Registration Form

WCW'13 Annual Conference & Exhibition
September 17-20 2013 Edmonton Alberta



Name _____

Company _____

Mailing Address _____

City _____ Province _____ Postal Code _____

Phone _____ Fax _____

Email _____

Part A: Conference Registration

Includes exhibition, opening breakfast, luncheons and evening programs. Gala & WFP Breakfast extra.

Registration Type ** Registration Fees will be $50 higher Onsite - Preregister and Save*

Check one	Prior to Aug 31	Sept 1-Sept 13*	Total
○ 3 Day Member	$495	$595	_____
○ 3 Day Non-Member	$595	$695	_____
○ 3 Day Life/Student	$85	$110	_____
○ 1 Day*	$275	$325	_____
○ Tuesday Exhibition Only	$200	$200	_____

* Indicate day of attendance for 1 Day Registration ○ Wednesday ○ Thursday ○ Friday

Membership Number(s)

AWWA _____ SWWA _____
WCWEA _____ MWWA _____
WEF _____ AWWOA _____
MSSA _____ NTWWA _____

○ Check here if vegetarian meal is required
○ or if there are any food allergy issues, please indicate:

Part B: Workshops

Workshops *W1 - W6 have been approved for 0.3 CEUs*

Tuesday September 17, **Cost per workshop $125**

AM sessions - 8:00 am to 12:00 noon

- ○ W1 - Source Control Strategies That Work
- ○ W2 - Biosolids Management: Understanding Requirements and Options
- ○ W3 - Leadership Concerns

PM sessions – 1:00 pm to 5:00 pm

- ○ W4 - Green Building: Clear Savings Potential!
- ○ W5 - Managing Greenhouse Gas in Wastewater Treatment Plants
- ○ W6 - Drinking Water Safety Plan Information Session
- ○ W7 - Swimming through Spam & Sharks (no CEUs)

Qty _____ x $125= _____ Total

Part C: Tours

Tours Tuesday September 17, **Cost per Tour $35**

Requirements in place for tours – please refer to program information

- ○ T1 – EPCOR E.L Smith Water treatment Plant - City of Edmonton, 9:00 am
- ○ T2 - The Labatt's Brewery in Edmonton, 12:30 pm
- ○ T3 - Composting Tour – Waste management Centre, 12:30 pm

Qty _____ x $ 35 = _____ Total

Part D: Special Events

- ○ **WFP Breakfast** *Thursday September 19* *Qty _____ x $ 20 = _____*
- ○ **GALA Dinner** *Thursday September 19* *Qty _____ x $ 75 = _____*

Part E: Total

A. Conference _____

B. Workshops _____

C. Tours _____

D. Special Events _____

Subtotal _____

5% GST _____

Voluntary Water for People Donation _____

GRAND TOTAL _____

○ I do not wish to be included in the list of attendees

NOTE: If you select this option, you will not receive any correspondence from any supplier or invitations to member hosted special events.

GST No R108199589
GST exemption #: _____

Payment Method

○ Cheque (Payable to Western Canada Water) ○ Visa ○ MasterCard

Cardholder Name _____

Card Number _____

Expiry Date _____

Signature _____

www.westerncanadawater.ca

Return Registration Form and Payment to:

WCW Box 1708
Cochrane AB T4C 1B6
p: 1.877.283.2003 / 403.709.0064
f: 1.877.283.2007 / 403.709.0068

Cancellation Policy

- Cancellation received before **September** 1: 100% refund less $50 service charge.
- Cancellation received **September 1 to 15**: 50% refund less $50 service charge.
- Cancellation received after **September** 15: NO REFUND
- Substitutions welcome

Online Registration is also now available. Please contact the office if you require information to access your membership profile.

