



**ALBERTA WATER & WASTEWATER
OPERATORS ASSOCIATION**

**47th Annual
Operators Seminar**

March 14 - 18, 2022

Banff Park Lodge, BANFF

ALBERTA WATER & WASTEWATER OPERATORS ASSOCIATION

2021 - 2022 EXECUTIVE

Dennis Tomuschat, Chair
Town of Bruderheim

Sandra Kotch, Vice Chair
The City of Calgary

Darrin Wenzel, Past Chair
Strathcona County

Bert J. Miller
City of Red Deer

Chris Huston
City of Lacombe

Daris Podgurski
Town of Penhold

Don Erechuk
DMJ Environmental

Doug Thorson
Life Member

Joe Rahn
Rocky View County

Kathy Jonzon
Aquatera Utilities

Mike Bureaud
EPCOR Water Services

Paresh Dhariya
Town of Devon

Rick Gervais
Smoky River Regional Water Commission

Tammy Elzinga
5,001 – 25,000 Population Rep.

Theo Hohner
Northern Sunrise County

AWWOA Staff

Dan Rites, Executive Director

Kirstin Mihaychuk, Program Coordinator

Jenna Horning, Membership Services

Erin Ciezki, Seminar Technical Program Coordinator

MONDAY - March 14, 2022

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

Workshop #1 - 8:30 – 12:00 Noon (0.3 CEUs)

Bonnybrook WWTP Cogeneration Expansion Project

This workshop will discuss the design of the system at a high level and will focus on interesting features and challenges in design and operation. Commissioning will be discussed at length, including planning and training.

Presenters: Kyle Jensen, Stantec; Ryan Balt, Graham; Sean Killoran, The City of Calgary

Workshop #2 - 8:30 – 12:00 Noon (0.3 CEUs)

Jar Testing for Operators, How to Optimize Water Plant Chemistry

This workshop will focus on the theory behind various available chemistries and what they target, the math behind stock solutions and dosages in jar testing.

Presenters: Doug Riddell and Dalen Crouse, Klearwater Equipment & Technologies

12:00 - 8:00 pm - Seminar Registration – BPL Hotel Lobby

Workshop #3 - 1:00 – 4:30 (0.3 CEUs)

Oxygenation and Circulation Techniques to Improve Water Quality in Raw Water, Wastewater, Stormwater, and Managed Lakes & Ponds

This workshop will provide a comprehensive review of both theory and practice of oxygenation and circulation techniques.

Presenters: Patrick Goodwin, Good Aquatics;
Raymond Menard, Algae Control Canada

Workshop #4 - 1:00 – 4:30 (0.3 CEUs)

Building a Maintenance Management Plan

This workshop will explore the concepts of a maintenance management strategy, prioritization of critical assets, developing schedules and reporting systems.

Presenters: Owen James and Grant Dixon, Associated Engineering

3:00 - 9:00 pm Trade Show Displays - Open for Viewing

Silent Auction - Pine Room

5:00 - 9:00 pm Trade Show Reception

TUESDAY - March 15, 2022

8:00 - 4:00 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)

Resiliency Lessons Learned from Natural Disasters and How They Impact Operations

This workshop will outline some of the impacts of recent disasters and what we have learned about our utilities as a result. Also, how can we leverage the lessons learned by the experience of other utilities to mitigate risks and make our infrastructure and operations more resilient.

Presenters: Stephan Weninger and Neal Cody, Stantec.

Workshop #6 - 8:30 – 12:00 (0.3 CEUs)

Engineered Hot Taps, Line Stops, Valve Inserts & Freezes - A Comprehensive Look at the Technology

This workshop discusses all of the technologies you didn't know existed to keep your infrastructure live and your clients with full services. Find out which are the most efficient and cost-effective ways to keep infrastructure live to accommodate downstream work.

