

H₂Oregon

Fall 2017
Vol. 39, No. 4

Proposed Rules Changes
OAR 333-061 PAGE 3

Highlights from the 23rd
Annual Summer Classic PAGE 4

MARKYOUR CALENDAR:
Conferences in Hood River,
Florence, and Sunriver PAGE 7

A publication of Oregon Association of Water Utilities
Read H₂Oregon online at www.oawu.net

Smart Solutions. Clean Water.



tag-inc.us

541.359.3755

TAG *The Automation Group*

INTEGRATION | SCADA | CONTROLS | INSTRUMENTATION

On-Call Technicians Available 24 hours / 7 days a week.





H₂Oregon

Fall 2017
Vol. 39, No. 4

WANTED

Your photos and articles for inclusion in H₂Oregon. OAWU requests your best photos of Oregon water scenery for our magazine covers and artwork!

Please mail your photo to our office. If we use your photo on the cover you will receive an official OAWU shirt and hat.

We are also seeking articles, clean jokes, Oregon trivia, letters to the editor and interesting stories. Please send submissions (no more than two pages in length) to:

Oregon Association of Water Utilities

935 N. Main St.
Independence, OR 97351
(503) 837-1212
Fax (503) 837-1213

Cover Photo by Mike Collier
Pine Hollow Reservoir, Oregon

CONTENTS

Proposed Rules Changes—OAR 333-061 by Jason Green, Executive Director	3
OAWU's Summer Classic 2017	4-5
OAWU's Annual Golf Scramble	6
Upcoming Conferences	7
Orphanage Experience—The Value of Water submitted by Hans Schroeder and Laura Alleslev	8-9
Thanks to OAWU's 2017 Sponsors	9
OAWU Operations & Projects by Scott Berry, Operations Manager	10
Need CEUs? Training at YOUR Facility!	10
Stormwater by Jeff Crowther, Wastewater Technician	12
Charged Up by Tim Tice, Projects Manager	14-15
Leak Detection by Heath Cokeley, Programs Manager/Circuit Rider	16-17
NRWA Fleet Program	17
Failure IS an Option by Mike Collier, Deputy Director/Sourcewater Specialist	18
OAWU Training & Events Schedule	19
System O&M Manuals Required	20
Quiz Corner	21
What Makes Us Rise? (part 2) Throwing My Loop by Michael Johnson	22-25
Need to Review Water or Sewer Rates? OAWU Can Help!	26
OAWU Does More	27
Membership Application Form	29
Membership Roster	30-32

We Appreciate our Advertisers!

Please take a moment to view their ads.

4B Engineering & Consultants	11	Neptune	11
American Flow Control	11	Oregon DEQ: Clean Water State Revolving Fund	25
American Leak Detection	25	Oregon Meter Repair	13
Bancorp Insurance	26	Owen Equipment	13
BioLynceus	19	PACE	19
BMI	20	Pittsburg Tank & Tower	15
Branom Instrument Co.	15	Sherwin-Williams	13
Cascade Columbia Distribution Co.	20	Special Districts Association of Oregon	22
EJ	23	The Automation Group	Inside Front Cover
Engineering America	Inside Back Cover	The Ford Meter Box	11
Ferguson Waterworks	13	TriPac	25
H.D. Fowler	13	USA BlueBook	Back Cover
Krausz	24		
Lakeside Utilities (EZ Street Cold Asphalt)	21		

Oregon Association of Water Utilities

935 N. Main St.
Independence, OR 97351
Ph: (503) 837-1212
Fax: (503) 837-1213

Notice: Oregon Association of Water Utilities invites you to prepare a short article about your water system or other topics which would be of interest to our readers. We also welcome articles from our associate members. The Publisher reserves the right to reject or edit any articles received for publication. Statements of fact and opinion are the responsibility of the authors alone and do not imply an opinion on the part of OAWU.

Send your articles with full color photographs, in digital format if possible, to the address listed above.

OAWU has the right to reject any advertising deemed unsuitable for the OAWU publication. Acceptance of advertising by OAWU does not constitute endorsement of the advertiser, its products or services, nor does OAWU publication make any claims or guarantees as to the validity of the advertisers offer.

H2Oregon is the official publication of the Oregon Association of Water Utilities, and is published quarterly for distribution to representatives of rural and municipal suppliers. Issues are mailed free of charge to member and nonmember rural water/wastewater associations. Articles and photos are encouraged with payment in complimentary copies.

H2Oregon is published for the Oregon Association of Water Utilities by **Mt. Angel Publishing, Inc.**

135 N. Main St., Mt. Angel, OR 97362
503-845-9499 fax: 503-845-9202
www.mtangelpub.com

OAWU Staff Members

Jason Green, Executive Director
jgreen@oawu.net

Mike Collier, Deputy Director
Sourcewater Specialist
mcollier@oawu.net

Mark Russell, Office Manager
mrussell@oawu.net

Donna Bernt,
Administrative/Financial Assistant
dbernt@oawu.net

Heather Davis, Administrative Assistant
hdavis@oawu.net

Tim Tice, Projects Manager
ttice@oawu.net

Scott Berry, Operations Manager
sberry@oawu.net

Heath Cokeley,
Programs Manager, Circuit Rider
hcokeley@oawu.net

Hans Schroeder, Circuit Rider
hschroeder@oawu.net

Jeff Crowther,
Wastewater Technician
jcrowther@oawu.net

For advertising information,
contact the OAWU office:

935 N. Main St., Independence, OR 97351
(503) 837-1212
office@oawu.net • www.oawu.net

H₂Oregon

OAWU Officers & Board Members

PRESIDENT

Edson Pugh

Deschutes Valley Water
881 SW Culver Hwy.
Madras, OR 97741
Phone: (541) 475-3849
Fax: (541) 475-6013
edson@dvwd.org
Rep. Reg. 3, exp. 2020

TREASURER

Micah Olson

City of Columbia City
700 N. College St.
Newberg, OR 97132
Phone: (971) 563-3128
micah@olsonllc.com
Rep. Reg. 1, exp. 2019

NRWA DIRECTOR

Mark Kerns

Avion Water Co.
60813 Parrell Rd.
Bend, OR 97702
Phone: (541) 382-5342
Fax: (541) 382-5390
mark1222229@icloud.com
Rep. Reg. 3, exp. 2018

VICE PRESIDENT

Mike Edwards

City of Bend
62975 Boyd Acres Rd
Bend, OR 97701
Phone: (541) 317-3050
Cell: (541) 480-6530
medwards@bendoregon.gov
Rep. Reg. 1, exp. 2018

SECRETARY

Matt Johnson

City of Amity
P.O. Box 159
Amity, OR 97101
Phone: (503) 835-4181
mjohnson@ci.amity.or.us
Rep. Reg. 5, exp. 2020

PAST PRESIDENT

Mark Beam

Ice Fountain Water District
1185 Tucker Road
Hood River, OR 97031
Phone: (541) 386-4299
Fax: (541) 386-7228
mbeamifwater@hrecn.net
Rep. Reg. 2, exp. 2019

Board of Directors

Ed Butts

4B Engineering & Consultants
3700 River Road N., Ste. 2
Keizer, OR 97303
Phone: (503) 589-1115
Fax: (503) 589-1118
epbpe@juno.com
Assoc. Mbr. Rep. exp. 2018

Gay Melvin

City of Dufur
PO Box 82
Dufur, OR 97021
Phone: (541) 467-2336
Fax: (541) 467-2353
gaybmelvin@ortelco.net
Rep. Reg. 3, exp. 2018

Phil Davis

Odell Water Company
P.O. Box 166
Odell, OR 97044
Phone: (541) 354-1393
pkdavis@hrecn.net
Rep. Reg. 2, exp. 2020

Craig Sheldon

City of Sherwood
15527 SW Willamette St.
Sherwood, OR 97140
Phone: (503) 925-2310
sheldonc@sherwoodoregon.gov
Rep. Reg. 2, exp. 2020

Tim Lyda

City of Tillamook
801 Laurel Ave
Tillamook, OR 97141
Phone: (503) 842-2343
tlyda@tillamookor.gov
Rep. Reg. 3, exp. 2018

Don Chandler

Nantucket Shores Water Co.
PO Box 236
Cloverdale, OR 97112
Phone: (541) 490-1419
lochsadon@yahoo.com
Rep. Reg. 1, exp. 2019

VACANT

Rep. Reg. 1 exp. 2019



OAWU's mission is to provide service, support and solutions for Oregon water & wastewater utilities to meet the challenges of today & tomorrow.

Proposed Rules Changes

OAR Chapter 333, Division 061

Jason Green, Executive Director



Recently, Oregon Health Authority, Drinking Water Services (OHA-DWS) completed proposed rule changes and updates to OAR 333-061. Proposed changes were presented to the Drinking Water Advisory Committee (DWAC) followed by a USPS notification and a site link to the proposed rules, a hearing date, and a request for public comment. To review the proposed rules online go to: www.oregon.gov/oha/PH/HealthyEnvironments/DrinkingWater/Rules/Pages/rulemaking.aspx — OHA-DWS encourages written comments and/or attending the hearing. The last day to make comments has been extended to October 25th.

