



**ALBERTA WATER & WASTEWATER
OPERATORS ASSOCIATION**

42nd Annual Seminar

March 13-17, 2017

Banff Park Lodge, BANFF

**ALBERTA WATER & WASTEWATER
OPERATORS ASSOCIATION**

2016 - 2017 EXECUTIVE

Bert J. Miller, Chair

City of Red Deer

Ryan Ropcean, Vice Chair

Aquatera Utilities

Nancy McAteer, Past Chair

Town of Penhold

Andy Bebbington

Town of Devon, WCW Representative

Dave Harrison

County of Forty Mile No. 8

Don Erechuk

Public Facilities Category

Doug Thorson

Life Member

Ed Spohr

EPCOR Water Services

George Wybenga

EPCOR Water Services

John Greathead

Town of Fox Creek

Mike Bureaud

EPCOR Water Services

Paresh Dhariya

Town of Devon

Ryan Moray

Town of Banff

Tim Gourlay

TSAG – Circuit Rider – Training

AWWOA Staff

Dan Rites, Executive Director

Cathie Monson, Training Program Coordinator

Kirstin Mihaychuk, Member Services

Erin Ciezki, Technical Program Coordinator

MONDAY - March 13, 2017

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

**Workshop #1 - 8:30 – 12:00 Noon (0.3 CEUs)
An Interactive Session on How Municipal Water Policies
Affect Operators**

Municipalities have been challenged to provide sustainable water and wastewater services in light of aging infrastructure, regulatory changes, funding shortfalls, a shortage of skilled operators, and challenges in responding to regionalization opportunities. This presentation will review examples of the municipal water policies and provide for an interactive discussion on how it all affects the industry's operators.

Presenters: Jillian Cormier, AUMA; and Rachel de Vos, AUMA

**Workshop #2 - 8:30 – 12:00 Noon (0.3 CEUs)
Utility Projects: Considerations for Operators**

This workshop will focus on operator considerations towards water & wastewater projects from initial assessment of existing infrastructure needs and risks to project development, completion and commissioning.

Presenters: Sue Howard, PL. Eng., PMP; and Tracy Allen, P. Eng., M. Eng., MBA, PMP

12:00 - 8:00 pm Registration - Hotel Lobby

**Workshop #3 - 1:00 – 4:30 (0.3 CEUs)
Chemical Feed - Practical Applications**

Water and wastewater treatment processes rely heavily on the addition of chemicals. This workshop provides a practical introduction to the selection and use of chemical feed equipment for chemicals commonly encountered in water and wastewater treatment.

Presenters: Max Wong and Harry Chan, Capital H2O

**Workshop #4 - 1:00 – 4:30 (0.3 CEUs)
Hazardous Locations in Wastewater Facilities**

This workshop provides an overview of the regulatory requirements and the operational considerations associated with hazardous locations in municipal wastewater facilities.

Presenter: Allan Bozek, EngWorks Inc.

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

Silent Auction - Pine Room

6:00 - 9:00 pm Trade Show Reception

TUESDAY - March 14, 2017

8:00 - 4:00 pm Registration - Hotel Lobby

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

Workshop #5 - 8:30 – 12:00 Noon (0.3 CEUs)

New Technologies in Watermain Replacement

Insitu technologies are both labour saving and cost effective in the rehabilitation of water distribution pipes. Whether it is burst replacement or insitu lining, operators need to understand the options available and choose the technology that best suits their specific situation.

Presenter: Al Turner, Canadian Induracoat

Workshop #6 - 8:30 – 12:00 Noon (0.3 CEUs)

Energy Optimization Opportunities in Water & Wastewater Operations

Next to the cost of employment, electric power is the second greatest expense in water and wastewater operations. Climate change linked to greenhouse gas emissions have policy makers establishing plans and priorities with an escalating carbon tax in Alberta in 2017. Strategic energy management policies, equipment upgrades, process control optimization, and electricity demand response will be covered in this workshop.

Presenters: Warren Mitchell, Devin Marshman and Steve Barker, Spartan Controls

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

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



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

The **AWWOA** values your input.