Presenter: Brandon Pater, Pacific Flow Control

10:00 - 4:00 pm Trade Show Displays - Open for Viewing

10:00 - 5:00 pm Silent Auction - Pine Room

**12:00 - 1:30 pm Delegate Lunch - In Display Area
Sponsored by Aquatech Diving & Marine Services Ltd and MPE Engineering**

5:15 - 6:00 pm Silent Auction Item Pickup - Pine Room

**7:00 - 10:00 pm PUB NIGHT NETWORKING EVENT -
Sponsored by Algae Control Canada
Elk & Oarsman Pub, 119 Banff Avenue**

WEDNESDAY - March 16, 2022

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

9:00 – 9:45 am **Official Opening** – Main Ballroom
Dennis Tomuschat, Chair, AWWOA

Greetings from Western Canada Water
Andy Barr, 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

9:45 – 10:15 am **Alberta Environment and Parks**

Drinking Water and Wastewater Section Initiatives and Certification Program Updates

Sharon Willianen, Jeffrey Wu, Terence Ko,
Tanya Hunter, Christine Donovan, Edith
Vanderpuye, AEP

10:15- 10:30 am **COFFEE - Alpine Meadows**

10:30 - 11:20 am **AEP Continued...**

11:20 - 11:40pm **Alberta Municipal Health and Safety
Association Presentation**
Craig Hrynychuk

11:40 – 12:00 **The Water School Update**
Dave Ericson, The Water School

12:00 - 1:30 pm **LUNCH**

1:30 - 2:15 pm **PRESENTATIONS:**

SESSION A **An Introduction to Water Stability:**
Kelsi Holzer, Delco Water

SESSION B **Using inDENSE™ Technology for Sludge
Densification to Increase Secondary
Treatment Capacity at Gold Bar WWTP:**
Julian Xheko, Stantec and Saif Molla, EPCOR

SESSION C **From No Data to SCADA in 30 Minutes:**
Paul Cook, SFC Energy Canada

SESSION D **Extreme Makeover - Lift Station Edition:**
Michael Thiessen, McElhanney

PLEASE NOTE: **The Annual General Meeting takes place at
3:45 pm in the Summit Room.**

WEDNESDAY - March 16, 2022

2:15 – 2:45 pm PRESENTATIONS:

SESSION A **City of Lloydminster WTP Control System Upgrade - Case Study:** Nicholas Sawatzky, MPE Engineering and Jamie Hopko, City of Lloydminster

SESSION B **Corrosion Monitoring and Asset Management:** David Speed, BioMaxx Environmental

SESSION C **Taste and Odour Mitigation Approaches for Water Utilities:** Klas Ohman, Associated Engineering

SESSION D **Destination Education of Station Operation, Through our Explanation on Elimination of Frustration (AKA User Friendlies):** Ryan Powell and Nicholas Brownhoff, EPCOR

2:45 – 3:00 pm **COFFEE – Alpine Meadows**

3:00 – 3:30 pm

SESSION A **Coagulation 101:** David Pernitsky, Stantec

SESSION B **Reduction of Bioaerosols Containing Pathogens Using Upper Room Ultraviolet Germicidal Irradiation (UVGI):** Martine Pawlowski, H2O Logics Inc.

SESSION C **Supervisory Control and Data Acquisition (SCADA):** Clifford Long, Stantec/Red Deer

SESSION D **Open Channel Flow Measurements:** Aarthie Fernando, VEGA Instruments Canada Ltd.

3:45 - 4:45 pm **AWWOA ANNUAL GENERAL MEETING Summit Room**
Executive Election Results
AWWOA - Three Door Prize Draws
Find the Hydrant Draw - Two Prizes

7:30 - 10:30 pm **CASINO NIGHT NETWORKING EVENT Sponsored by Wolseley Waterworks and Clow Canada**
Main Ballroom, Banff Park Lodge
Games and Prizes
Name Tag is required for admission

THURSDAY - March 17, 2022

8:30 - 10:15 am **Registration** – Hotel Lobby

9:00 - 9:30 am **PRESENTATIONS:**

SESSION A **Lessons from a Northern WTP Evaluation:**
Sarah Larlee, Associated Engineering

SESSION B **Lessons Learned during Process
Optimization of Bonnybrook WWTP
Secondary Treatment Plant D Expansion:**
Danelle Bishoff, Stantec and
Sean Killoran, The City of Calgary

SESSION C **Lagoon Management Mechanical SRS:** Fred
Netter and Rick Kneiss, Kayden Industries

SESSION D **Case History: Flow Test of a 97-year-old Iron
Pipe:** Sam Ghosn, DIPRA (Ductile Iron Pipe
Research Association)

9:30 - 10:15 am

SESSION A **Three Hills WTP Upgrade - Were the
Objectives Achieved?:** Richard Tombs,
ISL Engineering and Land Services Ltd.

