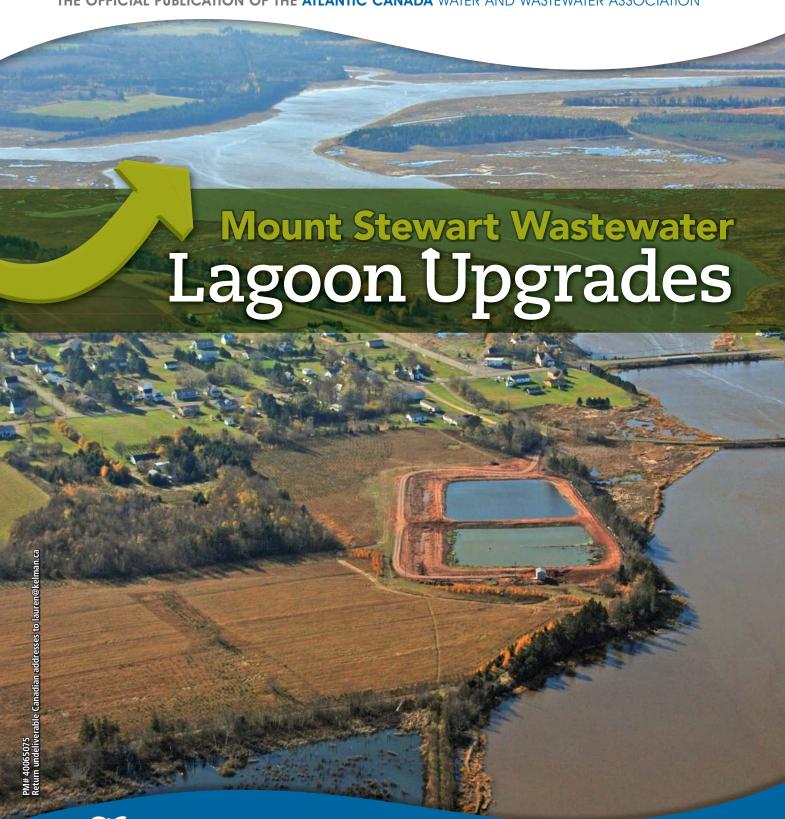


THE OFFICIAL PUBLICATION OF THE ATLANTIC CANADA WATER AND WASTEWATER ASSOCIATION





SHOWN ACTUAL SIZE

THE BIGGEST MOLDED C907 PRESSURE FITTING IN THE WORLD CAN'T FIT ON THIS PAGE.



Introducing 10" & 12" molded C907 pressure fittings – available only from IPEX.

As one of the first to pioneer PVC pipe and fittings in North America our commitment to innovation has led IPEX to introduce many industry firsts – including the largest sizes of PVC pressure pipe and fittings available anywhere in the world. Today, we are proud to offer the industry's first 10" and 12" C907 molded pressure fittings.





To learn more, call us at 1-866-473-9462 or visit www.ipexinc.com

Winter Headquarters!



BLOWERS



RELIEF VALVES



CHECK VALVES



FILTER ELEMENTS



AMT 12V SUB



ABS PIRANHA



LMI CHEM FEED



GOULDS 2DW



FULL FLOW SAMPLER



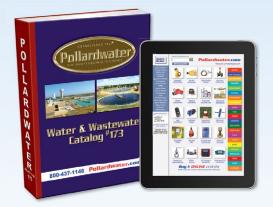
BIO SUPPLEMENTS



BIO BLOCKS



YSI PRO DO / BOD



800-437-1146 516-746-0852 FAX

Pollardwater.com





Are you looking for ways to improve the performance of your plant or decrease your treatment costs, to protect your infrastructures, remove sulfides, generate less sludge or to remove more TOC? Kemira can help you solve these challenges and much more. We aim to be a leading water chemicals supplier for raw and waste water applications, serving municipalities and water intensive industries. Together with our customers, we apply our knowledge and expertise to develop innovations that address the sustainable future of water.

Tel. +1 800 879 6353 us.info@kemira.com www.kemira.com



Go With the Flow is published four times yearly by the Atlantic Canada Water & Wastewater Association, PO Box 41002, Dartmouth, NS, B2Y 4P7. Copyright 2013.





American Water Works Association and the Water Environment Federation

American Water Works Association



Atlantic Canada Water & Wastewater Association

PO Box 41002, Dartmouth, NS B2Y 4P7 Phone: 902.434.6002 Fax: 902.435.7796 www.acwwa.ca contact@acwwa.ca

Section Office

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

Board Chair

Brett Pugh, P. Eng. brettp@cbcl.ca Ph: 902.421.7241 Ext. 2270 F: 902.423.3938

Past Chair

Jamie Hannam, MBA, P.Eng. jamie.hannam@halifaxwater.ca 902.490.4804 F: 902.490.1584

First Vice Chair

Margaret Walsh, PhD, P. Eng. mwalsh2@dal.ca 902.494.8430 F: 902.494.3105

Second Vice Chair

Scott Grasman, P. Tech. scott.grasman@fredericton.ca 506.460.2749 F: 506.460.2461

Secretary-Treasurer Willard D'Eon, MPH, P.Eng.

willardd@cbcl.ca 902 492 6753 F: 902.423.3938

WEF Delegate (2011–2012)

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

AWWA Director (2011-2014)

Reid Campbell

reid.campbell@halifaxwater.ca 902.490.4877 F: 902.490.4808



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

Managing Editor Design/layout Marketing Manager Advertising Co-ordinator

Scott Kelman Kristy Unrau Aran Lindsav Stefanie Ingram



MIX Paper from responsible sources FSC® C103094

TABLE of CONTENTS

FEATURES

Silent Hero Award	13
66th Annual Conference Recap	14
Discovery Awards 2013	16
Utility Update: Mount Stewart Wastewater Lagoon Upgrades	18
Member Spotlight	22







DEPARTMENTS

Message from the Chair	6
AWWA Director's Report	8
WEF Delegate's Report	10
CWWA Director's Report	12
Membership Corner	20
Back to Fundamentals	21
News & Notes	24
Professional Directory	29
Reach our Advertisers	30



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



Did you do the polar bear dip?

e are about to head into a brand new year and many of you may have made resolutions last month to make a change in your life. Here in Atlantic Canada, we have some of the finest locations and well-organized New Year's Day polar bear dips in the country, which in many cultures represents literally 'washing the slate clean.' Within ACWWA, we take 'the plunge into icy waters' at our Strategic Planning Session meeting in the fall of every year. But it is not as frosty as it sounds. This meeting brings together our board directors and committee chairs to spend one day focused on a target area within our association. In 2011, under the guidance of our Magazine Chair Amy McHarg and Section Chair Brett Pugh, we looked critically at our quarterly publication and made positive changes to improve the quality and organization of our magazine. This process of reflection, goal setting and action is similar to the process an individual goes through in a New Year's resolution. It is an important process, or habits may be repeated just because "we have always done it that way."

This past November, we took the opportunity to strategically look at our Annual Conference, which is a good habit that has become more of a tradition. For those who took the opportunity to attend last year's conference in Fredericton, NB I am sure you found good value in the strong technical program, tradeshow and many networking opportunities. Our congratulations go out to Scott Grasman and his conference committee for providing an excellent event in Fredericton! Our conference has grown significantly over recent years, and this is something we should be proud of in that it demonstrates the strength of our association and the hard work of so many of our committee chairs and members. However, we recognized that we are at the point where we have had so many positives that it is a good time to take a more focused look at where are, and where we want to go in coming years. As we move through the new year, we will work on the ideas generated at the November meeting to ensure our that our annual conference continues to be our marquee event that our conference attendees and members can rely on.