Various groups are involved in review and comments, including: DWAC, Oregon Water Utility Council, League of Oregon Cities, Special Districts Association of Oregon, and Oregon Association of Water Utilities.

Much work has gone into preparation and review of the proposed rule changes with water utilities seeking clarification, intent, and flexibility of the seismic resiliency addition. Which, if adopted, will affect future master plans prepared by those utilities serving 300 or greater connections and/or 1,000 population or greater. During a review meeting on October 10th, OHA-DWS Manager, David Emme, commented that it is important to leave flexibility for the systems because, fundamentally, a master plan is there to serve the community and system, not the state.

Proposed rule for seismic resiliency: 333-061-0060(5)(J)

The second major area of consideration is relating to routine, repeat, and special coliform bacteria sampling. Over the years, unless intent is specifically spelled out, original intent and design of a rule may become less clear than when originally adopted. Whether this is the case, or not, regarding coliform sampling, many systems have used Special sampling to take additional tests to ensure safe drinking water is in the distribution system, at customer's homes, at the source, for new construction, special tests, etc. It is OAWU's opinion that the recent proposed changes, if adopted, would greatly limit the use of special tests, leaving essentially only routine and repeat tests for operators to monitor various conditions they may wish to use a special sample to monitor with.

Proposed rule for Special samples: 333-061-0036(6)(a)(A)(v)(III)

Currently, various water professionals and groups are working with OHA-DWS personnel to meet the needs of operators, utilities/systems (keeping the various regions, sizes, customer bases, and complexities in context), and state regulatory requirements and needs. We will keep you informed on these updated rules as they become clarified and adopted. 💧



OAWU's Summer Classic 2017

The weather for this year was fantastic and the activities were great. Monday's pre-conference provided great classes, the eclipse, and a few extra CEUs to those who attended. The conference was kicked off by an opening session given by OAWU's Executive Director, Jason Green, and a legislative update by Mark Landauer. Tuesday held the evening outdoor barbecue with a meet and greet social, exhibitor prize give-away, followed by a bonfire on the beach. Wednesday continued with a full day of classes; some took the afternoon off to participate in the annual OAWU Golf Scramble at Gearhart Links. Thursday concluded the conference at noon with some final words and the highly anticipated raffle drawings and cash prizes.

- Thank you to this year's Gold Sponsor – EJ; Silver sponsors – H.D. Fowler and M&H/Kennedy Valve; and to our Bronze sponsors BergerABAM and CoBank
- Bonfire beverages sponsored again this year by Ferguson Waterworks

- Annual golf scramble at Gearhart Links which hosted 9 full teams
- At closing session, Thursday, OAWU gave away over \$1,500 in merchandise and \$200 in cash prizes
- This year's WaterPac raffle winner Remington 11-87 Sportsman Field 12 gauge was Brice Reick, City of Seaside
- The Jeff Swanson Memorial Scholarship raffle for a Glock Model 19, 9mm, went to Scott Rettinger, City of Lincoln City
- The winner of a full registration to the OAWU Sunriver Conference in March 2018 was won by Jack Grell, City of Lake Oswego

Mark your calendars for next year's OAWU Summer Classic in Seaside, Oregon August 20-23, 2018. See you there! 💧





OAWU's Annual Golf Scramble

Seaside, Oregon – Gearhart Links Golf Course – August 23, 2017

The sun was out most of the day, it was pleasantly warm and we had very little wind throughout the day; it was a perfect day to hit the links for this year's scramble. The staff at the Gearhart Links Golf Course were accommodating, friendly, and professional, helping to make the day even more enjoyable.

Nine teams challenged the course this year, making for a great competition. No one was safe from the errant drive, misjudged chip shot, or the mocking one received when their shot landed two fairways over; we must also admit that there were many great players and many awesome shots on the course again this year. The day was very pleasant and the banter helped build camaraderie throughout the scramble.

Special thanks to this year's event sponsor - Lakeside Industries, to The Ford Meter Box and Lakeside Industries for being this year's hole sponsors and for their support of the attendees and the Association.

The three winning teams were:

1st place – Simon Cartwright, Dave Olson, Alden Mead, and Eddie Kreipe

2nd place Tie – Doug Lewis, Doug Ashley, Johnathan Georgeades, and Brian Haage

2nd place Tie – Scott Motsinger, Don Miller, Ron Watts, and Chris Stark

The winners of the golfing competition games were:

Longest Putt #1 – Chris Stark

Longest Putt #2 – DJ Ezell

KP Men's #1 – Bill Van Eck

KP #2 – Steve Redford

KP Women's #1 – none

Longest Drive Men's #1 – Kevin Cedergreen

Longest Drive Women's #1 – DJ Ezell

Longest Drive #2 – Eddie Kreipe

Special thanks go out to Jeff Crowther (Circuit Rider), Heath Cokeley (Circuit Rider), and Tim Tice (Projects Manager) who helped make sure the scramble went off without a hitch. 💧



Mark your calendars for OAWU's next Summer Classic at Seaside, August 20–23, 2018.

It is a great location to enjoy while you earn CEUs and network with the associate members and your peers.



MARK YOUR CALENDAR

**Fall Operator's
Conference
Florence
Nov. 6–9, 2017**



UPCOMING CONFERENCES

**End of Year Operator's Conference
Hood River, December 4–7, 2017**



**40th Annual Management &
Technical Conference
Sunriver, March 5–9, 2018**





Orphanage Experience –

submitted by Hans Schroeder and Laura Alleslev

My “Danish daughter,” Laura, wanted to share her story about working at an orphanage in Kenya. Laura comes and stays with us, her “American family” every other year. It’s always exciting when she comes to visit us for a month. And here is her story:

Eight years ago, I made a life changing decision – I wanted to become an exchange student in the US. During my stay, I met an amazing guy, Casey Kyle Riddle, who passed away, way too young, last year. He introduced me to his family and before I knew it I was part of his wonderful family and I am now Hans and Tina’s “Danish daughter.”

I come back to visit every other year and in 2014, when I was in the states they introduced me to some family members who have adopted kids from an orphanage in Uganda. That really inspired me to do some volunteer work. When I returned to Denmark I googled different orphanages in Africa and I came across The Hope House Babies Home in Nairobi, Kenya. I wrote them and two months later I was on the plane, on my way to take care of the babies at the orphanage.

I spent two months at Hope House Babies Home and I completely fell in love with all the babies. I was with the newborn to 6 months old babies and I usually had 8 or 9 babies at a time – it was hard work! But I loved it, every single day. The orphanage didn’t have a lot of money, so I raised \$2000 before I went and spent it on different things the orphanage needed; diapers, infant formula, milk, rice, bread, soap, baby oil, cotton, sugar, detergent, corn flour, toilet paper and so on. But what we actually needed the most was water.

The water storage tank held approximately 10 days worth of water. The local supervisors just didn’t seem to understand to “pre-plan.” It usually took 3-4 days to get water delivered, when the tank was only 1/3 full they wouldn’t order more water. I never understood why the tank had to be empty before ordering more water. Sometimes we didn’t have any water for days. That meant we couldn’t give the babies a bath, we couldn’t give them a fresh diaper (because they used cotton diapers and we couldn’t wash them) and we couldn’t even feed them because we needed water for the infant formula. The orphanage did everything in their power to take good care of the babies; we just didn’t have the money to have water all the time.

I, who am from a western culture, had a very hard time working under these conditions. For me it was a human right to have water and even though I knew that they have a lot of poor people in Africa, I guess I didn’t want to believe how big the problem was ‘till I was stuck in the middle of it all. It broke my heart every time we had to be out of water for a couple of days, but I and all the other staff members tried our hardest to make it as comfortable as possible for the babies during those days. The staff was always full of love and joy, even on the hardest days and they did a lot of singing and dancing around with all the babies every single day.

-The Value of Water

It was truly a blessing being able to volunteer at the orphanage and care for all these lovely babies for two months. I wish I could have stayed longer, but I had to go back to Denmark and start nursing school. This project truly touched my heart, and it is still something I care a lot about. Not a day goes by when I don't think of all the babies. The Hope House Babies Home has my full support, and I would like to spread the word to everyone who has a little extra time or money to help them out. To find out how you can donate or become a volunteer, check out their website: www.hopehousebabieshome.org.

About the Hope House Babies Home (from their website):

Hope House Babies Home is based in Nairobi, Kenya. It was started in April 2002, by Australian Christian missionaries, Pastors Glen and Robert Bruce of African Growth Ministries.

The home opened with two babies and has since grown to care for up to 24 babies at any one time. We accept babies aged between one day to six months. They are brought in mostly from hospitals and clinics where we

care for them until they are either adopted or reach the age of three years. If a baby reaches the age of three and is not adopted, they transition them to a carefully vetted home that care for older children.

Since the home was started, over 450 babies have been adopted, mostly by Kenyan families. Each adopted child has adapted well to their new family. The Home receives no funding from the Government and relies completely on the generosity of people from Kenya and overseas to provide the necessary funds and gifts needed to care for the babies and maintain the home.

