

WCW Conference - Calgary Alberta
September 21 – 24, 2010
Technical Sessions

WEDNESDAY				
10:10 – 11:00	Government Affairs Rooms 201/202/203/204 <i>Moderator: Alan Pentney</i>		The Australian Experience Hyatt Imperial Room <i>Moderator: Ian Wright</i>	
	Government Affairs Session		Climate Resilient Water Supplies in Southeast Queensland, Australia David Solley	
11:00 – 2:00 LUNCH BREAK				
2:00 – 2:30	Project Delivery Room 209 <i>Moderator: Doug Olson</i>	Water Quality Room 206 <i>Moderator: John Herbert</i>	Conveyance & Pumping Rooms 203/204 <i>Moderator: Don Burgess</i>	Wastewater Technology & Innovation Rooms 201/202 <i>Moderator: Nigel Slater</i>
	From Conventional to Membranes - An Operational Approach Rick Deans	Disinfection By-Products in Drinking Water: A Case Study on Calgary, Alberta Mei Chen	Anderson Road Sanitary Trunk Study: A Review of Sanitary Sewer System Capacity Under Extreme Wet Weather Conditions Geoffrey Schulmeister	Proposed Wastewater Systems Effluent Regulations Amanda Lwanga-Thomson
2:30 – 3:00	Design & Construction of a WTP in an Environmentally Sensitive Area Garry Drachenberg	Haloacetic acids and THM Formation Potential-testing methodology and data from Saskatchewan systems Wo Yuen	Currie Distribution Reservoir Upgrades - Case Study Julie-Marie Pouliot Wilf Dumont	Back to Basics for Good WWTP Performance A. Warren Wilson
3:00 – 3:15 WATER BREAK				
3:15 – 3:45	Project Delivery Room 209 <i>Moderator: Doug Olson</i>	Water Quality Room 206 <i>Moderator: John Herbert</i>	Wastewater Collection Systems Rooms 203/204 <i>Moderator: Don Burgess</i>	Wastewater Technology & Innovation Rooms 201/202 <i>Moderator: Nigel Slater</i>
	Using Three Dimensional Software for Process Design Matthew MacPhail	Corrosion Leads Lead to Tap: An Update of Lead Survey Studies by the City of Calgary Jian Fu Deng	Nose Creek Sanitary Trunk Sewer Upgrade – Phase A Francis Rozsa	Implementing Innovative Process Design for the Rural Municipality Of Headingley Wastewater Treatment Facility Upgrade Saibal Basu
3:45 – 4:15	Alliance Relationship Contracting: A New Delivery Method for the North American Water Industry Stuart Torr	Groundwater Chlorination: Understanding the Breakpoint Chlorination Curve and How it Impacts Achieving a 4-Log Virus Reduction Requirement Alvin Beier	Infiltration and Inflow Modeling: A State-of-the Art Review Jim Dumont	City of Winnipeg North End Water Pollution Control Center – Raw Sewage Pumps Replacement. Challenges of Upgrading Equipment and Infrastructure to Today's Standards Matthew Maciejewski
4:15 – 4:45	Guidelines for the Design, Procurement and Construction of Large Diameter Transmission Pipe in the City of Calgary Chris Macey	The Journey of Microbiological Monitoring for Ensuring Safe Drinking Water Marty Allen	Building Dynamic Models of Complex Hydraulic Structures in Wastewater Collection Systems - Case Studies Eymond Toupin	Calgro an Evolving Municipal Biosolids Program Grace van Melle