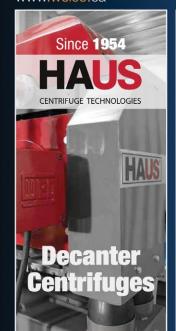
"We recognized that we are at the point where we have had so many positives that it is a good time to take a more focused look at where are, and where we want to go in coming years."

I would like to take this opportunity to welcome Amy McHarg, CBCL Ltd., as our new Membership Director on the ACWWA Board and our Halifax 2014 Conference Committee Chairs – John Eisnor and Rob Gillis from Halifax Water. John Eisnor is also our 2nd Vice Chair on the Board this year. We are very excited to have several new Committee Chairs joining us this year as well; Ramona Doyle from the City of Charlottetown - Magazine Chair, Matt Follett with SNC-Lavalin Inc. - Water For People Chair and France Castonguay with Government New Brunswick - Membership Chair. Along with our returning Board Directors and Committee Chairs and members, I think 2014 will be a great year for ACWWA. As our new board eases into service for the coming year, it is not too early to begin thinking of those Section members who have shown leadership potential for consideration of serving on our committees in the future. Similarly, help our Section grow! We know there are many more people in the water and wastewater industry that can benefit from ACWWA membership. Help us to get the word out to others about what our association brings to you.

Now to answer the question about the polar bear dip. I personally do not like the cold weather in the winter, and have never taken the plunge into our icy Atlantic Ocean on New Year's Day. I will confess, however, it is on my bucket list to do some year. Perhaps in 2015!

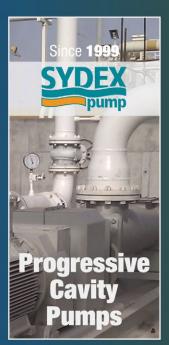


Your **Partner** in **Water** Technology









Eutek HeadCell® / SlurryCup™ / Grit Snail® **Advanced Grit Removal System**



The Best Performance in the Industry - Guaranteed

- · Removes 95% of all grit 75 micron and larger
- · Small footprint makes it the ideal retrofit solution
- · As little as 15% volatile solids
- · Greater than 60% total solids



For additional information call Hydro International (866) 615 8130 or visit www.hydro-int.com



ACWWA looking for a big turnout in Boston

want to start of this edition of my column by thanking Scott Grasman and his team in Fredericton for once again hosting an excellent ACWWA conference. The conference ran like clockwork and the technical sessions were excellent. Here is a big 'Well Done' to Scott and his team in Fredericton.

AWWA Immediate Past President Charlie Anderson and his wife Cindy had a very enjoyable time while they were in Fredericton. They asked me to pass on their appreciation of the wonderful hospitality shown to them. Charlie was also very impressed with the high quality of the technical program, the well-run events and of course the closing lobster feast on Tuesday evening.

Approximately 15 utilities were represented at a meeting hosted in Fredericton by Kevin Morley, AWWA's Manager of Security and

Emergency Preparedness programs. Kevin graciously agreed to come to Fredericton to talk to us about the WARN (Water/Wastewater Agency Response Network) program. Fiftytwo WARN's have been established to date in the United States and Canada and they have been very successful in enabling utilities to help utilities in times of crises. There was sufficient interest in forming a WARN for Atlantic Canada and it was agreed to form a steering committee and take some initial steps towards organizing a WARN. Kenda MacKenzie of Halifax Water, in her role as Government Affairs Committee chair has agreed to take on the role of leader of the Steering Committee to lead us through the organizational phase.

Utilities that attended the initial meetings in Fredericton should be hearing about progress before Christmas. Any utility that would like more information or to participate can contact either me or Kenda.

This year, AWWA's ACE 14, the world's premier water conference comes to Boston. This puts ACE within driving distance of the Maritime Provinces, which is something that happens only once in a generation. This is an excellent opportunity for people who can only get to ACE occasionally or have never been there to experience a 500 exhibit tradeshow, technical presentations from the leaders in the industry, and an Opening General Session with former New York City Mayor, Rudy Guiliani. While at ACE you can also support our Atlantic Canada representatives participating in Top Ops (Fredericton), Best of the Best Taste Test (Halifax Water) and Fresh Ideas Poster Competition (Jeff Diamond).

It would be tremendous if we could have the largest ever contingent from Atlantic Canada in Boston. The ACWWA Board will be looking to see what might be done to promote a major Atlantic Canada contingent in Boston. I hope to see you there.

Finally, I want to let you know that AWWA is part of the Value of Water Coalition. The Value of Water Coalition is a group of 12 associations and private sectors companies united to tell the story of the need for infrastructure replacement. The coalition is working on a strategy for a broad based campaign to educate consumers about the value of water and what it takes to provide drinking water and sanitation services. You will be hearing more about the value of water as it develops its message but in the mean time I would invite you to visit their web site at http://thevalueofwater.org.





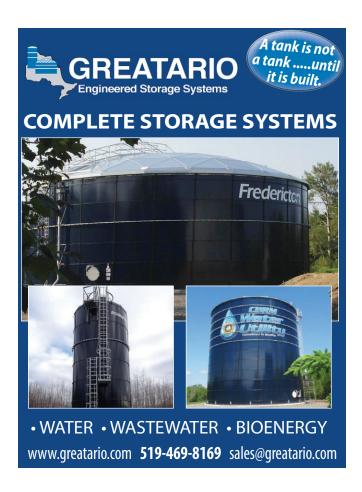
OPUS

- Wastewater Collection & Treatment
- Water Supply & Treatment
- Infrastructure Asset Management
- System Operation & Maintenance
- SCADA & Security
- Pump Stations
- Stormwater Management
- Trenchless Technologies

Partnering with Canadian municipalities for over 35 years to create sustainable communities through the development & management of world class infrastructure.

www.opusinternational.ca

80 Bishop Drive, Fredericton, NB Tel: 506-451-0055 water@opusinternational.ca Abbotsford • Calgary • Kelowna • North Vancouver • Prince George • Smithers • Victoria • Whitehorse





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:

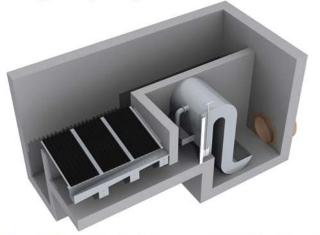
111 Wright Ave 303 Golden Grove Rd. 40 Loftus St Dartmouth, NS Saint John, NB Moncton, NB 902-468-1500 (P) 506-634-3112 (P) 506-857-1082 (P) 902-468-2721 (F) 506-634-0480 (F) 506-857-9006 (F)

www.mclennansales.com



Hydro-Jet® Screen **High Capacity Wet Weather Screen**





Represented by:



www.sansom.ca

Compact Floatables Retention and Collection System Screening

- · No power and no moving parts
- · Self-cleansing and self-activating
- · Corrugated screen panels increase capacity without increasing overall footprint
- · Coated screen panels resist grease build-up
- · Small footprint with low capital and life cycle costs
- · All corrosion resistant materials of construction
- · Built in emergency bypass

For additional information call Hydro International (207) 756 6200 or visit www.hydro-int.com





The value of water

EF has been busy this fall with the ACWWA conference in Fredericton and WEFTEC in Chicago which

were both incredible! It was said of WEFTEC that if you spent 20 seconds at every booth it would take you 12 hours to cover the floor display.

a xylem brand IN THE FLYGT TRADITION OF Flygt Experior is a revolutionary wastewater pumping system that combines state-of-the-art hydraulics, premium motors and intelligent controls to achieve continuous, clog-free pumping and sustained efficiency. N-Technology Hydraulics Premium efficiency motors
 SmartRun™ Intelligent Controls Flygt Experior approved pumps are available up to 78 kW / 105 hp. Energy costs are reduced up to 50%. Backed by the industry's most extensive sales and service organization, this is wh Flygt Experior is developed to deli time and time again. Benefit from the superior experience Inspired by you. Engineered by us. xylem

The meetings all went very well. I am now on the committee for nondispersibles which has become a huge issue with municipalities all over North America. I will have monthly conference calls and will update WEF members through Go With The Flow. If you have something to put forward please email me. Input from membership is always valued and appreciated.

