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### INSIDE:

- Project Spotlight: TransAqua WWTF Secondary Upgrade – Greater Moncton, NB
- Emerging Leaders Committee Update



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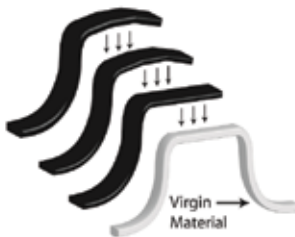
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On the cover: Early autumn morning on the Eel River in New Brunswick. | Dreamstime.com





## Let's connect in person again

Welcome fall and all that is has to bring. Bright colours all around us. The preparation for the change of seasons – new equipment installations, system preparedness for the seasonal changes of weather, temperature, construction completion deadlines... so much to do BUT we must make the time to attend the 2022 ACWWA Annual Conference being held in Saint John, NB and hosted by a wonderful Conference Committee that has been working diligently to bring the first event to us since COVID brought us to a full stop in 2020.

The anticipation continues to grow – and will culminate in reality. October 2–4, 2022.

We will have an opportunity to connect in person not only with individuals, but with the sharing of ideas and research through the many technical sessions on the schedule. The tours will offer a more visual, tangible opportunity, as well as the Trade Show.

There are no shortage of social opportunities – starting Sunday evening at the Meet & Greet where you may wish to participate in the Water Tower Building Competition. Monday evening will see the ABEA host a social gathering at the Saint John Ale House, then Tuesday we will have the Best of the Best Taste Test, ABEA Trade Show, and culminate at the Tuesday evening social/entertainment gathering.

Things are going to be busy – and the participants will leave feeling a sense of rejuvenation – full of new ideas and a pocket full of new contacts to draw from. Always good the have as you move into the budget planning process for the new year, or strategic planning for the future.



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“We will have an opportunity to connect in person not only with individuals, but with the sharing of ideas and research through the many technical sessions on the schedule.”

Instead of September feeling like the end of the third quarter, it feels like the beginning – students of all ages preparing for a new school year, and the Education Committee get back into full swing – vacations are over and people are ready for another year of being introduced to new ideas, reinforcing those that are consistent in the industry, certification exam preparation/writing, introduction of new technologies – the list is endless and as technology continues to advance so must we – in order to be prepared at all levels. Check out the courses available on the education portal – and if you don't find what you are seeking reach out and we will find what you need amongst our wealth of resources. Education is a team effort: [www.acwwa.ca/education/acwwa-courses.html](http://www.acwwa.ca/education/acwwa-courses.html).

Staying on a theme of education, there are scholarships available to move those forward who may require, or desire, financial support: [www.acwwa.ca/committees/scholarship.html](http://www.acwwa.ca/committees/scholarship.html).

There are also opportunities to participate in activities with our Emerging Leaders – [www.acwwa.ca/committees/elcommittee.html](http://www.acwwa.ca/committees/elcommittee.html). Network, network, network!

I would also like to make a request to all conference attendees to consider rolling up your sleeve and participating in the Blood Donor Clinic being arranged in honour of Danny Whiting, who we lost this past March and was a large part of our lives behind the scenes, supporting our Executive Director and being the IT genius that made everything run like clockwork. A good man gone too soon, but we can all do something in his honour.

Our Water For People silent auction will be back during the Conference, and we are seeking donations for the auction table. All items can be dropped off at the registration booth. Thank you in advance for your contribution! [www.acwwa.ca/committees/water-for-people.html](http://www.acwwa.ca/committees/water-for-people.html)

I look forward to seeing everyone at the Conference. Stay safe and healthy, and enjoy the fall. ☺

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## Get ready for October!

As I sit here enjoying the last week of our beautiful July sunny weather, I am thinking about the upcoming ACWWA AGM, Conference and Trade Show the week of October 2, 2022, in Saint John, NB. It will be the first time we have gathered in person for a couple years. I am looking forward to seeing you all face to face. The Conference Committee, led by Co-Chairs Barb Crawford, P.Eng., and Michael Baker, P.Eng., have put together a great program and schedule. There were 90 booth spaces available at the Annual Conference Trade Show that opened to book online July 25... and just a few days later there were only 12 spots left. Kudos to the ABEA for all the planning that has gone into organizing the space. Make sure you visit all the distributors and suppliers that have put a lot of effort into their spaces. Hopefully you have already registered for the Conference by the time you read this in September. If not, then pitter-patter, let's get at 'er: [www.acwwa.ca/2022-conference-registration](http://www.acwwa.ca/2022-conference-registration).

When you register, please sign up for the blood drive in memory of Jonah and Danny and get a free T-shirt with your donation. I will be saving my next CBS appointment to donate at the event. Also, don't forget to sign up for the Water For People Fun Run/Walk and come out to support our young professionals and Emerging Leaders at their Meet & Greet event.

I want to extend a big welcome to the incoming ACWWA WEF Membership Chair, Brandon Howard. Brandon is also a Young Professional/Emerging Leader in our Industry. Please take time to say hi to Brandon.



