


Sunday, November 5

6:30 pm	<p>Opening Reception at The Rooms – SPONSORED BY THE CITY OF ST. JOHN’S</p> <p>Buses will be available to take our delegates to the Rooms starting at 6:15, the bus will make multiple trips to get all of our Delegates to the Party. Meet in the LOWER LOBBY at the DELTA, for transportation.</p> <p>Immerse yourself in the culture of Newfoundland and Labrador. With dramatic space, incredible views and fascinating collections this will be an evening to remember, Enjoy live music, great food and fantastic networking.</p>
---------	--

Monday November 6

7:30	Registration and Breakfast (Bowring 1-3)
8:30	<p>Opening Plenary (Bowring 1-3)</p> <p>Nancy Kodousek, CWWA President Welcome to St. John's - TBD Peter Vanrolleghem - welcome from CAWQ and WEF Robert Haller - logistics Patsy Root on behalf of our sponsor IDEXX</p> <div data-bbox="237 699 556 1177"></div> <p>KEYNOTE ADDRESS</p> <p>Dianne Saxe is the Environmental Commissioner of Ontario (ECO), a tough but fair watchdog over Ontario’s environmental, energy and climate performance, and guardian of the Environmental Bill of Rights (EBR).</p> <p>Our keynote address will focus on the new ECO report “Every Drop Counts” that focuses on the connection between water and energy in Ontario’s municipal water and wastewater systems. These systems are the largest energy users for most municipalities, accounting for almost 40% of the total usage, on average. A scenario that is played out in water and wastewater utilities across the country.</p>
10:00	Refreshment break (Foyer -) sponsored by Schlumberger Canada Ltd.

	Bannerman 1	Bannerman 2	Bannerman 3	Bannerman 4	Bowring 2
10:30	A1: Utility Security – Water Sector Resilience Moderator: Carl Yates, Halifax Water	A2: Biosolids Moderator: William Fernandes, Toronto Water	A3: Water and Wastewater Research – Emerging Contaminants Moderator: Yves Comeau, Ecole Polytechnique	A4: Water and Energy Efficiency Moderator: Heather Zarski, EPCOR	A5: Innovative Data Solutions Moderator: Geoff Riggs, IBM
	<p>Welcome address from Public Safety Canada Overview of Public Safety Canada’s Role in Critical Infrastructure Resilience – Update on Initiatives Craig Oldham – Director General of Critical Infrastructure and Strategic Coordination</p> <p>Panel Discussion</p> <ul style="list-style-type: none"> • Dr. Kevin Quigley – Dalhousie University • Dr. Anthony Masys – Defence Research & Development Canada • Ian Mcilwham – Region of Durham 	<p>Carbon sequestration through land application: evaluating biosolids management options under BEAM and assessing opportunities in emerging carbon markets Samantha Halloran, Lystek International Inc</p> <p>Achieving Success with the Halifax N-Rich Biosolid Program Lise LeBlanc, Walker Environmental/LP Consulting</p> <p>Solutions for Small Systems – A Case Study in Compliance, Affordability & Sustainability Kevin Litwiller, Lystek</p>	<p>PFOS, PFOA and other poly- and perfluorinated compounds in the environment: “Where we were, where we are and where we’re going” Terry Obal, Maxxam Analytics</p> <p>Emerging Substances of Concern in Saskatchewan Water and Wastewater O.S. Thirunavukkarasu, Water Security Agency</p> <p>Wastewater treatment systems as reservoirs of antibiotic resistant bacteria: Can the spread of resistance genes be stopped? Kim Gilbride, Ryerson University</p>	<p>Scale back your Energy Usage in Domestic Boiler Systems and Reduce Water Bills with New Technologies Errol Small, Hydroflow Canada</p> <p>From an aspirational target to on-the-ground programs: the process of making water efficiency a reality. Jennifer Bailey, City of Vancouver</p> <p>Why Is Once-Through Cooling Still Happening, and What Can Be Done About It? Colwyn Sunderland, Kerr Wood Leidal Associates Ltd.</p>	<p>Geoff Riggs, IBM</p> <p>Mohamed Vedut and Thouheed Abdul Gaffoor, Emagin</p> <p>Shawn Bovay, Water Matrix</p>
12:00	Lunch (Bowring 1-3) sponsored by Ontario Clean Water Agency				
12:30	Poster Session – meet our poster presenters, this is your opportunity to hear more about their research and ask questions!				

