



**ALBERTA WATER & WASTEWATER
OPERATORS ASSOCIATION**

**45th Annual
Operators Seminar**

March 9 - 13, 2020

Banff Park Lodge, BANFF

ALBERTA WATER & WASTEWATER OPERATORS ASSOCIATION

2019 - 2020 EXECUTIVE

Paresh Dhariya, Chair

Town of Devon

Darrin Wenzel, Vice Chair

Strathcona County

Ed Spohr, Past Chair

EPCOR

Andy Bebbington

Town of Devon

Bert J. Miller

City of Red Deer

Chris Huston

City of Lacombe

Dave Harrison

County of Forty Mile No. 8

Dennis Tomuschat

Town of Bruderheim

Don Erechuk

DMJ Environmental

Doug Thorson

Life Member

John Greathead

Municipality of Jasper

Joe Rahn

Rocky View County

Kathy Robertson

Aquatera Utilities

Mike Bureaud

EPCOR Water Services

Sandra Kotch

City of Calgary

AWWOA Staff

Dan Rites, Executive Director

Kirstin Mihaychuk, Program Coordinator

Jenna Horning, Membership Services

Erin Ciezki, Seminar Technical Program Coordinator

MONDAY - March 9, 2020

**Pre Seminar Workshops (Pre-Registration Required)
Rocky Mountain Resort, 1029 Banff Avenue**

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

Creating a Training Program for the Future – CRD WTP

This workshop will highlight the City of Red Deer's future training program aimed at providing operator proficiency and competencies.

Presenters: Bert E Miller, City of Red Deer

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

Town of Devon's New Wastewater Treatment Plant – From Start to Finish!

This workshop will cover a variety of topics related to the planning and building of the new Wastewater Treatment Plant for the Town of Devon.

Presenters: Paresh Dhariya, Andy Bebbington, Jim Hepler, Town of Devon

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

Workshop #3 - 1:00 – 4:30 (0.3 CEUs)

Granular Media Filtration is a Batch Process: Comparison of Various Backwash Procedures and the Effect on Filter Performance

The workshop will review the granular media filtration process and why it should be considered a 'batch process'.

Provide comparisons of backwash procedures used in various water treatment plants. Case studies for both gravity and pressure filters will be included.

Presenter: David and Brett Hambley, Anthratech Western Inc.

Workshop #4 - 1:00 – 4:30 (0.3 CEUs)

Effective Communication for Utilities Personnel

This workshop will provide information on effective communication types and tools that can be used in the Utilities industry. From one-on-one, to small groups, to large groups, various examples will be provided.

Presenter: Todd Reimer, Boots on the Ground Coaching

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 10, 2020

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)

The Science of Pipe Cleaning

This workshop examines wastewater main cleaning procedures and new methods for optimal cleaning results. Attendees will have a better understanding of how to clean lines quicker, more effectively and with less effort.

Presenter: Ken Billingham, KEG Technologies Inc.

Workshop #6 - 8:30 – 12:00 (0.3 CEUs)

The Future – It's Not What It Used to Be (Climate Change 101)

This workshop looks at the impacts of severe weather as an added stress on infrastructure and the services it provides.

In addition to age and increased demand, the increased intensity of weather events can produce an incremental tipping point to trigger potential asset failure.

Presenters: Garry Drachenberg, Jeremy Fyke, Jeff Fetter, Juliana Tang, Grant Dixon, Associated Engineering

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 MSSA and Johnson Insurance**

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

**7:00 - 10:00 pm YP SOCIAL EVENT - Sponsored by Algae
Control Canada & Western Canada Water
Elk & Oarsman Pub, 119 Banff Avenue**

WEDNESDAY - March 11, 2020

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

9:00 – 10:00 am **Official Opening** – Main Ballroom
Paresh Dhariya, Chair, AWWOA