As soon as the ACWWA Conference is over, I will be directing my attention to attending WEFTEC in New Orleans beginning October 8, 2022. I will be (if the stars align) attending several WEF House of Delegates meetings throughout the week beginning early Saturday morning and then leading up to passing the gavel over to the incoming 2022-23 Chair or the WEF CAC at our annual meeting on Thanksgiving Monday in the afternoon. Clara and I will also be attending a WEF Leaders Meeting to invite everyone to come to Charlottetown in May of 2023 for the WEFMAX we are hosting.

WEFTEC is the largest water/wastewater tradeshow of event of its kind. You don't want to miss it this year. [www.weftec.org/attend/2022-attendee-registration](http://www.weftec.org/attend/2022-attendee-registration)

If you are unsure how to register, there is an online tutorial – just follow the link: [www.weftec.org/globalassets/assets-weftec/2---attend/registration/attendee-2022/attendee-registration-information/w22-attendee-online-registration-tutorial-5.2.55.pdf](http://www.weftec.org/globalassets/assets-weftec/2---attend/registration/attendee-2022/attendee-registration-information/w22-attendee-online-registration-tutorial-5.2.55.pdf).

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WEF's official websites are [www.wef.org](http://www.wef.org) and [www.weftec.org](http://www.weftec.org).

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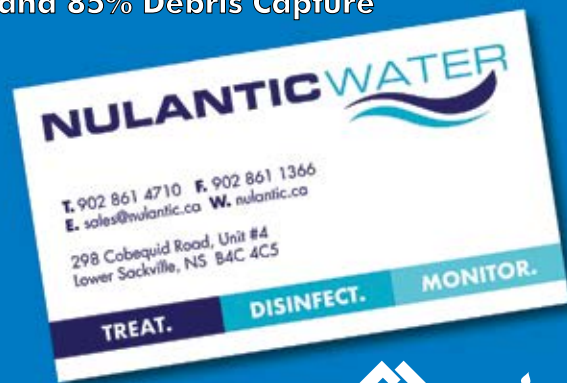
On a fun note, when at WEFTEC be on the lookout for Niles, the friendly mascot!

Time for me to get ready for some vacation time... so I'm signing off and I trust you all enjoyed your summer. See you all in Saint John, NB in October. 🐸



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## ACE 2022 recap and Water 2050 initiative

Welcome to the Fall 2022 issue of ACWWA's *Go With the Flow* magazine. As of this writing at the end of July, summer is quickly passing us by. By the time you read this, schools will be back in session, and people in our industry will be busy trying to see the major construction projects and budgeting processes through to completion. I hope everyone had some chance for vacation over the summer.

Fall also means that we are only a few weeks away from the return of our Section's ACWWA Annual Conference. *From Uncertainty to Opportunity*, the theme of this year's conference, promises to be a first-rate event in Saint John, NB. I know the organizing committee has been working hard over many months to put the finishing touches on what will be a high-quality event providing excellent value to our members. To that end, I am pleased to inform you that this year's AWWA Visiting Officer will be the AWWA Treasurer, Jon Eaton. Jon comes to us from the state of Minnesota, where he is the Superintendent of Utilities for the City of Eagan. Please be sure to seek Jon out at our conference to say hello, and to welcome him to our region.

AWWA ACE 2022 was held in San Antonio, Texas, this past June. It marked the first in-person ACE since the 2019 conference in Denver, Colorado. Preliminary results show that after three years of missing ACE because of the pandemic, demand for the return of in-person events is high. ACE 2022 had over 8,000 attendees, which far exceeded the projected registrants prior to the conference.

Also at ACE 2022, AWWA President Chi Ho Sham passed the gavel to new AWWA President Joe Jacangelo of the Virginia Section. Dr. Jacangelo is a 35-year member of AWWA, and we wish him well over the next year as he begins his term as AWWA President. Thanks to Chi Ho Sham for leading the Association through another challenging year, but one that still sees the Association in a strong position for the future.

In other Association news, I would like to highlight an initiative that AWWA launched in March of this year. Called 'Water 2050,' this initiative "seeks to establish a long-term vision of the future of water." AWWA members would have received an email with a link to the Water 2050 survey, which sought members' thoughts and input on the challenges and opportunities facing our sector over the next 30 years. Those results will be compiled, and member feedback incorporated into the development


"Preliminary results show that after three years of missing ACE because of the pandemic, demand for the return of in-person events is high. ACE 2022 had over 8,000 attendees, which far exceeded the projected registrants prior to the conference."

of the Water 2050 strategy over the next two years. From the Water 2050 landing page on the AWWA website, the Water 2050 initiative will strive to:

- Engage in meaningful conversations
- Enlist strategic partners
- Foster intergenerational responsibility
- Capture collective knowledge

As the Association progresses through the development of this initiative, I would encourage all members to take a spare moment to learn more about how Water 2050 proposes to help make our sector successful and sustainable. There is a very good Water 2050 resource page on the AWWA website. The page can be found at [www.awwa.org/Resources-Tools/Water-2050#12684713-events-developments](http://www.awwa.org/Resources-Tools/Water-2050#12684713-events-developments). Look for further information about the Water 2050 initiative in future AWWA publications.

As our ACWWA conference approaches, I look forward to seeing everyone in Saint John from October 2 to 4. It will be great to renew old friendships, and to make new ones while enjoying all the conference has to offer – from an excellent slate of technical sessions, to the ABEA tradeshow, to the networking opportunities offered throughout the schedule, I wish everyone a safe and productive conference.