	Bannerman 1	Bannerman 2	Bannerman 3	Bannerman 4	Bowring 2
1:30	B1: Urban Water Management – Workshop Dr. Anthony Masys – Defence Research & Development Canada Hiran Sandanayake – City of Ottawa Adrian Toth - CWWA	B2: Drinking Water Management - First Nations Moderator: Klas Ohman, Associated Engineering Ontario’s Approach to Collaboration with First Nations Communities to Resolve Long-Term Drinking Water Advisories Indra Prashad, Ontario Ministry of the Environment and Climate and Wesley Bova, Matawa Tribal Council and President Board of OFNTSC Working with The Federal Funding System to Provide Drinking Water to First Nations Bill Andrews, Hatch Corporation Critical Elements for Local Indigenous Water Security Anna Majury, Public Health Ontario	B3: Water and Wastewater Research Moderator: Aziz Gherrou, Laval University Understanding the impact of physicochemical perturbations on mixed microbial culture (MMC) composition in fermentation process for the production of Polyhydroxyalkanoate (PHA) using raw sludge Saurabh Kumar Ram, INRS-ETE State of the Art Resource Recovery Options for Municipal Wastewater Tanner Devlin, University of Manitoba Stop Struvite Formation, and Reduce Polymer requirements in Dewatering Processes with HydroFLOW Electronic Water Conditioners Bill Carroll, HydroFlow Canada	B4: Water and Energy Efficiency – Data Moderator: Aaron Boulton-Chaykowski, City of Calgary Water Smart – Leaks, Peaks and Data Geeks How Kootenay Communities are Conserving Water Tanji Zumpano, Regional District of Central Kootenay Real-time data quality and control of the Grand Rapids Wastewater Treatment Facility John Copp, Primodal Inc. Diving Below the Surface of 80+ Water Audits: Surprising Findings & Lessons Learned Lloyd Hipel, Enviro-Stewards Inc.	B5: Effective Utility Management Program Moderator: Terry Bender, OCWA Panel Discussion <ul style="list-style-type: none"> • Valerie Jenkinson, World Water & Wastewater Solutions • Terry Bender, Ontario Clean Water Agency • Mike Ippen, World Water & Wastewater Solutions • Dave Hunt, Ontario Clean Water Agency
3:00	Refreshment Break (Foyer)				