Every day I'm grateful for the life I have and that I'm able to travel the world and help out where ever I go. Casey Kyle Riddle was an inspiring person, he cared so much for other people and he always put the needs of others before his own, he let me be part of his life and his family welcomed me with open arms, like I was their own. Without him and his family I would probably have never gone to Kenya, but they have truly shown me what love is about, and I will do everything I can to spread this love to everyone I meet. 💧

A Special Thanks to Our 2017 Sponsors

GOLD SPONSOR

EJ

SILVER SPONSORS

HD Fowler Kennedy/M&H Valve

BRONZE SPONSORS

BergerABAM CoBank

DIAMOND, **GOLD**, **SILVER**, and **BRONZE** sponsorships are available.

TO BECOME A SPONSOR, CALL 503-837-1212



OAWU Operations & Projects

by Scott Berry, Operations Manager

Over the past 40 years, OAWU has focused primarily on training and onsite technical assistance for the water and wastewater systems in Oregon. We will continue to provide the same high level of attention to those services, but we are now offering additional services, as well.

Operations: Does your small utility find itself in need of a DRC, Operator of Record, or Operations and Management for your water or wastewater systems? Our team of qualified professionals can assist your utility in day-to-day operations, as well as, provide stability and longevity in meeting regulatory requirements.

Projects: OAWU is equipped to provide leak detection, leak loss surveys, smoke testing, lagoon profiling, external tank inspections with high quality drone video, installation of pipe, service connections, valves, fire hydrants and any other appurtenances at very competitive pricing. These services are not new to our seasoned and competent staff. Call us for an estimate on your next project.

Tailored Training: OAWU can provide training on topics designed to meet your utility's specific needs. Our instructors work directly with your utility managers and staff to develop a "menu" of training topics that will meet the needs of Continuing Education Units, as well as, train future certified operators. We can design a training program for a single class, multiple sessions, consecutive days, or with recurring frequency. Take the frustration out of those monthly safety meetings by allowing us to provide the topics.

Written Plans: We offer water and wastewater Rate Studies, Water Management and Conservation Plans, required management plans, sampling and emergency plans, and other documents necessary to meet regulatory compliance.

We are here to support the water and wastewater utilities of Oregon. 💧

Need CEUs? Training at YOUR Facility!

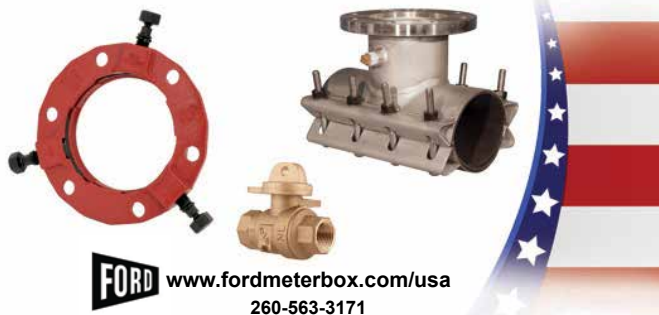
Let us design a training program that can be brought to you. We will come to your utility and tailor the training to meet your needs. Presentations can include safety, management, operations, maintenance, certification, math, and more.



Call for more info: (503) 837-1212 www.oawu.net

Made in the USA!

Look to Ford Meter Box for U.S. Manufactured Products



www.fordmeterbox.com/usa

260-563-3171

Contact Ford Meter Box for AIS and Buy America compliant products

Civil • Electrical • Control Systems • Environmental
Engineering & Consultation
Certified Water Rights Examiner
Water & Waste Water System Design & Consultation
Pump System Analysis & Consultation

4B ENGINEERING & CONSULTING

Edward Butts, PE, BCEE, CWRE
Principal/Chief Engineer
503-589-1115
503-881-7100 (cell)
epbpe@4bengineering.com

3700 River Rd. N
Suite 2
Keizer, OR 97303
503-589-1118 (fax)
www.4bengineering.com

ARB® UTILITY
MANAGEMENT
SYSTEMS™



MORE COVERAGE
THAN EVER.

GET YOUR 2X WITH THE v4.

The R900® Gateway v4 fixed network data collector



NEPTUNE
TECHNOLOGY GROUP

TAKE CONTROL | neptunetg.com



IN 1929, AMERICAN INVENTED THE MECHANICAL JOINT. TODAY WE BRING YOU ALPHA™.

Few things in the waterworks industry have been as innovative as the Mechanical Joint. Times have changed. And so has AMERICAN. Introducing the AMERICAN Flow Control Series 2500 with ALPHA™ restrained joint ends. Now, you can use the same valve for ductile iron, HDPE, PVC, and even cast iron pipe. Unlike MJ, the restraint accessories come attached, leaving only one bolt on each end to tighten. That saves you time and money.

The AMERICAN Series 2500 with ALPHA™ restrained joint ends – it's the only gate valve you'll ever need.

ALMOST ANY MATERIAL.
NO TIME AT ALL.



AMERICAN
FLOW CONTROL
THE RIGHT WAY

www.american-usa.com

PO Box 2727, Birmingham, AL 35207 • Ph: 1-800-326-8051 • Fx: 1-800-610-3569

EOE/Vets/Disabilities

ALPHA™ is a licensed trademark of Romac Industries Inc. (U.S. Patent 8,894,100)

DUCTILE IRON PIPE FLOW CONTROL INTERNATIONAL SPIRALWELD PIPE STEEL PIPE



Stormwater

by Jeff Crowther, Wastewater Technician

Many of us receive grants or other funding for our most important infrastructure. When we think about upgrading our utility network, my guess is most immediately think of the sanitary collection or water distribution. Many utilities don't give the funding, time, and consideration needed to its stormwater system. I will outline why the storm system shouldn't be an afterthought, but should be something we actively pursue funding for before it presents an issue.

There are two major concerns regarding stormwater. These are conveyance, or the amount of flow running through a system; and treatment, which protects the receiving waterbodies. The conveyance aspect of the stormwater system is the most obvious, since an inadequacy will cause flooding. Although a major inadequacy can often be seen quickly, minor issues will only be seen when a major storm event hits. These issues during major storms can be avoided by conducting a proper engineering study prior to the storm and upgrading any undersized lines. Although the public does not normally notice these systems working well, they will be very aware if issues cause damage to their property.

The second aspect of a stormwater system is water quality. Proper treatment protects the receiving water bodies from pollutants, and keeps Oregon wildlife and recreation centers healthy and happy. Examples of treatment systems that provide water quality treatment are stormwater swales, planters, and proprietary treatment systems. The system that works best needs to be site specific and should be chosen on a project by project basis, due to numerous variables having an impact on the design. One aspect that often gets overlooked in design and design considerations is incorporating these systems into the overall aesthetics of our jurisdiction, as well as, ongoing maintenance needed to provide a functioning system. This may be achieved with well planted stormwater planters that act as landscape strips, or swales that are planted with grasses and shrubs.

There are many ways to fund these upgrades. We can designate a monthly fee on the water and sewer bill that will go directly to stormwater improvements and management. We see a lot more Cities and Agencies using the stormwater fee approach. We can also contact USDA regarding loans and grant possibilities that may work for infrastructure improvements.

I hope I have convinced you to look at your current system and evaluate funding options and improvements that may be needed. It is always best to be proactive and look to the future rather than react to the situations that occur. I believe it will benefit your jurisdiction, your residents, and the environment in general. 💧



OREGON METER REPAIR, LLC

DAVE SCHLUCKEBIER

President

Mobile: (503) 970-7881

meterdave@hotmail.com



**H.D. FOWLER
COMPANY**

28800 SW Boberg Rd
Wilsonville, OR 97070

Ed Pettett
Outside Sales

503-783-3490
Cell 503-476-2804
edp@hdfowler.com



SHERWIN-WILLIAMS®
Protective & Marine Coatings

Michael A. Zach

Project Development Manager
NACE CIP Level 3 #22138

The Sherwin-Williams Company

3326 160th Avenue SE, Suite 310, Bellevue, WA 98008

mike.zach@Sherwin.com

protective.sherwin-williams.com

Ph: 425-643-2017 ext 114 Cell: 206-817-5137 Fax: 425-643-8653



FERGUSON® Ask us About:
Waterworks **FERGUSON
ONLINE**

YOUR COMPLETE SOURCE FOR WATERWORKS SUPPLIES & SERVICES

- PIPE, VALVES, HYDRANTS & FITTINGS
- BACKFLOW & CONTROL VALVES
- ACCESSORIES & REPAIR FITTINGS
- WATER METERS & AMR/AMI PRODUCTS & INSTALLATION – ELSTER-AMCO & DATAMATIC
- SERVICES DIVISION: • HOT TAPPING & SERVICE TAPPING • VALVE/LINE STOP INSERTION • CHLORINATION/DECHLORINATION • HDPE FUSION
- CASTINGS
- SERVICE BRASS
- DRAIN PIPE/MATERIAL & GEOTEXTILES

Darrin Andersson

Municipal Sales, All of Oregon

P) 503-507-1754

E) Darrin.Andersson@Ferguson.com

Tom Aldrich

Municipal Sales, All of Oregon

P) 541-928-1329

E) Tom.Aldrich@Ferguson.com

7 Branches To Serve You:

Portland 503-240-6747 Vancouver 360-896-8708 Hillsboro 503-547-0208 Salem 503-362-2436 Eugene 541-501-0512 Redmond 541-548-2865 Medford 541-618-7411



**EQUIPMENT & ACCESSORIES FOR
PUBLIC WORKS**

SEWER CLEANING
HYDRO-EXCAVATING
PIPELINE INSPECTION
LINE LOCATING
LEAK DETECTION
VALVE OPERATING
ROOT CONTROL
GREASE / ODOR CONTROL
STREET SWEEPING

**SCHEDULE A
PILOT
PROGRAM
TODAY!**
(800) 992-3656



Product Spotlight:



Municipalities rely on Helix Laboratories for non-hazardous chemical and microbial solutions to combat F.O.G. (fats, oils and grease) and harmful sulfides.