Thank you for the opportunity to serve our Section. Please feel free to contact me with any AWWA-related questions or concerns at [scott.grasman@fredericton.ca](mailto:scott.grasman@fredericton.ca). 



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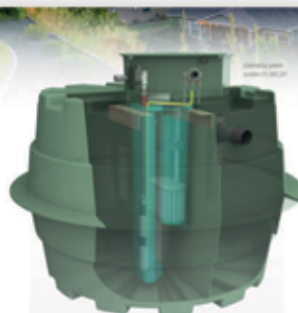


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## Our latest advocacy work

The CWWA has been active over the past quarter attending conferences and undertaking advocacy work for the Canadian water sector. The latest advocacy work comes from the Climate Change Committee. As Environment and Climate Change Canada work to develop a National Adaptation Strategy to address climate, CWWA has been a regular contributor and commends the Government of Canada for this important initiative. The Committee recently provided recommendations related to a Discussion Paper and requested continued representation as the 'Voice of the Water Sector' as the next steps of the Strategy are developed.

On the conference side, planning and implementation efforts continue on the National Water and Wastewater Conference (NWWC) which will be held in Halifax this November. The conference offers a wide-ranging technical program covering almost all aspects of the municipal water sector, while offering the best networking environment for Canada's water leaders. The preliminary conference program has been launched and while there is still work to refine sessions and confirm speakers, it provides a great sneak peek into the great sessions and speakers lined up.

Registration for the event recently opened. You can learn more about the conference and view the preliminary program at the following link: <https://cwwa.ca/national-water-and-wastewater-conference/>. 



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## Stellar events & opportunities

The Annual Conference is just around the corner and the ABEA is working hard behind the scenes to bring stellar events and opportunities to the delegates and fellow members.

For the golfers amongst us: We will begin Sunday at the Rockwood Golf Course, with a 10:00 am start – make sure to check the box on your registration form.

Monday evening, we will be gathering at the Saint John Ale House for music, dancing, and plenty of conversation – maybe even some nibbles as the night goes on. It’s a wonderful opportunity to chat with old friends and make a few new ones.


Tuesday we will present the Trade Show, from 10:00 am – 2:00 pm. You can visit 90 booths full of the latest technology and the specialists on hand to explain what they have to offer to solve your problems or assist in preparing you for the future. Lunch will be served within the venue.

And for the first time, the ABEA will sponsor the Tuesday evening Meet, Greet, Eat and Entertainment event. James Mullinger will share his comic stylings and we will gather in an informal setting to chat and munch on some

wonderful food, and catch up with friends and colleagues before we depart on Wednesday.

The ABEA continues to listen to the needs of our customers and assist in problem solving. We are a caring team made up of 59+ unique members and are here to assist in any way possible. We welcome our new members: Atlantic Waterworks, SFC Energy, HMS Networks, Reed Mfg. Co., and Robar. Please take the time to stop by their booths and introduce yourself.

The ABEA continues to offer four x **\$1,000 Academic Scholarships** annually to deserving individuals who meet the application criteria (visit [www.ABEA.biz](http://www.ABEA.biz)). It is never too early to start preparing.

Education is an ongoing process and our membership continues to find ways to assist their customers with creative delivery methods to keep them informed of changes in the industry. If you have a need, please feel free to reach out. We are certain that we have something to meet your needs on an individual basis, or we can create a program in conjunction with the ACWWA Education team. 

## 2022 ABEA host suppliers

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### Meet our ABEA members:

#### Current ABEA Board:

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Vice-President – Matthew Manning  
Sr. Director – Martin Phinney  
Jr. Director – vacant  
Past-President – Mike McDonah  
Sec./Treasurer – Kyle Gracie  
Director/Liaison – Catherine Cameron



Contact information for our members, and applications for our Scholarship and Grant Program can be found at

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





## Celebrating our members

Welcome to the following new members:

Name	Organization	Membership
Christian Vienneau	Ville de Dieppe	WEF
Rob Burt	Sansom Equipment	WEF
T. Michelle Sherwood	Town of Sackville	AWWA
Hanna Dwoyney	Village of Alma	AWWA
Matt Duffy	Town of Three Rivers	AWWA
Patrick Daigle	Town of Grand Falls	AWWA
Tony Mummery	Town of New Glasgow	AWWA
Ellen Murphy	County of Inverness	AWWA
Lewis Macquarrie	County of Inverness	AWWA
Jimmy Basker	County of Inverness	AWWA
Tristan Mombourquette	County of Inverness	AWWA
John Macdougall	County of Inverness	AWWA
Lance Yipp	County of Inverness	AWWA
Carme Telesford	Municipality of Kings County	AWWA

### As of July 29, 2022

Total AWWA active members: **432**

Total AWWA late members: **25**

Total active WEF members: **103**

Total WEF late members: **5**

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# UNCERTAINTY TO **OPPORTUNITY**

