

NATIONAL WATER & WASTEWATER CONFERENCE

PROGRAM AT A GLANCE

Monday, November 4, 2024

	ROOM 2E	ROOM 2F	ROOM 2G	ROOM Pan Am	ROOM 2H
	A1: Biosolids Management Moderator:	A2: Drinking Water Management – distribution system	A3: Water Efficiency - Using Meters and Data to Manage Water Use	A4: Carrots and Sticks – Motivation and Performance Assessment for Sustainable & Resilient Capital	A5: Flushables Moderator: Brian Brost, City of St.
	Renee Grosselle, City of Winnipeg	Moderator: Ehsan Roshani, National Research Council	Moderator: Mike O'Meara, Regional Municipality of York	Project Delivery	Albert
10:30 am	Thermal Hydrolysis: Maximizing Water Treatment at City of Franklin and Michigan's Oakland County Steven Greseth, Peter Kiewit Sons ULC	Should you be concerned with Styrene Releases when CIPP Lining Water Pipes? Mark Knight, University of Waterloo and Andrew Hallett, Watertight Lining Solutions Inc.	Managing Water Losses: Optimizing Sensor Placement for Efficient Monitoring in Water Systems Glynn Addicott, ACG	Interactive session led by Lourette Swanepoel, Envision Canada Program Manager, Canadian Society for Civil Engineering	What the Flush is the IWSFG Barry Orr, Municipal Enforcement Sewer Use Group
11:00 am	A Recap of the City of Winnipeg Biosolids Management Program Darren Keam, WSP	PFAS Leaching in Drinking Water System Components Kathryn Foster, NSF International	Revolutionizing Water Management: Continuous Water Meter Reading in the Age of Scarcity Eric Bourbeau, X-TELIA		Arrow Utilities real sewer struggles with wipes and the costs of dealing with them Kate Polovsky, Arrow Utilities
11:30 am	Committing to Land Application Amid PFAS Regulations: Case Study of Two Michigan Utilities Implementing Class A Biosolids Treatment Technologies Sarah Mason-Renton, Lystek International	Divers? What do you mean I need divers for a pipeline inspection? William Jappy, Pure Technologies Ltd.	Water Meters Can't Find Main Line Leaks? You Bet They Can! Keesha Dorosz and Oleks Rudkovski, Kamstrup Water Metering		Eliminate the Wet Well with Direct in-line pumping Robert Mott, Flow Solutions
12:00 pm	Lunch in the Marketplace Room - York 1-4				•
	ROOM 2E	ROOM 2F	ROOM 2G	ROOM Pan Am	ROOM 2H
	B1: Wastewater Management – emerging challenges	B2: Drinking Water Management – First Nations	B3: Climate Change	B4: Canada Infrastructure Bank	B5: Miscellaneous

	Moderator: Dean Iamarino Regional Municipality of Halton	Moderator: Kirk Stinchcombe, Econics	Moderator: William Fernandes, City of Toronto		Moderator: Jaime Boutilier, CIMA
1:30 pm	Assessing the potential of activated bauxite residue (ABR) to remove PFAS in the water column Jingya Pang, University of Alberta	Source Water Protection for a First Nation Through a Traditional Knowledge Lens Chris Gerrits and Evan Finbow, C.F. Crozier	Reducing GHG Emissions Maureen Hodgins, Water Research Foundation and Jeff Carmichael, Metro Vancouver	Alex Ryan, Canada Infrastructure Bank Shawn Adams, Government of Manitoba Gordon Daman, Red River Group John Peters, Access Credit Union Stephen Gordon, Jacobs	Evolving our Professional Services Training Program for Future Leaders Amy Winchester, CBCL Limited
2:00 pm	Ovivo's Integrated Solution for Onsite PFAS Destruction - Case Study – Treating Reverse Osmosis (RO) Reject Utilizing Obreak [™] Electro-Oxidation Tom Whitton, E2metrix (Ovivo) [Virtual speaker]	Establishing and Updating Water Quality Objectives for Burrard Inlet Karin Bjorklund, Kerr Wood Leidal and Anuradha Rao, Tsleil-Waututh Nation [Karin will join virtually]	Incorporating Increasingly Extreme Weather Events in Water Infrastructure Planning Colwyn Sunderland, Kerr Wood Leidal Associates	Alexia Stangherlin, City of Brandon	Big FIVE (5) Simple Solutions for Sewer Backups, Flooding and I/I (You will be amazed at how simple and cost-effective this is!) Barbara Robinson, Norton Engineering
2:30 pm	Removal of PPCPs using constructed wetlands in the North Arcadio Rodriguez, City of Whitehorse	NIBI EnviroTech on Small Systems & First Nation Challenges Kelsey Friesen and Robin Richards, NIBI Envirotech	Planning Processes for Integrated Asset Management: A CSA Group Research Project Lynn Barber, CSA Group		Predicting water temperature inside water distribution systems using Deep Learning Ehsan Roshani, National Research Council
3:00 pm	Refreshment Break Room - York 1-4				
	ROOM 2E	ROOM 2F	ROOM 2G	ROOM Pan Am	ROOM 2H
	C1: Wastewater Management – innovations in treatment Moderator: Jesse Hulsman,	C2: Drinking Water – Distribution System Management Moderator: Rodney Bouchard, Union	C3: Water Efficiency Moderator: Mike O'Meara, Regional Municipality of York	C4: Foresight – Municipal/Academic/private Sector Partnerships	C5: WSER – Updates and Compliance Challenges Moderator: Diana Tao, Tetra Tech
	Municipality of East Hants	Water Supply			
3:30 pm	Membranes with New Biology: energy savings, superior loading, hydraulic and filterability too! Jean Gagnon, Veolia WTS	A Shifting Mindset: Tapping into Water Main Resilience using Performance Based Decision Making Sam Ghosn, DIPRA	Onsite Water Reuse Benjamin Morrison, Cleanflo Water Technologies	Join us for this panel discussion exploring collaborations between municipalities, academia and the private sector in advancing cleantech adoption for the water sector.	Environment and Climate Change Canada Karissa Aubie, Wastewater Section, Environment and Climate Change Canada