Greetings from Western Canada Water
Jeffrey Halliday, WCW

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

10:00 – 10:30 am **Alberta Environment and Parks**

Certification Office Update

Tanya Hunter and
Vernice Bello, AEP

10:30- 10:45 am **COFFEE - Alpine Meadows**

10:45 - 11:30 am **Alberta Environment and Parks - ASERT**
Dan Pearson, Emergency Response Officer

11:30 - 12:00pm **The Water School Update**
Dave Ericson, The Water School

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

1:30 - 3:30 pm **PRESENTATIONS:**

SESSION A/B **Jump Start Your Lead Sampling Program:**
Aaron Janzen, Debra Long, Chad Moore,
Jaclyn Roulston, AEP
Sean Nickerson, Jeff Charrois, EPCOR
Russ Dueck, City of Calgary

1:30 - 2:00 pm

SESSION C **Large Diameter CIPP Trenchless Culvert
Repair:** Michael O'Toole and Mick Delaw, Source One Environmental

SESSION D **Achieving Ultra-Low Phosphorus and sNRP
Removal Using Reactive Filtration:** Dalen Crouse, Nexom

PLEASE NOTE: **The Annual General Meeting takes place at
3:30 pm in the Summit Room.**

WEDNESDAY - March 11, 2020

2:00 – 2:30 pm PRESENTATIONS:

SESSION C City of Saskatoon - Piloting Ceramic Media versus Sand / Anthracite in Filtration Basins: Trevor Johnson, Filtralite / Delco Water

SESSION D The Town of St. Paul's WWTP Upgrade - Tertiary Filtration: Chris Howorth, Veolia

2:30 – 2:45 pm COFFEE – Alpine Meadows

2:45 – 3:15 pm

SESSION C Eliminating Confined Space Entry in Air Release Valve Chambers: An Alberta Case Study: Derek Traquair, USC West

SESSION D Industrial Cybersecurity - Both Harder and Easier than it Seems: Andrew Ginter, Waterfall Security Solutions

3:30 - 4:30 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 Sponsored by Wolseley Water Works, Mueller Canada and Robar Industries
Main Ballroom, Banff Park Lodge
Games and Prizes
Name Tag is required for admission

Operator Photo Contest!



AWWOA is celebrating this years' 45th annual seminar with a photo contest featuring picture submissions from Operators all around the province.

Check out the display of water/wastewater inspired photos outside of the ballrooms.

Contest winners will be announced at the Friday morning session.

THURSDAY - March 12, 2020

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

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

SESSION A **Algae – How Much is too Much! Algal and Cyanobacterial Blooms Related Operational Challenges:** Grant Dixon, Associated Engineering

SESSION B **Safely Remediating Wastewater with Waste Go:** Colin Brushett and Norm Grexton, Waste Go

SESSION C **Updating Your Working Map:** Martin Nordstrom, Lethbridge North County Potable Water Co-op

SESSION D **Trench Safety Awareness & Duties of the Competent Person:** Courtney Gehring, Mountainview Systems

9:30 - 10:15 am

SESSION A **Red Deer WTP Control System Maintenance Upgrades:** Minh Nguyen, Eramosa Engineering

SESSION B **2020 Update on WSER & Co.: How to Brave Regulatory Hurdles for Wastewater Treatment Systems:** Dr. Dörte Köster, Associated Environmental Consultants Inc.

SESSION C **Things Being Done in Alberta to Tackle Climate Change:** Chris Howorth, Veolia

SESSION D **What Can My SCADA System Do?** Zane Spencer and Nick Sawatzky, MPE Engineering Ltd.