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# 75<sup>TH</sup> ANNUAL CONFERENCE

of the Atlantic Canada Water & Wastewater Association

October 2-4, 2022 | Hilton Saint John







## CONFERENCE HIGHLIGHTS

Sunday, Oct. 2, 2022	10:00 am	ABEA Golf Tournament at Rockwood Park Golf Course
	2:30 pm – 4:30 pm	Technical Tour of Moosehead Breweries
	5:30 pm – 7:30 pm	Emerging Leaders Event and Mixer
	7:30 pm – 10:30 pm	Meet & Greet Reception
	8:30 pm - 9:30 pm	Water Tower Competition
Monday, Oct. 3, 2022	8:30 am – 10:00 am	Opening General Session
	10:30 am – 12:00 pm	Technical Sessions
	12:00 pm – 1:30 pm	ACWWA AGM & Awards Luncheon
	1:30 pm – 2:30 pm	Hydrant Hysteria
	2:30 pm – 4:00 pm	Technical Sessions
	3:00 pm – 4:30 pm	Technical Tour of the Clow Canada fire hydrants, valves, and water/wastewater accessories manufacturing plant
	5:00 pm	Water For People Fun Run/Walk
	6:00 pm	Dine on Your Own in Uptown Saint John
	9:00 pm – 1:00 am	ABEA Common Hospitality Reception
Tuesday, Oct. 4, 2022	8:00 am – 9:30 am	Technical Sessions
	9:30 am – 10:30 am	“Best of the Best” – Tap Water Taste Test
	10:00 am – 2:00 pm	ACWWA/ABEA Tradeshow
	2:00 pm – 4:00 pm	Technical Sessions
	2:00 pm – 4:00 pm	Technical Tour of the Loch Lomond Drinking Water Facility
	6:30 pm	ABEA Tuesday Night Social

### KEYNOTE SPEAKER: **RYAN MITCHELL**



As the President & CEO of Saint John Energy, Ryan is passionate about energy innovation, sustainability and economic development in New Brunswick. Ryan is a graduate of NBCC, UNB and is an alumni of the Wallace McCain

Institute Strategic Executive program.

He is a registered engineer in New Brunswick and has an MBA as well as over 20 years of engineering experience in diverse and progressive management positions, with most of his experience coming from the telecommunications sector. Ryan was also recently named to Canada’s Clean50 list as one of Canada’s top sustainability leaders in 2021.

### THE CONFERENCE VENUE

Our venue for the 2022 ACWWA Conference is the Hilton Hotel and Saint John Trade & Convention Centre, located on the beautiful waterfront. The Convention Centre is connected to the hotel, and is the largest facility in the province of New Brunswick, with a capacity of 2,300 people. The hotel is the only waterfront hotel in the city, and offers views over the Harbour and the Port of Saint John. Both the hotel and Convention Centre are connected to the indoor Pedway system, linked to Uptown Saint John, including the historic City Market. It features a heated indoor saltwater pool and harbour-front restaurant and bar. The venue is also connected to the pathway system, which allows users to walk or stroll around the harbour.

The hotel has multiple dining options, including the York Bistro & Pub and York patio. There are also award-winning restaurants a short walk from the hotel in the nearby historic zone, as well as a lively bar, restaurant, and patio scene in the adjoining mall. Our conference and hotel venue location makes access to all the amenities of Saint John an easy walk.

