen@pennecon.com





CAMPBELL'S CONCRETE LTD.



Campbell's Concrete Ltd. believes their success rests on these three pillars –
Customer Satisfaction, Employee Well Being and Partnership With Suppliers.

We dedicate ourselves to providing customer service that cannot be topped, along with discovering and meeting the needs of our customers. We recognize that our employees are what make our company exceed the expectations of our customers. We believe that our suppliers are our partners in business and that shows in the length of our relationships with them.

We believe that we live our philosophy here at Campbell's Concrete Ltd. and that is why we have customers, employees and suppliers that have been with us since the day we started in 1974. The day we made the decision to become "Committed to Quality & Service"

Specializing in Municipal & Industrial Waterworks, our divisions include:

Precast | Waterworks Supply & Construction Products | Concrete Repairs

PROUD MEMBERS OF



Toll Free: 1-800-361-3442

Phone: 902-368-3442

Fax: 902-894-5581

Email: info@campbellsconcretepei.com

www.campbellsconcretepei.com

420 Mount Edward Road
Charlottetown, PE C1A 7K7



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

Flowstar Industrial ULC

Flowstar serves Atlantic Canada with extensive product lines including:

Pumps, Valves, Mixers, Expansion Joints, Braided Hose, Strainers, Flow Meters and Sealing solutions as well as related Industrial products.



ACPE Company

FLOWSTAR INDUSTRIAL ULC., TRURO, NS, 902 896-0041
WWW.FLOWSTARIND.CA SALES@FLOWSTARIND.CA



Find us online

www.acwwa.ca



Complete Turn-key Liquid Storage Solutions

Experience spanning over 30 years with more than 400 installations.

GREAT TANKS • GREAT SERVICE

(519) 469-8169 | WWW.GREATARIO.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

OUR TECHNOLOGY IS BASED ON SOUND SCIENCE

Inspect More, Clean Better

Active Acoustics screen for blockage with no flow contact

MILLIONS OF FEET INSPECTED

- Save time, water, AND money
- Screen 2+ miles per day
- EPA validated
- Highly portable and easy to operate



877-747-3245

sales@infosense.com • www.infosense.com



HUNTLEY'S SUB AQUA CONSTRUCTION

SEE ABOVE AND BELOW THE SURFACE OF THE WATER

▶ Remote Operated Vehicle Underwater ROV video

▶ 4K Aerial Drone video
When you want to see above & below the surface



THE RIGHT EQUIPMENT FOR EVERY JOB

Get to the bottom at WWW.HUNTLEYSSUBAQUA.CA

UNDERWATER VIDEO INSPECTION SURVEYS

CCTV • DRONE • ROV

DEEP DOWN YOU WANT THE BEST



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

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
Montreal, Québec

(800) 595-0514
www.cancoppas.com
controls@cancoppas.com



Cole Harbour Students Learn About the Water Cycle

During the Weather unit in Science, the Grade 5s from 5/6 Grant at Caldwell Road Elementary School in Cole Harbour learned about the water cycle. As two-eyed seeing is important to understanding the world around them, they wanted to reflect the Mi'kmaw culture and Indigenous ways of being in their artwork.

The elders at the front of the poster were placed on the red for our Mi'kmaw heritage. Each elder was designed by a Grade 5 student; they symbolize the

elders watching over and protecting the environment.

The background honours Mi'kmaw culture with silhouettes of a wigwam, wildlife, and nature along with a birch-bark canoe in the river, and a medicine wheel hanging from a tree while showing the water cycle in the centre.

The Grade 5s are excited for their art piece to be in the ACWWA annual water calendar and featured at the conference in Membertou this fall. 🌊



“The Grade 5s are excited for their art piece to be in the ACWWA annual water calendar and featured at the conference in Membertou this fall.”



Updated guidelines for lead service lines

The Federal-Provincial-Territorial Committee on Drinking Water has recently proposed changes to the guideline for lead in drinking water. The proposed changes include new lead sampling protocols and a reduction in the maximum acceptable concentration from 10 µg/L to 5 µg/L. A significant source of lead in drinking water results from lead service lines, where the service line is the portion of pipe that runs between the watermain and the internal premise plumbing.