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

WEDNESDAY - March 15, 2017

- 8:30 - Noon** **Registration** – Hotel Lobby
- 9:00 - 9:15 am** **Official Opening** - Ballroom
Bert Miller, Chair, AWWOA
- 10, 20, 30 & 40 Year Membership Awards**

MORNING SESSIONS – Banff Park Lodge Ballroom

- 9:15 - 10:00 am** **Alberta Environment & Parks Update**
Jeff Charrois, Tanya Hunter and Donald Reid, AEP
- 10:00 - 10:20 am** **Alberta Job Grant Overview**
Richard Lemaire, Alberta Labour
- 10:20 - 10:30am** **COFFEE - Alpine Meadows**
- 10:30 - 10:45am** **The Water School**
Dave Ericson, Hillcrest Financial
- 10:45 - 12:00pm** **“Battling the Beast” Response and Recovery to Canada’s Worst Natural Disaster:** Moderator: Garry Drachenberg, Associated Engineering
Discussion Panel: Travis Kendel, Regional Municipality of Wood Buffalo; Steve Justus, Associated Eng.; Brian Brost, City of St. Albert and Jeff Charrois, AEP
- 12:00 - 1:30 pm** **LUNCH**
- 1:30 - 2:45 pm** **AWWOA ANNUAL GENERAL MEETING**
Summit Room
- AWWOA Door Prize Draws** - Three Prizes – Must be in attendance to win.
- Find the Hydrant Draw** – Two Prizes
- 2:45 – 3:00 pm** **COFFEE – Alpine Meadows**

AFTERNOON SESSION “A” Castle Room

Session Moderator – Tony Wizniuk

- 3:00 – 3:45 pm** **The Advantages of Remote Monitoring in Collection Systems:** Brogan Quist, SmartCover Systems
- 3:45 - 4:15 pm** **Piloting of Oxygen-Based Forcemain Odor Control:** Davey Robertson, EPCOR and Max Wong, Capital H2O
- 4:15 – 4:45 pm** **Implementing a Cross Connection Program:** Colin Stebner, WCS AWWA and Troy Murray, City of Red Deer

WEDNESDAY - March 15, 2017

AFTERNOON SESSION "B" Assiniboine Room

Session Moderator – Erin Gallagher

3:00 – 3:45 pm **Operation Risk Management Strategies for Capital Projects:** Chris Monson and Doug Simpson, Colliers Project Leaders

3:45 - 4:15 pm **Characterizing Source Water Organics and Pretreatment to Mitigate Ultra Filtration Membrane Fouling :** Amanda Scott and Barry Pynn, GE Power

4:15 – 4:45 pm **Membrane Autopsy: A Troubleshooting Tool to Optimize Water Systems:** Mazen Ellabban, PWT Professional Water Technologies

AFTERNOON SESSION "C" Summit Room

Session Moderator – KC Stone

3:00 – 3:45 pm **Gibbons Pump Station Bypass: Our Experience with a Fisheries Act Violation:** Mike Darbyshire and Cory Pepper, Alberta Capital Region Wastewater Commission

3:45 - 4:15 pm **Drinking Water Challenges in the Amazon Basin: A Story of Elevated Fluoride in Rural Bolivia:** Jesse Skwaruk, EPCOR

4:15 – 4:45 pm **SCADA The Next Generation – Strathcona County Case Study:** Zane Spencer, MPE Engineering and Mark Williams, Strathcona County

CASINO

7:30 – 10:30 pm **Social Event**
Sponsored by Wolseley
Main Ballroom,
Games and Prizes
Name Tag is required for admission

THURSDAY - March 17, 2017

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

MORNING SESSION “A” Castle Room

Session Moderator – Jim Hepler

9:00 – 9:30 am **Wastewater Source Control:
Development of Oil & Gas
Sector Code of Practice:** Wade Teveniuk,
Alberta Capital Region Wastewater
Commission

9:30 – 10:15 am **Unique, Compact Hollow Fiber Rack
Assembly to Reduce Footprint and
Energy:** David Shin, Hydranautics – A
Nitto Group Company

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

10:45 – 11:15 am **Impact of non – Flushables on
Wastewater Systems:** Vanessa Higgins
and Tony Wizniuk, Strathcona County

11:15 - 12:00 pm **CCTV / GIS Asset Management
“Connecting the Dots”:** Amie Forsyth
and Mark Maurier, Cam-Trac Inspection
Services Ltd.

