

# ALBERTA WATER & WASTEWATER OPERATORS ASSOCIATION

# 49<sup>th</sup> Annual Operators Seminar

March 11 - 15, 2024

Banff Park Lodge, BANFF

# ALBERTA WATER & WASTEWATER OPERATORS ASSOCIATION

#### 2023 - 2024 EXECUTIVE

Mike Bureaud, Chair

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**Nathan Vis** 

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Paresh Dhariya

Town of Devon

**Peter Crane** 

**EPCOR** 

**Shannon Gladue** 

Kehewin Cree Nation

Wade Bell

**H2O Innovation** 

#### **AWWOA STAFF**

Dan Rites, Executive Director
Kirstin Mihaychuk, Program Manager
Jenna Horning, Membership Services
Erin Ciezki, Seminar Technical Program Coordinator

#### MONDAY - March 11, 2024

Pre-Seminar Workshops (PRE-REGISTRATION REQUIRED)
Rocky Mountain Resort, 1029 Banff Avenue

Workshop #1 - 8:30 – 12:00 Noon (0.3 CEUs)
Critical Leak Repair Without Shutdown

This workshop will explore a range of critical leak repair solutions as well as strategies for avoiding these challenging situations before they worsen.

Presenter: Brandon Pater, Pacific Flow Control Ltd

# Workshop #2 - 8:30 – 12:00 Noon (0.3 CEUs) Taste and Odour Mitigation Approaches for Water Utilities – Recent Learnings

This workshop will draw upon recent case studies and years of collective experience to mitigate T&O issues that arise in existing water and wastewater systems and show you what to look out for when building new systems. *Presenter: Klas Ohman, Associated Engineering* 

12:00 - 7:00 pm - Seminar Registration - BPL Hotel Lobby

#### Workshop #3 - 1:00 - 4:30 (0.3 CEUs)

#### SCADA Systems - Basics to Emerging Technologies

This workshop will recap the basics of how process control and SCADA systems are constructed, and dive into some of the new technologies that are available in these fields.

Presenters: Zane Spencer and Nick Sawatzky, MPE, a division of Englobe

#### Workshop #4 - 1:00 - 4:30 (0.3 CEUs)

## Advanced Wastewater Treatment Processes (Effluent Polishing)

This workshop will cover advanced wastewater treatment processes by providing an overview of preliminary, primary, and secondary treatment and then focusing on why tertiary treatment is necessary.

Presenter: Maryam Izadifard

3:00 - 8:00 pm	Trade Show Displays - Open for Viewing		
	Silent Auction - Pine Room		
4:00 - 8:00 pm	Trade Show Reception		

(Drink ticket redemption continues until 9:00pm at lobby bar only)

NOTES:			

#### TUESDAY - March 12, 2024

8:00 - 3:00 pm - Seminar Registration - BPL Hotel Lobby

Pre-Seminar Workshops (PRE-REGISTRATION REQUIRED)
Rocky Mountain Resort, 1029 Banff Avenue

Workshop #5 - 8:30 – 12:00 (0.3 CEUs) Robotics Assistance for Operators

This workshop will provide an overview of ground, aerial and submersible robotic solutions that are enhancing operator efficiencies and providing safer working conditions for municipal operators.

Presenter: Laurent Cataye, Rocky Mountains Unmanned Systems

#### Workshop #6 - 8:30 – 12:00 (0.3 CEUs) Chloramines (Total Chlorine) Boosting

This workshop will assist operators in understanding ammonia-N complications, provide options to boost chloramines and demonstrate how to undertake these boosting strategies.

Presenters: Win Tun and Emily Liu, Alberta Environment and Protected Areas; Simon Patterson, County of Two Hills

10:00 - 3:00 pm Trade Show Displays - Open for Viewing

10:00 - 4:00 pm	Silent Auction - Pine Room
12:00 - 1:30 pm	Delegate Lunch - In Display Area Sponsored by Aquatech Diving & Marine Services Ltd and Pipetech Rentals LP
4:15 -5:00 pm	Silent Auction Item Pickup - Pine Room
5:30 – 7:00 pm	WOMEN OF WATER (WOW)

NETWORKING EVENT for women in the industry - Hosted by AWWOA
Elk & Oarsman Pub, 119 Banff Avenue

7:00 - 10:00 pm PUB NIGHT NETWORKING EVENT Sponsored by ACC Water Solutions &
Klearwater Equipment & Technologies
Elk & Oarsman Pub. 119 Banff Avenue

NOTES:			