New AWWA Standard: Standard for Replacement and Flushing of Lead Service Lines

As water utilities take measures to identify and remove all lead service lines over time, there is a new standard available from the AWWA Standards Subcommittee on Lead Service Lines that can assist with the process. AWWA C810-17 *Standard for Replacement and Flushing of Lead Service Lines* describes procedures for the replacement of lead

service lines and for flushing following replacement. The document includes valuable guidance on: appropriate tools and techniques; flushing a service line after replacement; factors to consider in optimizing flushing; instructions to provide customers affected by replacement, and; verification of lead level management prior to return to service. The Standard supports full lead service line replacement over partial lead service line replacement, as partial replacements can result in increased lead release. Flushing following replacement is used to help remove particles that may be present in the service line and near the point of use.

Have topics that you would like to see highlighted by the ACWWA Technical Knowledge Committee? Contact Committee Chair, Amina Stoddart, at amina.stoddart@dal.ca.

And remember, content from our Lunch & Learns is always available by visiting the Technical Knowledge Committee on YouTube (<https://goo.gl/DStnFz>).

“Flushing following replacement is used to help remove particles that may be present in the service line and near the point of use.”

bb
BIBBY-STE-CROIX
from concept to completion
Design by Robert Scullion

BIBBY-STE-CROIX 1757 Burlington Street East, Hamilton, Ontario L8H 3L5
T: 905.312.4775 • Toll Free 1.800.982.5682 • F: 905.312.1434 • www.bibby-ste-croix.com

See us at Booth 35 **Made in Canada.**

Utility partnerships key to water innovation, says BlueTech CEO

Press enquiries to:
Natasha Wiseman
E: natasha@wiseonwater.com



Partnerships between utilities, academics, and technology companies will unlock innovation in the water sector, says Paul O'Callaghan, chief executive of water technology intelligence company BlueTech Research.

Speaking ahead of BlueTech Forum, which took place in Vancouver, Canada on June 6–7, he said, “The global drive for innovation is gathering apace and water utilities and municipalities have little choice but to embrace it.

“At a global level we face multiple challenges, fast-growing urban populations, environmental degradation, climate change and stretched budgets. This all means the resource and cost efficiencies innovation can bring are increasingly urgent.”

O'Callaghan continued, “Being open to innovation will mean developing close partnerships between the companies providing water and sewerage services, academics institutions and technology companies. Utilities that fail to do this will be left behind.”

Utilities and municipalities attending BlueTech Forum include Denver Water, Metro Vancouver, Scottish Water, and Severn Trent Water. O'Callaghan says BlueTech's track record shows that participants will find opportunities to develop utility-to-utility partnerships to take initiatives forwards at an international level.

“Global cooperation on issues relating to water and the environment has never been more important and our experience shows that utilities and industrial companies value the opportunity to

open up relationships with academics and innovators that can lead to commercial and research partnerships. The Forum is set up to generate these collaborative enterprises.”

BlueTech Forum provides multiple opportunities for intensive networking at the highest level through numerous hosted roundtables, curated one-to-one business meetings, and social events. BlueTech's expert analysts will be on hand throughout to help forge new connections and provide the market expertise needed to ensure they are founded on the best available information.


The theme for 2018 was ‘managing water risk in the circular economy’ and keynote speakers include research scientist Michael Flynn, who is researching water recycling technology development for space travel, and Jens Kolind, vice president of technical industries at biotechnology specialist Novozymes.

BlueTech Forum took place at the Vancouver Convention Center on June 6–7, 2018.

About BlueTech Research

BlueTech® Research

provides investors, water companies, researchers, and regulators with the latest information at their fingertips. The company provides clarity and critical analysis on emerging water technology market areas.

BlueTech Research maps and analyses the water technology innovation landscape. The company is focused on what is changing and how new approaches, new technologies, and new needs are reshaping the water technology market.  AN O₂ ENVIRONMENTAL COMPANY

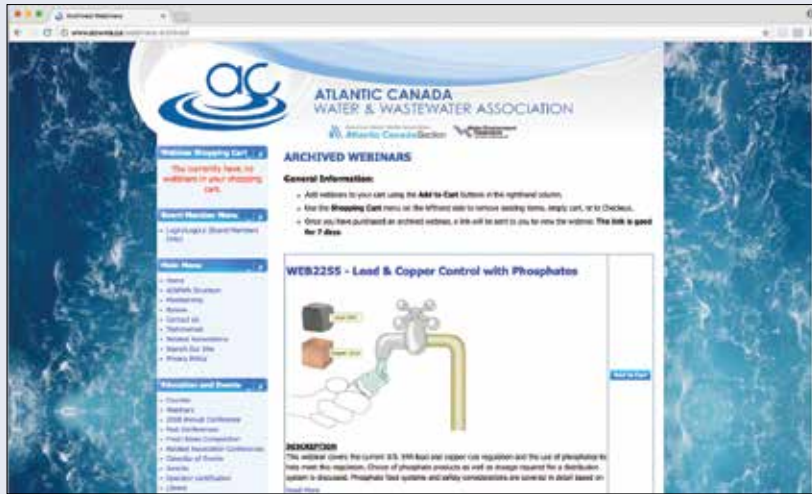
Send your news items to:

Lindsay Wilcott,
ACWWA Magazine Chair

lwilcott@cbcl.ca

Did you know?

ACWWA recently partnered with the Illinois Section of the American Water Works Association (ISAWWA) to provide archived webinars.



ISAWWA records all its webinars and most are made available to ACWWA as Archived Webinars.

If you are an ACWWA member, you can watch the Archived Webinars for the low price of \$25 each (\$30 for non-members). Once you have registered you may view the webinar as many times as you would like.

The Archived Webinars are available 24 hours a day, 7 days a week, and you can start and stop them whenever you like.

ACWWA benefits from the purchase of each webinar. A great way to learn and help support our Section!

Go to www.acwwa.ca/webinars-archived for more information. 

Pumps for all your waste water challenges

- Thickened Sludge
- Bio-mass
- Thin Sludge
- Dewatered Sludge
- Activated Sludge
- Lime Milk
- Auxiliary Flocculents
- Combined Sewage
- Flotation Sludge



CLASSIC TORNADO® T1
Rotary Lobe
Pumps



NEMO® Progressing
Cavity Pumps

Full Service-in-Place (FSIP®) Pumps

TORNADO® T2
Rotary Lobe Pumps



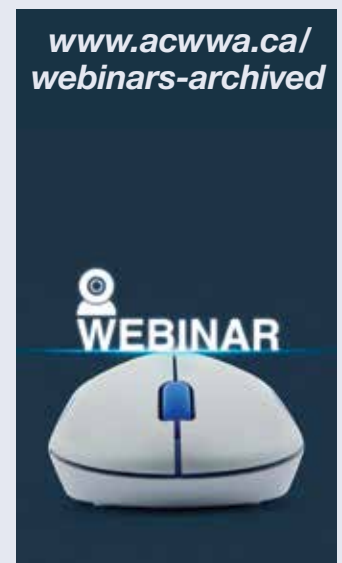
N.Mac™ Twin
Shaft Grinders



NEMO® Mini
Metering Pump

NETZSCH

NETZSCH Canada, Inc.
Tel: 705-797-8426
ntc@netzsch.com
www.pumps.netzsch.com



THE BIOSOLIDS CYCLE

The 9th Canadian Biosolids & Residuals Conference

and NEBRA's Annual Conference

September 9-12, 2018

World Trade & Convention Centre
Halifax, Nova Scotia



www.cbrc2018.org



Atlantic Purification Systems Ltd.

10 Ferguson Road, Dartmouth NS B3A 4M1

Phone: 902-469-2806 Toll Free: 800-265-2300 e-mail: sales@aps.ns.ca



Serving Atlantic Canada since 1970
www.aps.ns.ca

Visit our New Brunswick Office at: 695 Malenfant Blvd., Dieppe NB E1A 5T8
Phone: 506-857-2880 Cell: 506-863-7867 Toll Free: 888-863-7867
ryan@aps.ns.ca michelle@aps.ns.ca troy@aps.ns.ca

2018 ACWWA Photo Contest

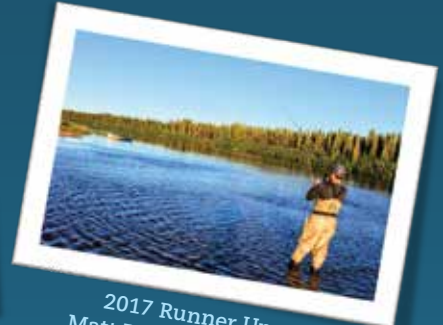
Our Family* and Water (*includes pets)



2017 Runner Up
Wendy KrKosek (Halifax Water)



2017 Top Prize
Brian Morneau (CBCL)



2017 Runner Up
Matt Balcombe (CBCL)

RULES AND CRITERIA:

1. Photo **must** be submitted by an ACWWA Member.
2. Photo **must** include water AND a family member(s) and/or pet(s).
3. Please provide first name of those in photo.
4. Unlimited submissions. Only one winning picture per member.
5. Judged by ACWWA Board.
6. Deadline for submission is September 1, 2018.
7. Submit pictures or questions to julie.stokes@moncton.ca.