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# ACWWA TECHNICAL PROGRAM

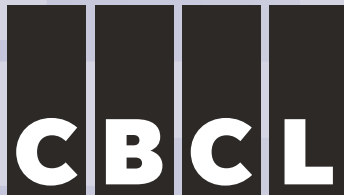
MONDAY – OCTOBER 3			
10:30 am – 11:00 am	TransAqua WWTF Upgrade to Biological Treatment – Year One Retrospective (Mike Abbott: CBCL)	And the Medal for Metal Mitigation Goes to... Mussels! The Role of Freshwater Mussels in Water Treatment (Alicia Penny, Kellie White, Anthony Mazzocca: Cape Breton University / Cape Breton Regional Municipality)	Backflow Compliance – City of Moncton's Success Story on Ensuring Public Safety from Source to Last Drop (Julie Stokes: City of Moncton)
11:00 am – 11:30 am	Rothesay WWTP Technology Innovation (David McKenna: Dillon Consulting Limited)	Brownification: Causes and Implications of Changing Source Water Quality on Drinking Water Treatment (Lindsay Anderson: Dalhousie University)	1,800 mm Raw Water Transmission Main Repair (Jason Leclerc: Saint John Water)
11:30 am – 12:00 pm	Winterize Your lagoon: Nitrification Below 1 (Marc Larivière, Christian Scott: VWT Canada)	Atlantic Canadian Surface Waters and Natural Organic Matter – Finding a Common Ground between Industrial Processes and Potable Water (Jillian Flanagan, Mitra Mehrabani: Stantec Consulting Ltd.)	City of Ottawa's Multi-Purpose Wet Weather Management Solution: Success with Integrated Planning and Operational Integration – from Concept through to Implementation (Adrien Comeau: Stantec Consulting Ltd.)
2:30 pm – 3:00 pm	Wastewater Effluent Dispersion Studies (Natasha Horsman: Englobe Corp.)	One Water, One Data: Utility-wide Adoption of Consolidated Water Quality Data Management & Analytic Applications (Adam McKnight: Halifax Water)	Standardized Water Treatment in Nunavut (David McKenna: Dillon Consulting)
3:00 pm – 3:30 pm	UV Audit of Four Wastewater Treatment Facilities in Nova Scotia, Canada: Determining System vs. Matrix Limitations (Kyle Rauch: Dalhousie University)	Building a Water Distribution Model for Hydraulic Analysis in the EPANET Application Utilizing a GIS Software (Mohamed Osman: Atlantic First Nations Water Authority Inc.)	Treatment of Biofilms and Opportunistic Pathogens in Simulated Drinking Water Distribution Systems Using UV LED (Carlos Jaser Lara de Larrea: Centre for Water Resources Studies (CWRS) – Dalhousie University)
3:30 pm – 4:00 pm	What Are the Long-Term MBR Plant O&M Costs and Risks: The Oxford PCP Experience (Olav Natvik: Stantec Consulting Ltd.)	Building an Asset Management System to Facilitate Capital Planning for Atlantic First Nation Water and Wastewater Systems (Julie DiCicco & John Lam: Dillon Consulting Limited / AFNWA Inc.)	Integration of UV LED Disinfection with Chlorine for a Small Water Supply (Xuedongzi Jiang: Dalhousie University)
TUESDAY – OCTOBER 4			
8:00 am – 8:30 am	I&I in 2022 – The Times they are A-Changin' (Barbara Robinson: Norton Engineering)	Advancements in Elevation (Z) Mapping for Watermains (Gerald Bauer, Krista Flanagan: Stantec Consulting Ltd.)	Proactive Approach to Transmission Main Condition Assessment – St. John's Regional Water Supply – Final Analysis (William Jappy: Pure Technologies Ltd.)
8:30 am – 9:00 am	The Moncton Story— Stormwater Management from Inlet to Outlet and All Points In Between (Jody Malo & Darryl Bonhower: Omnitech Inc./ City of Moncton)	Integrated Urban Drainage Modeling – Rising to the Challenge of 21st Century Urban Flood Risk in a Changing Climate (Dave Eadie: Stantec Consulting Ltd.)	Renovation of a DN 250 Fresh Water Main Under a River in Winnipeg, Manitoba (Simon Richtmann: Primus Line)
9:00 am – 9:30 am	Greater Shediac Sewerage Commission WWTF Upgrades (Chris Gallant: Englobe Corp.)	Operations, Maintenance, and Asset Management: Opportunities for Information Sharing (Martha Myers: AIM Network)	What a Couple of Years! Leveraging Technology to Facilitate Remote Collaboration & Enhanced QA/QC (Ashley LeMasurier: Stantec Consulting Ltd.)
2:00 pm – 2:30 pm	Wastewater Surveillance of SARS-CoV-2 in Nova Scotia (Graham Gagnon: Dalhousie University)	Automatic Irrigation of Cannabis in Colombia (Mario Camacho: TAMPAC SAS)	Development of a Novel Passive Sampling Approach For Monitoring Geosmin and 2-MIB BY GC-MS in Source Water (Theresa Afi: Centre for Water Resources Studies (CWRS), Dalhousie University, Halifax)
2:30 pm – 3:00 pm	Applying Wastewater-Based Epidemiology to a Small-Scale Wastewater System in Nova Scotia (Meghan Swanburg: Dalhousie University)	Release of Atlantic Canada Water and Wastewater Guidelines (Amy Winchester: CBCL Limited)	Assessing the Feasibility of Passive Sampling for Early Detection of Cyanobacteria Using RT-QPCR Analysis (Dave Redden: CWRS Dalhousie)
3:00 pm – 3:30 pm	Use of Laser Scanning Technology for Process Facility Design (Matt Balcombe, Katherine MacCaull: Dillon Consulting)	Assessment of the CSO Reduction Strategy for the Greater Moncton Sewer Commission using Long-Term Computer Modelling (Victoria Fernandez: CBCL Limited)	Case History: Flow Test of 100-year-old Cement-mortar Lined Cast Iron Pipe (Sam Ghosn, P.Eng: DIPRA (Ductile Iron Pipe Research Association))
3:30 pm – 4:00 pm	Odour Control Systems in Wastewater Treatment Plants (Linda Cooke-Weaver: Wolseley Canada Inc.)	Challenges of Water and Wastewater Infrastructure in Nunavut (Sarah Collins, Paul Clow: Government of Nunavut)	Developing a Modified Approach of a Receiving Water Study in Complex Ambient Conditions (Jennifer Bainbridge: Dillon Consulting Limited)

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# EMERGING LEADERS COMMITTEE UPDATE

The ACWWA Emerging Leaders Committee (formerly known as the Young Professionals Committee) is an active group that offers engaging networking and volunteering opportunities for members of the ACWWA who are new to the water and wastewater industry. This fall, the Committee is pleased to continue to offer our Lunch and Learn series and will be hosting several events at the 2022 Annual Conference from October 2 to 4 in Saint John, as described below.