#### WEDNESDAY - March 13, 2024

**8:30 - Noon REGISTRATION –** Hotel Lobby

9:00 – 9:30 am Official Opening – Main Ballroom

Mike Bureaud, AWWOA Chair

**Greetings from Western Canada Water**Grant Dixon, WCW President Elect

#### **AWWOA Awards Presentations**

• The Gerald Samuel, Operator of the Year Award

• The Ron Bayne, Service Award

• The Steve Blonsky, Life Member Award

• AWWOA - NAIT Achievement Awards

9:30 - 10:25 am Alberta Environment and Protected Areas

**Drinking Water and Wastewater Update** 

Steve Craik and Jeffrey Wu, AEPA

2024 Drought Risk Management,

Darren Bourget, AEPA

Audits, Inspections, and Investigations

Michael Conboy, AEPA

10:25-10:40 am COFFEE - Alpine Meadows

10:40 - 11:00 am Water Professionals International

Tom Healy, WPI

11:00 - 12:00pm Keynote Speaker - Sponsored by ATAP

Tyler Smith – Mental health advocate, Humbolt Broncos crash survivor and Amazing Race Canada winner

12:00 - 1:30 pm LUNCH

1:30 - 2:15 pm PRESENTATIONS:

SESSION A Balancing Act: Strategies for Navigating

Droughts in Alberta Waterways through Operational Water Management,

Mustafa Hashimi and Chad Moore, AEPA

SESSION B Kehewin Cree Nation Partners with

Industry - Digital Water Treatment Process Model, Shannon Gladue, Kehewin Cree

Model, Shannon Gladue, Kehewin Cree Nation, and Denise Dodds, Jessica Wiens

and Linnea Russell, SLB Canada

SESSION C The Challenges of Aquatic Invasive Species

**Eradication Without Rotenone,** 

Monique Johnson and Lindsey Kowalchuk,

Town of Sylvan Lake

SESSION D ACTIFLO / Power Consumption,

Ashwani Attri, The City of Calgary

#### WEDNESDAY - March 13, 2024

2:15 – 2:45 pm	PRESENTATIONS:
SESSION A	Smart Technology for Wastewater Operations/Inflow and Infiltration Detection, Rod Schnell, Accu-Flo Meter Services Ltd.
SESSION B	Trouble Shooting and Chemical Optimization, Doug Riddell and Kelly Franks, Klearwater Equipment & Technologies
SESSION C	Choosing the Right Dancing Partner: Tendering Strategies for Capital Projects, Devon Fedor, Alberco Construction Ltd.
SESSION D	<b>EPCOR Gold Bar WWTP Sludge Densification,</b> Luke Opry and Julian Xheko, Stantec Consulting Ltd.
2:45 – 3:00 pm	COFFEE – Alpine Meadows
3:00 – 3:30 pm	
SESSION A	<b>Tools of the Trade,</b> Ryan Powell and Nicholas Brownoff, EPCOR
SESSION B	Water Treatment Tools and Strategies for Spring Runoff on the North Saskatchewan, Blake Moore, Darren Diprose, and Peter Crane, EPCOR
SESSION C	Preventing Motor Failures with Good Cabling Practices, Ryan Cooke and Ammar Rashid, ABB
SESSION D	<b>High Performance Lagoon Systems,</b> Tom Birkeland, Lemna Environmental Technologies
3:45 - 4:45 pm	AWWOA ANNUAL GENERAL MEETING Summit Room Executive Election Results AWWOA - Three Door Prize Draws Find the Hydrant – Two Draw Prizes
7:30 - 10:30 pm	CASINO NIGHT NETWORKING EVENT Sponsored by Wolseley Waterworks with co-sponsors Clow Canada, Trojan Industries, Pro-Line Fittings, Westlake Pipe & Fittings, and GF Urecon Ballroom, Upper Level, Banff Park Lodge Games & Prizes – Name Tag Required

Registration - Hotel Lobby

Travis Smith, Kamstrup

Why Isn't Spilled Water a Party Foul,

Waste Residuals Management at Surface Water Treatment Plants, Fengqin Wang, Alberta Environment and Protected Areas

PRESENTATIONS:

8:30 - 10:15 am

9:00 - 9:30 am

SESSION A

SESSION B

SESSION C Catch of the Day, Nikki Unsworth, Regional Municipality of Wood Buffalo and Dorte Koster, Associated Environmental Consultants SESSION D Wetland Wonderland: Taking the Waste Out of Water, Elizabeth Calvin and Julian Botero-Artuso, MAGNA Engineering Services 9:30 - 10:15 am **SESSION A** Optimization in WWTP Lift Stations, Satish Padmashali, Regional Municipality of Wood Buffalo SESSION B The Basics on Electrical Equipment Used by Operators and Maintenance - MCC, Switchgear, VFDs, SoftStarts and Motors, Cedric Rosario and Kevin Laviolette, Carbon Controls Ltd SESSION C Leveraging the Cloud for Real-Time Operational Insights, Jeff Smith, Trimble Inc, and Ali Mousavi, Cansel Survey Equipment SESSION D The Advantages of Rare Earth Coagulation for Reducing Chemical Sludge Production **During Phosphorous Removal,** Kevin Bossy, Bishop Water 10:15 - 10:45 am COFFEE - Alpine Meadows NOTES:

10:45 - 11:15 am PRESENTATIONS: SESSION A IoT Remote Monitoring - Case Study, Nick Sawatzky, MPE, a division of Englobe SESSION B Coagulation Modelling at the Fort McMurray Water Treatment Plant, John Michalopoulos, Regional Municipality of Wood Buffalo, and Tyler Bennett, Coagtech Ltd. SESSION C Town of Taber Stormwater Wetland Project. Ramin Lahiji. John Browning and Brent Hamilton, Town of Taber SESSION D Managing FOGs in Wastewater Collection and Treatment Systems with Biological Products, Ray Menard, ACC Water Solutions 11:15 - 12:00 pm SESSION A **Controller for WW Pumping Stations that** Easily Adapts as Your Needs Change, Luc-Rejean Lepine, Xylem Canada LP SESSION B Increasing Availability and Reliability with Onboard Diagnostics, Mark McDowell and Conor Henney, Endress+Hauser and Intrepid Group Ltd. SESSION C How Lethbridge Got the Lead Out, Leanne Lammertsen, Luis Rauda and Doug Winters, City of Lethbridge When Your New Permit Requires Ammonia SESSION D & TN Removal, Consider MABR Technology, Bruce Stevens and Neri Nathan, Fluence 12:00 - 1:30 pm LUNCH NOTES:

1:30 - 2:00 pm PRESENTATIONS:

SESSION A	Finding Challenging Water Leaks - Leaks that Don't Surface Where They are Leaking, Brad Forsyth and Toby Weickert, The City of Calgary
SESSION B	Impact of Equipment Sizing on Plant Operations, Max Wong, Capital H2O Solutions
SESSION C	Municipal Water Education for Behaviour Change, Vanessa Higgins, Strathcona County
SESSION D	Bioaugmentation to Remove Sludge from Wastewater Lagoon in Northern Climate - A Case Study with Ontario Clean Water Agency at Bruce Mines Ontario, Jonathan Lee, Acti-Zyme Products Ltd
2:00 - 2:45 pm	
SESSION A	Mobile Mapping for Field Operations, Andrew Wolff and Mark Wille, Strathcona County
SESSION B	Modern Disinfection Methods, with a Focus on Chlorine. Critical Do's and Don'ts, Mark McDowell and Aarthie Fernando, Endress+Hauser and Intrepid Group Ltd.
SESSION C	Automate Your Subsurface Utility Engineering and Locate Sketching, Ali Mousavi, Cansel Survey Equipment
SESSION D	Avoiding Pitfalls: Effectively Navigate Wastewater Lagoon Risks with a Robust Lagoon Management Strategy, W.R. (Bill) MacMillan, Lethbridge County, and Andrew Ambrocichuk, Hydrasurvery Ltd.,
2:45 – 3:00 pm	COFFEE - Alpine Meadows
NOTES:	
L	

3:00 – 3:30 pm PRESENTATIONS:

SESSION A The Heartland of Alberta's Approach to

**Leak Detection,** Javed Muki, Pure Technologies, a Xylem Brand

SESSION B An Update on PFAS in Drinking Water,

Johnny Ke, Stantec Consulting Ltd

SESSION C CLOSED

SESSION D Modelling of the Aerobic Granular Sludge

Process for a WWTP in Western Canada, Julian Xheko, Stantec Consulting Ltd

3:30 - 4:00 pm

SESSION A Odour and Corrosion Control in Municipal

Collection Systems, David Speed,

BioMaxx Environmental

SESSION B Unveiling the Science of Polymer

Activation: Exploring the Benefits through Applications, Ethan Brooke, Cleanwater1

SESSION C CLOSED

SESSION D Alberta Environment and Protected Areas –

Certification Q&A. Christine Donovan and

Tammy Elzinga, AEPA

6:00 pm RECEPTION - Alpine Meadows

7:00 pm Annual Banquet – Main Ballroom

Tickets Required

**AWWOA - Past Chair Award** 

9:00 pm ENTERTAINMENT

Comedian - Pete Zedlacher



After the Seminar, an evaluation will be emailed to you.