TOP PRIZE

\$250 gift card of your choice

SECOND PLACE PRIZE

\$150 gift card of your choice

THIRD PLACE PRIZE

\$100 gift card of your choice



Engineering Solutions



Crandall Engineering Ltd.
A Division of Englobe Corp.



Crandall is pleased to now have a local presence in New Brunswick, Nova Scotia and Newfoundland & Labrador as part of Englobe.

Municipal Infrastructure

Water / Wastewater Treatment

Land Development

Transportation and Traffic

Mechanical and Electrical

Geotechnical and Materials

Environmental

SCADA

Moncton, NB

Saint John, NB

Fredericton, NB

Dartmouth, NS

Mount Pearl, NL

Toll Free:
1-866-857-2777

www.crandallengineering.ca

ACWWA Technical Committee YouTube channel

Did you know?

The ACWWA Technical Committee has created a YouTube page:

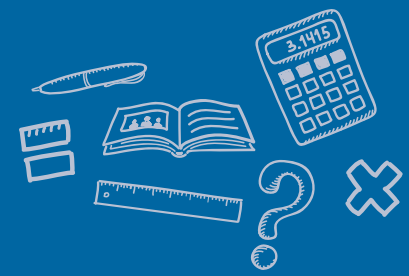
www.youtube.com/channel/UCVw28diBru2wBlhJXkkQbqw

We will be using this platform to share recorded Lunch and Learns and other resources with our membership.

Visit our page today to see what resources are available and to subscribe to our channel.



SUBSCRIBE NOW!



ACWWA upcoming courses

NOVA SCOTIA

Pipe and Cable Locate Training – Sydney
October 10, 2018
Non-member Price: \$343.85
Member Price: \$322.00

Water Treatment, Level I & II – Halifax
October 16–19, 2018
Non-member Price: \$1,121.25
Member Price: \$1,029.25

Basics of Pipe Tapping and Service Line Product – Sydney
October 17, 2018
Non-member Price: \$316.25
Member Price: \$287.50

Fundamentals of Pumping – Truro
October 18, 2018
Non-member Price: \$201.25
Member Price: \$172.50

Lift Stations and Forcemains – Halifax
November 27, 2018
Non-member Price: \$343.85
Member Price: \$322.00

Wastewater Collection, Level I & II – Halifax
December 4–7, 2018
Non-member Price: \$1,121.25
Member Price: \$1,029.25



NEW BRUNSWICK

Fundamentals of Pumping – Fredericton
October 16, 2018
Non-member Price: \$201.25
Member Price: \$172.50

Water Distribution, Level I & II – Moncton
November 5–8, 2018
Non-member Price: \$1,121.25
Member Price: \$1,029.25

Wastewater Treatment, Level I & II – Moncton
November 19–22, 2018
Non-member Price: \$1,121.25
Member Price: \$1,029.25

PRINCE EDWARD ISLAND

Wastewater Aeration – Charlottetown
October 11, 2018
Non-member Price: \$343.85
Member Price: \$322.00

For more information and to register online, go to www.acwwa.ca/courses/courseschedule.html



ENGINEERING AND ENVIRONMENTAL DESIGN AND CONSULTING

CBCL LIMITED
Consulting Engineers

Halifax • Sydney • Saint John Fredericton • Moncton
Charlottetown • St. John's • Happy Valley-Goose Bay

f t y in
www.CBCL.ca



PASS YOUR CERTIFICATION EXAM

Download the app for free

Take certification preparation with you!
Available on iOS, Android, and as a desktop version via your web browser.