	Bannerman 1	Bannerman 2	Bannerman 3	Bannerman 4	Bowring 2
3:30	C1: Urban Water Management – Workshop (continued)	C2: Drinking Water Management - Laboratory Practices and Methods Moderator: Patsy Root, IDEXX	C3: Water and Wastewater Research Moderator: Ron Droste, University of Ottawa	C4: Wastewater Management – Stormwater Moderator: Diana Qing Tao, Tetra Tech	C5: Infrastructure Assessment Moderator: Clayton Tiedemann, EPCOR
	<p>Dr. Anthony Masys – Defence Research & Development Canada</p> <p>Hiran Sandanayake – City of Ottawa</p> <p>Adrian Toth - CWWA</p>	<p>Microbiology testing under ISO 17025: Making things easier Patsy Root, IDEXX</p> <p>Successes and Challenges in Monitoring Microcystin by ELISA: recommendations for utilities Rasha Maal-Bared, EPCOR Water</p> <p>Defined substrate technology as an improved detection system for total coliforms and E. coli in drinking water Colin Fricker, CRF Consulting</p> <p>Measurement Uncertainty in Laboratory Test Results: Understanding what your results really mean... Terry Obal, Maxxam Analytics</p>	<p>Optimizing Biofiltration during Drinking Water Treatment: Evaluating Media Design and Nutrient Amendment Monica Emelko, University of Waterloo</p> <p>Biomolecules Modified Microspheres as Surrogates for Cryptosporidium Filtration by Multi-Scale Approaches Lu Liu, University of Alberta ** eligible for Phillip H Jones Award</p> <p>Raw water zeta potential as an indicator of matrix effects on protozoa recovery by USEPA Method 1623 Bryanne Rempel, City of Calgary</p> <p>Monitoring filter effluent particle size to evaluate Cryptosporidium and Giardia removal efficiency Wendell James, EPCOR Water Services</p>	<p>Estimating Base Infiltration (BI) in the Municipal Sanitary Sewer Systems of York Region Robert Major and Ranin Nseir, Regional Municipality of York</p> <p>Applications of Smart Data Infrastructure for Wet-Weather Control and Decision Support Diana Qing Tao, Tetra Tech</p> <p>High Quality Tertiary Wastewater Filtration using Discfilter Technology Myriam De Ladurantaye-Noël, Veolia Water Technologies Canada</p>	<p>Prepare for the Road Ahead - The Condition of Your Capital Assets Sangeeta Chopra, Ontario Clean Water Agency</p> <p>In Service Forcemain Condition Assessment - Halifax, Ottawa and Kingston Case Studies Mike Garaci, Pure Technologies</p> <p>A Framework for Reliability Assessment Model For Water Distribution Networks Mohammed Alsharqawi, Concordia University ** eligible for Phillip H Jones Award</p> <p>Inspection Scheduling of Wastewater Pipelines Mohamed Elmasry, Concordia University ** eligible for Phillip H Jones Award</p>

					<p>Holistic Resilience-Based Asset Management Using System Dynamics and Evolutionary Optimization Ahmed Assad, Concordia University</p>
5:45	CWWA Annual General Meeting (Bannerman 1)				
5:45	CAWQ Annual General Meeting (Bannerman 2)				
5:30 – 6:30pm	Power Hour – a chance to browse our exhibitor displays and chat with our sponsors and exhibitors. Cash bar will be available.				

Tuesday, November 7

7:30	Registration and Breakfast (Bowring 1-3)				
	Bannerman 1	Bannerman 2	Bannerman 3	Bannerman 4	Bowring 2
8:30	D1: Utility Security – Cyber Security Moderator: Ian McIlwham, Region of Durham	D2: Drinking Water Management - Legionella Moderator: Patsy Root, IDEXX	D3: Water and Wastewater Research – Wastewater Treatment Moderator: Robert Delatolla, University of Ottawa	D4: Infrastructure Management Moderator: David Main, AECOM	D5: The People Side – Operators to Leaders Moderator: William Fernandes, Toronto Water
	<p>CCIRC & Plant Cybersecurity Essentials Frank Turbide – Canadian Cyber Incidents Response Centre</p> <p>Data & Software Security and Regulatory Compliance in the Cloud Goran Novkovic, Toronto Water</p> <p>Cyber Security Diligence in a Blitzkrieg World Carl Yates, Halifax Water</p>	<p>Beyond Legionella – NSF 444 Kevin Wong, Canadian Water Quality Association</p> <p>Case Studies in Managing Building Water Quality: Legionella, Corrosion, and Discolored Water Sheldon Masters, Corona Environmental Consulting</p> <p>Legionella pneumophila: Testing the water from the Utility to the Buildings Patsy Root, IDEXX Water</p>	<p>Side stream treatment of digested sludge thickening lagoon supernatant using partial nitrification: importance of start-up strategies and ammonia loading rates Yanxi Shao, University of Alberta ** eligible for Phillip H Jones Award</p> <p>Characterization of microbial dynamics in EBPR process operated at short sludge retention times Bei Wang, University of Guelph</p> <p>Eliminating ammonia toxicity from lagoon effluents at temperatures as low as 1°C Bradley Young, Veolia Water Technologies Canada ** eligible for Phillip H Jones Award</p>	<p>Wastewater and Stormwater System Resiliency under Climate Change Uncertainty Fabian Papa, FP&P HydraTek Inc. and Robert Muir and Lijing Xu, City of Markham</p> <p>Bridging infrastructure financing gap. How 85% of the watermain breaks were predicted in 3% of the water network in the city of Kitchener Mehrdad Varedi, Waterlix</p> <p>Development of a Water Distribution Network Model Utilizing GIS Data Sammy Mutti, C3 Water Inc.</p>	<p>Addressing Workforce Challenges: The Future of the BC Water and Waste Industry Carlie Hucul, BC Water and Waste Association and Kalpna Solanki, Environmental Operators Certification Program</p> <p>Developing Leaders from Within – Update on the Successes, the Complications and the Forks in the Road Nancy Kodouseks, Region of Waterloo</p> <p>Canadian Water & Wastewater Operators Certification Association Kalpna Solanki, EOCP & CWWOCA</p>
10:00	Refreshment Break (Foyer) sponsored by Laval University				