One of the ongoing programs at WEF is 'The Value Of Water': The Value of Water Coalition is made up of both public and private members of the water industry, who have come together at a time when our water infrastructure is at risk. We aim to educate the public on the importance of clean, safe, and reliable water to and from every home and community, to ensure quality water service for future generations.

We want to help you understand the real value of water in your daily life, and recognize that water is...shared. It is irreplaceable. And it belongs to you. And us. To our children, and to the environment that

As diverse as we are, we know the value of water. Do you? Check them out at www.thevalueofwater.com.

I had mentioned at the AGM about Utility memberships. Please make an effort to have at least a WEF Utility membership for your municipality. It will give some valuable information to your operators and give them access to resources that WEF have to help them with their operations and problems. Contact me for a membership application.

WEF is working with the member associations and CWWA to keep a line of communication going on government regulations, issues etc. They are interested in Canadian affairs and are contributing to the association and CWWA efforts to keep on top of things that happen in our country.

That is it for now. Let me know if WEF can help you in any way. 🥌

xylemwatersolutions.com/ca 1.800.588.7867 (PUMP)



Unique Benefits of UPP Membership

Customizable

Utility Partnership packages are fully customizable, based on the needs of your utility.

Simplified Billing

All memberships are synchronized on ONE invoice for an easy once a year payment.

Notoriety

Free membership for designated public official(s) to emphasize the importance of your daily operations.

Savings

Receive discounted rates to WEFTEC and WEF Conferences including free passes to the WEFTEC EXPO for all employees.

Benefit from distributor pricing on all WEF products and services.

Enjoy 40% off WEF books and WEF Knowledge Center courses.

Convenience

WEFTEC registrations can be included in the UPP Membership transaction.

Seamless Transition

All your current WEF members retain their original membership number, credit for all years of membership, and remain a full-voting member.

Flexibility

New WEF members can be added each year, at no charge for the first year of membership.

Benefits of WEF Membership

Enhance Your Industry Skills

Stay on top of advances, trends, and proven solutions through WEF's highly regarded technical publications, Technical Practice Updates, Access Water Knowledge and education.

Facilitate Lifelong Learning

Choose your training and earn CEUs and PDHs through WEF's educational program, including: WEFTEC®, WEF Conferences, hot topic seminars, workshops and webcasts.

Champion Productive Relationships

Within WEF and Member Associations (MAs), our members work together to help each other develop and grow professionally, while building valuable relationships with industry partners and prospects.

Enrich Your Leadership Potential

Gain leadership skills that can be applied to your career by volunteering your service to a WEF and WEF MA committee.

Increase Awareness and Recognition in Your Field

Each year, WEF presents awards for outstanding contribution to the water environment profession.

WEF Member Associations

Included in WEF membership is membership to your local Member Association – champions for water quality on a regional level, providing convenient, affordable opportunities for training and networking with water professionals in your area.

Membership Enrollment

Step 1

WEF will provide a list of current and former members within your utility, allowing you to specify which members will be designated in your Utility Partnership Program Membership.

Step 2

You determine when you want your UPP Membership cycle to begin. WEF staff will synchronize renewal dates and pro-rate any necessary dues amounts.

Step 3

WEF will consolidate all current and new memberships into your new annual invoice.

Contact WEF today and start enjoying the benefits of your UPP Membership.

Call 1-800-666-0206, or send an e-mail to *csc@wef.org*. You may also contact Brittany Burch at *bburch@wef.org*, or 1-703-684-2400 ext. 7213.

About WEF

Since 1928, the Water Environment Federation (WEF) has guided technological development in the water community. As a leading source of water quality information, WEF works to provide its members, public officials and the general public with the necessary tools to engage in or learn ways to improve quality of life through the sustainable management of water resources, water protection, and water and wastewater treatment.



CWWA introduces new e-Bulletin

elcome to the new CWWA e-Bulletin. In its efforts to improve communications to members CWWA has launched the new electronic version of the popular CWWA Bulletin. This will not only ensure cheaper, faster delivery to our members, but allow CWWA to expand distribution. Using e-Bulletin will be an important way of reaching both members and non-members. This will strengthen CWWA's role as The National Voice of the Water and Wastewater sector and create a greater national presence.

This is an invitation to all that are interested to receive the CWWA e-Bulletin to just follow the 'subscribe' link and you will automatically receive the bulletin each month. Check it out at the CWWA web site.

CWWA continues to be very active and busy during 2013 and it is my pleasure to provide a short update on some of the key ongoing activities:

CWWA activities and news:

Canadian Energy and Water Efficiency Conference

CWWA hosted the very successful Canadian Energy and Water Efficiency Conference in Calgary from October 16-18. The conference featured presentations that not only explored water and energy efficiency but also the interconnection of energy and water. Presentations included program development and implementation including energy auditing and recovery and the importance of considering both together effectively managing demand, costs and improving stewardship. The event provided an excellent opportunity to members of the CWWA Energy and Water Efficiency Committee to

have meetings and discuss the outcome of the conference and the next steps.

CWWA Wastewater Management Conference

Building on our success in 2012 at the joint CWWA Wastewater Management Conference and the Central Canadian Symposium on Water Quality Research, CWWA and CAWQ are teaming up again to host the 49th Central Canadian Symposium on Water Quality Research and CWWA Wastewater Management Conference. The continuing collaboration will help build relationships between researchers and water and wastewater professionals.

This conference will bring together researchers, water and wastewater utility managers and operators, private sector consultants, technology developers and providers, including federal and provincial regulators to explore the latest research on emerging issues.

The conference is scheduled for the Niagara Region in Ontario, March 5-7, 2014.

Wastewater Systems Effluent Regulations (WSER)-Implementation Update

The CWWA Wastewater and Stormwater Committee members participated in a teleconference with the Federation of Canadian Municipalities (FCM) to discuss the implementation and impacts of the new WSER regulations.

FCM provided an update on the status of the new Building Canada Fund. The federal government insists that they will have the new program in place in time for 2014; however, there has been little to no consultation or communication on the specifics of the program. While CWWA members would prefer to see a dedicated portion of the funding set

aside for compliance with the WSER, this seems unlikely.

Given the likely tight deadlines for the project submissions, all municipalities and utilities are encouraged to have their projects as close to application ready as possible.

Upcoming Events 2013

Window on Ottawa

Learn how Federal Legislation will impact you: attend the Window on Ottawa.

The dates for this year's Window on Ottawa event will be November 27 & 28 at the Delta Ottawa City Center. Again this year two full-day workshops on Cyber Security and on Climate Change and Drinking Water Quality will precede the Window on the 26th.

The CWWA Annual General Meeting is always held in conjunction with the Window on Ottawa. This is an important opportunity for members to hear about CWWA's activities for the past year and priorities for the future. The Annual General meeting of members and the annual banquet is scheduled for November 27.

Upcoming Events 2014

Joint CWWA-Wastewater

Management Conference and the
CAWQ-Central Canadian Symposium
on Water Quality Research

March 5-7, 2014 Niagara on the Lake, ON

CWWA - 16th Canadian Drinking Water Conference

October 27-29, 2014 Gatineau, Québec

Should any other information be required on CWWA activities or initiatives, please don't hesitate to contact me directly at roland.richard@nb.sympatico.ca or visit the CWWA site at www.cwwa.ca.