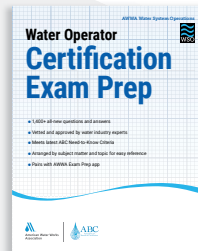
Or get the new book

1400+ all NEW questions and answers

Vetted and approved by experts

Meets latest ABC Need-to-Know Criteria

Arranged by subject matter and topic for easy reference



AWWAexamprep.com

 American Water Works Association



Our concern for the environment



is more than just talk

As we continue to deliver valuable information through the pages of this magazine, in a printed format that is appealing, reader-friendly and not lost in the proliferation of electronic messages that are bombarding our senses, we are also well aware of the need to be respectful of our environment. That is why we are committed to publishing the magazine in the most environmentally-friendly process possible. Here is what we mean:

- We use lighter publication stock that consists of recycled paper. This paper has been certified to meet the environmental and social standards of the Forest Stewardship Council® (FSC®) and comes from responsibly managed forests, and verified recycled sources making this a RENEWABLE and SUSTAINABLE resource.
- Our computer-to-plate technology reduces the amount of chemistry required to create plates for the printing process. The resulting chemistry is neutralized to the extent that it can be safely discharged to the drain.
- We use vegetable oil-based inks to print the magazine. This means that we are not using resource-depleting petroleum-based ink products and that the subsequent recycling of the paper in this magazine is much more environment friendly.
- During the printing process, we use a solvent recycling system that separates the water from the recovered solvents and leaves only about 5% residue. This results in reduced solvent usage, handling and hazardous hauling.
- We ensure that an efficient recycling program is used for all printing plates and all waste paper.
- Within the pages of each issue, we actively encourage our readers to REUSE and RECYCLE.
- In order to reduce our carbon footprint on the planet, we utilize a carbon offset program in conjunction with any air travel we undertake related to our publishing responsibilities for the magazine.

So enjoy this magazine...and KEEP THINKING GREEN.

NULANTIC WATER
WATER SOLUTIONS. CLARIFIED

51 Ballathie Crescent
Fall River, NS B2T1P6
(902) 861-4710
sales@nulantic.ca

NS NB PE NL

TREAT	ODOUR	DISINFECT	MONITOR
Process Equipment	Vapour, Odour, Gas, Removal Systems	Chemical Feed	Online Analyzers
Tubular Membrane	Media	Gas Dissolution	Portable/Lab Inst.
Centrifuges	Covers	Onsite Generation	Gas Detectors
Resource Recovery		Fyne Nanofiltration	Weigh Systems

www.nulantic.ca

Atlantic Backflow Specialists Ltd.
Serving Atlantic Canada

Surveys
Tests



Installations
Repairs / Parts

Certified Cross Connection Control Specialists

Kevin S. Jones
Bus: (902) 499-7745

kevin@atlanticbackflow.com
www.atlanticbackflow.com

Fax (902) 434-3990
65 Mt. Edward Rd.
Dartmouth, N.S.
B2W 3K6

It takes a team to turn on the tap.
We are 450 proud stewards of the water cycle.