	Bannerman 1	Bannerman 2	Bannerman 3	Bannerman 4	Bowring 2
10:30	<p>E1: Climate Change Responses and Tools in the Atlantic Provinces</p>	<p>E2: Drinking Water Management – Safe Drinking Water Planning Moderator: Steven Craik, EPCOR</p>	<p>E3: Water and Wastewater Research – Bioreactors Moderator: Yves Comeau, Ecole Polytechnique</p>	<p>E4: Waste Water Management - Flushables Moderator: Ed Von Euw, Metro Vancouver</p>	<p>E5: Water Pricing Moderator: Carl Bodimeade, Hatch</p>
	<p>NFL Climate Change Action Plan Gerald Crane, Government of Newfoundland and Labrador</p> <p>Incorporating Climate Change in Floodplain Mapping and Planning Ali Khan, Government of Newfoundland and Labrador</p> <p>Climate Change Adaptation Tools and Barriers in Newfoundland and Labrador Jonas Roberts, Amec Foster Wheeler</p>	<p>Building Water Safety Plans Begin with HACCP Sheldon Masters, Corona Environmental Consulting</p> <p>Water System Criticality Using Dynamic System Failure Response Analysis Julien Bell, GM BluePlan</p> <p>Planning for an Emergency Drinking Water Supply in Edmonton Heather Zarski, EPCOR</p>	<p>Performance evaluation of a geotextile membrane bioreactor for the treatment of domestic wastewater Brahima Seyhi, Centre des technologies de l'eau</p> <p>Nitrifying bio-cord reactor: performance optimization and effects of substratum and air scouring XIN TIAN, University of Ottawa ** eligible for Phillip H Jones Award</p> <p>Treatment of high organic loading wastewater using aerobic granular sludge bioreactors: approaches to maintain system stability Zhiya Sheng, University of Alberta ** eligible for Phillip H Jones Award</p>	<p>Educating Residents on Wastewater Infrastructure Protection Jennifer Weaver, Regional Municipality of York</p> <p>The costly problem of 'unflushables' – Metro Vancouver's behaviour change campaign approach Jeff Gogol, Metro Vancouver</p> <p>Sewer Systems – Update on the Impact by Consumer Products Neil Thomas, City of Fredericton</p>	<p>Canada's EcoFiscal Commission - <i>Report on Water Pricing and the Environment</i> Only the Pipes Should be Hidden: Best practices for pricing and improving municipal water and wastewater services Jonathon Arnold, EcoFiscal</p> <p>Sustainable Rate Structures Carl Yates, Halifax Water</p> <p>Financing Sustainable Water Programs Mary Ann Dickinson, Alliance for Water Efficiency</p>
12:00	Lunch (Bowring 1-3) sponsored by Foreign Affairs, Trade Development Canada				