THURSDAY

	Instrumentation & Controls Room 209 <i>Moderator: Ian Wright</i>	Water Technology & Innovation Rooms 203/204 <i>Moderator: Paul Wobma</i>	Storm Water Management Room 206 <i>Moderator: David Atkinson</i>	Wastewater Technology & Innovation Rooms 201/202 <i>Moderator: Mike Whalley</i>	
8:30 – 9:00	The Past, Present, and Future of Real Time Controls in Edmonton's Combined Sewer System Angela Steward	The Use of UV / Peroxide for Treatment of Micropollutants in Drinking Water Rob Haas	The City of Calgary Stormwater Quality Retrofit (SWQR) Program Ian Morley	Advanced Sludge Degritting - A Cost Effective Solution to Abrasives Removal Pat Herrick	
9:00 – 9:30	Alarm Management: Edmonton Water Treatment Plants Abhishek Bhargava	Got Gas? Relief Through the Effective Design & Construction of Onsite Sodium Hypochlorite Facilities. Matt Henney	Coventry Hills Stormwater Quality Retrofit Wet Pond John Grainger Corinne Arkell	Building the Business Case - Conceptual Design of the Bonnybrook Wastewater Treatment Plant Headworks Upgrade Max Wong	
9:30 – 10:00	Sustainable Real-Time Water Utilities: The Value of SCADA Data to the Enterprise Darrol Weiss Dean Henley	Use of Ion Exchange Pretreatment for THM Compliance at Hudson Bay, SK Barbara Martin	Shepard Wetland - The Largest Constructed Wetland in Canada – Reflections on the Construction and Commissioning Phases David Taylor	Commissioning of Pine Creek WWTP M. Kim Fries	
10:00 – 10:30	COFFEE BREAK				
	Instrumentation & Controls Room 209 <i>Moderator: Ian Wright</i>	Water Technology & Innovation Rooms 203/204 <i>Moderator: Paul Wobma</i>	Storm Water Management Room 206 <i>Moderator: David Atkinson</i>	Wastewater Technology & Innovation Rooms 201/202 <i>Moderator: Mike Whalley</i>	Utility Management Room 205 <i>Moderator: Corinne Arkell</i>
10:30 – 11:00	Water Treatment Plant Dechlorination: Advancement in Chemical Injection Control Technology Matthew McCrank	Using Zeta Potential to Improve Filtration Performance David Pernitsky	Treatment Design Optimization of a Stormwater Pond Using Computation Fluid Dynamics and Biochemical Analyses Margarita Houston	Pilot Test of High Rate Tertiary Filtration Process For Phosphorous Removal Peter Wood	Maintaining a Skilled Workforce Using A Competency Management System: A City Of Calgary Water Utility Case Study Melanie Clark
11:00 – 11:30	Optimizing Biological Nutrient Removal Through Instrumentation Bob Dabkowski	Working Through a Significant Chemical Regime Change at Calgary's Two Water Treatment Plants Jason Sinclair	Concurrent Dual Drainage Modeling of Urban Watersheds Andrew Wiens	Three Years of Operation of the Steinbach SAGR Facility Confirms the Viability for Cold Temperature Post-Lagoon Nitrification Martin Hildebrand	A Water And Wastewater Operations Career Attraction Project As A Catalyst In Support Of Workforce Renewal Edith Phillips Del Morrison Michael Aherne
11:30 – 12:00	Automatic Sludge Age Control: Wasting Pounds Instead of Gallons Bob Dabkowski	Winter Operation with Optimized Chemical Doses at Edmonton's Rosedale Water Treatment Plant Saifuddin Molla	TBA	Fort Resolution Wastewater Management Study Ken Johnson Tricia Hamilton	Can You Hear Your Customers, Getting Community Input on Service Levels Greg Chartier

12:00 – 1:30	LUNCH BREAK			
	Utility Management 2 Room 209 <i>Moderator: Alan Pentney</i>	Water Technology & Innovation 2 Rooms 203/204 <i>Moderator: Jason Sinclair</i>	Linear Infrastructure Maintenance Room 206 <i>Moderator: David Taylor</i>	Odour Control Rooms 201/202 <i>Moderator: Ryan Roberts</i>
1:30 – 2:00	Implementation of ISO 14001 within The City of Calgary, Water Services: Exploring the benefits and challenges Natasha Kinloch	Maximizing Treatment Plant Water Efficiency in a Closed Watershed Anita Selinger	The New CSA Guideline for Sewer Defect and Distress Coding: Moving Forward Ross Homeniuk	Membranes For Odour Control? - A Case Study on a New Approach for the Clovis Water Reuse Facility Trevor Jones
2:00 – 2:30	Application of Spatial Database Models For Data Management On Engineering Projects Candice Gottstein	Slow Sand Filtration - Demand Operated and Cleaned Using Backwash David Manz	Large Diameter Interceptor Inspection and Analytical Assessments Using Multi-Sensor Technologies Chris Macey	Superoxygenation For Odour Control At Harbour Landing Forcemain Alex Munoz
2:30 – 3:00	Developing a Sustainable Service Based Asset Management Plan, Getting from A to Z Greg Chartier	Pay Me Now Or Pay Me Later - The Role Of Raw Water Reservoir Management On Treatment Implications Sutha Suthaker	Determining Operational Vulnerabilities in Gravity Wastewater Sewer Systems David Enns	Odour Control for the Pine Creek WWTP: From Pre-Design to Optimization Catalina Nadeau-Bonilla
3:00 – 3:15	COFFEE BREAK			
	Utility Management 2 Room 209 <i>Moderator: Alan Pentney</i>	Water Technology & Innovation 2 Rooms 203/204 <i>Moderator: Jason Sinclair</i>	Linear Infrastructure Maintenance Room 206 <i>Moderator: David Taylor</i>	Reclamation & Reuse Rooms 201/202 <i>Moderator: Ryan Roberts</i>
3:15 – 3:45	Applying PAS-55 Principles – Water Wastewater Case Study James Nesbitt	Membrane Treatment - Using New Technologies in New Ways Don Burgess	Utilidor Replacement in Inuvik, NWT Ken Johnson	Technical Considerations for the Reclamation & Reuse of Bonnybrook Effluent A. Warren Wilson
3:45 – 4:15	The Improvement of Municipal Water Use Data Collection Methods to Facilitate Water Conservation Measures Allisha Sordi	Membrane Application for Organic Control Rudy Chan Samantha Simpson	Condition Assessment of Large Diameter Water Transmission Mains Marshall Gibbons	Water Treatment & Reuse at a Fire Training Facility Sutha Suthaker
4:15 – 4:45	OurWinnipeg: Phase 1 - Infrastructure Review Andy Nagy	The “Green” Water Treatment: Northern Sunrise Regional WTP Design Hwei Suan	A New Direction for the City of Winnipeg Water Main Cleaning Program Jon Goodbrandson	Technical, Economic, Environmental and Social Challenges Associated with Large Scale Desalination and Reuse Schemes David Griffiths