Winner of the Silent Hero Award, Allan Nisbet



- 1. What is your Job Title? Operator of Water and Wastewater Systems.
- 2. Who do you work for? I

currently work

for the communities of North Rustico, Borden-Carleton, Morell, and Crapaud, I also do some private work on very small systems in Wood Islands, Montague and New Glasgow.

- 3. Where do you currently live? My wife and I live in Hunter River and we spend most of the summer months in Cavendish at Marco Polo.
- 4. Where did you grow up? Hunter River, I live less than two miles from where my parents live.
- 5. When I am not working... I have two hobbies: golf and old cars. I have a golf membership at a local golf course Glasgow Hills and have only had time to play a few rounds a year. I also have a couple of older cars that I haven't had time to drive this year.
- 6. If you could go on a road trip with any one person, who would it be and where would you go? I am not a traveler. I like P.E.I. but I would like to take my wife and visit Newfoundland.
- **7.** Toughest thing about your job? Dealing with the public.
- 8. When you were a kid, what did you want to be when you grew **up?** There is nothing I look back on and think I would have done different.
- 9. Last book you read? The Hunger Games
- 10. Last movie you saw? Season of the Witch
- 11. What music did you listen to this morning? I never have time to listen to music in the morning.
- 12. Favorite TV show? MASH
- 13. What was the best gift you ever received? My wife surviving breast cancer.

- 14. What's the most useless thing you ever purchased? A 1977 Chevy half ton.
- 15. Describe your perfect day. Standing on the Number one tee box at Glasgow hills golf course waiting for the sun to come up to play. Anyone who has ever played there will know what I'm talking
- about, it is amazing.
- 16. Who is the most influential person in your life? My grade eleven home room teacher Boyd MacDonald.
- 17. What is you ideal vehicle? Mopar Muscle Cars
- 18. How long have you been a member of ACWWA? 2 Years 🐸







2013 ACWWA Annual CONFERENCE HIGHLIGHTS

Scott Grasman, 2013 ACWWA Annual Conference Chair

he 2013 ACWWA Annual Conference in Fredericton is now in the books. On behalf of the conference organizing committee, I would like to thank all of the delegates, suppliers, companions, and guests for attending the 66th Annual ACWWA Conference. We were very pleased to have the conference back in Fredericton for the first time since 2002.

Conference activities began on Sunday, with the annual ACWWA golf tournament, held this year at Fredericton Golf Club. Participants enjoyed a great afternoon on the links, and the beautiful, sunny weather did not hurt, either

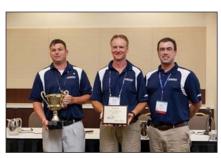
The Sunday Meet and Greet was well attended, where people had the chance to renew old friendships, and make some new friends, too.

Major ACWWA awards were

presented during the conference's opening session. Congratulations to Dr. Graham Gagnon and Rob Gillis, this year's honoured recipients of the George Warren Fuller and Ira P. MacNab Awards, respectively.

In keeping with the conference theme, **Protect Your Assets:** Managing Your Infrastructure Needs, the technical program commenced on Monday morning with an engaging presentation about meeting the challenges of renewing and maintaining water and wastewater infrastructure by focusing on asset management principles, by the keynote speaker, Dr. Guy Felio. Following his keynote address, Dr. Felio moderated an assembled panel of industry experts in a roundtable style discussion that brought further focus to the connection between sustainable infrastructure renewal







and asset management programs. All told, the technical program featured 33 quality presentations concerning a wide range of water, wastewater, and asset management topics. New to this year's conference were two well-attended offsite technical sessions, that were of special interest to water and wastewater system operators. Congratulations to this year's Fresh Ideas winner, Jeff Diamond, of R.V. Anderson Associates.

The Annual General Meeting Luncheon saw the installation of the new ACWWA Board, and featured addresses from this year's visiting officers, Mr. Charlie Anderson, and Mr. Cordell Samuels. Charlie is the Immediate Past President of AWWA, while Cordell, at the time of the conference, was the current WEF President. Delegates had many opportunities to interact with them throughout the conference in order to bring forward new ideas and areas of concern.

This year's Top Ops competitions again proved to be spirited and entertaining, and were a nice way to conclude Monday's formal conference program. Congratulations to all competing teams, and special acknowledgement to the wastewater contest winners, Team Halifax Water, and the water contest winners, from the City of Fredericton.

This year's conference had some open time built into Monday evening's schedule, where people were free to dine around historic downtown Fredericton before enjoying an evening of music and networking at the excellent ABEA hospitality reception, held at the iRock Club.

Tuesday's conference program began with the annual ACWWA Awards Breakfast. This year's breakfast enjoyed a record attendance, with over 165 people rising early to honour all of the award recipients.

The annual ABEA tradeshow was an excellent showcase of the latest industry products and technology, and featured the largest number of booths to date at an ACWWA Conference.

Along with the tradeshow, one of the highlights of Tuesday's program was the inaugural ACWWA 'Best of the Best' tap water taste test event. For the first time at an ACWWA annual conference, water utilities of the region entered samples of high quality tap water to be judged for taste and aesthetic characteristics. While the spirit of the event was meant to be fun, it also underscored the dedication, expertise, and hard work required of our industry professionals to produce safe, reliable, and enjoyable tap water for our customers each day. Congratulations to Halifax Water, winners of the first ever AC-WWA 'Best of the Best' event.

The conference closed with an evening of great food, fellowship, and entertainment at the annual Down East Feast. Delegates enjoyed a plentiful meal, and witnessed the return of the WEF '5S' initiation ceremony.

Perhaps the most inspiring event of the evening was the acknowledgement of our members' generosity in support of the ACWWA's preferred charity, Water for People. With the presentation of several significant donations from the City of Moncton, ABEA, and CBCL, combined with the proceeds from the conference Silent Auction and 50/50 draws, our Association raised over \$25 000 for Water For People during this year's conference.

The Down East Feast drew to a close with a funny and energetic performance by Atlantic Canada's own Jimmy Flynn.





In summary, people seemed to enjoy this year's conference in Fredericton, held in the new and modern facilities of the Fredericton Convention Centre

I would like to offer a final acknowledgement to this year's conference sponsors, whose support was instrumental to allowing your conference committee to produce a quality event:

Presenting Sponsors: CBCL Limited, exp., and Greatario.

Gold Level Sponsors: AECOM, APS, GENIVAR, R.V. Anderson Associates Limited, and Stantec.

Silver Level Sponsors: Charmac Construction Co. Ltd., McLennan Sales, Monteith Underground Services Ltd., and Saint John Water. Nutrition Level Sponsors: Sansom Equipment Limited.





Finally, I would be remiss if I did not acknowledge the tremendous effort put forth by the members of this year's conference organizing committee. Committed volunteers are the lifeblood of ACWWA, and this year's committee featured an outstanding group of people whose sole objective was to produce a first class conference experience for all who attended. Thank you.

We look forward to seeing everyone at next year's ACWWA Annual Conference, to be held in Halifax, N.S., from October 19-21.