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

MORNING SESSION “B” Assiniboine Room

Session Moderator – Daris Podgurski

9:00 - 9:30 am **Water Quality Based Effluent Limits for
the City of Wetaskiwin – and What to
do About Chlorine False Positives:** Dörte
Köster, Hutchinson Environmental
Sciences Ltd. and Danielle McIntosh, City
of Wetaskiwin

9:30 - 10:15 am **Improvement of Anaerobic Sludge
Digestion Using Biological Environment
Technology:** Jonathan Lee, Acti-Zyme

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

10:45 – 11:15 am **Using UMVs / Drones to Improve
Hydrographic Survey Quality
and Operator Safety:** Nathan
Sikkes and Andy Tenham, McElhanney
Land Surveys Ltd.

11:15 – 12:00 pm **Sludge Reduction in Lagoons: A More
Affordable Approach:** Dr. Paul Deprez,
Nordevco Associates Ltd.

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

THURSDAY - March 17, 2017

MORNING SESSION "C" Summit Room

Session Moderator – Erin Gallagher

- 9:00 - 9:30 am** **A Guide to Laboratory Quality Control and Method Detection Limits:**
Blair Easton, ALS Environmental
- 9:30 - 10:15 am** **"Beyond the Catch Basin" – Advances in Storm Water System Sediment Removal:** Brian Brost, City of St. Albert and Craig Jones, BOS Solutions
- 10:15 - 10:45 am** **COFFEE - Alpine Meadows**
- 10:45 – 11:15 am** **Hinton Water Treatment Plant – 6 Years Later:** Richard Tombs, ISL Engineering and Land Services Ltd.
- 11:15 – 12:00 pm** **UV 101 – Compliance with Reduced Chemicals – Is it the Right Solution?:**
Phyllis Butler Posy, Atlantium Technologies
- 12:00 - 1:30 pm** **LUNCH**

AFTERNOON SESSION "A" Castle Room

Session Moderator – Jim Hepler

- 1:30 - 2:00 pm** **Operational Reporting, Technology and Results:** Adam McCardle, Eramosa Engineering
- 2:00 - 2:45 pm** **The Importance of Networking in Advancing Your Career:** Kim Fath, Town of Vulcan, Carl McDonnell, Town of Carstairs and Scott Chant, Town of Olds
- 2:45 – 3:00 pm** **COFFEE - Alpine Meadows**
- 3:00 – 3:30 pm** **Mixing Best Practices:** Rana Elbittibssi, Xylem
- 3:30 – 4:00 pm** **The Basics on Electrical Equipment Used by Operators and Maintenance – MCC, Switchgear, VFDs, SoftStarts and Motors :** Marc Goldade, Carbon Controls

THURSDAY - March 17, 2017

AFTERNOON SESSION "B" Assiniboine Room

Session Moderator – Tony Wizniuk

- 1:30 - 2:00 pm** **Optimization of the Red Deer Water Treatment Plant Residuals Outfall to Determine Water - Quality Based Effluent Limits:**
Tara Roumeliotis, Hutchinson Environmental Sciences Ltd.
- 2:00 – 2:45 pm** **Drinking Water Electronic Reporting – File Based Data:** Kathleen Pongar, Government of Alberta, Environment & Parks (AEP)
- 2:45 – 3:00 pm** **COFFEE - Alpine Meadows**
- 3:00 – 3:30 pm** **Fun Times Planning, Commissioning and Running a Tertiary Filtration Pilot:**
Daniel DuToit, Associated Engineering and Debbie Wier, Regional Municipality of Wood Buffalo
- 3:30 – 4:00 pm** **Process Reliability and Efficient Operations Depends on Effective Polymer Management:** Martin Caspar, Jason Boomhour, Chris Howorth & Simon Vincent, Veolia Water Technologies Canada Inc.
- 6:00 pm** **RECEPTION - Alpine Meadows**
- 7:00 pm** **AWWOA Annual Banquet and Awards Presentations – Tickets Required**
- 2016 NAIT Achievement Awards
- Steve Blonsky Honorary Life Membership Award
- 2017 Ron Bayne Service Award
- 2016 Gerald Samuel Operator of the Year Award
- Past Chair Award
- 9:00 pm** **ENTERTAINMENT**
The Wardens – Original music and stories from the backcountry of the Canadian Rockies

FRIDAY, March 17, 2017

MORNING WORKSHOP SESSION - Ballroom

Attendance required for 0.3 CEUs

Moderator: Bert Miller, Chair, AWWOA

8:30 – 11:30 am **Reconnect With Water – Blue Mind**
This workshop will provide insight into a ground breaking conversation surrounding Blue Mind, a New York Times Best Seller by author Wallace J. Nichols, on the the benefits of being in, on, under or simply near water. Nichols will share research, stories and provide an interactive session. Operators can discuss what attracted them to a career in water and further explore their connection to this vital element.