4:00 pm	Optimization of nitrogen removal in wastewater treatment using low dissolved oxygen Fatima-Zahra Ezzahraoui, Toronto Metropolitan University	Same Day Return to Service Asbestos Pipe Renewal Mark Knight, University of Waterloo	Planning for Water Neutral Development Using Efficiency as a Tool Mary Ann Dickinson, Dickinson and Associates	Foresight Canada, Xylem and AquaAction share their innovative partnership models, what success has looked like and where they see challenges and opportunities in building future-proof, effective alliances in Canadian water and	CBRM Wastewater Treatment Achievements - WSER Challenges in Maritime Communities Mike Abbott, CBCL Limited
4:30 pm	The recovery of curdlan from aerobic granular sludge wastewater treatment systems Adedoyin Adekunle, University of Northern British Columbia	Unveiling the Dynamics: Understanding Pressure Transients in Water Networks Shahab Hashemi, ACG-Envirocan and Glyn Addicott, Hydraulic Analysis	Splintering and Fragmenting: What Changes in Demographics and the Political Landscape Mean for Water Demand Management in Canada Kirk Stinchcombe, Econics	 water technology. Panel featuring: Michele Samuels, Xylem Kariann Aarup, AquaAction Nina Bader, Foresight Canada 	City of Calgary's Journey with WSER Compliance Brenda Casella, City of Calgary
5:00 pm	Power Hour in the Marketplace Room - York 1-4				
5:15 pm	CWWA AGM Room - PanAm				



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Tuesday, November 5, 2024

	ROOM 2E	ROOM 2F	ROOM 2G	ROOM Pan Am		
	D1: Wastewater Management	D2: AI and Digital Solutions	D3: Utility Optimization and Sustainability	D4: Managing costs and risks of water service delivery through natural		
	Moderator: Megan Lusty, Government of Nunavut	Moderator: Ehsan Roshani, National Research Council	Moderator: Brian Brost, City of St. Albert	Infrastructure: examples from the Prairies Moderator: Carl Bodimeade, Hatch		
8:30 am	Constructed Treatment Wetlands for Wastewater Treatment Nicholson Jeke, Native Plant Solutions/Ducks Unlimited Canada	Managing Smart for the Future: How Toronto Water is Reducing CSOs with Phased Implementation through Digital and Automation Technology Diana Tao, Tetra Tech	WTP Optimization to Support Continuous Performance Improvement and Facility Planning Anna Comerton, Associated Engineering	Panel Discussion featuring: Dimple Roy, International Institute for Sustainable Development		
9:00 am	The Essential Use Concept: A Regulatory Approach to Manage PFAS in Wastewater Patricia Hania, Toronto Metropolitan University	How AI and Cloud Technologies Are Driving America's Largest Trenchless Capital Improvement Project: A Case Study of Current Tools Used and Workflows Eric Sullivan, SewerAl Corporation [Virtual speaker]	Incorporating an integrated Management Systems' approach with utility business processes to achieve long-term sustainability and reliability Andrew Henry, Lake Huron & Elgin Area Water Systems	Duane Nicol, City of Selkirk Roy Brooke, Natural Assets Initiative		
9:30 am	Improving cold-weather ammonia removal in a northern lagoon with an in-situ, rope-type media system. Case study of a full-scale project Kevin Bossy, Bishop Water	Securely but Simply enabling Remote Operations with Zero Trust Don Bowman, Agilicus Incorporated	Sustainability Strategy for Water Utilities Alan Shapiro, Shapiro & Company			
10:00 am	Refreshment Break					
	Room - York 1-4 ROOM 2E	ROOM 2F	ROOM 2G	ROOM Pan Am		
	E1: Wastewater Management	E2: Drinking Water Treatment Techniques and Innovation	E3: Energy and Water Efficiency	E4: Canada Water Agency		
	Moderator: Mike Abbott, CBCL	Moderator: Anna Comerton, Associated Engineering	Moderator: Darren Keam, WSP			