We are pleased to have Dr. Lauren Somers as our guest speaker to kick off our Fall Lunch and Learn series. Dr. Somers is an assistant professor in Civil and Resource Engineering at Dalhousie University. Her research focuses on the function of sensitive hydrologic systems and how they are impacted by, and contribute to, climate change and other environmental perturbations. Join us **virtually on Thursday, September 29 at noon (12:00 ADT)** as Dr. Somers presents her research on *Groundwater resources in the Peruvian Andes under a changing climate*. In the talk, she will discuss how decreasing water storage in snowpack and glaciers are threatening water resources for downstream populations. Her tracer experiments and hydrological models investigate the role of groundwater in sustaining streamflow as the glacier discharge supply diminishes under climate change projections. She will highlight potential adaptation

strategies to increase groundwater recharge, including hillslope trenching. Those interested in attending can register at [www.eventbrite.ca/e/acwwa-lunch-learn-series-groundwater-in-the-peruvian-andes-wdr-somers-tickets-387076535337](http://www.eventbrite.ca/e/acwwa-lunch-learn-series-groundwater-in-the-peruvian-andes-wdr-somers-tickets-387076535337).

This year, the Emerging Leaders and Water For People events at the annual conference include the Charity Silent Auction, Water For People Fun Run/Walk, and the 50/50 raffle. The Charity Silent Auction will be open for viewing and bidding throughout the conference, with bidding closing prior to the technical sessions on Tuesday afternoon. Those wishing to make donations to the Silent Auction can contact [meghan.swanburg@acadiu.ca](mailto:meghan.swanburg@acadiu.ca) or bring the item(s) to the Silent Auction room the first day of the conference (Sunday, October 2). The 5 km Water For People Fun Run/Walk will be held on Monday at 5:00 PM, leaving the Saint John Hilton and meandering along the Harbour Passage Trail. Thank you to Sansom Equipment Limited for supporting the WFP Fun Run/Walk. Water For People committee members will also be selling 50/50 tickets during the Tuesday Night Social. If you plan on attending the conference, please check out these events and anyone is welcome to donate items to the Silent Auction.

We are also looking for volunteers to assist with the Silent Auction, the Water For People Fun Run/Walk, and selling 50/50 tickets at the Tuesday Night Social at the conference. If you are interested in volunteering, please email [lindsay.anderson@dal.ca](mailto:lindsay.anderson@dal.ca). ☺



## THE PANEL SHOP

**For further information please contact:**

Brad Matchett  
Operations Manager, The Panel Shop  
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# AWWA wins fourth-straight APEX Award

Source: AWWA.org

**“Opflow, AWWA’s operations magazine, won an Award of Excellence for a series on advanced metering infrastructure.”**

The American Water Works Association (AWWA) announced in July that for the fourth-straight year, it received an APEX Award from Communications Concepts, an organization that advises publishing and marketing professionals on best practices to improve their publications and communications programs.

This is the 34th year for the annual APEX Awards, which recognize excellence in graphic design, editorial content, and overall communications effectiveness.

This year, *Opflow*, AWWA’s operations magazine, won an Award of Excellence for a series on advanced metering infrastructure covered in the January/February, March, and April 2021 issues (category 24 – magazine series). This is the fourth consecutive award won by *Opflow*, and the third year in a row that it picked up an Award of Excellence for a series on a single topic/theme.

“This is a tremendous honour,” said John Hughes, editor of *Opflow*. “I am extremely grateful to be part of the *Opflow* team, which deserves credit for our being recognized among an extremely competitive field of entries. We are fortunate to work with exceptional writers, who do an outstanding job explaining important issues facing the water sector, like advanced metering infrastructure.”

“AWWA’s publications – *Opflow*, *Journal AWWA* and *AWWA Water Science* – all work hard to share knowledge and best practices to members,” said AWWA CEO David LaFrance. “Our publications staff works tirelessly to produce high-quality educational content and opportunities for our members, consumers, and the total water community. Receiving this award furthers the statement that AWWA’s members are the leaders who ensure excellence in the management of water.”



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# Upcoming ACWWA Courses

## ACWWA provides technical training and education courses as follows:

- Small System seminars (typically one day)
- Management courses (one to two days)
- Education courses (four days) on:
  - Water Distribution
  - Water Treatment
  - Wastewater Collection
  - Wastewater Treatment

### General information:

- Courses and workshops vary from half day to four days in length.
- Textbooks and other materials will be sent to the training facility for each registered attendee.
- It is important to register as early as possible as to ensure course materials are ordered.
- Continuing Education Units (CEUs) are provided for successful completion of applicable training programs and seminars.

### Online – Instructor led

Disinfection of Potable Water Piping  
September 28 and 29, 2022  
**Non-member Price:** \$437.00  
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Safe Drinking Water Act  
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**Non-member Price:** \$437.00  
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Chemical Safety  
October 3 and October 4, 2022  
**Non-member Price:** \$437.00  
**Member Price:** \$408.25

### In Person – Instructor led Nova Scotia

Basic Electrical Motor Controls & VFDs Course – Truro  
September 26, 2022  
Non-member Price: \$316.25  
Member Price: \$287.50

Automatic Diaphragm Valve – Halifax  
November 15, 2022  
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Wastewater Collection  
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November 21–24, 2022  
**Non-member Price:** \$1,121.25  
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**New Brunswick**  
Wastewater Treatment  
Level I & II – Moncton  
November 14–17, 2022  
**Non-member Price:** \$1,121.25  
**Member Price:** \$1,029.25

Automatic Diaphragm Valves – Fredericton  
November 17, 2022  
**Non-member Price:** \$345.00  
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Water Distribution  
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For more information, and to register for a class, visit [www.acwwa.ca/education/acwwa-courses.html#schedule](http://www.acwwa.ca/education/acwwa-courses.html#schedule).