SESSION B **Bonnybrook WWTP UV Disinfection
Upgrades and Commissioning:** Sean
Killoran and Steve Pickle, The City of Calgary

SESSION C **Free Disinfection in Post-Lagoon
Nitrification: Performance Review of
Existing Cold Climate SAGRs:**
Damian J. Kruk, Nexom

SESSION D **Liquid-Only Sewer; Addressing the Pressure
of Wastewater Collection in Alberta:**
Kevin Huynh, Alberta Wilbert Sales Ltd.

10:15 - 10:45 am **COFFEE - Alpine Meadows**

THURSDAY - March 17, 2022

10:45 - 11:15 am PRESENTATIONS:

SESSION A **UV Disinfection in Alberta: Applying the March 2021 Municipal Waterworks Standards to New and Existing Drinking Water UV Disinfection Systems:** Wayne Lem and Jackie Corlett, Trojan Technologies

SESSION B **Advanced Process Control to the Aeration Basins:** Paul A. Nelsen, Egger Turo Pumps & Iris Valves

SESSION C **Improving Lagoon Performance with Bioaugmentation - Case Study - Ponoka:** Dennis Greenhow and Dhaval Vaghasia, Algae Control Canada

SESSION D **Sanitary Sewer System Renewal Optimization: A Practical Approach:** Mark DeGagne and Tory McNeill, McElhanney

11:15 - 12:00 pm

SESSION A **Distribution Network THM Mitigation in Consecutive and Wholesale Water Systems:** Ethan Brooke, UGSI Solutions

SESSION B **Granulated Sludge and the Need for Accurate, Reliable Process Control:** Dean Rudd, Endress+Hauser Canada

SESSION C **Lagoon and Pond Sludge Surveys: The Data-Driven Insurance Policy for Your Next Desludging Project:** Andrew Ambrocichuk, Hydrasurvey Ltd.

SESSION D **When Nothing Goes as Planned. An Operators Story of Reservoir Cleaning, Inspection and Repair:** Tony Wizniuk and Michael Greenwood, Strathcona County

12:00 - 1:30 pm **LUNCH**

THURSDAY - March 17, 2022

1:30 - 2:00 pm **PRESENTATIONS:**

SESSION A **Red Deer Residuals Management Facility - Journey from Design to Commissioning:**
Bert J. Miller, City of Red Deer and
Jeff Huber, Associated Engineering

SESSION B **Where Does Effluent Go and Who Cares Anyway?:** Tracy MacDonald and Dörte Köster, Associated Environmental Consultants

SESSION C **Digital Tools: Friend or Foe?:**
Roxanne Richardson, Stantec Consulting Ltd.

SESSION D **Innovations in Wastewater Pumping:** Paul Payette, Crane Pumps and Stewart Meffen, Superior Equipment Sales

2:00 - 2:45 pm

SESSION A **Q: Why Is My Treated Water Yellow?**
A: Check for Manganese: Jenna Jensen and
Chad Moore, Alberta Environment and
Parks

SESSION B **The Effect of 'Selector' Design Features and Plant Operation on Sludge Settleability in Full-Scale WWTPs with EBPR:** Julian Xheko, Stantec and Nisa Jayathilake, The City of Calgary

SESSION C **CSA Z462-21: Beyond Arc Flash:** Andrew Greschner, Stantec Consulting Ltd.

SESSION D **How LoRaWAN™ Enables Scalable, Cost-Efficient AMI Water Metering:**
John Cherewko, eleven-x

2:45 – 3:00 pm **COFFEE - Alpine Meadows**

THURSDAY - March 17, 2022

- 3:00 – 3:30 pm PRESENTATIONS:**
- SESSION A The Benefits of Digital Instruments: What They Can Tell Us, and Why We Need to Listen:** Dean Rudd, Endress+Hauser Canada
- SESSION B Headworks Upgrades: Important Retrofit Considerations:** Simon Meikle and Andrew Buchner, Stantec Consulting Ltd.
- SESSION C CLOSED**
- SESSION D Challenges with Disinfection Residuals in Regional Water Systems:** Win Tun, Alberta Environment and Parks
- 3:30 – 4:00 pm**
- SESSION A Quantum Disinfection - Bacteria Removal:** Cristian Chris, SEGO Industries
- SESSION B TBA**
- SESSION C CLOSED**
- SESSION D A Northern Alberta Utility's Proactive Approach to Assessment Avoids Potential Catastrophic Pipeline Failure:** Justin Hebner, Xylem
- 6:00 pm RECEPTION - Alpine Meadows**
- 7:00 pm Annual Banquet – Main Ballroom**
Tickets Required
AWWOA - Past Chair Award
- 9:00 pm ENTERTAINMENT**
Comedian – Bob Beddow



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 18, 2022

MORNING WORKSHOP SESSION – Main Ballroom

Attendance required for 0.3 CEUs

8:30 - 11:30 am Mastering a Comeback – Moving from Stressed to Resilient

When a community faces an infrastructure failure such as a water break, the problem is given immediate attention. When you or someone on your team isn't doing well, it needs to be treated with the same vigor.