**AWWOA** values your feedback.

Your input will make the seminar experience even better next year.

#### FRIDAY - March 15, 2024

#### MORNING WORKSHOP SESSION - Main Ballroom

#### 8:30 - 11:30 am Effective Tough Conversations – The Key to High Performing Teams

This 3-hour workshop-style leadership presentation will focus on the Foundations of Successful Coaching Conversations for Operators. It will provide participants with better understanding and practical methods they can apply on the job immediately to build better relationships and get results from their management efforts.

Industry challenges being discussed include: Navigating regulatory changes, Knowledge transfer and retirement challenges, and Technology Advancements.

Presenters: Melanie Richmond and Rachelle Lee,

Einblau & Associates

11:30 am CLOSING REMARKS

Chris Huston, AWWOA Chair

#### PAST AWARD RECIPIENTS

From last year's seminar award ceremony

2022 GERALD SAMUEL OPERATOR OF THE YEAR AWARD

> Corey Hodgson EPCOR

2023 RON BAYNE SERVICE AWARD

### Tanya Hunter Alberta Environment and Protected Areas

2022 STEVE BLONSKY HONORARY LIFE MEMBERSHIP AWARD

> Lorne (KC) Stone and Ed Spohr

For a complete list of past award recipients visit awwoa.ca/awards-scholarships

List of Exhibitors Willow Room **AWWOA** 64 Capital H2O Systems Inc 65 Fabco Plastics Limited Pine Room Silent Auction 66 & 67 Klearwater Equip & Maple Room Wajax | Tundra Technologies 68 NAIT **National Process** 69 & 70 Utility Supply (West) Equipment Inc Corp. 2 Aquateck West 3 Mueller Canada 71 Cambridge Brass 4 Elemental Bioremediation 72 Advance Diving 73 Norwood Waterworks 5 Evoqua Water 74 infraStruct Products & Technologies 6 Services Nexom 75 Ipex bu Aliaxis 7 & 8 Mequipco Ltd 76 REED Manufacturing Co. 9 Clear Water Controls 77 10 Alberta Wilbert Sales Ltd 78 EnviroTrace W.R. Meadows of 11 79 H2 Solutions Inc Western Canada 80 & 81 Waste Go 12 Magna Engineering Services 82 KTI Limited 13 Trojan Industries 83 Novamen Inc McKay Water Works 84 Benchmark Instru. & 14 Analytical Services Inc 15 Hydrasurvey Ltd Terminal City Iron Works 85 ESG Filtration Ltd 16 86 Hayward Flow Control 17 ClearTech Industries 87 Allied Centrifuge Tech./ 18 Top Shot Concrete Inc 19 Cam-Trac Inspection Indust. Dynamics 88 **Element Materials** Services Ltd BettsM Controls Inc WJF Instrumentation 89 20 90 DWG Process Supply Ltd Lambourne Environmental 21 22 Aerzen Canada Inc 91 Ramtech Environmental 92 23 Metropolitan Pump Co. Ltd

- Aqua Clear Environmental 24
- 25 **KPIC Maintenance Services**
- Carbon Controls Ltd 26
- Wolseley Canada 27
- 28 & 29 Accu-Flo Meter Service
- 30 Donison & Associates Ltd
- 31 Victaulic
- 32 Superior Equipment Sales
- 33 Unified Alloys
- 34 Alberta Environment & Proctected Areas
- 35 & 36 GF Urecon ICONIX Waterworks 37
- 38 CD Nova Instruments Ltd
- 39 Chem International
- 40 Water First
- 41 Movewater Inc
- 42 Stormtec Water Management
- 43 Integral High-Performance Coatings
- 44 CARO Analytical Services
- 45 Restocrete Inc
- 46 & 47 Zimco Instrumentation
- 48 & 49 North Fringe Industrial
- 50 Pipetech Rentals
- 51 True Depth Diving & Marine Services Inc
- 52 Seahorse Aquatic Vegetation Harvesting/ Truxor Canada
- ALS Canada Ltd
- 54 & 55 Jadler Industries
- 62 & 63 ACC Water Solutions