10:30 am 11:00 am	Partitioning of pharmaceutical and personal care products in five environmental matrices from naturalized artificial streams in Calgary, Alberta Daniela Pulgarin Zapata, University of Alberta The potential for micropollutants and fecal indicators as tracers of domestic sewage contamination along the Bow River	Enhancements to the Time-Tested Slow Sand Filtration Process to Solve Modern Day Drinking Water Challenges Robert Lecraw and Kristof Karpiuk, MS Filter Systems Inc. Too Much of a Good Thing? Re-evaluating Ozone Needs After 20 Years Michael Mckie, CIMA+	Biogas cogeneration at Bonnybrook Wastewater Treatment Plant Jifan Liu, City of Calgary The carbon footprint of using biogas generated from municipal sewage sludge Bill Barber, Cambi	Canada Water Agency - Overview Daniel Wolfish, Interim President, Canada Water Agency, Canada Water Agency CWA programs Ute Holweger, Canada Water Agency Managing Canada's Transboundary Waters Patrick Cherneski Canada Water Agency
11:30 am	Jaime Hicks, University of Alberta Collaboration for Capital Upgrades to Winnipeg's Sewage Treatment Plants Andrew Blanchette, Veolia North America	The Challenges of Colloidal Iron Removal from Surface Water - A Case Study Involving a Long Term Pilot Test Rick Sen and Karim Abouzeid, MAGNOR	Home Water Use Monitoring Kirk Stinchcombe, Econics	The National Freshwater Data Strategy Geoffrey Gunn. Senior Analyst - Data, Canada Water Agency Questions and Answers
12:00 pm	Lunch in the Marketplace Room - York 1-4	I	<u> </u>	
	ROOM 2E	ROOM 2F	ROOM 2G	ROOM Pan Am
	F1: Water and Wastewater Monitoring and Surveillance Moderator: Jaime Boutilier, CIMA	F2: Using Water Data for Public Health Moderator: Renee Grosselle, City of Winnipeg	F3: Energy Efficiency Moderator: Rodney Bouchard, Union Water Supply	F4: Water Canada Top 50 Infrastructure Projects – Water Moderator: Corrine Lynds, Water Canada
1:30 pm	Surveillance	Moderator: Renee Grosselle, City of	F3: Energy Efficiency Moderator: Rodney Bouchard, Union	F4: Water Canada Top 50 Infrastructure Projects – Water
1:30 pm 2:00 pm	Surveillance Moderator: Jaime Boutilier, CIMA Reliable Treatment Outcomes by Real-time Influent Monitoring	Moderator: Renee Grosselle, City of Winnipeg Occurrence of Legionella pneumophila in US Drinking Water	F3: Energy Efficiency Moderator: Rodney Bouchard, Union Water Supply Comparing the carbon footprint of removing perfluorinated compounds from biosolids with direct land application of cake	F4: Water Canada Top 50 Infrastructure Projects – Water Moderator: Corrine Lynds, Water Canada Featuring projects from - City of Portage La Prairie, City of Toronto and

	sources (a case study)	Chand Mangat, Public Health Agency of		
	Navideh Najafpour, Azad University	Canada		
3:00 pm	Refreshment Break			
	Room - York 1-4			
	ROOM 2E	ROOM 2F	ROOM 2G	ROOM Pan Am
	G1: Wastewater Management – odour control	G2: Drinking Water Utility Management	G3: Climate Change	G4: Water Canada Top 50 Infrastructure Projects – Wastewater
	Moderator: Darren Keam, WSP	Moderator: Amy Winchester, CBCL	Moderator: Jeff O'Driscoll, Associated Engineering	Moderator: Corrine Lynds, Water Canada
3:30 pm	It Doesn't Have to Stink: Wastewater Odour Control 101 Ashley Boulter, USP TECHNOLOGIES	Temporary Water Pumping Station Installation and Live Transition to Facilitate Station Upgrades – Garner Rd Pumping Station, Hamilton James Saunders, RV Anderson Associates and William Docherty, Hamilton Water	Drought Readiness and Response in Calgary: A WATERbalancing Act Nicole Newton, City of Calgary	Featuring projects from - Arrow Utilities, City of Winnipeg and the City of Calgary
4:00 pm	Prevent odor complaints, Extend asset life with Data-Driven H2S Management Sean Naaykens, Hach	Edmonton EL Smith Water Treatment Plant distribution pump outage Vicki Campbell, EPCOR Water Services	Achieving Treatment Resilience in a Changing Climate: Research Partnerships Projects Emphasize New Insights and New Tools Maureen Hodgins, Water Research Foundation and Monica Emelko, University of Waterloo	
4:30 pm	Reduction of odour control operating costs while increasing performance at wastewater treatment facilities using Photoionization Treatment technology Shan Shanchayan, NeutraTek Odour Solutions LP	Adaptive Monitoring of the Winnipeg River Watershed Jeff Simpson, Aquatic Life	Assessing Drought Preparedness Across 100 Public Water Systems in Manitoba Jeff O'Driscoll, Associated Engineering	
7:00 pm	Canadian Museum for Human Rights [Buses will depart from the Delta Winnipeg lobby starti 11:00 pm]	I ng at 6:45 pm and will run every 15 minutes on the h	I our for the duration of the evening to the Museum	I and return back to the Hotel. The last bus wil