	Bannerman 1	Bannerman 2	Bannerman 3	Bannerman 4	Bowring 2
1:30	F1: Planning for Climate Change at Different Levels	F2: Water and Wastewater – Small Systems Moderator: Nancy Kodousek, Region of Waterloo	F3: Water and Wastewater Research – Bioreactors Moderator: Helen Zhang, Memorial University of Newfoundland	F4: Water and Energy Efficiency – Energy Efficiency and Recovery Moderator: Qing Zhang, EPCOR	F5: National Infrastructure Information Moderator: Colwyn Sunderland, Kerr Wood Leidel
	<p>The Perfect Storm-Full-cycle Strategic Asset Planning and Management in the Face of Climate Change Glynis Fleming, Lucity Canada</p> <p>The Mohawk Council of Akwesasne water/wastewater infrastructure vulnerability assessment Guy Felio, Stantec and OFNTSC</p> <p>Watershed Performance-based Approach to Surface Water Capture for Urbanizing Areas Ron Scheckenberger, Amec Foster Wheeler</p>	<p>Ensuring Affordability for Small Communities: Best Practices to Address Water and Wastewater Needs Lesley Herstein, WaterTAP</p> <p>Sustainable approaches to drinking water treatment in Newfoundland and Labrador (NL) Robert Tyssen, SanEcoTec</p> <p>Designing towards resilience: Conceptual Wastewater and Stormwater Design for Membertou First Nation, Nova Scotia Anthony Chown, Stantec Consulting Ltd.</p>	<p>Chemical Partitioning between Solids and Water in Wastewater Treatment Systems Cindy Yang, Environment and Climate Change Canada</p> <p>Application of Anammox processes to various reactor configurations to treat Ammonia rich wastewater Sen Yang, University of Alberta</p> <p>Impacts of Psychrophilic Conditions on Anaerobic Membrane Bioreactors Treating Municipal Wastewater Linda Li, Dillon Consulting ** eligible for Phillip H Jones Award</p>	<p>City of Toronto – Water Supply - Transmission Operations Optimizer (T.O.O.) Mike Brannon, Toronto Water</p> <p>A Collaborative Approach to Saving Energy in Water & Wastewater Facilities Tammy Bellamy and Franklyn Smith, Regional Municipality of Waterloo</p> <p>Low-Energy Nitrification of Wastewater using Membrane-Aerated Biofilm Reactors Craig Duvall, University of Guelph</p>	<p>Public Sector Digest/Canadian Water Network Survey</p> <ul style="list-style-type: none"> • Tyler Sutton, Public Sector Digest • Bernadette Conant, CWN <p>Contrasting Performance Measurement with Benchmarking: Lessons Learned from the National Water and Wastewater Benchmarking Initiative David Main, AECOM</p>
3:00	Refreshment Break (Foyer)				