- **AEC Industrial Solutions**

- Acti-Zyme Products Ltd
- 93 Pro-Line Fittings
- 94 Ford Meter Box
- 95 John Brooks Company
- 96 Vanko, Analytical & Instru. Specialists 97 Robar Industries Ltd
- 98 Spartan Controls
- 99 **IVIS Construction**
- 100 Southern Rewind
- 101 Sego Canada Inc
- 102 Endress+Hauser Canada
- 103 Denso North America
- 104 Westech Industrial Ltd
- 105 Telematic Controls
- 106 CB Process Instr. & Controls
- 107 Taber Solids Control
- 108 Engineered Pipe Group 109 Waste'n WaterTech Ltd
- 110 Hach Canada
- 111 & 112 RIDGID
- 113 Arndt Motor and Pump Service
- 114 Liberty Pumps
- 115 Fernco/S1E/Pipe Patch 116 Clean Harbors
- 117 AWI (Anthratech
- Western)
- 118 & 119 Chamco Indust.
- 120 Aguatech Canadian Water Services Inc
- 121 & 122 Xylem Canada
- 123 Aquatech Diving & Marine Services Ltd

#### **List of Exhibitors**

124 Aquatera Utilities 125 N.S. Pawliuk & Son Contracting 126 EMCO Waterworks

127 TDH Fluid Systems Inc

128 Metercor Inc 129 Kamstrup

130 Clow Canada

131 Delco Water

132 Toray Membrane USA

133 MPE, a division of Englobe

134 Target Products

135 ISL

136 Romac Industries

137 Mountainview Systems

138 Safesidewalks Canada 139 Camenex Control

Systems Ltd 140 Hetek Solutions Inc

141 Veolia Water Technologies Canada

142 BioMaxx Environmental

143 Wachs Canada

144 Linestar Utility Supply

145 Procon Systems (2013) 146 & 147 CIMA+

148 & 149 Summit Valve and

Controls Inc

# The AWWOA wishes to thank all of our sponsors for their generous support!

ACC Water Solutions Inc

**AEC Industrial Solutions Ltd** 

**Aquatech Canadian Water Services** 

**Aquatech Diving & Marine Services** 

Aquateck West Ltd

Aquatera Utilities

**ATAP** 

**BettsM Controls** 

CIMA+

**EPCOR** 

Iron Clad Mechanical Services Ltd

ISL

Kamstrup

Klearwater Equipment and Technologies

McElhanney

MPE, a division of Englobe

**Pipetech Rentals** 

Ramtech Environmental Products

SEGO Canada Inc

Southern Rewind

Stantec

**Taber Solids Control** 

The City of Calgary

**TIL Environmental Solutions** 

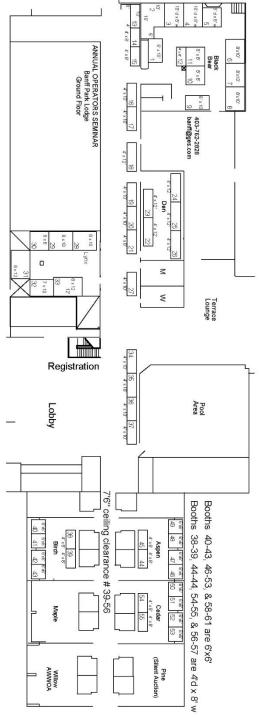
Toray Membrane USA

Waste Go Canada

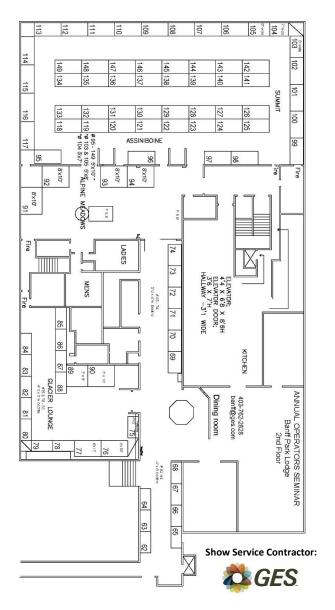
Wolseley Waterworks

W.R. Meadows of Western Canada

### Banff Park Lodge Lower Level



### Banff Park Lodge Upper Level



#### \*\*NEW HOURS FOR 2024!\*\*

Trade Show Display Times Monday: 3:00 - 8:00 p.m. Tuesday: 10:00 a.m. - 3:00 p.m.



# ALBERTA WATER & WASTEWATER OPERATORS ASSOCIATION

# 49<sup>th</sup> Annual Operators Seminar SPONSORED BY:













### **Fundraising Events**

- Two 50/50 events, Monday and Tuesday.
   Tickets will be sold by the Charitable Donations
   Committee.
- Silent Auction, in the Pine Room on:

Monday: 3:00 - 8:00 p.m.

Tuesday: 10:00 a.m. to 4:00 p.m.

All funds raised are in support of

The Water School

#### **Social Media**

Alberta Water & Wastewater Operators Association

@awwoa

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