11:30 am **CLOSING REMARKS**
Bert Miller, 2016 – 2017 Chair, AWWOA

PAST RECIPIENTS OF THE GERALD SAMUEL OPERATOR OF THE YEAR AWARD

1984	Steve Blonsky High Prairie	2000	Karen Waldick Linden
1985	Denis R. Gray Nanton	2001	Bob Einarson Rocky Mountain House
1986	Lyman "Sonny" Crowther Whitecourt	2002	Harold Lewis Vulcan
1987	Barry Parker Swan Hills	2003	Randy Reaman Red Deer
1988	Burton Hingley Lomond	2004	Gordon Miller Rocky View Water Coop
1989	Albert Bourlon Valleyview	2005	Malcolm A. McKinnon Standard
1990	John Thoma Fairview	2006	Gordon Fournier Drumheller
1991	Guy Jette Fort McMurray	2007	Kerry Clark EPCOR Edmonton
1992	Ken Osepchuk Smoky Lake	2008	Keith Straub High Level
1993	Ernie Formanek St. Paul	2009	Randy Cyba Vegreville
1994	Brent Applegate Wandering River	2010	John Girhiny EPCOR Edmonton
1995	John White Granum	2011	Dwayne Cikaluk ACRWC
1996	Bob Quinn Calgary	2012	Doug Renwick Aquatera
1997	Andy Maguire Edmonton	2013	Steve Solic Taber
1998	Barry Brookes Red Deer	2014	Curtis Schultz Aquatera
1999	Bruce MacLennan Rosemary	2015	John Zacharias MacKenzie County

**PAST RECIPIENTS OF THE
RON BAYNE SERVICE AWARD**

1985	Gerald Samuel	2001	Harold Lewis
1986	Ron Bayne	2002	Kathy Abramowski
1987	Herb Zinger	2003	Mike Pelletier
1988	Ken Elstone	2004	Doug Thorson
1989	Award not presented	2005	Frank Wetsch
1990	Del Morrison	2006	Garth Carl
1991	Award not presented	2007	Terry Chapman
1992	Louis Hedberg	2008	Carl McDonnell
1993	Steve Blonsky	2009	Glenda Donovan-Malik
1994	Dalton Stafford	2010	Kim Fath
1995	Bob Vatcher	2011	Award not presented
1996	R. Lynne Coulter	2012	Nancy McAteer
1997	Bert Miller	2013	K.C. Stone
1998	Ed Westerbeek	2014	Allan Kendrick
1999	John Barrett	2015	Cathie Monson
2000	Andy Bebbington	2016	Dwayne Cikaluk

**PAST RECIPIENTS
OF THE STEVE BLONSKY
HONORARY LIFE MEMBERSHIP**

2001	Steve Blonsky	2011	Glenda Donovan-Malik
2002	Herb Zinger	2012	Andrew T. Maguire
2007	Doug Thorson & Harold Lewis	2013	Not Awarded
2008	John Barrett	2014	Del Morrison & Gerald Samuel
2009	Norm Grexton	2015	Not Awarded
2010	Gerald Will	2016	John Thoma & Ron Freng

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

Aquatera

Biomaxx Wastewater Solutions Inc.

CIMA Canada Inc.

Cognera

EPCOR

Eramosa Engineering Inc.

MPE Engineering Ltd.