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

THURSDAY - March 12, 2020

10:45 - 11:15 am PRESENTATIONS:

- SESSION A** **Expanding Eden - Upgrading the Eden Valley Water Treatment Facility:** Logan Dixon, Stoney Nakoda Nation and Jeff MacLeod, Evolve Water Solutions Ltd.
- SESSION B** **Biological Nutrient Removal Troubleshooting Tools for a Mechanical WWTP:** Daniel du Toit, Associated Engineering
- SESSION C** **EPCOR's Industrial Source Control Program:** Ryan Ledl, EPCOR Drainage Services
- SESSION D** **Selecting the Best Chlorine Analyzer for Your Facility's Needs – A comparison of DPD and Amperometric Chlorine Measurement Technologies:** Andrew Barker, Kuntze Instruments

11:15 - 12:00 pm

- SESSION A** **Flotation Without Dissolved Air: Charged Microbubbles for the Enhanced Removal of Suspended Solids:** Jeff Knollenberg, Heron Innovators, Inc.
- SESSION B** **Turning Grease into Helpful Fatty Acids:** Dennis Greenhow, Algae Control Canada
- SESSION C** **How to Bypass the Entire Flow of the 3rd Largest WWTP In Alberta:** Shane Clouston and Cory Pepper, Alberta Capital Region Wastewater Commission
- SESSION D** **Asphalt and Concrete Wastewater Awareness:** Tessa Trahan, EPCOR Drainage Services

12:00 - 1:30 pm LUNCH

THURSDAY - March 12, 2020

1:30 - 2:00 pm PRESENTATIONS:

SESSION A RVWC Raw Water Line Assessment: George Grosariu and Kevin Johnson, Rocky View Water Coop

SESSION B Biofiltration Technology for Iron, Manganese, Ammonia and Arsenic Removal from Groundwater: Dr. Babak Roshani and Sandeep Raja Danegeti, DelcoWater a division of Delco Automation

SESSION C Status and Trends of Stormwater Regulations and Stormwater Best Management Practices: Kristen Andersen, Associated Environmental Consultants Inc.

SESSION D It Takes a Village to Lift a Boil Water Advisory:
Megan Wood, WSP Canada Group Ltd.

2:00 - 2:45 pm

SESSION A How to Interpret Particle Counts & Turbidity Readings:
John Clark, Chemtrac Inc.

SESSION B Water Facility Maintenance Using Divers:
John Dickau and Steve Berube, Aquatech Diving & Marine Services Ltd.

SESSION C Cathodic Protection Interference – Line Replacement: Lyle Clarke, CRNWSC

SESSION D City of Red Deer AMR Water Meter Program: Colin Stebner and Colin Molsberry, City of Red Deer

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

THURSDAY - March 12, 2020

3:00 – 3:30 pm PRESENTATIONS:

SESSION A Making a Difference with First Nations Water-Chippewas of Nawash Perspective: Frederick Dubeau, Chippewas of Nawash

SESSION B The Role of a Dedicated Sewer Department: Bryce Friesen and Taylor Darroch, City of Lethbridge

SESSION C CLOSED

SESSION D Hydrant Monitoring to Reduce Costs and Increase Safety: Michael Rose, Silversmith Data

3:30 – 4:00 pm

SESSION A Ceramic Membrane Ultrafiltration, Granisle & Bowen Is. BC: Thomas Munding, WSP

SESSION B Crawler Chronicles: Investigating Lagoon Crawler Usage for Better Biosolids: Dagny Sanche and Brandyn Furber, EPCOR

SESSION C CLOSED

SESSION D A Better Sewer for Small Communities: Keven Kelley, Orenco Systems, Inc.

6:00 pm RECEPTION - Alpine Meadows

7:00 pm Annual Banquet – Main Ballroom
Tickets Required
AWWOA - Past Chair Award

9:00 pm ENTERTAINMENT
Misty and the Sandman
Comedy Hypnosis Show



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 13, 2020

MORNING WORKSHOP SESSION – Main Ballroom

Attendance required for 0.3 CEUs

8:30 - 11:30 am Impacts of Wildfires – It Takes a Team!
Join us for a presentation and discussion on Alberta's 2016 Wildfires. Various perspectives and impacts will be discussed from the operators involved in the day to day response to the thoughts and insights of the team leader for the provincial recovery task force.