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# PROJECT SPOTLIGHT

## TRANSAQUA WWTF SECONDARY UPGRADE – GREATER MONCTON, NB

**Project Owner:** TransAqua Greater Moncton Wastewater Commission

**Engineers:** CBCL Limited

**Construction Cost:** \$90 Million



### ► PROJECT SCOPE

The greater Moncton wastewater collection and treatment system includes trunk collector sewers and tunnels, eight pumping stations, a wastewater treatment facility (WWTF), and a biosolids treatment (composting) facility which services Moncton, Dieppe, and Riverview. The WWTF was originally constructed in 1994 as a chemically enhanced primary treatment process with ferric sulphate and polymer addition, with a treatment capacity of 115,000 MLD.

CBCL Limited was commissioned in 2014 to plan and design secondary treatment upgrades necessary to meet new federal effluent guidelines (Wastewater System Effluent Regulations – WSER) and to have capacity to process flows ranging from 90,000 to 143,000 MLD.

### ► PROJECT OBJECTIVES & APPROACH

The main objective of the project was to develop a secondary treatment plant upgrade that will meet and exceed the required effluent

objectives for the foreseeable future. This objective resulted in the selection of biological nutrient removal (BNR) as the general process approach. However, as the presence of combined sewers within the collection system results in large flow variations in combination with decreased wastewater concentration, step feed variations of the BNR process were investigated. Process modelling was performed to determine the impact that step feed would have on secondary clarifier sizing. The modelling results indicated that utilizing step feed would enable the use of the retrofitted circular primary clarifiers (with a fourth clarifier added) as secondary clarifiers. The clarifier retrofit was supported by computational fluid dynamics (CFD) modelling to optimize the use of existing structures. The remainder of the design was then completed featuring septage receiving, fine screens, aerated grit removal, turbo blowers, selective foam wasting, rotary drum thickeners, and VFA collection from dewatering processes to allow for some seasonal biological phosphorus removal.

A summary of the upgrades to the WWTF include:

- **Preliminary Treatment Upgrades**
  - Replacement of automatic bar screens, with three new 6 mm fine screens
  - Two new aerated grit chambers with dedicated grit pumping, classifier, and washing systems.
  - Upgraded septage receiving with new septage screening
- **Primary Treatment Upgrades**
  - Four new rectangular primary clarifiers equipped with chain and flight mechanical sludge collectors

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- **Secondary Treatment Upgrades**
  - Two new four-stage step-feed bioreactors
  - Existing three primary clarifiers will be retrofitted to secondary clarifiers and a fourth secondary clarifier added
  - New fine bubble aeration diffusion system supplied from a high-speed turbo (HST) blowers
  - New blower building to house the blowers and standby generator
  - New Secondary Treatment Building located next to the primary clarifiers
  - New WAS and RAS collection and pumping systems
- **Disinfection Upgrades**
  - New UV disinfection units and new disinfection building
- **Solids Handling Upgrades**
  - Two new rotating drum thickeners for WAS and new WAS holding tank
  - Retrofits to existing centrifuge units for dewatering of a mixture of WAS and primary sludge
  - New solids loading out building with biofilter for odour control



//

**THE MAIN OBJECTIVE OF THE PROJECT WAS TO DEVELOP A SECONDARY TREATMENT PLANT UPGRADE THAT WILL MEET AND EXCEED THE REQUIRED EFFLUENT OBJECTIVES FOR THE FORESEEABLE FUTURE.**