**Municipal Service & Supplies Association
(MSSA)**

Wolseley Canada Waterworks

for their generous support

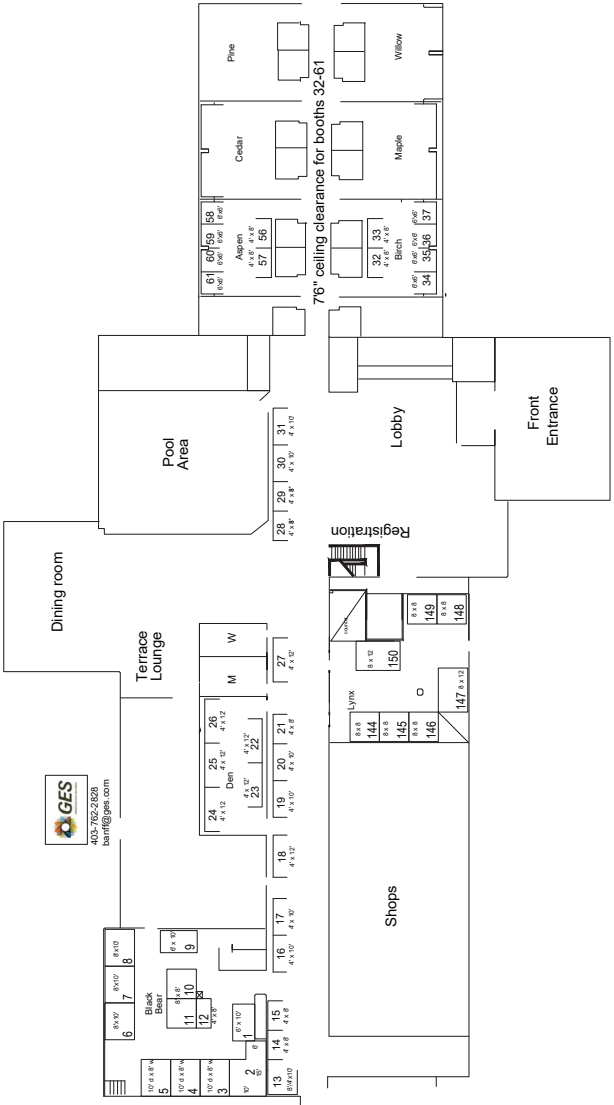
List of Displayers

Willow	AWWOA	56	Mountainview Systems
Pine	Silent Auction	57	J.C. Industries
Maple	BioMaxx WasteWater Solutions	58	Aqua Clear Environmental
Cedar	New Line Trenchless Technologies	59	Calgary Sewer Scope
1	Hetek Solutions	60	North Fringe Industrial Technologies
2	CD Nova	61	North Fringe Industrial Technologies
3	A. H. McElroy Sales & Service (Canada)	62	Fabco Plastics
4	Urecon Pre-Insulated Pipe	63	Georg Fischer
5	National Process Equipment (Natpro)	64	Capital H2O Systems
6	W.R. Meadows of Western Canada	65	Atek Water Systems
7	Mequipco Ltd.	66	Klearwater Equipment & Technologies
8	ATS Traffic Group	67	NAIT
9	CIF Composites	68	Robar Industries
10	JWC Environmental	69	Mueller Canada
11	ISCO	70	Nexom
12	Evoqua Water Technologies	71	Anthratech Western
13	Wolseley Waterworks Group	72	IPEX Inc.
14	Kaizen LAB	73	Johlin Measurement
15	Trojan Industries	74	Galaxy Plastics
16	McKay Waterworks Supply	75	Chamco Industries
17	Cam-Trac Inspection Services	76	Arndt Motor and Pump
18	Top Shot Concrete	77	NG Inc.
19	ClearTech Industries	78	Metercor
20	Alberta Municipal Services Corp	79	Univar Canada
21	SRP Control Systems	80	Procesco
22	Advance Diving Projects	81	Strata Controls
23	Simark Controls	82	Trenchless West
24	Cubex	83	StonCor Group
25	Western Tank and Lining	84	Insituform Technologies
26	Carbon Controls	85	Abloy Canada
27	Lambourne Environmental	86	IDEXX Laboratories
28	Environment & Parks	87	DWG Process Supply
29	Hach & Cam-Am	88	Hayward Gordon
30	Corix Water Products	89	Norwood Waterworks
31	WJF Instrumentation	90A	IVIS
32	Canada Colors & Chemicals	90B	Spartan
33	AMHSA	91	John Brooks Company
34	United Rentals	92	Kupferle Hydrants
35	United Rentals	93	Canadian Dewatering
36	United Rentals	94	Unified Alloys/ Pro-Line
37	BOS Solutions	95	Camenex Control Systems
		96	Summit Valve and Controls