2013 WCW Conference and Exhibition - Tentative Paper Schedule

Wednesday, September 18

ROOM	Salon 9	Salon 10	Salon 11	Salon 12
Session	Collection-Distribution	Storm Water	Water Treatment	WW Treatment
Chair	Open	George Bontus, Insituform	Gerald Samuel, AECOM	Luke Schoening, MPE
2:00 p.m.	**Effects of Climate Change on Utilities** John Albert, Water Research Foundation	**Characterization of Total Suspended Solids (TSS) and Settleable Solids (SS) in Stormwater Management Facilities (SWMF): Animal, Mineral, and Vegetable and Size Does Matter** Geri De La Mare, City of Calgary	**Clarifying Quality, Capacity, and Risk: Saving Capital Costs through use of Tube Settlers** Rob St. Pierre, City of Saskatoon YP	**Aquatera – WWTP Upgrades Phase II** Brad Webb, Stantec
2:30 p.m.	**A Comparison of Water and Sanitation in the Canadian North and the American North** Ken Johnson, Stantec	**Construction Cost Estimates as Random Variables: Balancing Probabilities and Expected Values** Greg Schmidt, Associated Engineering	**Taste & Odour Control Pilot Testing for Upgrades at the 205 ML/d Buffalo Pound Water Treatment Plant** Rudi Sapach, AECOM	**Relative Performance of Grit Removal Systems** Patrick Herrick, Hydro International PLC
3:00 p.m.	Coffee Break (30 min)			
3:30 p.m.	**Modelling Deterioration in Sewer Mains Using the Markov Model** Jan-Mark Gustafson, AECOM	**Rehabilitation of Outfalls within the Capital Region** Greg Tippet, Stantec	**Aging Water Treatment Infrastructure Challenges & Solutions for a Small WTP** Jackie Mykytiuk, Associated Engineering YP	**How DAF Optimization Impacts Wastewater Treatment Plant Operation and Final Effluent Quality - A Case Study of Gold Bar Wastewater Treatment Plant** Bing Lin, EPCOR
4:00 p.m.	**PCCP Condition Assessment - Performance and Deterioration Statistics based on 10 years of Data** Tim Ross, Pure Technologies	**Performance Assessment for Oil/Grit Separators for Stormwater Management in Road Application Study** Julie Van Doesburg, Associated Engineering YP	**Using the Variable UV dose Strategy in UV System Control and Monitoring For Dose Pacing UV Reactors** John Qing Sheng Ke, Stantec	**Removal of Pharmaceuticals: How Effective Our WWTPs are?** Mei Chen, City of Calgary
4:30 p.m.	**The Challenge of Implementing Detailed Condition assessment of PCCP for the Lake Huron Primary Water Supply System** Logan Fresenmair, Pure Technologies	**Non-Point Source Pollution and Stormwater Treatment Technology Advancements** Shane Mulligan, Lafarge Canada Inc.	**RO/UF Membrane Analysis Using Chromatic Elemental Imaging** Ken Robinson, Avista Technologies	**Membrane Protection; Grinders & Bar Screens to Fine Screens to Ultra-Fine Screens** James Impero, Ovivo USA, LLC

Thursday, September 19

ROOM	Salon 9	Salon 10	Salon 11	Salon 12
Session	Collection-Distribution	POTA**	Water Treatment	WW Treatment
Chair	Joel Sawatzky, Stantec	April Boyko, AECOM	Jackie Mykytiuk, Associated Eng	Pat Fisher, AECOM
8:30 a.m.	**The City of Calgary- Graves Bridge Feedermain** Mark Draper, CH2M Hill	**System Dynamic Modelling Approach to Analyze Demand and Supply Scenario of Edmonton and Investigation of Management Options** Romana Saila, U of A *	**Chemical Storage Tank Venting Upgrade** Esther van Herk, EPCOR YP	**Compact, Flexible and Efficient Wastewater Treatment** Robert Lafond, Veolia Water Solutions
9:00 a.m.	**The Highway 63 Utility Relocations Project in Fort McMurray** Stephan Weninger, Stantec	**Affordable Remote Monitoring of Small Water Treatment Plants** Scott Foster, BI Pure Water (Canada) Inc.	**Optimizing WTP Disinfection via Biological Pre-Treatment** Shengtao Weng, Associated Engineering	**An application Feasibility Study on Using Bioreactors for Treating Oil Sand Process-Affected Water** Lei Zhu, U of A*