The intent of this program is to provide skills, and tools for individuals to move forward and succeed during any crisis. We will work through the situations water and wastewater operators face daily in their roles.

Presenters: Jeannette Austin, EXCELLO

11:30 am CLOSING REMARKS

Sandra Kotch, AWWOA Chair

AWARD RECIPIENTS

From last year's seminar award ceremony

**2020 GERALD SAMUEL OPERATOR
OF THE YEAR AWARD**

**Blair Brandenburg
City of Spruce Groove**

2021 RON BAYNE SERVICE AWARD

**Kirstin Mihaychuk
AWWOA**

**2021 STEVE BLONSKY HONORARY
LIFE MEMBERSHIP AWARD**

**Bert E Miller
and
Andy Bebbington**

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

List of Exhibitors

Willow	AWWOA		
Pine	Silent Auction		
Maple	BioMaxx Environmental		
1	Aerzen Canada	56	Chem International
2	National Process Equipment Inc	57	Fabco Plastics Western Ltd
3	Donison & Associates Ltd	58	Algae Control Canada
4	Mueller	59	Capital H2O Systems Inc
5	Westech Industrial Ltd	60	VWR/Avantor
6	JWC Environmental	61	Hydrasurvey Ltd
7	Mequipco Ltd	62	Klearwater Equipment & Technologies Corp
8	Evoqua Water Technologies Ltd	63	Robar Industries
9	Clear Water Controls	64	Utility Supply Corp. West
10	E.B. Horsman & Son	65	Cambridge Brass
11	Stormtec Water Management	66	NAIT
12	LineStar Utility Supply	67	Norwood Waterworks
13	Trojan Industries	68 & 69	InfraStruct Products
14	McKay Water Works	70	IPEX Inc
15	Advance Diving Projects	71	Heat-Line
16	Top Shot Concrete	72	Waste Go
17	SRP Control Systems	73	Aquatera Utilities
18	ClearTech Industries	74	Stowell Pumps
19	Cam-Trac Inspection	75	EnviroTRACE
20	GF-Urecon	76	Procon Systems
21	Wolseley Water Works	77	McElhanney Ltd
22	Alberta Wilbert Sales Ltd	78	Delco Water
23	Northern Lakes College	79	Winters Instruments
24	Aquateck West	80	PipeTech Rentals
25	Cubex Equipment Ltd	81	SAIT
26	Carbon Controls Ltd	82	Jadler Industries Alberta
27	Lambourne Environmental	83	REED Manufacturing Co
28	Accu-Flo Meter Service	84	Pond Pro Canada
29	Victaulic	85	DWG Process Supply Ltd
30	H2 Solutions Inc	86	Endress+Hauser
31	Superior Equipment Sales	87	Nexom
32	Elemental Marketing & Remediation	88	Pro-Line Fittings
33	Alfagomma Canada	89	Ford Meter Box
34	Kayden Industries	90	John Brooks Company
35	Alberta Enviro. & Parks	91	N.S. Pawliuk & Son Contracting
36	WJF Instrumentation Ltd	92	Spartan Controls
37	Acti-Zyme Products Ltd	93	Unified Alloys
38	ICONIX Waterworks	94	General Wire/Kupferle
39	Tundra Process Solutions	95 & 96	Wajax
40	EECOL Electric	97	IVIS Construction
41	Infrastructure Asset Management Alberta	98	Veolia
42	Waterfall Security Solutions	99	Metercor Inc
43	Integral High Performance Coatings	100	Taber Solids Control
44	Portage College	101	Telematic Controls
45	Calgary Sewer Scope	102	Pan Dakota Dive Services
46	H2O Logics Inc	103	Waste'n Water Tech
47	Ar-Tech Coating Ltd	104	HACH
48	Avensys Solutions Inc	105	BettsM Controls Inc
49 & 50	North Fringe Industrial	106	APWA AB Chapter
51 & 52	Vanko	107	Hetek Solutions Inc
53	Mountainview Systems Ltd	108	Arndt Motor and Pump
54	ALS Environmental	109	Liberty Pumps
55	Roshan Water Solutions	110	Fernco/Source One Environmental
		111	Clean Harbors Lodging Services