	Bannerman 1	Bannerman 2	Bannerman 3	Bannerman 4	Bowring 2
3:30	<p>G1: Municipal Climate Change Adaption – tools for transformation</p>	<p>G2: Drinking Water Management – Health Moderator: Klas Ohman, Associated Engineering</p>	<p>G3: Water and Wastewater Research – Small Systems Research and Technologies Moderator: Clayton Tiedemann, EPCOR</p>	<p>G4: Wastewater Management Moderator: Ed Von Euw, Metro Vancouver</p>	<p>G5: Communications Moderator: Todd Westcott , Water Canada Magazine]</p>
	<p>FCM Programs – GMF, MAMP, MCIP and more Overview of programs, process and success stories</p> <ul style="list-style-type: none"> • Shannon Joseph, FCM • Bowdin King, FCM • Guillaume Couillard, FCM • Jean-Patrick Toussaint, FCM 	<p>Fecal indicators in private drinking water wells in southern Ontario and the prevalence of naturalized <i>E. coli</i> Anna Majury, Public Health Ontario, Queen's University</p> <p>A Large Waterborne Outbreak of <i>Campylobacter</i> in New Zealand Colin Fricker, CRF Consulting</p> <p>Lessons from a fatal outbreak in New Zealand Steve Hruday, University of Alberta</p> <p>Targeted metagenomic analysis of drinking well water in southern Ontario – implications for testing, including human, public, and environmental health Anna Majury, Public Health Ontario, Queen's University</p>	<p>Passive Arsenic Adsorption for Small Remote First Nation Communities – a few years of operational data! Irfan Gehlen, Kerr Wood Leidal Associates Ltd.</p> <p>Low-Cost Adsorbent for Arsenic Removal from Rural Water Supply Systems Javid, Shadbahr, Memorial University of Newfoundland ** eligible for Phillip H Jones Award</p> <p>Water Filtration Technology Developed for Small Rural Communities in Newfoundland by Using a Local Fly Ash-Derived Adsorbent He Zhang, Memorial University of Newfoundland</p> <p>Removal of Natural Organic Matter from Newfoundland water supplies for DBPs reduction Hoda Tafvizi, Memorial University ** eligible for Phillip H Jones Award</p>	<p>"Hops Management": Regulating discharges from Fermentation Operations Jeff Gogol, Metro Vancouver</p> <p>Wastewater Treatment Plant Flow Equalization Using Existing Combined Sewer Overflow Real Time Control Sites Maxym Lachance, Tetra Tech and Abhishek Bhargava, EPCOR</p> <p>Current And Future Challenges For Municipalities To Achieve Their Final Wastewater Effluent Limits Bradley Young, Veolia Water Technologies Canada ** eligible for Phillip H Jones Award</p> <p>Remote control MBR: How a wastewater treatment plant in Poland can help Canadian communities meet the wastewater challenges of the future. Nicholas Gurieff, Alfa Laval</p>	<p>Communication Strategies for Emerging Contaminants Rob Renner, Water Research Foundation</p> <p>Communicating the Value of Wise Water Use Mary Ann Dickinson, Alliance for Water Efficiency</p> <p>Delivering a Residential Awareness Campaign on a Shoestring Mike Darbyshire, Alberta Capital Regional Wastewater Commission</p> <p>Peter Vanrolleghem, Laval University and Water Environment Federation</p> <p>Panel Discussion</p>

Rally in the Alley – sponsored by EPCOR

Tuesday night, visit St. John’s infamous George Street has the most bars and pubs per square foot of any street in Canada. Come experience the famous nightlife of downtown St. John’s in this pub crawl for National Water and Wastewater Conference delegates. Get ready to enjoy a traditional fish and chips dinner, learn local step dancing and some local songs, and to be welcomed into the Order of Screechers. It is a time to be remembered for years to come.

Wednesday, November 8

7:30 Registration and Breakfast (Bowring 1-3)

	Bannerman 1	Bannerman 2	Bannerman 3	Bannerman 4	Bowring 2
--	--------------------	--------------------	--------------------	--------------------	------------------

8:30	<p>H1: Climate Resilience and Infrastructure Vulnerabilities Moderator: Natalia Moudrak, Intact Centre on Climate Adaptation</p>	<p>H2: Drinking Water Management – Source Water Quality Moderator: Lynnann Winsor, City of St. John’s</p>	<p>H3: Water and Wastewater Research – Wastewater Treatment Moderator: Bev Mollard, Ontario Clean Water Agency</p>	<p>H4: Utility Management – Miscellaneous Moderator: Qing Zhang, EPCOR</p>	<p>H5: Breaking through: FCM helping communities transform their water services through lessons in innovation</p>
------	---	--	---	---	--