Optimizing sewer function to benefit communities, the environment and waste water infrastructure.

NOW RENTING NOZZLES!
Rent the tool you need for specialty jobs



"The Standard of the Industry"



**EXCLUSIVE SALES
PARTNER**



VACTOR



CHECK OUT OUR ONLINE STORE
shop.owenequipment.com

800-992-3656

THREE FULL-SERVICE LOCATIONS
Oregon • Washington • California



Charged Up

by Tim Tice, Projects Manager

In the Fall 2016 issue of H2Oregon, we wrote about the launch of our new “Energy Efficiency Circuit Rider” program, which includes initial reviews of the efficiency of electric motors for both water and wastewater utilities. The program, funded through USDA- RD allows our association to provide no-cost energy assessments for utilities.

A year has passed and we would like to share some findings with those operators who have yet to schedule a visit. Much has been learned and more will develop as the program continues. For now, we encourage you to call the office to arrange a visit and see how we can assist you. The findings for our initial year:

- Total of 30 assessments were completed, 20 for water and 10 for wastewater
- Highest single entity (water/wastewater) annual savings was \$29,354.00
- Highest single water utility savings was \$22,145.00
- Highest single wastewater utility savings was \$16,370.00
- Average percentage of proposed saving for wastewater utility is 22.6 percent
- Average percentage of proposed savings for water utility is 28.9 percent

Some discoveries behind the numbers may be helpful to provide ideas for operational changes for the utility:

- Long running times for motors (18-20 daily hours) may not necessarily require a variable frequency drive, but possibly a soft start
- A motor’s load factor should be considered along with the efficiency, since the latter is provided in nominal terms, and this percentage can be in the range of 20 percent
- Load factor, measured in percentage, is a measure of uniformity with which energy is used and a high-level percentage implies a more constant rate of electrical use
- Most electric motors are designed to operate at 50 to 100 percent-rated load, and operate most efficiently at 75 percent load
- Operational times may play a role in determining total cost as many power companies have set hours when the cost per kilo-watt increases due to the cost of stored power

An example would be:

A utility consumes 211,000 kWh (kilo-watt hours) throughout one year and has an average load factor of 65 percent. By simply increasing the load percentage from 65 to 75, the operating cost is reduced approximately \$150.00 per month. Any motor that may operate 1,000 plus hours annually, should be considered for an analysis for both load and efficiency.

Overloaded motors can overheat and lose efficiency. Found on the nameplates or operating manual, the service factor is a multiplier that indicates how much a motor can be overloaded, most are rated at 1.15. which informs us that a 10 Hp motor can handle an 11.5 Hp load, but only for short periods of time. Operating a motor above the rated loads will reduce both the motor's life and efficiency. We see over-sized motors designed for and put into operation to account for peak demands. However, many times, we see flow is throttled down by a partially closed valve to accomplish a different objective.

Steps can be taken to increase load factor and efficiencies and decrease energy costs. Arrange the pumping schedule so motor operations can be completed during

non-peak hours. Reset operational times to prevent multiple pumps from simultaneous start-up.

This past year has certainly enlightened me to the everyday costs that are generated by the consumption of electrical energy. The association invites utilities to inquire about an energy assessment and see if findings from your system are like those from the initial year. The association is also gaining momentum in networking with energy experts to further assist in the implementation of the second step: replacing and upgrading the motors on either water or wastewater systems.

If you are interested in the Association performing an energy assessment, please contact us to begin the process. *The best that life has to offer!* 💧

PITTSBURG TANK & TOWER MAINTENANCE CO., INC.

SAVE!
We have a crew in
YOUR AREA!

Inspections

Wet
Dry
ROV

Repair

In Service
Cleaning
Paint
Insulation

New & Used

Relocation
Erection
Dismantles

Tanks

Elevated
Underground
Ground

ROV inspections can be viewed on TV console
During inspection & DVD provided. All inspections
include bound reports, recommendations, and cost estimates.

Patrick Heltsley

(270) 826-9000 x 4601
270-748-1325

Don Johnston

(270) 826-9000 x 1001
(270) 748-1343

www.watertank.com

Branom Instrument Co.

Since 1947

BRANOM
INSTRUMENTATION

*We are a manufacturer's representative that understands
solutions for water/waste water applications and
have a wide variety of products and solutions
to meet your water/waste
water needs.*

Process Instrumentation for Control & Monitoring of:

- Flow
- Level
- Pressure
- Temperature
- Liquid Analytics

SALES • REPAIR • CALIBRATION • ON-SITE SERVICE • START-UP

www.branom.com

800-767-6051

Serving Washington, Oregon, Idaho, Alaska and Montana



Leak Detection

by Heath Cokeley, Programs Manager/Circuit Rider

I have written articles in the past about leak detection, but it has been several years and I think it may be about time for another one. One of the things I would like you to think about, when reading this article, is: *Why is leak detection important for my specific system?* and *What should our system's leak detection program look like?* The why: we may have a small system that captures their water in a spring at a higher elevation and gravity flows to a tank, then out to distribution with no pumping cost in which case leak detection may be a lower priority. Not that you would ever want to waste water, but if it's going to cost us more to find and repair the leaks than it's going to save us over time, it may just be a lot lower on the priority list than other things we have on our plate. The other side of it is we may have a system that is already at capacity and needs every drop, or a surface water plant where the cost to produce the water and pump it is such that finding and repairing a leak could be a big cost savings to the system.

After evaluating where the priority of finding and repairing leaks is for our specific system we can start to decide what our leak detection program should look like. I know in previous articles I have talked about low cost ways to evaluate our system for leaks. One example is: middle of the night leak audits where we isolate a section of our system when we have no water use and see if the pressure drops, being sure never to drop the pressure below 20 psi at any service or on any mainline. Another low-cost method and my personal favorite, when it comes to leak detection, is a set of Geophone acoustic leak detectors. These will typically cost around \$400 and can easily find leaks on service lines by placing them on the meter face when the customer is not using water. They can also pinpoint leaks below ground from the surface, depending on the surface material. The one downside to the Geophones is they are very sensitive and so care needs to be taken when using them. If we have the listening part in our ears and drop them on the ground or have something close by hit the ground, in my case a shovel being tossed out of a pickup bed, they can do permanent damage to your hearing.

If we have looked at or tried these options and are looking for the next step up in leak detection some type of electronic acoustic leak detector may be in order. There are many different kinds and brands of electronic acoustic leak detectors that are available for the water industry and I have used many of them with good results. The Association has an older Fisher unit that we can loan out to member utilities and I have found many leaks with that machine. The newer unit the Association has purchased for the Association staff to use to help systems find leaks is a Subsurface LD-18. I recently helped a small system that had requested assistance in locating a

leak, which proved this unit's worth. I could pinpoint a leak that was up the road 100 plus feet and on the opposite side of the road from where the water was surfacing. This ability to pinpoint a leak before excavating can provide a large cost savings compared to exploratory excavation.

If our system is looking for the next step up still from electronic acoustic leak detection equipment, we may want to consider a leak correlator. These units can be placed on sections of pipe and evaluate that section for a leak, if it does, where that leak is and then we can more accurately pinpoint that leak with an acoustic leak detector. The Association has looked at these units for some time and has just recently purchased one with the hopes of utilizing it as one of our many services we

can provide to our member utilities, as the cost of these units can make it a difficult piece of equipment for a small utility to buy.

In this article, I have tried to go over a handful of different types of equipment to look for leaks in a distribution system, but there are many more tricks of the trade and technologies out there that may meet our system needs. I always enjoy, when I am out visiting with system Operators, when they share about how they approach leak detection, what has worked for them, or what hasn't. As that gives me the opportunity to take those stories and information to other water utilities. I hope you find something to take away from this article and with that I'll see you down the road. 💧

NRWA Fleet Program

The National Rural Water Association has created partnerships with the Ford Motor Company and the Chrysler Group to offer special fleet discounts to State Rural Water Associations and their utility system members. This partnership combines the buying power of 31,000 individual utilities to provide reduced fleet pricing on utility vehicles.

The Rural Water Fleet Program is a valuable member benefit for water and wastewater utilities. State Rural Water Associations determine eligibility for their members, and provide a fleet code that allows access to substantial vehicle discounts to fill the need for reliable work vehicles.