Presenters: Lane Simon and Paul Curtis, Regional Municipality of Wood Buffalo
Dana Woodworth, Associated Engineering, Team Lead for the 2016 Horse River Wildfire Provincial Recovery Task Force.

11:30 am CLOSING REMARKS
Darrin Wenzel, AWWOA Chair

AWARD RECIPIENTS

From last year's seminar award ceremony

**2018 GERALD SAMUEL OPERATOR
OF THE YEAR AWARD**

**Curtis Kerr
Town of Cardston**

2019 RON BAYNE SERVICE AWARD

**Bert J Miller
City of Red Deer**

**2019 STEVE BLONSKY HONORARY
LIFE MEMBERSHIP AWARD**

**Ralph Havinga
and
Don MacKinnon**

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 | DXP-Natpro | 59 Capital H2O Systems Inc |
| 2 | Donison & Associates Ltd | 60 KETEK Group |
| 3 | Mueller Canada | 61 Delco Water |
| 4 | Evoqua Water Tech | 62 Klearwater Equipment & Technologies Corp |
| 5 | Westech Industrial Ltd | 63 NAIT |
| 6 | W.R. Meadows | 64 Robar Industries |
| 7 | Mequipco Ltd | 65 EPG Pipe |
| 8 | JWC Environmental | 66 Denso North America Inc |
| 9 | Brenntag Canada | 67 SFE Global |
| 10 | Nexom | 68 & 69 Martech |
| 11 | Endress+Hauser Canada | 70 IPEX Inc |
| 12 | Insituform Tech Ltd | 71 Spartan Controls |
| 13 | McKay Water Works | 72 Galaxy Plastics |
| 14 | Hydrasurvey Ltd | 73 THURO Inc |
| 15 | Kaizen Lab | 74 Image Inspection Services Ltd |
| 16 | Cam-Trac Inspection Services Ltd | 75 Pond Pro Canada Ltd |
| 17 | Top Shot Concrete | 76 Waste Go |
| 18 | ClearTech Industries | 77 CARO Analytical Services |
| 19 | Trojan Industries | 78 Reed Manufacturing Co |
| 20 | GF-Urecon | 79 Mountainview Systems |
| 21 | Lambourne Environmental | 80 Stowell Pumps |
| 22 | VEGA Instruments Canada | 81 Waste 'n Water Tech Ltd |
| 23 | Alberta Wilbert Sales Ltd | 82 Abloy Canada Inc |
| 24 | APWA Alberta Chapter | 83 Intrepid Group Ltd |
| 25 | Cubex Ltd | 84 DWG Process Supply Ltd |
| 26 | Carbon Controls Ltd | 85 Utility Supply (West) |
| 27 | Wolseley Water Works | 86 Proline Fittings |
| 28 | Accu-Flo Meter Service | 87 Ford Meter Box |
| 29 | Victaulic | 88 Norwood Waterworks |
| 30 | Clear Water Controls | 89 Proform Construction Products |
| 31 | Fuji Pipe Locators Ltd | 90 John Brooks Company |
| 32 | Superior Equipment Sales | 91 Target Products |
| 33 | Elemental Marketing & Remediation | 92 IVIS Construction Inc |
| 34 | Kayden Industries | 93 EMCO Waterworks |
| 35 | Alberta Enviro. & Parks | 94 General Pipe Cleaners/ Kupferle Hydrants |
| 36 | SRP Control Systems Ltd | 95 Wajax |
| 37 | WJF Instrumentation Ltd | 96 & 97 Summit Valve and Controls |
| 38 | ICONIX Waterworks | 98 Hayward Gordon |
| 39 & 40 | CIMA Canada Inc | 99 Mission Communications |
| 41 | Aqua Clear Environmental | 100 Taber Solids Control |
| 42 | Netzsch Canada Inc | 101 Wika Instruments |
| 43 | Chem International | 102 Telematic Controls |
| 44 | Vanko Analytical & Instrumentation Specialists | 103 Frontier Supply |
| 45 | Tundra Process Solutions | 104 CB Process Instrument. & Controls |
| 46 | J.C. Industries | 105 HACH |
| 47 | Cascade Geotechnical Inc | 106 Hetek Solutions Inc |
| 48 | Calgary Sewer Scope Inc | 107 Wachs Canada Ltd |
| 49 & 50 | North Fringe Industrial | 108 Arndt Motor and Pump |
| 51 | QQR Mechanical Contracting Ltd | 109 Liberty Pumps |
| 52 | Camenex Control Systems | 110 Fernco/Source One Environmental |
| 53 & 54 | Electrogas Monitors | 111 Sanitherm |
| 55 | Alta-West Hydrant & Hottaping Service | 112 AWI (Anthratch Western Inc) |
| 56 | Bay Industrial | |
| 57 | Fabco Plastics Western Ltd | |
| 58 | Algae Control Canada | |