	<p>Project to Address Unacceptable Inflow and Infiltration (I/I) from New Developments: Survey Results 2016 Barbara Robinson, Norton Engineering Inc</p> <p>Discovering Infrastructure Vulnerability John Presta, Region of Durham</p> <p>Urban Extreme Rainfall Flood Risk: Vulnerability and Resources to Support Action Dan Sandink, ICLR</p>	<p>Tracking Human Fecal Contamination in the Surface Waters Surrounding Calgary, Alberta: A Toolbox Approach Bryanne Rempel, City of Calgary</p> <p>Vulnerabilities in Drinking Water Management: Enabling Resilience through Scenario Planning Anthony Masys, Defence Research and Development Canada</p> <p>Quantifying the impact of road salt management practices on water quality in public supply wells within the Region of Waterloo Mike Stone, David Rudolph and Jeff Melchin, University of Waterloo</p>	<p>Best Design Practices for Odour Management of High Profile, Sensitive Waste Water Applications in a Dense Urban Environment Derek Webb, BIOREM Inc.</p> <p>Biostyr Duo: The next generation of biological aerated filter Myriam De Ladurantaye-Noël, Veolia Water Technologies Canada and Xin Tian, University of Ottawa ** eligible for Phillip H Jones Award</p> <p>Nickel removal from a mining wastewater using specific chelating ligands Aziz Gherrou, Centre des technologies de l’eau</p>	<p>Considerations, Lessons and Frameworks for Municipal Climate Change Vulnerability and Risk Assessment in Southern Ontario Edmundo Fausto, Toronto and Region Conservation</p> <p>Facility Classification: new approaches Kalpna Solanki, Environmental Operators Certification Program</p> <p>Performance Improvements through Capital Replacement Upgrades Franklyn Smith, Region of Waterloo</p>	<p>FCM Programs – GMF, MAMP, MCIP and more Overview of programs, process and success stories</p> <ul style="list-style-type: none"> • Shannon Joseph, FCM • Bowdin King, FCM • Guillaume Couillard, FCM • Jean-Patrick Toussaint, FCM
--	---	---	--	---	---

10:00 Refreshment Break (Foyer)

	Bannerman 1	Bannerman 2	Bannerman 3	Bannerman 4	Bowring 2
10:30	I1: Climate Change Impacts and Opportunities	I2: Drinking Water Management Moderator: Klas Ohman, Associated Engineering	I3: Waste Water Management – Miscellaneous Moderator: Linda Li, Dillon Consulting		I4: Customer Service – the Customer of the 21st Century Moderator: Nancy Kodousek, Region of Waterloo
	Climate Change Impacts on the Moose Factory Water Plant Intake Asim Masaud, Ontario Clean Water Agency and Elvio Zaghi, Stantec Canada Gets Ahead of the Storm: Flood-Resilient Standards for Existing Homes and New Residential Communities Natalia Moudrak, Intact Centre on Climate Adaptation Stormwater Charge Kenda MacKenzie, Halifax Water	Building Capacity of Small Water Systems in BC – A Pilot Project Carlie Hucul, BC Water & Waste Association Case Study: Well FPH1 Treatment System in the Township of Centre Wellington Dennis Mutti, C3 Water Inc. Case Study: Innovative and Unexpected Changes to Meet Anticipated Ontario Disinfection Regulatory Changes Sammy Mutti, C3 Water Inc	Old Technologies with New Applications: Impacts on Aquatic Organisms Erin Hayward, Trent University ** eligible for Phillip H Jones Award Overview of the City of St. John’s Water and Wastewater Treatment Facilities Andre Bourque, CH2M Preparation of nanofibrous Metal-Organic frameworks membranes for efficient water quality management Johnson Effoe Efome, University of Ottawa		Panel Discussion <ul style="list-style-type: none"> • Bill Shea, Toronto Water • Valerie Jenkinson, World Water & Wastewater Solutions • Kali Gerhardt, Kamstrup Metering
12:00	Lunch (Bowring 1-3)				