Contact your State Rural Water Association to access the Rural Water Fleet Program. Vehicles may be purchased at your local dealer or



through the national fleet auto group at www.nrwafleet.com. Incentive discount pricing is available on fuel efficient cars, vans, SUVs and trucks. Systems can save up to \$6,750 off factory invoice per vehicle.

Happy shopping!



Program Details

- Entities must be current members of State Rural Water Associations to be eligible.
- There is no limit to the number of vehicles that can be purchased under the program.
- Incentive pricing is deducted off the factory invoice.
- Fleet vehicles must be in service for a minimum of 12 months or 20,000 miles.
- Vehicles must be registered and operated in the United States.
- Call OAWU today to get your Fleet Identification Number (FIN).



Failure IS an Option

by Mike Collier, Deputy Director/Sourcewater Specialist

It seems like many people are afraid of failure. To try something and fail is something we all experience multiple times throughout our lives, maybe even throughout our day. It is something in life we will experience and hopefully learn and grow from. Failure in relationships, athletics, school, or work. Failure is not the problem, we all do it, it is our reaction to a failure that shapes who we are. Fixation, anger, disappointment, regret are all responses to failure. If these are temporary, depending on the situations, these responses may be appropriate. These responses are a reaction to being hurt from the failure they can stem from arrogance and/or pride, insecurity, or selfishness. We can see this natural reaction in a child after they lose at a game, they will get angry and sad, say that it is not fair, and may start to cry. These feelings are innate in humans, coping with these feelings, working through them, trying to learn from the experiences, and trying to be empathetic to others who are struggling with a failure are positive steps we can take. We must get over it, learn from it and move on.

To continue to fixate, be angry, or hurt from a failure can manifest itself into anxiety or depression. It is good to recognize the failure and figure out what can be done, if anything, to be successful in the future. An important step toward avoiding anxiety and depression stemmed from the idea of being a failure is to understand that a failure does not make us who we are. Taking control of our thoughts and not letting us define ourselves by what we, falsely, believe to be the worst possible outcome – a failure. It is vital to understand that I am an individual, who is not perfect (this is ok), I have many great attributes and abilities.

If we have trouble effectively getting over our failures it may help to take some time to write down a list of our good qualities. We can take time after we have failed at something to look through the list to remind us of who we really are. This can help us overcome the negative thoughts that can impact us after a failure. As once said by Winston Churchill, “success is not final, failure is not fatal: it is the courage to continue that counts,” and Henry Ford stated that, “failure is simply the opportunity to begin again, this time more intelligently.”

All great inventors and great leaders have failed and tried again, and again, and again, and again. This is the way humans learn and figure out what works, or doesn't work. We should not be afraid to fail, it provides the opportunity we need to develop and grow. We never know what kind of impact may take place when someone is willing to overcome this struggle, new strengths may develop in the individual they didn't realize they had, or new ideas may come about that end up changing the world for the better. An additional note is to realize that we don't have to try to figure out every situation by ourselves. Before we fail or succeed it is important to seek the opinions of others around us, they may have some experiences that could help us to avoid a few of our own failures. If you struggle with putting yourself down after a failure I hope you can glean something from this article that you can put into practice and if you don't struggle after a failure I hope you can be sympathetic and help those that do. 💧

TRAINING & EVENTS SCHEDULE

Date	Class Title	Location	CEU Information	ESAC#, Fee/Free
November 6	Effective Utility Management	Florence	0.6 Water/Wastewater	3520 FREE
November 6-9	2017 Fall Operators Conference	Florence	2.0 Water/Wastewater	3520 Fee
November 14	Water Management Conservation Program	Beaverton	0.3 Water	3504 Fee
November 15	Water & Wastewater Field Operations & Safety	Eugene	0.6 Water/Wastewater	2944 Fee
December 4	Effective Utility Management	Hood River	0.6 Water/Wastewater	3536 FREE
December 4-7	19 th Annual End of Year Operators Conference	Hood River	2.1 Water or Wastewater	3536 Fee
December 12	Water & Wastewater Field Operations & Safety	Newport	0.6 Water/Wastewater	2944 Fee

Levels 1-4 Water Operator Exams

Trained and certified operators are necessary to ensure that the systems are managed in a manner that fully protects public health and the environment. The OARs for certification stipulate that the qualifying experience for applicants for certification as a water treatment plant operator must attain at least half the required operating experience at a public water purification plant that uses complex filtration technology and is not more than one classification lower than the level of certification they are seeking. In other words, if you have only worked for a Class 2 treatment plant, we allow you to apply for a Level 3 certification but not a Level 4 certification. If you move on to a Class 3 plant, then you must have ½ the qualifying experience (at the Level 3 plant) before allowing to apply for a Level 4 certification. Reciprocity from state-to-state ensures that the operator have the operating experience for which they are certified.

For additional information, please visit <http://public.health.oregon.gov/HealthyEnvironments/DrinkingWater/OperatorCertification/Levels1-4/Pages/exams.aspx>

More Resources

Drinking Water Data Online	https://yourwater.oregon.gov
Center for Health Protection	http://public.health.oregon.gov/PHD/Directory/Pages/Program.aspx?pid=4
Drinking Water Services	http://public.health.oregon.gov/PHD/Directory/Pages/Program.aspx?pid=58

Training class dates, class topic and/or locations may be subject to change as needed.

For more information on any class by OAWU, please contact the office at 503-837-1212, office@oawu.net or visit www.oawu.net.

LEARN MORE AT OAWU.NET



Optimize

**BNR
F:M Ratio
Solids Handling
Carbon Source**

970-586-3391 ♦ 888-823-7404
sales@biolynceus.com ♦ www.biolynceus.com

BioLynceus
 Environmental Solutions for Waste Water
 Providing Solutions Since 1994



Utility Design
 Structural Engineering
 Road Design
 Planning
 Survey
 Stormwater Design
 NPDES Compliance
 Stream Restoration
 Pump Stations
 LID Designs
 Bridge Construction
 Retaining Wall Design
 Water Treatment Facilities
 Water Main Replacements
 Trenchless Pipe Replacements

PACE
 An Engineering Services Company

Kirkland 425.827.2014
 Wenatchee 509.662.1762
 Lake Oswego 503.597.3222

paceengrs.com

System O&M Manuals Required

Have you completed your state-required Operations & Maintenance Manual?

Oregon Association of Water Utilities has prepared a full day class to assist operators in outlining an operations and maintenance manual per the Oregon Administrative Rule 333-061-0065 which requires each water system to develop an operations and maintenance manual.

This class will assist the water and wastewater system operator in outlining the specific points in developing the draft of the O&M manual. Step by step, each attendee will create their draft as it relates to their utility system during class. The e-file may then be completed back at the system office.

Class cost is \$160, or if you are unable to attend a class you may purchase a thumb drive with e-files for \$160. To sign up for the class, or to have a thumb drive mailed to you, contact your Association for further information. ♦



**CASCADE COLUMBIA
DISTRIBUTION COMPANY**
Water Treatment Chemical Supplier

Primary Coagulants Alum • PAC • ACH • Organic Polymers

Filter Aides

Chlorine Sod Hypochlorite • Cl Cyl • Dry Calcium Hypochlorate

Dechlorination Sodium Bisulfate • Calcium Thiosulfate • Ascorbic Acid

pH Control Sodium Bisulfate

Corrosion Inhibitors Ortho & Poly Phosphates • Sequestering Agents • Potassium Permanganate • Copper Sulfate

Fluorides Activated Carbon • Hydrogen Peroxide • Ferric Chloride • Phosphoric Acid • Citric Acid • Sodium Silicate

Specialty Products Defoamers • Odor Control

**SPECIALIZING IN A COMPLETE LINE
OF MUNICIPAL WATER TREATMENT CHEMICALS**

Call for anything special!

Jeff Zachman & Joe Price, Technical & Sales

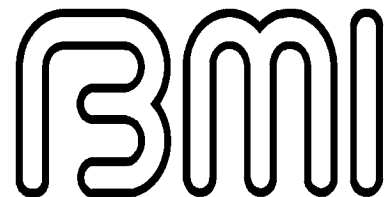
Jeff: Office/Fax 503-636-8252, Pager 503-299-0775, jeffz@cascadecolumbia.com

Joe: Office 503-266-2959, joep@cascadecolumbia.com

Orders: Portland 503-625-5293, Toll-Free 887-625-5293

Fax 503-625-4335

Serving the Pacific Northwest since 1926



Backflow Management Inc.