FRIDAY

	Global Perspective Room 206 <i>Moderator: Jason Sinclair</i>	Trenchless Technology Room 209 <i>Moderator: Ian Morley</i>	Water Resource Management Rooms 203/204 <i>Moderator: Corinne Arkell</i>	Wastewater Technology & Innovation 2 Rooms 201/202 <i>Moderator: A. Warren Wilson</i>
8:30 – 9:00	The Formation and Development of CAWST, the Centre for Affordable Water and Sanitation Technology Camille Dow Baker	Trenchless 101 Dan Willems	A Multi-Criteria Decision Making Process for Water/Wastewater Projects Juliana Tang	TBA
9:00 – 9:30	Water For People's World Water Corps - Volunteers Making a Difference Bill Skinner Tom Reinders	Planning and Designing Major Infrastructure in Urban Areas Duane Strayer	A Holistic Approach to Protecting The Watershed Stephanie Neufeld	City of Lethbridge - WWTP Digester Gas Cogeneration System Jim MacDonald
9:30 – 10:00	Improving the Use Of Data For Local Government Infrastructure Planning in Northern Ghana Jody Rechenmacher	Sheep River Watermain Crossing Juan Morales	Integrated Water Management Planning: A Comprehensive Approach To Managing Water and Infrastructure In the Local Government Context Glen Shkurhan	Bonnybrook WWTP- VFA Upgrade Via Retrofit Calvin Wong
10:00 – 10:30	COFFEE BREAK			
	Global Perspective Room 206 <i>Moderator: Jason Sinclair</i>	Trenchless Technology Room 209 <i>Moderator: Ian Morley</i>	Regional Systems Rooms 203/204 <i>Moderator: Corinne Arkell</i>	Wastewater Technology & Innovation 2 Rooms 201/202 <i>Moderator: A. Warren Wilson</i>
10:30 – 11:00	TBA	Trenchless Upgrading of Lynnwood Neighbourhood Storm and Sanitary Systems David Yue	Re-use of Existing Infrastructure in Regional Systems Jeff Fetter	From Chlorination to UV Disinfection: A Retrofit Case Study Ida Soh
11:00 – 11:30	Providing Safe Drinking Water in Uganda Chris Town	Metro Vancouver – 2009 Highbury Siphon Rehabilitation (Phase 1) Mark Brand	Design, Construction and Commissioning the East Calgary Regional Water Pipeline Shawn Pillai Mark Ruault	City of Saskatoon H.M. Weir Pollution Control Center – Struvite Formation In Anaerobic Digesters With Hydraulic Mixing Matthew Maciejewski
11:30 – 12:00	Turbidity and TDS Reduction by Ultrafiltration and Reverse Osmosis Baha Hasasneh	A Tale of Two Tunnels: The City of Calgary Beddington Creek South Sanitary Upgrades – A Case Study Mark Draper	Vermilion River Regional Water System Business Case Analysis Golnaz Azimi	UF Membranes For The Achievement of Limit of Technology Effluent Phosphorous Concentrations Jeff Penny