f/HalifaxWater
www.HalifaxWater.ca

Halifax Water
STRAIGHT from the SOURCE

Scotia Tech

- 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

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

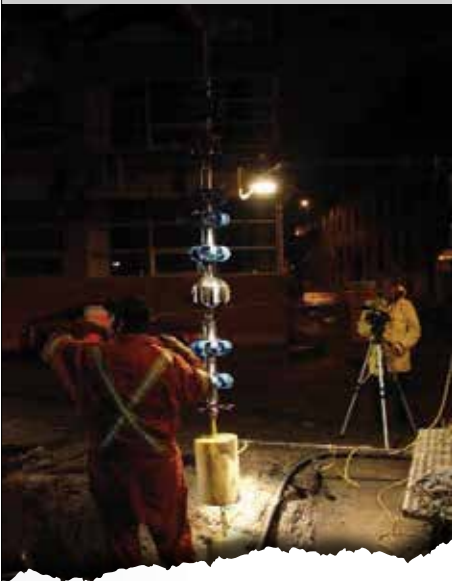


Company	Page	Phone	Website/Email
Anthrafilter	25	519-751-1080	www.anthrafilter.net
Atlantic Purification Systems, Ltd.	41	902-469-2806	www.aps.ns.ca
Aqua Data Atlantic	29	902-468-9447	www.aquadata.com
Atlantic Backflow Specialists Ltd.	45	902-499-7745	www.atlanticbackflow.com
AWI (Antratech Western Inc.)	48	403-255-7377	www.awifilter.com
Belzona Atlantic Canada	11	902-789-0479	www.belzonaatlantic.com
Bibby-Ste-Croix	38	905-312-4776	www.bibby-ste-croix.com
BioMaxx	9	855-940-5556	www.biomaxx.ca
Blue-White Industries, Ltd.	16	714-893-8529	www.blue-white.com
Campbell's Concrete Ltd.	34	902-368-3442	www.cclweb.com
Cancoppas Limited	36	905-569-6246	www.cancoppas.com
Canplas Industries Ltd.	4	800-461-1771	www.canplas.com
CBCL Limited	43	902-421-7241	www.cbcl.ca
Chemline Plastics Ltd.	3	800-930-2436	www.chemline.com
ChloraTech	24	418-801-8439	www.chloratech.ca
Concord Supply	36	877-436-3800	www.concordsupply.ca
Crandall Engineering Ltd.	42	506-857-2777	www.crandallengineering.ca
Denso North America Inc.	14	416-291-3435	www.densona.com
EPIC Training	20	855-908-3688	www.epictraining.ca
EXP	13	506-452-9000	www.exp.com
FLOWSTAR Industrial	35	902-896-0041	www.flowstarind.ca
Greatario Engineered Storage Systems	35	519-469-8169	www.greatario.com
Halifax Water	45	902-490-4840	www.halifaxwater.ca
Huntley's Sub Aqua	36	902-678-7234	www.huntleyssubaqua.ca
InfoSense, Inc.	36	877-747-3245	www.infosense.com
Joose Environmental Consulting	29	902-316-2493	www.jooseenv.com
Kemtag Enterprises Limited	19	506-852-4004	www.cla-val.com
McLennan Sales, Division of EMCO Corporation	35	506-634-3112	www.mclennansales.com
Mission Communications	3	678-969-0021	www.123mc.com
NETZSCH Canada Inc.	40	705-797-8426	www.pumps.netzsch.com
Nulantic Water Inc.	45	902-861-4710	www.nulantic.ca
Penn Valley Pump Company, Inc.	8	800-311-3311	www.pennvalleypump.com
Pica Corp.	47	780-468-6800	www.picacorp.com
Roth Global Plastics	12	866-943-7256	www.rothmultitank.com
Sansom Equipment	6	506-444-0344	www.sansom.ca
Scotia Tech Fluid Services Ltd.	45	902-468-2777	
ShadComm Ltd.	7	888-388-8800	www.shadcomm.com
Shaw Resources	20	902-758-2095	www.shawresources.ca
Smith & Loveless Inc.	7	704-844-1100	www.smithandloveless.com
Soleno	22	450-347-7855	www.soleno.com
The Ford Meter Box Company, Inc.	18	260-563-3171	www.fordmeterbox.com
The Panel Shop - A Division of Pennecon	33	506-455-1925	www.thepanelshop.com
UNIVAR	15	855-888-8648	www.univar.com
WSP	2	905-882-4211	www.wsp.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 and access direct links to any of these companies.

GOOD DECISIONS START

WITH GOOD INFORMATION



PICA helps Asset Managers who are serious about managing their pipeline assets proactively and fixing leaks before they can actually happen. With PICA's set of non-destructive testing tools, Asset Managers can know the real condition of their buried pipelines. Good information is powerful: pipelines can be surgically repaired, rehabilitated with liners, or partially replaced, thus extending their useful life while at the same time reducing risk of failure (and sleepless nights).

Internal (ILI) Tools, such as See Snake, Chimera, RAFT and EMIT

For pipe sizes 4" to 78" are used in raw water, drinking water, waste water force mains and siphons to report high-resolution pipe-wall condition.

Pipe wall thickness directly affects structural strength

PICA's new external Bracelet Probe can map internal H2S damage and pits

Extensively field tested in 2017, now ready for general deployment



For more information on how PICA can help you keep on top of your critical pipeline assets, see www.picacorp.com or write info@picacorp.com.

Call us at 1-800-661-0127



RELIABLE. PROVEN. TRUSTED.

Phoenix Underdrain System

Improve your filter performance

Granular media filtration is a specialized process and each filter configuration is unique. With AWI's site-specific approach to filter optimization you can expect improved filter performance, an operator-friendly treatment process, and the training and technical support to maintain your filters in optimum condition.

AWI's innovative filter optimization products include the *Phoenix Underdrain and Panel Systems*. These custom-engineered solutions guarantee uniform backwash water flow distribution, ensuring sustainable filter performance and long service life of your media bed.

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 Panel System with Air Scour



Filter Assessment & Pilot Studies



Filter Media Design & Supply



Canada 403-255-7377
USA 801-566-1700
awifilter.com