**WE PROVIDE COST EFFECTIVE WAYS TO
MEET ALL YOUR WATER SYSTEM NEEDS**

CONTACT US AT:

(800) 841-7689

www.bmi-backflow.com

- **TRAINING**
- **CONSULTATION**
- **PUBLIC EDUCATION PACKETS**
- **ASSEMBLY TRACKING SOFTWARE**
- **ENFORCEMENT DOCUMENTS**
- **WRITTEN PROGRAM PLANS**

"BMI is dedicated to the pursuit of clean, safe drinking water through education"

QUIZ CORNER

- What is the primary use of Greensand in water filtration system?
 - Remove lead and copper.
 - Add flavor to the water.
 - Disinfect the water.
 - Remove iron and manganese.
- During a backwash cycle on a conventional or direct water filter the filter bed should lift by roughly _____% of the liftable media?
 - 10
 - 20
 - 30
 - 40
- Of all the water on the earth, humans use only about?
 - three tenths of one percent / 0.3
 - three percent / 3.0
 - three hundredths of one percent / 0.03
 - none of the above
- Based on USA population and gallons of fresh water used each day, the average person uses?
 - 450 GPD
 - 750 GPD
 - 1,050 GPD
 - 1,750 GPD
- Of the USA population, what percent receives water from a private water source?
 - 7.0
 - 15.0
 - 27.0
 - 38.0
- What does the acronym GWUDI stand for?
 - Giardia with undiscovered direction identified
 - Groundwater under the direct influence of surface water
 - Groundwater operator under direction of instructor
- How many waterways are considered scenic waterways in Oregon?
 - 22
 - 51
 - 211
- What type of phosphorus is soluble and not particulate?
 - Poly-phosphate
 - Organic-phosphate
 - Ortho-phosphate
 - Agoro-phosphate
- What term is used to describe liquid that is removed from a digester, between an upper layer of scum and a lower blanket of sludge?
 - Subnatant
 - Effluent
 - Filtrate
 - Supernatant
- What bacterial activity measurement is expressed as mg/L/hr?
 - Respiration rate (RR)
 - Dissolved oxygen (DO)
 - Reverse osmosis (RO)
 - Oxygen uptake rate (OUR)

ANSWERS: 1-D, 2-B, 3-A, 4-C, 5-B, 6-B, 7-A, 8-C, 9-D, 10-D

EZ STREET®



503-222-6421 bill.bailey@lakesideindustries.com

Not only does it work in ALL weather conditions, it even works in standing water for quick winter repairs.

Hot box ready – safely heat to 275° F



No petroleum diesel – VOC free

EZ STREET
asphalt is easy
to apply hot or
cold and requires
no mixing or
tack coat.

EZ STREET® Utility Cuts — Bulk, Tote, or Bag



What Makes Us Rise?

Throwing My Loop... by Michael Johnson

[Continued from last issue]

Have you ever wondered how some woman can come into a small town where the basketball team just finished an 0 and 19 season and have the team winning the next year? Then the next year, they win the district. Same kids. How do people do that? I can't tell you how many horses I've seen who were vicious beasts. Those horses bucked, pawed, bit, and kicked. People said, "With as many chances as that horse had, he's just no good. He should be put on a kill truck." And someone off to the side says, "Well, if you are going to kill him, why don't you give him to me?" Next thing you know, that horse is running his heart out for that man or woman. He doesn't buck with her—his head is draped over her shoulder in the stall. How do people do that? What is that person doing differently from everyone else who ever came in that horse's life? It's the same with humans, horses, and dogs. All mammals respond to the same things.

Ever heard a coach say, "These kids today...they just don't care anymore. They're just not motivated." Ever heard that? We all have. I've always thought that is absolutely the worst thing any coach can say. It is an open admission—a confession - that

coach cannot do what he or she is hired to do. I've had a number of people tell me, "You can't motivate another person. You can't open up someone's mind and pour in desire." That is a seductive way to think. I agree the person saying those words cannot motivate another because they have never thought about motivating another. The college professor who says the students are stupid and don't belong. He needs to say that. Those with elitist views need to have someone to look down on. Such little people. It's much easier to blame. While we hear such statements from cynical people, you will never hear a "true helper" speak such words. Such thoughts never enter their mind.

Too busy changing lives, I suppose.

True helpers are rare, you know. You don't find them often... and they're a bit strange. For example, they rarely use praise—not much anyway—and they never use criticism. That's a bit odd, don't you think? We all know praise from a teacher is important, isn't it? And how do you correct someone without criticism? I don't know. All I know is that's not the way "true helpers" do it.

SDIS Special Districts
Insurance Services

Over 30 years of experience in providing specialized and affordable insurance services for Oregon's domestic water, sanitary, and irrigation districts.

SPECIAL DISTRICT INSURANCE SERVICES

SDIS has a broad offering of insurance coverages including liability, property, boiler & machinery, crime, workers compensation, and more. Members of the program also enjoy many benefits including, but not limited to:

- Training, loss control, safety consultations, risk management and claims management services
- Research and technical assistance
- Pre-loss legal services for members enrolled in the property/casualty program
- Background check and drug-free workplace program
- Member ownership of a program where surplus revenues are invested to stabilize rates and enhance service

Contact us today to learn why the majority of Oregon's special districts choose SDIS for their coverage needs.

Administered by Special Districts Association of Oregon

PO Box 12613 Salem, OR 97309

Toll-Free: 800-285-5461 Phone: 503-371-8667

Email: underwriting@sdao.com Web: www.sdao.com

SDAO
ADVISORY SERVICES, LLC

SDIS
SPECIAL DISTRICTS
INSURANCE SERVICES



After studying them for so many years, I still struggle to describe what it is they do—with the human, horse, or dog. With the seventh grader who is always in trouble, with the high school student in alternative school, or with the thirty-three year old young woman whose husband was beating her and she escaped. Now she's come to the university and is terrified she won't graduate. I still struggle to describe what exactly it is the "Pygmalion" does, but I have seen lives such as these changed with my own eyes. And when I try to describe what it is they do, I know I will fail. Like in the last nine books I've written, I will again fail to capture the magic...but it will give me such joy to try. I never tire of trying to describe that. I never tire of trying to capture the pure quicksilver thing that changed—and saved—my life.

So what did Jerry Lytle do to—and for—me?

The Helper treats others with equality.

It sprang from the first day. How many people do you know who would take the time to talk with and listen to the "least of these" at five o'clock on a Friday afternoon? *"I'm Jerry Lytle. I'll visit with you. Come in."*

From the first moment he encountered me, he treated me in a certain way—as if I were his equal. From that initial moment and for the next 50 years, Jerry Lytle always treated me as if he and I were the same in life. That small behavior on his part may seem

insignificant to some. Indeed, every poor teacher and every poor coach would consider it so...but to the downtrodden, to the lost, it is not. When someone treats us with kindness and equality, loyalty and willingness to listen to the mentor begins.

The Helper is inclusive.

Jerry Lytle had so many people in his world. He was a successful person. He had been an outstanding athlete, he had a substantial number of close friends, and was always sought after and popular...and yet he invited me into that world the first day as if I were already one of those friends. I can only imagine how many people who knew me would tell him not to do that. If someone asked Jerry Lytle, "Why on earth would you include Michael Johnson?" Jerry—like Jesus—might well have said, "Cause the righteous don't need saving."

Helpers minimize the difficulty of the task.

When I expressed fear about the requirements of academia, Jerry would say, "Well, while there is work involved, it's not work that you can't do. The work is sometimes tedious, sometimes not so exciting, but it is certainly not at a level beyond your ability."

"How can you know that?" I asked him. "Maybe I will fail."

"Only if you choose to," he said. "And the reason I know you can...is because I did."



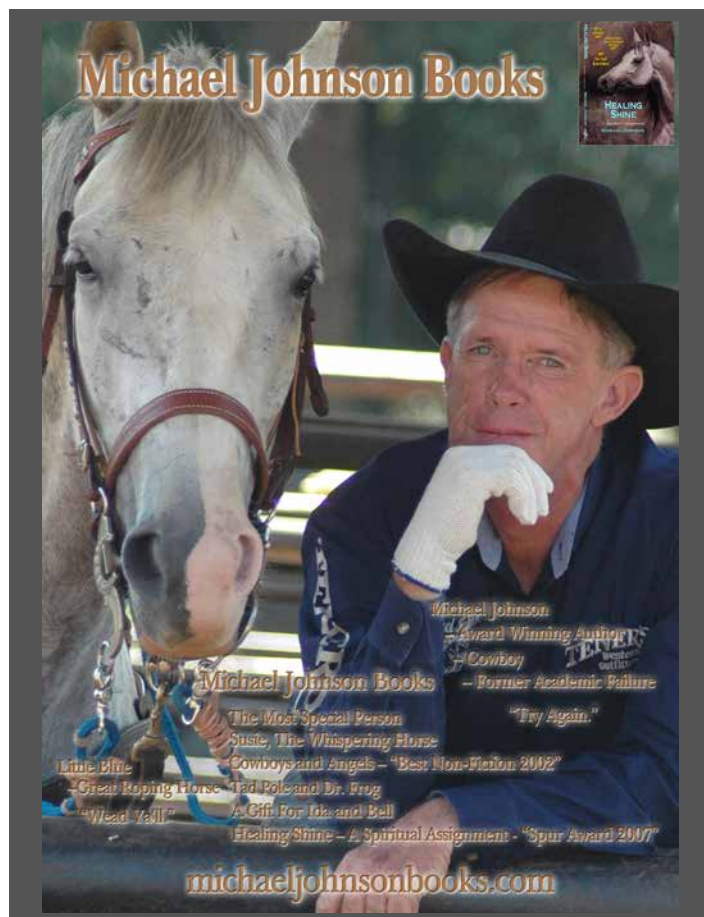
ej

We Cover Your Infrastructure®



Visit ejco.com/lunch to request a lunch and learn demo or call 800 626 4653.