Co-Presenting:





Platinum:



Gold:













MEDIA SPONSOR



The 2013 Finalists

SCIENCE CHAMPION:

Jeff Hoyle (Dalhousie Env.Sci/Agriculture, Truro) Richard Zurawski (New 95.7 / Zurawski Productions) Tamara Franz-Odendaal (Mount Saint Vincent Biology)

PROFESSIONAL OF DISTINCTION:

Brendan Murphy (St. Francis Xavier Earth Sciences)
Noni MacDonald & Michael Graven (Dalhousie and IWK –
Pediatrics & Comp. Science)
Kevin Kelloway (Saint Mary's Psychology)

INNOVATION:

Srinivas Sampalli (Dalhousie Computer Science) SENSELab - Manohar Bance, Rob Adamson, Jeremy Brown ABK Biomedical - Daniel Boyd (President/CSO)

EMERGING PROFESSIONAL:

Mather Carscallen (SabrTech Inc.)
Jennie Rand (Acadia University Engineering)
Christa Brosseau (Saint Mary's Chemistry)

HALL OF FAME INDUCTEES:

Dr. George Geoffrey Meyerhof, (1916-2003) was a world-renowned professor in Civil Engineering, a former Dean of the NS Technical College, now part of Dalhousie University, and a founding member of the Halifax Grammar School.

Dr. Thomas John (Jock) Murray is an internationally known neurologist, specializing in Multiple Sclerosis, a much loved professor and former Dean of Dalhousie University's Medical School.

YOUTH AWARD:

Harishitaa Prithiviraj – Grade 8 student, Bible Hill School, Nova Scotia. 🥌



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.



Description

The project involved the upgrade of a single cell wastewater treatment lagoon that was not meeting its permit and had operational problems. The lagoon, constructed in 1970, is located in the Community of Mount Stewart, Prince Edward Island, on the south side of the Hillsborough River, a designated Canadian Heritage River.

Mount Stewart is a small historic village with a population of approximately 300. It is a community proud of its historic ties to the Hillsborough River and former railway junction. The community boasts two restaurants and an ecotourism center and is a bustling hub for users of the Confederation Trail.

The project team included technical design staff from CBCL Limited (Charlottetown, PEI and Halifax, N.S.), Community of Mount Stewart Council and system operators, the PEI Department of Environment, Labour and Justice, Director of Aboriginal Affairs and Archaeology and the Mi'Kmag Confederacy of PEI.

Challenges

The Community had struggled for a number of years with a facility that did not produce the quality effluent required and, at times, appeared to be leaking. However, given the significant capital cost of upgrading the facility, along with significant land use and historic site issues, the project was essentially stalled from 2008 to 2011. A predesign study identified upgrades recommended including lining the facility, additional treatment capacity, disinfection of effluent and improved site access and security.

Essentially, methods in the early 1970's for construction of wastewater treatment lagoons consisted of shaping the lagoon from existing native materials recompacting the native soils in an attempt to create low permeable liner. At the Mount Stewart site previous land use and documented research indicated that the site held archeological significance. While the facility in its day would have met any land use and separation requirements, changes to the facility's present day

size or location would not have met current standards. Therefore the pre-design of the upgrade considered keeping all work within the existing footprint, and from an archeological perspective, minimizing any excavation outside the limits of the lagoon slopes. A significant challenge for the project was to not disturb the site any more than it had already been in 1970.

Success

The Community, through a rate increase and Provincial and Federal funding, was able to cooperate with the various parties such as the Hillsborough River Association, the Mi'Kmag Confederacy of PEI, local fishers and Provincial departments to upgrade the facility within the community's financial means without detrimentally affecting stakeholders during construction. Some of the features that contributed to the success of the project included collaboration between the Community Council, the design team, the Provincial Archeologist Helen Kristmanson, Provincial Approvals/



Regulatory Compliance Engineer Morley Foy, and archeological consultants Davis MacIntyre and Associates.

To minimize the impact on the site, the design included limiting all excavation depth and size. The installation of a geosynthetic clay liner allowed reconstruction of the treatment cell without increasing the cell depth or footprint. Testing and removal of sludge and vegetation, combined with composting and remixing, made for efficient removal and re-use of the material for cell slope and wetland bottom cover and provided a growth medium for wetland plants. Building up from the existing surfaces, including shredding and mulching of vegetation, avoided clearing and grubbing and helped avoid any archeological disturbances. Operation during construction was enabled by incorporating a berm dividing the single cell into two cells

with a bypass allowing operation to continue.

A wetland was constructed for polishing and natural disinfection, but in doing so, the size of the treatment cell was reduced to a point where additional D.O. was required. The additional D.O. and mixing is provided by a solar powered mixing system called a Solar Bee. The Solar Bee has been in continuous operation since commissioning. Effluent quality results have consistently met or

exceeded the standard required.

The project was completed on schedule during a time window of opportunity that avoided any significant impact to the local shell fishers

Funding

The project was funded in combination by increased system user rates, the New Deal for Cities and Communities Fund and the Build Canada Fund. 🐸



Consulting Engineers

solvina todav's problems with

Engineering and Environmental Design and Consulting





info@CBCL.ca · www.CBCL.ca

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





Jeff Diamond - RV Anderson wins 2013 ACWWA Fresh Ideas Competition

n 2010, ACWWA introduced the Fresh Ideas competition as part of its Annual Conference Technical Program. Criteria for the Fresh Ideas participants are a first time Young Professional participant at the ACWWA section conference presenting a water related topic. The top presentation selected from the group of qualifying presenters are given the opportunity to compete in the Fresh Ideas poster competition at the AWWA Annual Conference and Exposition (ACE).

We were very pleased to present the 2013 Fresh Ideas Award to Jeff Diamond from RV Anderson in Fredericton, NB. Jeff's presentation on Asset Management Strategies and Long Term Financial Plans Using PSAB Inventories was delivered very well as a timely idea.

Jeff has been a junior engineer with R.V. Anderson Associates Limited in Fredericton, NB for over three years. During that time, he has worked on several PSAB 3150 projects to assist municipalities and commissions in their transition to PSAB compliancy, which is a major shift in the way government accounting is done. In addition to that, Jeff has been working with municipalities to evolve into more detailed asset management systems, including risk studies and condition assessments. Jeff will represent the ACWWA section at the upcoming ACE 2014 in Boston, Massachusetts in the Fresh Ideas poster competition.

New ACWWA Members (as of November 1)

Name	Company	Membership
Daniel Wesley		ACWWA
Kelly Dawson	Harris Utilities-Cogsdale	ACWWA
Carol Dibble		ACWWA
Shawn Rowe	Halifax Regional Water Commission	ACWWA
Village of Shediac		ACWWA
Jillian Woods		ACWWA
Dan Estey		ACWWA
Sarah Payne	Dalhousie University	ACWWA
Shelley LaVie	Town of Souris	ACWWA
Julie DiCicco		ACWWA
Curtis Foran	City of Moncton	ACWWA
Tom Mihajlovic	Town of Labrador City	ACWWA

Membership Totals as of November 1, 2013

	Active	Late	Total
AWWA	462	30	492
WEF			122

^{*}No New WEF Members as of November 1, 2013

Certification Questions

Trent Brewer

Water

- 1. What type of disinfection works by disrupting the metabolic activities of the organisms? Ultraviolet light
- 2. What term describes the capability of water or chemical solution to resist a change in pH? Buffering capacity
- 3. In the Guidelines for Canadian Drinking Water Quality, what do the letters M.A.C. stand for? Maximum Acceptable Concentration
- 4. Trihalomethanes are formed when chlorine reacts with what? Organic material
- 5. A trench must be shored or sloped if it is deeper than what depth?

4 feet (1.2 metres)

Waste Water

- 1. What will Cattails growing in a lagoon cause? Short circuiting in affected lagoon
- 2. When one liquid is dissolved in another liquid, it's called what? An emulsion
- 3. The addition of what chemical to a sour digester may cause a dangerous vacuum to develop? Lime
- 4. If a liquid sulfonator is misting, what's the most likely cause? Defective evaporator
- 5. What is the primary purpose of forced draft ventilation systems in lift stations? Removal of dangerous gases 🥌

How is a UV disinfection system selected?