//

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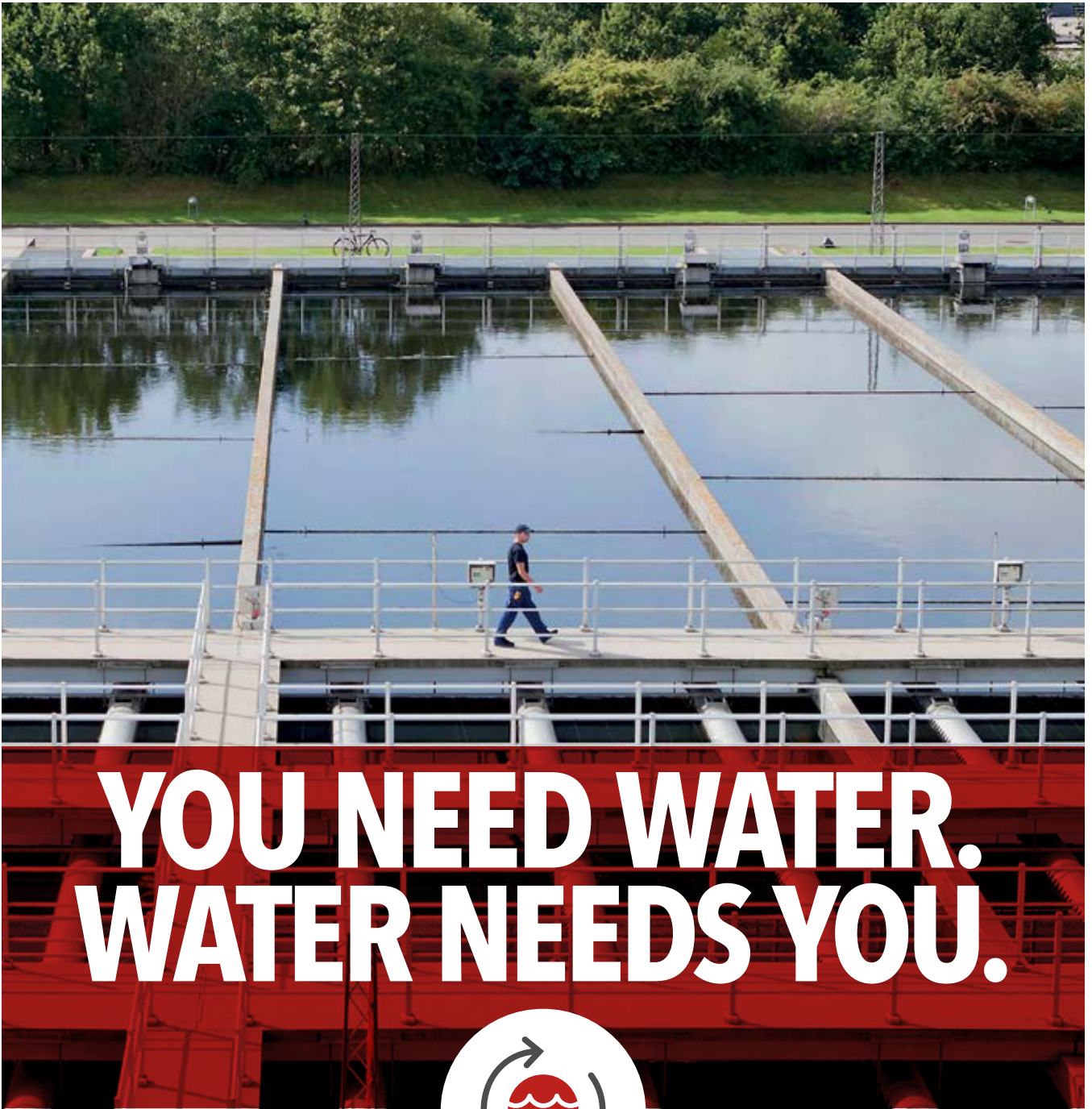
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The project was delivered in five phases including preliminary treatment, primary treatment, biological treatment, solids handling, and disinfection. The first two phases (preliminary and primary treatment) utilized the conventional design-bid-build methodology and was completed in 2018. In order to expedite project delivery and provide the owner with additional control in the construction process, subsequent phases were delivered utilizing the construction management method with the owner acting as construction manager.

Master agreements were developed with contractors representing all required trades and designs were developed such that projects could be released to the contractors as completed. Trade packages typically included civil, structural, and process mechanical and electrical. The biological treatment and solids handling phases were commissioned in late 2020 and the final disinfection phase completed in 2022. Overall project budget for the upgrades to the facility was \$90 million. Effluent discharging from the upgraded facility is now in compliance with WSER limits. 







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Please see below for announcements, upcoming deadlines, and volunteer opportunities. If you have any items you would like to add to the announcement board in an upcoming issue of *Go With the Flow*, please contact ACWWA at: [kmaccaull@dillon.ca](mailto:kmaccaull@dillon.ca).

### Volunteer positions!

ACWWA is looking for individuals who are interested in becoming more involved on tasks within the organization. Current positions available include:

- Project Highlights Coordinator: Responsible for finding interesting project and working with project teams to develop the stories to include in *Go With the Flow* magazine and on the association website. This individual would work the Communications Committee

to develop and publish the Project Highlights.

- Interviews Coordinator: Responsible for finding and working with individuals in the water and wastewater industry to highlight in in *Go With the Flow* magazine and on the association website. This individual would work the Communications Committee to develop and publish the Interviews.
- Announcement Board Coordinator: Responsible for updating and maintaining the

Announcement Board for both *Go With the Flow* magazine and the ACWWA website. This individual will work with the Communication Committee.

If you are interested in any of these positions, please provide a maximum 200-word submission expressing your interest and explain what you would like to do in the role. This can be sent by email to: [contact@ACWWA.ca](mailto:contact@ACWWA.ca). If you have any questions please contact [kmaccaull@dillon.ca](mailto:kmaccaull@dillon.ca).

### ACWWA 2022 Conference



The Annual Conference of the Atlantic Canada Water and Wastewater Association is taking place in Saint John,

October 2-5, 2022. The Hilton Saint John is pleased to welcome visitors back to the harbour front hotel. The conference theme this year is "Uncertainty to Opportunity." The past few years have forced organizations to pivot, adapt, and become flexible as they discover new paths for delivery of their services. We want to embrace these challenges and find out what opportunities have come from the past two uncertain years. Registration is available through the ACWWA website. [🌐](https://www.acwwa.ca)



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