List of Exhibitors

- | | |
|--|----------------------------------|
| 112 AWI (Anthratch Western Inc) | 131 Joe Johnson Equipment |
| 113 & 114 Xylem | 132 VEGA Instruments Canada |
| 115 Brenntag Canada Inc | 133 Romac Industries |
| 116 EMCO Waterworks | 134 Pacific Flow Control Canada |
| 117 Aquatech Diving & Marine Services | 135 Camenex Control Systems |
| 118 & 119 Chamco Industries | 136 Summit Valve and Controls |
| 120 SFC Energy | 137 Wachs Canada Ltd |
| 121 Denso North America Inc | 138 Intrepid Group |
| 122 TDH Fluid Systems Inc | 139 CARO Analytical Services |
| 123 Target Products | 140 Electrogas Monitors |
| 124 Stonhard | 141 CGI Instrumentation Inc |
| 125 SEGO Industries | 142 Georg Fischer Piping Systems |
| 126 Greatario Engineered Storage Systems | 143 CB Process |
| 127 & 128 Ramtech Environmental Products | 144 RIDGID |
| 129 Clow Canada | |
| 130 MPE Engineering Ltd | |

The Alberta Water & Wastewater Operators Association wishes to thank

Alberco Construction

Algae Control Canada

Aquatech Diving & Marine Services

Aquateck West

Aquatera Utilities

BioMaxx Environmental

EPCOR

H2 Solutions

Master Meter Canada

MPE Engineering Ltd

Mueller Canada

SEGO Industries

Stantec

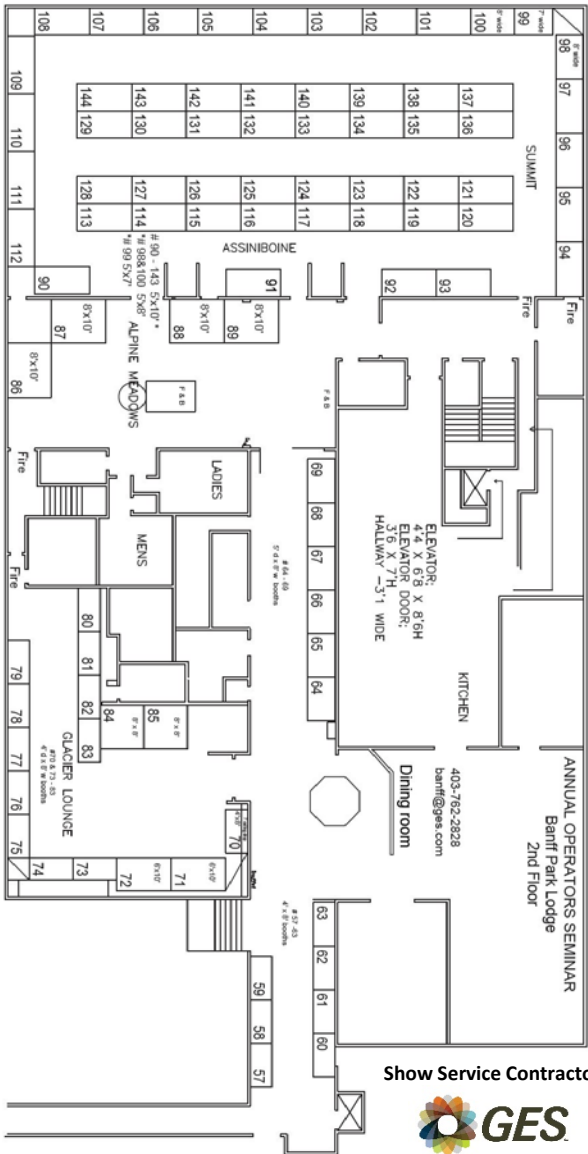
The City of Calgary

Westech Industrial

Wolseley Waterworks

for their generous support!

Banff Park Lodge Upper Level



Trade Show Display Times
Monday: 3:00 – 9:00 p.m.
Tuesday: 10:00 a.m. – 4:00 p.m.



ALBERTA WATER & WASTEWATER OPERATORS ASSOCIATION

47th 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 - 9:00 p.m.
Tuesday: 10:00 a.m. to 5:00 p.m.

All funds raised are in support of
The Water School

Social Media

Alberta Water & Wastewater Operators Association

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