2013 WCW Conference and Exhibition - Tentative Paper Schedule

9:30a.m.	**Applying Rocket Science in the Water Industry: Computational Fluid Dynamics for Process Engineers** Bernardo Majano, RV Anderson Associates	**Addressing Operational, Engineering and Strategic Groups through Evidence-Based Asset Prioritization** George Illaszewicz, Associated Engineering	**Nanotechnology and Water Treatment: Tiny Solutions for Great Challenges** Jesse Skwaruk, NAIT*	**City of Saskatoon Wastewater Treatment Plant Odour Source and Mitigation Study** Mathew MacPhail, Stantec
10:00 a.m.	Coffee Break (30 min)			
10:30 a.m.	**Advantages of Modern Septage Receiving Stations** Andrew Lyle, Flowpoint Systems Ltd.	**Regional Water Operators' Consortiums Solve the Problem of Finding Certified Operators for Small Systems** Kathy Abramowski, Alberta Env Gerald Samuel, AECOM	**Northern Water: Treating it with Context** Ken Johnson, Stantec	**Application of Municipal Sewage Wastewater to Fast Growing Woody Crops- an Alternative Treatment Solution** Richard Krygier, Natural Resources Canada
11:00 a.m.	**Pipeline Condition Analysis and Rehab: a Holistic Approach** David Russell, PICA Corp	**An Alberta Environmental Public Health Assessment of Small, Non-Municipal Drinking Water Systems** Karen Emde, Alberta Health Services	**Alberta's First LEED Silver Certified WTP – New Water Ltd. Regional System** Nathan Miller, Associated Engineering YP	**Sidestream Treatment of Biological Aerated Filter (BAF) Backwash at the Canmore WWTP** Sean Gill, Stantec
ROOM	Salon 9	Salon 10	Salon 11	Salon 12
Session	Collection-Distribution	POTA**	Collection-Distribution	Water Treatment
Chair	Alexandria Fisher, CBSR	Max Wong, Capital H2O	Mike Yakemchuk, MPE	Nathan Miller, Associated Eng
2:00 p.m.	**Risk Assessment Analysis and the Identification of Infrastructure Renewal Needs for the Town of Cochrane, AB.** Nicolas Abarca, Urban Systems Ltd.	**Water infrastructure Planning Solutions for Fort McMurray's Population Growth** Edith Asselin, Associated Engineering	**Pressure Management Using Automatic Control Valves** Fred Fuller, Cla-Val Company	**Surface Water Clarification and Organics Reduction in a Single Treatment Approach** Bryce Carter, Infilco Degremont
2:30 p.m.	**Post Installation Repair of Large Diameter Reinforced Concrete Pipe** Adam Braun, AECOM	**Successes and Challenges in Commissioning and Operating a Dechlorination System at Water Treatment Plant** Alvin Han, EPCOR	**The Municipality's Case for Directional Drilling of Water Transmission Lines in Rural Municipalities** Amber Mitchell, Stantec	**Was It Worth It? - Evaluating a Capital Project One Year On** Jeff Ruzicka, Associated Engineering YP
3:00 p.m.	Coffee Break (30 min)			
3:30 p.m.	**ATCO Energy Solutions – River Water Intake and Pumphouse** David Ofield, Stantec	**A Comparison Between Fecal Coliforms and E. coli for the Purpose of Regulatory Monitoring of Wastewater Effluents** Theingi Maw, City of Calgary	**Is it Safe to Enter? Sewage Pumping Station Ventilation Evaluated Using CFD** Bob Hawboldt, Associated Engineering	**City Of Lethbridge WTP Residual Dewateriing Pilot** Michael Boh, City of Lethbridge
4:00 p.m.	**Smart Distribution Systems - Technologies Bringing Storage Tanks to the 21st Century** Onno Koelman, PAX Water Technologies	**Sustainable Engineering Design Evaluation: Town of Didsbury North Industrial Stormwater Wetland** Garnet Dawes, ISL Engineering	**Regional Distribution Systems: Disinfectant Changeover from Chlorination to Chloramination** Jason Stusick, MPE Engineering	**Advances in UV Technology and the Option to use UV for 4-Log Virus Disinfection During Primary Disinfection of Groundwater Before Distribution** Greg Warkentin, Trojan Technologies
4:30 p.m.	**Benefits of Direct Condition Assessment to Aging Pipeline Infrastructure** Ankit Vajpayee, Pipeline Inspection	**River for Life: Developing Edmonton's Water Quality Strategy** Kristel Unterschultz, Urban Systems Inc.	**A New Approach to Air Valve Design in Alberta Central East Regional Water Pipeline Project** Liang Yu, Martech	**Covering Your Assets - Application of Risk Review Practices for Water Treatment Plant Design** Samantha Marcy, Associated Engineering YP
Friday, September 20				