Made in the USA



Helpers are focused on you doing better.

I think the poor teacher, poor coach, and poor leader make a mistake when they hear someone discussing this topic. They assume that this subject of helping means you let the student do whatever he wants, or the horse do as he pleases. They “hear” no discipline and no boundaries. This behavior translates to them as “weakness.” Those people depend almost exclusively on their authority to rule.

Contrast that with what the Helper actually does...

They do not rely on authority, but they are certainly not always nice. If, for example, the mentor finds you giving less than he or she knows you can, they will withdraw their affection quickly. You are in for a scolding and they do that skillfully. They can sting you. The Helper is interested in your success and they want nothing less. If Jerry Lytle found you not doing your best, he could give you a firm—firm—nudge in the proper direction.

Helpers lack egos.

Their focus is not on themselves. Their focus is on you. Like others with the magic, if you had a conversation with Jerry Lytle, you would find him to be skilled in the art, but the conversation would never be about him. The conversation would be about you.

Helpers last a lifetime and beyond.

When a true helper comes in your life, they never leave. No matter how long it's been since we've seen them, the conversation picks up right where we left them before. Phone calls, letters, Christmas cards, the stream continues. Always checking on us, so proud of us, a joy in our lives and we are in theirs. Jack Nicklaus had his coach, Jack Grout, for 35 years. Ben Crenshaw and Tom Kite had Harvey Penick for 40 years. They ain't got nothing on me. I had Jerry Lytle for 50 years.

I'll stop now. I could go on and on. Trust me when I tell you that. I never tire of this subject because I know what it did for me. When I help some young person now, I see the puzzlement in their face and at some point they will say, “Why are you doing this? I certainly appreciate it, but my goodness, why are you doing all this?”

And I say, “Because someone did it for me.”

One final note. There is one thing the Helper does for us more valuable than any other.

This story explains...

I took our big Australian Shepherd to a herding dog clinic in Amarillo a few years ago. Rowdy and I were both scared to

NEWEST MEMBER OF THE HYMAX® FAMILY THE TWO-BOLT HYMAX CLAMP*

HYMAX®

Repair the past. Connect the future.



- Only 2 bolts = less time in the ditch*
- The most durable permanent repair clamp
- Available in nominal sizes 3"-12"
- Extra-wide working range of up to 1.60"

FAMILY MEMBERS



HYMAX COUPLING

HYMAX VERSA



HYMAX GRIP



*Product lengths of 15" and higher have more than 2 bolts

KRAUSZ is the creator of HYMAX

For more info, visit krauszusa.com or call 855-457-2879 (855-4KRAUSZ)

death. All the other working dogs in the clinic were so smart they could do algebra, and well...let's just say Rowdy and I weren't quite at that level. We had a wonderful day however, and that experience remains one of the highlights of our lives. At the end of the day, the Master, Orin Barnes, from Canyon, Texas, said this goodbye to the crowd...

"We've had joy here today. We've all learned a great deal—especially me. I want you to remember something. I want you to remember this..."

"The great teacher is always doing the same thing. Whether working with the human, the horse, or the dog, the great teacher is always...convincing us that we can."

That's what true helpers do. They give us strength and power because they believe in us. They raise our self-esteem. They get us to try. When we fail, they stand with us and after a time, they say, "Try again." And when victory comes, they rejoice with us.

That's what Jerry Lytle did for me.

*Dr. Michael Johnson
Texas A&M University-Commerce
Distinguished Alum 2008*

Electronic Leak Detection and Correlator Leak Surveys



Portland • Eugene • Salem • Medford

888.777.5325

AmericanLeakDetection.com

TRIPAC



Bill Foster
President



951.280.4488 x112
951.272.4445 Fax
billf@tripaconline.com

475 Klug Circle
Corona, CA 92880

www.TRIPACONLINE.com



Low Cost Loans to Improve Wastewater and Stormwater

Contact CWSRF for the **BEST LOAN RATES** to public agencies for the planning, design or construction projects that prevent or mitigate water pollution.



(503) 229-LOAN
CWSRFinfo@deq.state.or.us

Scan QR code to visit:
www.deq.state.or.us/wq/loans/loans.htm



Need to Review Water or Sewer Rates? OAWU Can Help!

Take advantage of your Association's services – We Do Rates!

OAWU has built a solid reputation for providing water and wastewater systems with factual, user-friendly, and defensible Rate Studies. Our rate studies, once implemented, have allowed many systems to obtain Capitol Improvement funding from various private and government lending agencies. An OAWU rate study can also provide a plan for systems to gain the capital to “pay as you go” by outlining a strategy to maximize and streamline revenue and thereby allow water/wastewater system administrators to forecast projects that may be funded in-house. OAWU will provide you a professionally compiled rate study and supporting documentation that will allow you and your council or board to adopt new rates necessary to meet your system needs.



For bids or estimates, call OAWU: 503-837-1212.



Rex Lesueur,
Licensed Agent &
Consultant,
National Speaker
& Author

Attn: Private & Association Water Companies

Finally An Insurance Policy Designed Specifically For You, Save up to 26% off Your Current Premium and Get Individualized Protection for Your Water District!

Most water districts end up purchasing costly inadequate insurance protection that fails to provide you protection from the every day risks your water district faces. **WaterPro's** insurance program protects your district's property and its liability exposures including protection for risks like **Accidental Pollution, Failure to Supply, Equipment damage** to pumps, gages, and electrical boards, **Wrongful Acts of Boards, Employment Practices** along with a whole smorgasbord of other add-ons too numerous to list here! Stop paying for mediocre insurance coverage upgrade your protection now! **Call Rex 800-452-6826**

Don't Take Our Word for It, Our Customers Say It Best:

Rex provides EXCELLENT service, he recently went to bat for our little **Water District** and obtained **payment on a claim** that the insurance company denied! **We Don't Worry, We Have Rex**, *Erica Anderson, Christmas Valley Domestic Water Supply, Christmas Valley Or.*

“Rex's WaterPro program is one of the most comprehensive insurance programs I've ever seen. He was able to provide the Oregon Association Water Utilities with a quality program at a great price.” *Jason Green, Executive Director*

**Water
PRO**

BANCORP
Insurance

Don't Worry, Call Rex at 1-800-452-6826 Today!

OAWU Does More



- Rate Studies
- Project Management
- Interim & Contract Operations
- Water Management & Conservation Plans
- Water Rights Research
- CCR Writing & Web Hosting
- Project Operational Plans Review
- Tracer Studies
- Operation & Maintenance Manuals, ERPs, Sampling Plans, etc.
- Direct Responsible Charge Services
- System Performance & Evaluation
- Construction Project Work & Inspections
- Operator of Record Services
- Leak Detection/Water Audits
- Hydrant Repairs & Maintenance
- Reservoir Cleaning
- Tank Inspections
- Well Testing/Shocking
- Lagoon Profiles & Sampling
- Treatment Plant Efficiencies
- Drone Inspections for Tanks, Projects, Lagoons, etc.
- On-Call & Emergency Response
- Sewer I&I Testing
- Smoke Blower
- Confined Space Services
- Backflow Device Testing & Inspections
- Conferences & Formal Classroom Training
- Tailored Onsite Training for Larger Utilities
- Board Training
- Certification Reviews & Other Fee Classes

WHY AREN'T YOU A MEMBER OF OAWU?

Serving Water & Wastewater Utilities Since 1977

- We provide **onsite technical assistance and training**, meaning that we will come to you and help with any problems you may be encountering with water or wastewater.
- We provide water and sewer rates and **lagoon profiling**. Call OAWU at 503-837-1212 for a bid or estimate. We can save you money!

These are just a few facts about OAWU. The next time you are in need, pick up the phone and call us before hiring outside help. We are here to help. ***It's our industry. It's what we do.***

To join or for more information,
visit www.oawu.net or call 503-837-1212.

Oregon Association of Water Utilities
935 N. Main Street
Independence, Oregon 97351
Phone (503) 837-1212
Fax (503) 837-1213 www.oawu.net



OAWU's mission is to provide service, support, and solutions for Oregon water and wastewater utilities to meet the challenges of today and tomorrow.

MEMBERSHIP APPLICATION

Name: _____

Address: _____

City/State: _____

County: _____ ZIP: _____

System Email: _____

Phone: _____ Fax: _____

Operator: _____

Contact Person: _____

Number of Hook-ups: _____

Were you referred? By whom _____

Type of System:

☐ Water ☐ Wastewater ☐ Both

Membership Category Amount of Dues

<input type="checkbox"/> Regular Member	\$ _____ See schedule below
<input type="checkbox"/> Associate Member	\$400.00
<input type="checkbox"/> Individual Member	\$75.00

Regular Member Dues Schedule

1 to 100	\$75 + 32 cents per hookup
101 to 500	\$85 + 32 cents per hookup
501 to 1,000	\$90 + 32 cents per hookup
1,000 and up	\$100 + 32 cents per hookup
Maximum dues is	\$950.00

Mail payment to: OAWU
935 N. Main Street
Independence, OR 97351

*If paying by credit card, please call
the OAWU office at 503-837-1212 for
processing and receipt.*

Membership Types

Regular Member

A Regular Member shall be any water or wastewater utility, public or private, engaged in the production, distribution or reclamation of water. A Regular Member shall have one vote.