By Shawn Rowe

unicipal water and waste water disinfection using ultraviolet light is becoming increasingly popular in our industry. For potable water systems, properly selected UV disinfection systems can provide an effective disinfection solution while minimizing the formation of disinfection byproducts and can eliminate the need to handle dosing chemicals. In wastewater service, UV disinfection can provide effective disinfection without requiring dosing chemicals or a need for further treatment to limit toxicity characteristics (dechlorination). To properly size, select, and install a UV disinfection system for municipal wastewater or water service the designer must work closely with the equipment manufacturers to ensure an adequate UV disinfection system is selected. In general, individuals specifying or selecting a UV system for a given duty point must have a clear understanding of three key parameters:

Water Quality:

The nature and quality of the water to be disinfected is critical; not only in selecting an appropriate UV system, but also in deciding if UV disinfection is even possible or suitable at all. Ultraviolet transmissivity (UVT) is the most important parameter in the selection of a UV unit because the UVT of the water will determine how well the UV-C 220nm light will penetrate the water so the pathogens in the water are exposed to sufficient UVC light to be inactivated. In addition to UVT, parameters such as iron concentration need to be understood, as some constituents can impact maintenance requirements and ultimately treatment performance.

Water Flow Rate:

The length of exposure time that pathogen has to the UVC light for a given UV intensity is a key factor in determining how effective UVC light will be in deactivating a given pathogen at a particular flow rate. The longer the exposure time, the more UVC radiation will penetrate the pathogen's cells and therefore the more effective the inactivation process will be. Modern UV systems have the ability to adjust power output and conserve energy based on instantaneous flow rates that are used to determine UV exposure times.

Pathogens to be inactivated:

Different pathogens have differing resistance to UV; some are more susceptible than others and so require

"Scientists have determined through extensive laboratory testing the amount of UV dose to inactivate a range of pathogens by various log reductions."

different amounts of UVC exposure in order that they are inactivated. In order to correctly size and select a UV system, it must be established which pathogen(s) are to be inactivated. Scientists have determined through extensive laboratory testing the amount of UV dose to inactivate a range of pathogens by various log reductions. UV dose requirements are measured in millijoules per centimeter squared (mJ/cm2).

While UV disinfection is a viable option for disinfection in municipal water and wastewater systems care must be taken in the application of this technology. The three key parameters listed above should be reviewed with equipment manufacturers and local environmental regulators to facilitate proper implementation of a UV disinfection system. Note that the list above is a general overview and is not intended as an exhaustive list of design considerations. One reference document that can aid in the selection process is the "Ultraviolet Disinfection Guidance Manual For The Final Long Term 2 Enhanced Surface Water Treatment Rule" as published by the USEPA. This document can be found online at http://www.epa.gov/ogwdw/disinfection/lt2/pdfs/quide_lt2_uvquidance.pdf



SILICA FILTER SANDS FILTER STONE ANTHRACITE & GARNET

Eastern Canada's largest supplier of filtration sands and stone for water & waste water treatment industries

RESOURCE@SHAWRESOURCES.CA • WWW.SHAWRESOURCES.CA TEL: (902) 883-2220 (HALIFAX AREA), 1-800-607-2509

Rob Gillis Interview

- 1. What is your Job Title? Eastern Passage WWTF, Resident Engineer during the Design Build Expansion and Upgrade of the Facility
- 2. Who do you work for? Halifax Water
- 3. Where do you currently live? Cole Harbour, NS. Home of Sidney Crosby and Nathan MacKinnon
- 4. Where did you grow up?

North End Dartmouth. For those of you familiar with HRM, you'll know where I mean.

5. What's the toughest thing about your job?

Answering this question ... that's a tough one. I believe I am in an unique position that allows me to interact with a variety of professionals every day from the designers to the contractors building the facility, to the operators that will inherit the facility once the project is complete. The toughest part would be balancing interests, deliverables and expectations.

Finish these sentences:

- 6. "When I'm not working, I'm..."
 - ...at home trying to think of ways to make my home more energy efficient while my children leave lights on, doors open and water running.
- 7. "The accomplishment I'm most proud of is..."
 - ...that during the births of my three children (all on separate occasions), I only fainted once during the three events. I'm not good with hospitals or blood.
- 8. "When I was a kid, I wanted to be..."
 - ...a clown, firefighter, or banker (went through a few stages) when I grew up.
- 9. "Not many people know I can..."
 - ...clean a bathroom like nobody's business.

What is...

10. ...the last book you read?

Stuart MacLean Vinyl Café Notebooks

11. ...the last movie you saw?

Cloudy with a Chance of Meatballs 2

12. ...your favourite TV show?

Breaking Bad (only on 4th Season – don't tell me how it

13. ...the best gift you've ever received?

Three healthy children. Not trying to be cheesy but it truly is the greatest gift.

14. ...your guilty pleasure?

A bag of Lays Rippled Chips, Kraft Chip Dip (most flavours) and a bottle of Coke.

15. ...the song or story you remember from the radio this morning?

Rob Ford admitting to substance use (November 6th)

- 16. ...the most useless thing you've ever purchased? Nordic Track Abs Work. Don't think I ever used it. Became a clothes rack until I was able to trade it at a yard sale with a neighbor for two blue toddler chairs.
- 17. If you could go on a road trip with any one person, living or dead, who would it be and where would you go? (and what would be in the CD player).

Another tough question. CD would definitely be Tragically Hip with a little Neil Diamond and David Myles on the side. A driving tour across Canada, then south to California, east to Florida and north to return home, all towing a pop up trailer and staying in camp grounds. I think I would travel with any one of my children when they are older, assuming at least one of them would be interested in hanging with their dad. If I could get the whole family going, that would be great too. 🥯



WATER IS OUR SPECIALTY

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



Environmental Services Inc.

2492 Route 640, Hanwell, NB E3E 2C2 Phone: (506) 455-1085 Fax: (506) 455-1088

"Serving Municipalities and Industry since 1993" Website: www.natechenv.com Email: admin@natechenv.com

Water should be clear, but not invisible.



Indispensable to jobs, the economy, our health, and our communities, water runs through our lives in many ways.

We all have something at stake when it comes to water. Each of us also has a valuable contribution to make.



YOUR RESPECT



YOUR EFFORT



YOUR FUTURE



YOUR HEALTH



YOUR LOYALTY

WATER'S WORTH IT

Be as good to water as water's been to you. To learn more, visit www.WatersWorthlt.org.



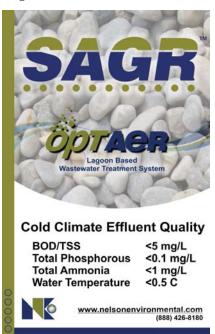
FAQ On Operator Certification – Newfoundland and Labrador

Submitted on behalf of the **Government Affairs Committee**

o assist in providing greater clarity on Operator Certifications Requirements within each of the Atlantic Provinces, the Government Affairs Committee is providing an overview of each province, starting with Newfoundland and Labrador.

There are 375 certified operators within Newfoundland with a total of 567 certificates. Certification is mandatory within NL and Operators are eligible to achieve certification to one level above what their facility/system is classed.