2013 WCW Conference and Exhibition - Tentative Paper Schedule

ROOM	Salon 9	Salon 10	Salon 11	Salon 12
Session	Trenchless	POTA**	Water Treatment	WW Treatment
Chair	Chris Jones, Stantec	Ken Johnson, Stantec	Esther van Herk, EPCOR YP	Stephan Weninger, Stantec
8:00 a.m.	**Big Lake Offsite Sanitary Gravity Portion(W14) Project** Craig Vandaelle, Michels Canada	**A Provincial Capacity-building Strategy for Rural 'Source-to-tap': A Progress Report on the Closer to Home (C2H) Initiative** Michael Aherne, AWWOA Workforce Development	**Open**	**The Simplest Possible RO Pretreatment** Robert Ning, King Lee Technologies
8:30 a.m.	**City of Hamilton's Trenchless Sewer Lateral Rehabilitation Program** Chris Lewis, Liquiforce	**Strategies for Renewing Alberta's Skilled Water and Wastewater Operations Workforce: Implications for Diligent Utility Management** Michael Aherne, AWWOA Workforce Development	**Seasonally Adjusted Coagulation Strategies for Edmonton's Water Treatment Plants** Sadra Heidrey-Monfared, EPCOR YP	**Creating Biosolids Baskets: Investigating New Beneficial Use Options for Edmonton Region Biosolids** Mark Teshima, Sylvis Environmental
9:00 a.m.	**City of Saskatoon - Intercepter Trunk Sewer Rehabiliation** Ladd Gould	**Drinking Water Source Water Protection Planning in Alberta** Steph Neufeld, EPCOR	**The Balance Between Disinfection By-Product Control and Primary Disinfection for Small Prairie Surface Water Treatment Plants** Peter Hooge, Associated Engineering	**Evaluation of Potential Parameters for Estimating BOD5 at Calgary Wastewater Treatment Plant** Dalibor Ambrus, City of Calgary
9:30a.m.	**Pilot Project Using Akkerman GBM System in the 66 Stree Sanitary Sewer Tunnel Project** Ray Davies, City of Edmonton	**A Dwelling Unit Based Approach to Wastewater Design Standards for Residential Land Uses** Galen Heinrichs, City of Saskatoon	**Design and Construction of a Space-Limited WTP Expansion in a Rapidly Growing Municipality** Steven Justus, Associated Engineering	**Improving Mixing and Foam Control of Anaerobic Digestion Process at the City of Winnipeg's North End WPCC** Saibal Basu, Stantec
10:00 a.m.	Coffee Break (30 min)			
Chair	Greg Tippett, Stantec	Ayan Abdille, EPCOR	Andrew Kleisinger, MPE	Crystal Eggert, NAIT
10:30 a.m.	**Rationalizing an Approach and Rehabilitating a 150 year Brick Sewer Inventory in Victoria, BC** Chris Macey, AECOM	**Providing Secure Remote Access to Water and Wastewater Process Control Systems** Zane Spencer, MPE Engineering	**Biological Process to Reduce Chemical Pre-treatment for RO Membranes** Rudy Chan, Associated Engineering	**Ammonia Removal in Cold Climate Lagoon Based Wastewater Treatment Systems** Martin Hildebrand, Nelson Environmental Inc.
11:00 a.m.	**Product Overview and Quality Assurance Ramifications Associated with Pressure Pipe Liners** George Bontus, Insituform Chris Macey, AECOM	**Drinking Water Safety Plan (DWSP) Implementation: Early Lessons and Insights from Alberta's Small Communities** Graham Gagnon, Dalhousie University	**Successful Use of DAF for Algae Laden Small Rural Systems** Monique Durand, MPE Engineering Ltd.	**Improved Treatment Performance and Reduced Operating Costs Through the Installation of Turbo Blowers for Lagoon Aeration in Lloydminster** Stephan Weninger, Stantec
11:30 a.m.	**Horizontal Directionally Drilling a 320m HDPE Triple Barrel Sanitary Siphon under the Red Deer River, Open Trenching 1000m of Triple Barrel Siphon and Installation of the Initial Stage of an Odour Management Facility** Joel Sawatzky, Stantec	**The City of Calgary Wastewater Bylaw Update – Strategies and Best Practices"** Jesse Aylward, City of Calgary	**Clarification of Highly Variable Source Water 2,100 NTU to 2 NTU in 90 min or Less** Eric Gaudet, Associated Engineering YP	**East Coulee WWTP Upgrades for Stringent Treated Effluent Standards** Kevin Liu, MPE Engineering

*Student Paper competition sponsored by AWWOA and AWWA

**POTA - Planning, Operation, Training and Administration