List of Exhibitors

- | | |
|---|---|
| 113 RIDGID | 130 MPE Engineering Ltd |
| 114 Ramtech Environmental | 131 Aquatera Utilities |
| 115 Canadian Dewatering | 132 Hayward Flow Control |
| 116 & 117 Xylem | 133 Sego Industries |
| 118 & 119 Chamco Industries | 134 Aaron Drilling |
| 120 N.S. Pawliuk & Son Contracting Ltd | 135 Veolia Water Technologies Canada |
| 121 TDH Fluid Systems Inc | 136 Advance Diving Projects |
| 122 Cambridge Brass | 137 Unified Alloys |
| 123 Joe Johnson Equipment | 138 Metercor Inc |
| 124 Revive Pipe Restoration | 139 & 140 LineStar Utility Supply |
| 125 Pacific Flow Control Ltd | 141 & 142 United Rentals |
| 126 Bureau Veritas Labs | 143 CGI Instrumentation |
| 127 EnReach Hot Tap Services | 144 Acti-Zyme Products Ltd |
| 128 Eramosa Engineering | |
| 129 Aquatech Diving & Marine | |

*The Alberta Water & Wastewater
Operators Association
wishes to thank*

AEC Industrial Solutions

Alberco Construction

Algae Control Canada

ALS Global

Aquatera

ATS Traffic Ltd

BioMaxx Environmental

ClearTech Industries Inc

Engineered Pipe Group

EPCOR

Eramosa Engineering

Johnson Insurance

MPE Engineering Ltd

Mueller Canada

Municipal Service & Suppliers Association

Robar Industries

Stantec

The City of Calgary

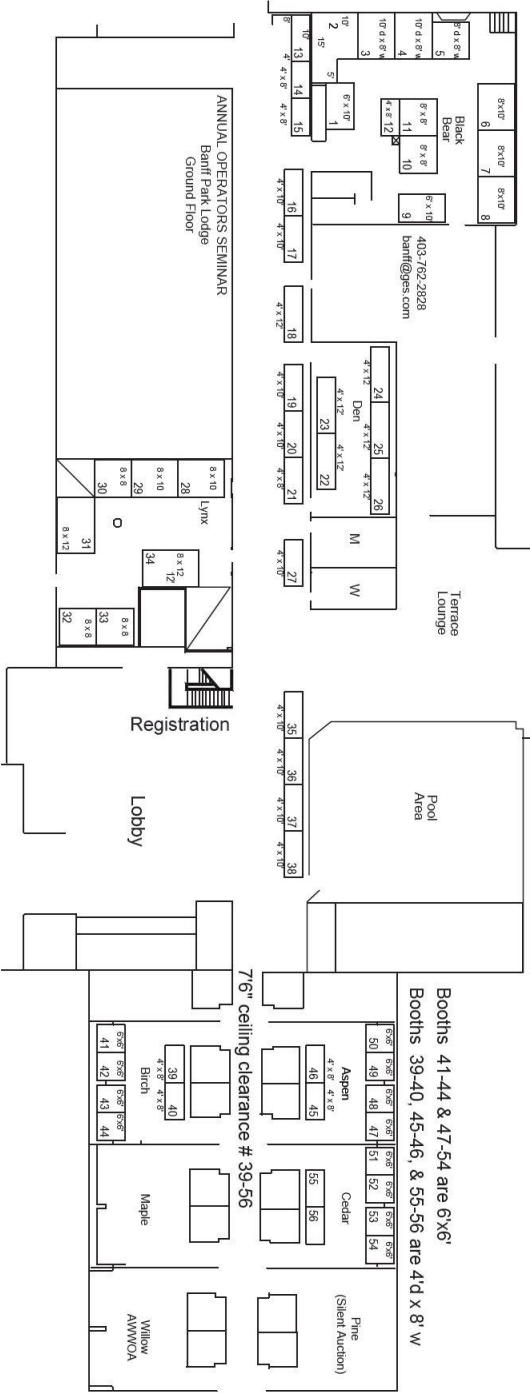
Waterfall Security Solutions

Western Canada Water

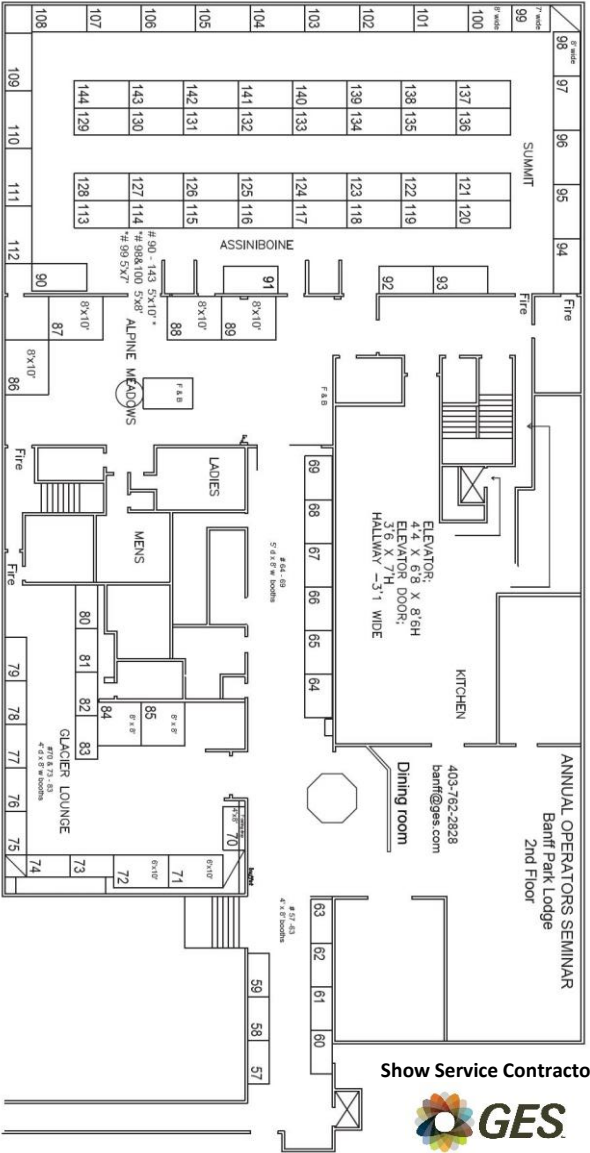
Wolseley Waterworks

for their generous support!

Banff Park Lodge Lower Level



Banff Park Lodge Upper Level





ALBERTA WATER & WASTEWATER OPERATORS ASSOCIATION

45th 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

@awwoa

#AWWOA2020