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Wednesday, November 6, 2024

	ROOM 2E	ROOM 2F	ROOM 2G	ROOM Pan Am
	H1: Wastewater Management	H2: Drinking Water Management – Using New	H3: Utility Management – rethinking old	H4: Infrastructure Failure
	Moderator: Richard MacEwen,	Technology to Solve Old Problems	problems	Moderator: Carl Bodimeade
	Charlottetown Water and Sewer Utility	Moderator: Jeff O'Driscoll, Associated Engineering	Moderator: Nicole Taylor, City of Moncton	
8:30 am	Clariphos	Characterizing the fate/removal of	Private Servicing Solutions to Address the	
	Jordan Van Shane, Bishop Water	microplastics through a drinking water	Housing Crisis	Vicki Campbell, EPCOR
		treatment plant with source water impacted by	Chris Gerrits, C.F. Crozier and Katherine	
		stormwater inputs	Rentsch, Crozier Consulting Engineers	Jean Lamarre, Ville de Montreal
		Jingyi Liu, Civil and Environmental Engineering		
		Department - University of Alberta		William Fernandes, City of Toronto
9:00 am	East Trunk Wastewater Storage Facility:	Micro-Bubbles Enhance Photon Utilization	The Case for Asset Management	Nancy Mackay, City of Calgary
	Preparing for extreme wet weather	Efficiency in Ultraviolet-Based Advanced	Richard Stamper, PEMAC	
	conditions and reducing the burden on	Oxidation Processes		Cheryl Nelms, Metro Vancouver
	existing infrastructure	Hafiz Hamza, University of Manitoba		
	Christine Hill, Arcadis			Ian Morin, WSP (speaking on Iqaluit failur
9:30 am	SulFeLox: Low Hazard Iron Solution for	The Well Health Check Process for Diagnosing	Rebranding a journey in in Utility	
	Odour & Corrosion Control	Well Problems	Modernization	
	Ashley Boulter, USP TECHNOLOGIES	Tom Ballard, Southeast Hydrogeology	Kate Polkovsky and Cindy deBruijn, ARROW	
		[Virtual speaker]	Utilities	
10:00 am	Refreshment Break			
	Room - York 1-4			
	ROOM 2E	ROOM 2F	ROOM Pan Am	
	I1: Wastewater Management	I2: Underground Infrastructure	I3: Interactive panel on infrastructure and	
			national advocacy featuring the Chair of our	
	Moderator: Jean Lamarre, City of	Moderator: Rodney Bouchard, Union Water	Utility Leadership Committee	
	Montreal	Supply	Carl Bodimeade and Robert Haller, Canadian	
			Water and Wastewater Association	

10:30 am	Fixing the Drawbacks of Anaerobic Digestion by Recycling Matthew Williams, Thermal Process Systems	Optimizing Pipe Replacement Prioritization Based on Non-Invasive Assessment: Gresham's Innovative Approach to Watermain Prioritization using Non-linear Vibroacoustic Cameron White, KenWave Solutions Inc.	
11:00 am	iCT-based Optimization of Disinfection Chemistries Ashley Boulter and Ian Watson, USP TECHNOLOGIES	Longest Canadian PipeDiver Inspection (18.6km Electromagnetic Inspection for the City of Winnipeg) William Jappy, Pure Technologies Ltd.	
11:30 am	Assessing Biofilm Formation on Microplastics in Biological Wastewater Treatment Systems: Investigating Influential Factors and Impacts on Treatment Processes Gaurav Bhardwaj, York University	Flow Meter Chamber Upgrades & Integration Pilot Project Matt Phillips, CIMA+ and Rodney Bouchard, Union Water Supply	
12:00 pm	Lunch and Closing Remarks Room - York 1-4		
1:30 pm	Water Canada Downstream Room - Pan Am		