- 1. High School Operators who completed Grade 11 in NL prior to 1985 are considered to have achieved high school graduation. Operators who graduated in 1985 and later must have completed Grade 12.
- 2. High School Equivalent the following are accepted as equivalents to high school graduation:



Newfound- land	land Minimum Hrs/Yrs maintain		Recertification Requirements Period ⁴			
and Labrador	Education ^{1,2}	Certified?	Annual Certification³	Period	CEUs	Hrs Experience
WTF Level 1	High School or Equivalent	1 Year	N/A	N/A	24 hours	N/A
WTF Level 2	High School or Equivalent	3 Years	N/A	N/A	24 hours	N/A
WTF Level 3	2 Years Post- Secondary or 90 CEUs	4 Years (Class II facility or higher) – 2 Years DRC	N/A	N/A	24 hours	N/A
WTF Level 4	4 Years Post- Secondary or 180 CEUs	4 Years (Class III facility or higher) – 2 Years DRC	N/A	N/A	24 hours	N/A
WWTF Level 1	High School or Equivalent	1 Year	N/A	N/A	24 hours	N/A
WWTF Level 2	High School or Equivalent	3 Years	N/A	N/A	24 hours	N/A
WWTF Level 3	2 Years Post- Secondary or 90 CEUs	4 Years (Class II facility or higher) – 2 Years DRC	N/A	N/A	24 hours	N/A
WWTF Level 4	4 Years Post- Secondary or 180 CEUs	4 Years (Class III facility or higher) – 2 Years DRC	N/A	N/A	24 hours	N/A
Water Distrib. 1	High School or Equivalent	1 Year	N/A	N/A	24 hours	N/A
Water Distrib. 2	High School or Equivalent	3 Years	N/A	N/A	24 hours	N/A
Water Distrib. 3	2 Years Post- Secondary or 90 CEUs	4 Years (Class II facility or higher) – 2 Years DRC	N/A	N/A	24 hours	N/A
Water Distrib. 4	4 Years Post- Secondary or 180 CEUs	4 Years (Class III facility or higher) – 2 Years DRC	N/A	N/A	24 hours	N/A
WW Collection 1	High School or Equivalent	1 Year	N/A	N/A	24 hours	N/A
WW Collection 2	High School or Equivalent	3 Years	N/A	N/A	24 hours	N/A
WW Collection 3	2 Years Post- Secondary or 90 CEUs	4 Years (Class II facility or higher) – 2 Years DRC	N/A	N/A	24 hours	N/A
WW Collection 4	4 Years Post- Secondary or 180 CEUs	4 Years (Class III facility or higher) – 2 Years DRC	N/A	N/A	24 hours	N/A

- o General Educational Development (GED);
- o Post secondary assessment by professional qualified to assess education status;
- Successful completion of relevant trades program (trade qualified);
- o Successful completion of post secondary degree program from a recognized institution; or
- o Successful completion of diploma program from a recognized institution.
- 3. Hours to Maintain Annual
 Certification There is no specific requirement for number of hours to maintain certification.
 An operator's certification will remain valid in NL as long as an operator remains employed as an operator at that type of facility. Their certificate will remain valid for up to 3 years after they terminate their employment as an operator.
- 4. There are no specific requirements for recertification in NL.
 - o Currently, there is no expiry date on certifications in NL and submission of training records is not required.

- o A Permit to Operate is issued to water and wastewater facilities by the Department of Environment and Conservation, and requires operators to receive 24 hours of training per year.
- There are no stipulations with respect to experience requirements for certification.

Provincial Contacts and related websites for Clarification: Newfoundland & Labrador

Deneen Spracklin PO Box 8700 St. John's NL, A1B 4J6 dspracklin@gou.nl.ca 709-729-1158 709-729-0320

http://www.env.gov.nl.ca/env/waterres/training/index.html

http://www.env.gov.nl.ca/env/waterres/regulations/policies/operator_certification.html

Please refer to ACWWA Training Programs for assistance in obtaining CEUs.

ABEA Scholarship 2013

Sean Chilibeck

he Atlantic Board of Equipment suppliers is proud to present a scholarship for \$1000 to Charlotte Pyke of Fredericton. Her success throughout high school, and community involvement made her an outstanding candidate for the 2013 scholarship, and ABEA is proud to support her continuing education.

The scholarship was established in 2011 to promote and stimulate the exchange of ideas concerning water supply systems and the science and engineering industry within Atlantic Canada. ABEA consists of a wide variety of members, and understands the need to encourage local students in the pursuit of a higher education (College or University). The scholarship is open to any full time student whose parents are a member of ACWWA or ABEA. Although preference is given to students intending to pursue a career related to the water/wastewater industry we understand that few of us set out for this trade from high school, and thus is available for any student.

We are proud to present the scholarship for 2013 to a distinguished applicant, who has shown exceptional drive throughout her high school career. If you have a daughter or son who are hoping to begin College or University for the 2014-2015 school year please visit www.abea.biz and follow the link for the scholarship program to apply.



Water For People – Atlantic Canada Committee

his year the Atlantic Canada Committee of Water For People continued with the great fundraising events of past ACWWA Annual Conferences. This year over \$31,000 was raised for Water For People – a record amount for the section.

These donations from corporate sponsors, individual donors, associations, and generous utilities have gone a long way to making Atlantic Canada stand out as a tremendous donor among AWWA sections. A special thanks goes out to the ABEA (donated \$15,000), the City of Moncton (donated \$10,000), CBCL (donated \$1,000), and Michelin Tires (donated set of 4 tires for the auction) for their tremendous efforts. A total breakdown of funds raised are listed here:

1. ABEA	\$15,000
2. City of Moncton	\$10,000
3. CBCL	\$1,000
4. Silent Auction & 50/50	\$4,245
5. Golf	\$350
6. Fun Run	\$675
7. Greatario	\$147
Total:	\$31,417

The funds raised for Water For People fuel essential water and sanitation coverage through the award-winning and unique program initiatives provided by Water For People. Water For People's program is currently extending throughout Africa, India, and Latin America.

Thanks to everyone who donated money, items for the silent auction, and who participated in our events.

The Atlantic Canada chapter of Water For People will be hosting the



water for people

annual Well Tapped event on Friday, March 21, 2014. Please mark this date off in your calendar and we'll look forward to celebrating World Water Day with you all.

To become more involved or to find out more information about Water For People events and initiatives please contact Atlantic Canada's Chair of Water For People, Matt Follett, at Matthew.Follett@snclavalin.com.

"The funds raised for Water For People fuel essential water and sanitation coverage through the award-winning and unique program initiatives provided by Water For People."

E DO IT ALL

CORROSION PROTECTION & SEALING SYSTEMS YOU CAN DEPEND ON



Extend Structure Life, Reduce Maintenance & Repair Costs

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

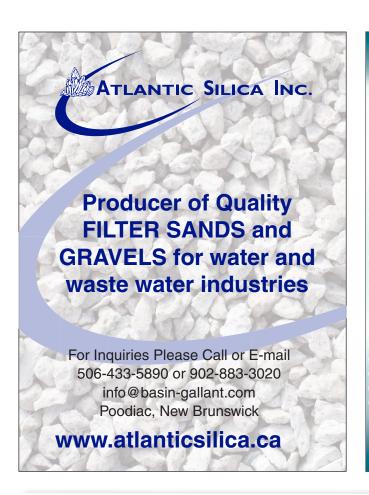
A member of Winn & Coales International.



www.densona.com

Toronto • Edmonton Denso North America Inc.

90 Ironside Cres. Unit 12 Toronto. ON M1X 1M3 Tel: 416.291.3435 Fax: 416.291.0898







THE OFFICIAL PUBLICATION OF THE ATLANTIC CANADA WATER AND WASTEWATER ASSOCIATION



Interactive Media-Rich PDF online!

View the interactive version, WWW.acwwa.ca



UNITING THE WORLD of



Registration opens mid-November.