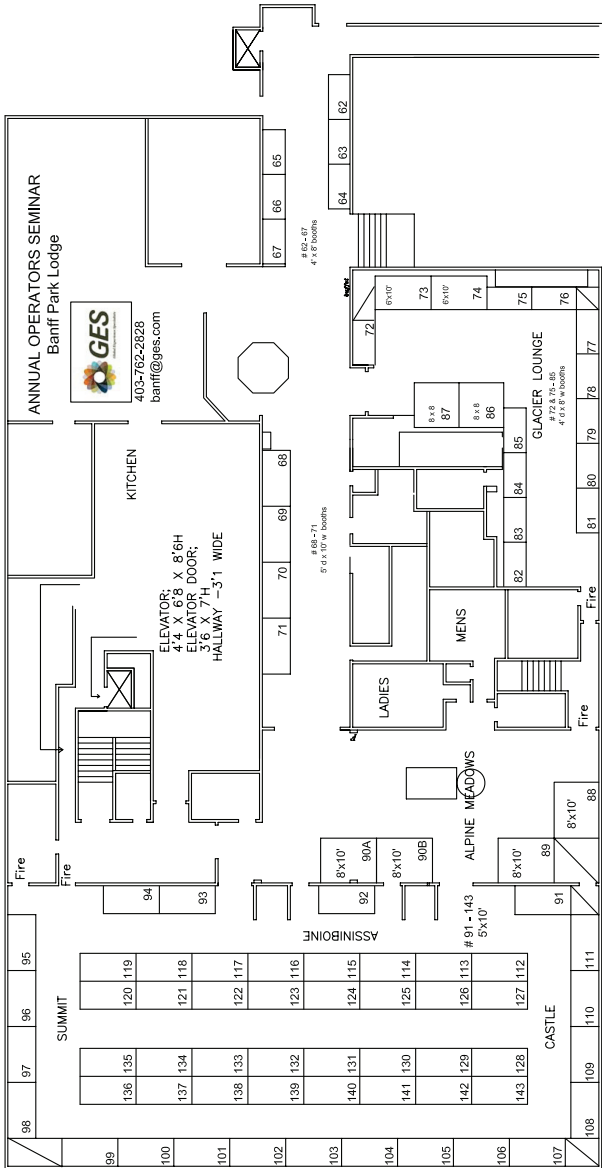
List of Displayers

97	Reed Manufacturing	141	Linestar Utility
98	USC Utility Supply	142	Linestar Utility
99	Canadian Leak Detection	143	McElhanney Land Surveys
100	Taber Solids Control	144	Accu-Flo Meter Service
101	Vanko Analytics	145	Victaulic Company
102	Frontier Waterworks & Pump	146	Johnson Inc.
103	Brenntag Canada	147	Clear Water Controls
104	Autosol	148	Superior Equipment
105	Advanced Water Technologies	149	SHAC Environmental Products
106	Colliers Project Leaders	150	Kayden Industrial
107	Ramtech Environmental		
108	Liberty Pumps		
109	RIDGID		
110	Western Pump		
111	Ford Meter Box		
112	Xylem Inc.		
113	AVK Valves & Hydrants		
114	Telematic Controls		
115	Cambridge Brass		
116	E.P. Engineered Pump		
117	ALS		
118	Target Products		
119	N.S. Pawliuk & Son		
120	TDH Fluid Systems		
121	Veolia Water Technologies		
122	AGAT Laboratories		
123	Acti-Zyme Products		
124	KSB Pumps		
125	Star Pipe Canada		
126	MPE Engineering		
127	Westron Pumps		
128	McElhanney Land Surveys		
129	Aquatech Diving		
130	Aquatera Utilities		
131	Donison & Associates		
132	Sii 360		
133	Sii 360		
134	Eramosa Engineering		
135	Wajax Industrial		
136	Wajax Industrial		
137	Kemira		
138	Meltric Corporation		
139	CIMA Canada		
140	Wachs Canada		

Banff Park Lodge Main Level



Banff Park Lodge Upper Level





ALBERTA WATER & WASTEWATER OPERATORS ASSOCIATION

42nd Annual Operators Seminar

Sponsored by:



FUND RAISING 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 pm
Tuesday: 10:00 am to 5:00 pm.

All funds raised
support the Water School