ACE14 presents solutions to water utility challenges and offers more than 30 new and emerging topics to address and support utility needs. The four-day professional program will provide comprehensive support for drinking water and combined utilities under these subject areas:

- ➤ Communicating the Value of Water
- ➤ Regulatory Compliance
- ➤ Water Reclamation and Reuse
- ➤ Stormwater
- ➤ Utility Management and Finances
- ➤ Wastewater
- ➤ Water Quality and Treatment
- ➤ Water Resources and Planning

- ➤ Capital Project Delivery
- ➤ Desalination
- ➤ Emergency Preparedness
- ➤ Infrastructure Replacement and Renewal
- ➤ Sustainable Infrastructure
- ➤ Plus More!

www.awwa.org/ace14

PROFESSIONALDIRECTORY

Atlantic Backflow Specialists Ltd.

Serving Atlantic Canada

Survevs **Tests**



Installations Repairs / Parts

Certified Cross Connection Control Specialists

Fax (902) 434-3990

Albert S. Jones CET. Bus: (902) 499-7748

albert@atlanticbackflow.com www.atlanticbackflow.com

69 Mt. Edward Rd. Dartmouth, N.S. B2W 3K6



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

- Inspection of hydrants and valves
- Unidirectional flushing of water main design and execution
- Leak detection
- · AquaCad Suite hydraulic modeling
- · Hazen-Williams Coefficient testing
- · Flow pressure and fire flow testing
- · Agua Zoom camera diagnosis of wastewater systems
- Manhole inspections with 360 degree camera
- Canalis Wastewater collection software



- Water & Wastewater Treatment & Disinfection
- Water & Wastewater Analysis & Instrumentation
- **Pumps and Fluid Handling Systems**
- Wholesale Water Conditioning & Pumps
- Industrial Spray Paint & Sand Blast Equipment
- Industrial Air Systems and Air Filtration

NS/NFLD: 10 Ferguson Road, Dartmouth, Nova Scotia, Canada, B3A 4M1;

Phone: 902-469-2806; Toll Free: 800-265-2300 Fax: 902-463-3529; email: sales@aps.ns.ca

NB/PEI: Contact Luke Delehanty at APS/Delehanty Fluid Solutions

695 Malenfant Blvd., Dieppe, NB, E1A 5T8; Phone: 506-857-2880; Toll Free: 888-863-7867; email: luke@aps.ns.ca

"Celebrating over 40 years of Service in Atlantic Canada"

www.aps.ns.ca



Canada's first regulated water, wastewater and stormwater utility

450 Cowie Hill Road P.O. Box 8388 Stn A Halifax, NS B3K 5M1 490-4840

Providing world class services for our customers and our environment



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



Automation Solutions for Water and Wastewater Applications

- Lift Station Protection and Control Panels
- · Water and Wastewater SCADA Systems
- Unitronics PLC Sales & Service
- · Control System Maintenance and Upgrades
- · Instrumentation Solutions
- PLC Programming
- OmniSite™ Monitoring and Alarm System Sales, Installation & Programming

Ph: 506.455.1925 • Fax: 506.459.3400 • www.thepanelshop.com CSA Certified • ISO9001 Registered • Member MPWWA • APWWA • ABEA





REACHOURADVERTISERS

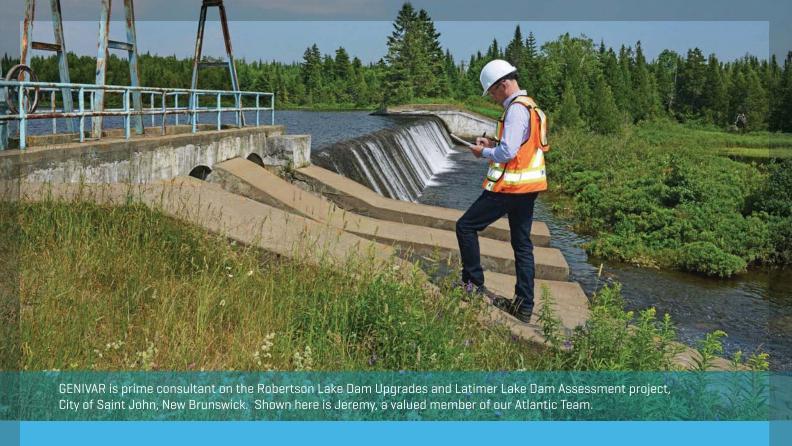
Company	Page	Phone	Web Site
APS - Atlantic Purification Systems Ltd.	29	(902)469-2806	www.aps.ns.ca
Aqua Data Atlantic	29	(902)468-9447	www.aquadata.com
Atlantic Backflow Specialists Ltd.	29	(902)499-7748	www.atlanticbackflow.com
Atlantic Silica Inc.	27	(902)883-3020	www.atlanticsilica.ca
Canada Pipe Company Ltd.	29	(902)444-7350	www.canadapipe.com
Cancoppas Limited	27	(800) 595-0514	www.cancoppas.com
CBCL Limited	19	(902)421-7241	www.CBCL.ca
Denso North America Inc.	26	(888) 821-2300	www.densona.com
Distribution Brunet Inc.	13	(902)479-7473	www.distributionbrunet.ca
exp Services Inc.	25	(506)452-9000	www.exp.com
GENIVAR Inc.	31	(902)835-9955	www.genivar.com
Greatario Engineered Storage Systems	9	(519)469-8169	www.greatario.com
Halifax Water	29	(902)490-4840	www.halifaxwater.ca
Hydro International Wastewater	7, 9	(866)615-8130	www.hydro-international.biz
IPEX Inc.	2	(866)473-9462	www.ipexinc.com
Kemira Water Solutions, Inc.	4	(800) 879-6353	www.kemira.com
Liqui Force Services	32	(800)265-0863	www.liquiforce.com
McLennan Sales, Division of EMCO Corporation	9	(506)634-3112	www.mclennansales.com
NATECH Environmental Services Inc.	22	(506)455-1085	www.natechenv.com
Nelson Environmental Inc.	24	(888) 426-8180	www.nelsonenvironmental.com
OPUS International Consultants (Canada) Limited	8	(506)451-0055	www.opusinternational.ca
Pica Corp.	29	(780)468-6800	www.picacorp.com
Pollardwater.com	3	(800) 437-1146	www.pollardwater.com
Scotia Tech Fluid Services Ltd.	22	(902)468-2777	
Shaw Resources	21	(902)758-2095	www.shawresources.ca
Smith & Loveless Inc.	4	(800)898-9122	www.smithandloveless.com
Sommers Motor Generator Sales Ltd.	29	(800)690-2396	www.sommersgen.com
The Panel Shop	29	(506)455-1925	www.thepanelshop.com
Welco Expediting Ltd.	7	(888) 279-8636	www.welco.ca
Xylem Inc.	10	(800) 588-7867	www.xylemwatersolutions.com/ca

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.

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 for 2014.

Darrell Harris, Marketing Manager 1-866-985-9793 | darrell@kelman.ca





SHAPING LIVES

GENIVAR prides itself on the fact that its Water and Wastewater Engineering Services are managed by people living in the communities that benefit from their work. Our end users are always top of mind, because they include our own families.

We offer a full range of Water and Wastewater services, including:

WATER SYSTEM MODELING – WATER DISTRIBUTION SYSTEM DESIGN WASTEWATER COLLECTION SYSTEM DESIGN – I/I REDUCTION STUDIES TRUNK SEWER DESIGN – STORMWATER SYSTEM DESIGN

NOVA SCOTIA Halifax - Dartmouth NEW BRUNSWICK Moncton - Saint John - Fredericton PRINCE EDWARD ISLAND Summerside - Charlottetown NEWFOUNDLAND St. John's





Why dig?

Think: Non-invasive, robotic surgery for pipeline systems.

www.liquiforce.com 1-800-265-0863