Annual Dues - See Dues Schedule

Associate Member

An Associate Member shall be any organization individual or corporation, supplying services or equipment to water and wastewater utilities. An Associate Member shall have one vote. For Associate Member Benefits, please contact OAWU.

Annual Dues \$400.00 per year

Individual Member

An Individual Member shall be an individual involved in the water/wastewater industry or a user of such utilities. The membership is informational in nature and shall be non-voting.

Annual Dues \$75.00 per year

Benefits of Membership

- On-site technical assistance
- Various free training programs
- Discounts on training courses
- Discounts on Annual Conference registration
- Access to on-site training program
- Subscription to quarterly *H2Oregon* magazine
- Direct mailings in your area about upcoming training courses
- Summaries of legislative issues
- Legislative representation at state and federal level
- Associate Member Services and Products Guide
- Access to technical assistance library
- Access to technical and testing equipment for loan
- Voting rights in Association affairs (Regular & Associate Members)
- Positive contacts with other organizations
- Camaraderie with water and wastewater professionals
- Operator Of Record services
- Job referrals, announcements and searches
- Well testing
- Plan review
- System performance evaluation and options
- Additional programs and services
- Disaster response assistance and planning



Please return to OAWU:
935 N. Main St., Independence, OR 97351
or Fax: 503-837-1213 or email: office@oawu.net.

MB17

MEMBERS

62nd Court Mutual Water Company
 Adair Village, City of
 Adams, City of
 Adrian, City of
 Agate Water System
 Albany Rifle & Pistol Club
 Alpine Crest Improvement Dist.
 Amigo Villa Water Service, Inc.
 Amity, City of
 Ananda Center at Laurelwood, Inc.
 Arch Cape Water & Sanitary District
 Arlington, City of
 Arrah Wana Water Company
 Arrowhead Mobile Home Park
 Aspen Lakes Utility Company, L.L.C.
 Athena, City of
 Aumsville, City of
 Aurora, City of
 Avion Water Company
 Baker City, City of
 Bandon, City of
 Bandon Dunes Resort
 Banks, City of
 Barlow, City of
 Barlow Water Improvement District
 Bay City, City of
 Bay Hills Water Association
 Beaver Water District
 Beaverton, City of
 Bend, City of
 Bend Research Inc.
 Benton County Service District
 Berndt Creek Water Corp.
 Biggs Service District
 Black Butte Ranch
 Black Mountain Water District
 BLM Eugene
 Blue River Water District
 Blue Spruce Mobile Estates
 Bly Water & Sanitary Dist.
 Boardman, City of
 Bonanza, Town of
 Boring Water District #24
 Bradley Lake Estates
 Brandy Bar Landing, Inc.
 Breitenbush Hot Springs
 Bridge Water District
 Brooks Community Service District
 Brownsville, City of
 Buell-Red Prairie Water District
 Bunns Village Properties, LLC
 Burns, City of
 Burnside Water Association
 Butte Falls, Town of
 Camp Rilea
 Canby Utility
 Cannon Beach, City of
 Canyon City, Town of
 Canyonville, City of
 Carlton, City of
 Cascade Head Ranch Dist. Improv.
 Co.
 Cascade Locks, City of
 Cave Junction, City of
 Cedarhurst Improvement Club, Inc.

Century Meadows Sanitary System,
 Inc
 Century Meadows Water System, Inc.
 Charles Tracts Water Company
 Chart Water Supply, Inc.
 Chehalem Mt. Sun Ridge Association
 Chenoweth Water PUD
 Christmas Valley Domestic Water
 Cimarron City Water Co., Inc.
 Circle C Improvement Dist.
 Clarks Branch Water Association
 Clatskanie, City of
 Clayton Creek Water Association
 Cline Butte Utility Company
 Cline Falls MHP
 Cloverdale Sanitary District
 Cloverdale Water District
 Coburg, City of
 Colorado Lake Co-Op
 Colton Water District
 Columbia City, City of
 Columbia Hills Homeowners
 Association
 Columbia River PUD
 Conagra Foods
 Condon, City of
 Confederated Tribes of Siletz Indians
 Coquille, City of
 Corbett Water District
 Cornelius, City of
 Cottage Grove, City of
 Country Club Water District
 Country View Mobile Estates
 Covanta Marion, Inc.
 Cove, City of
 Cove Orchard Water Association
 Crater Lake National Park
 Crescent Water Supply &
 Improvement District
 Creswell, City of
 Crooked River Ranch Water Co-Op
 Crystal Springs Water District
 Culver, City of
 Dallas, City of
 Dayton, City of
 Dayville, City of
 Deception Creek Mobile Park
 Deer Creek Estates Water Association
 Deerhorn Community Water
 Association
 Depoe Bay, City of
 Deschutes Valley Water District
 Detroit, City of
 Dexter Oaks Mobile Home Park
 Dexter Sanitary District
 Diamond Peaks at Leisure Woods
 I & II
 Diamond Peaks Tract 1355
 Diamond Summit Association
 Dietz Airpark Water System
 Donald, City of
 Drain, City of
 Drifter's MHP
 Dufur, City of
 Dundee, City of
 Eagle Point, City of

East Shore Water Improvement
 District
 East Yamhill Rural Water Company
 Eastmont Water Company
 Echo, City of
 Elgin, City of
 Elkton, City of
 Enterprise, City of
 Estacada, City of
 Eugene Mobile Village
 Fairview, City of
 Fairview Water District
 Falcon Cove Beach Water District
 Falcon Heights Water & Sewer
 District
 Fall Creek Water District
 Falls City, City of
 Fern Ridge School Dist. 28J-10
 Fern Valley Estates Improvement Dist
 Fernridge Mobile Estates
 Fir View Water Company
 Fischer's Mobile Home Park
 Fishhawk Lake Recreation Club, Inc.
 Florence, City of
 Forest Park Mobile Village
 Fossil, City of
 Garden Valley Water Association
 Garibaldi, City of
 Gaston, City of
 Gates, City of
 Gearhart, City of
 Georgia Pacific-Wauna
 Gervais, City of
 Gilchrist Water Co., LLC
 Gladstone, City of
 Glendale, City of
 Gleneden Sanitary District
 Glenmorrie Co-op Association
 Glide Water Association
 Goble Water Association
 Gold Beach, City of
 Gold Hill, City of
 Government Camp Water Company
 Grand Prairie Water Supply Company
 Grand Ronde Community Water
 Association
 Grand Ronde Sanitary District
 Granite, City of
 Grants Pass, City of
 Green Oaks Mobile Ranch
 Greenhoot Properties
 Haines, City of
 Halfway, City of
 Hall's Trailer Court
 Halsey, City of
 Harbor Water PUD
 Harrisburg, City of
 Hebo Joint Water/Sanitary Authority
 Heceta Water District
 Helix, City of
 Heppner, City of
 Hidden Valley Improvement District
 High Lostine Owners Association
 Highland Subdivision Water District
 Hiland Water Corporation
 Hillsboro, City of

Hines, City of
 Hood River, City of
 Hopewell Water Company
 Hubbard, City of
 Hunnell Hills Community Water
 System
 Huntington, City of
 Hwy 58 Trailer Park
 Ice Fountain Water District
 Idanha, City of
 Idleway Improvement District, Inc.
 Imbler, City of
 Independence, City of
 Indian Meadow Water Company
 Interlachen Water PUD
 Ione, City of
 Irrigon, City of
 Island City, City of
 Jackson County Parks
 Jacksonville, City of
 Jasper Knolls Water District
 Jewell School District
 John Day, City of
 John Day Water District
 Johnson Creek Water Services
 Company
 Junction City, City of
 Juniper Mobile Park
 Keizer, City of
 Kelly's Brighton Marina, LLC
 Kelso Water Association
 Keno Water Company, Inc.
 K-GB-LB Water District
 Kilchis Water District
 Kingswood Heights Water
 Association
 Klamath Falls, City of
 Klippel Acres Water System
 Knappa Water Association
 Knoll Terrace Park
 L.A. Water Cooperative
 La Casa Mia
 La Pine, City of
 Lady Creek Water System
 Lafayette, City of
 Laidlaw Water District
 Lake Grove Water District
 Lakeside, City of
 Lakeside Water District
 Lakeview, Town of
 Lakewood Homeowner's, Inc.
 Lamontai Improvement District
 Lamplighter Water Association
 Lane County Parks
 Langlois Water District
 Lark Meadows HOA
 Laurelwood Water User's Co-op
 Lawrence Subdivision Water
 Association, Inc
 Lebanon, City of
 Lexington, Town of
 Lincoln City, City of
 Little Beaver School, Inc.
 Long Creek, City of
 Lostine, City of
 Lowell, City of



MEMBERS



Luckiamute Domestic Water Co-op
 Lyons-Mehama Water District
 Madras, City of
 Madrone Hill Mobile Home Park
 Malin, City of
 Manzanita, City of
 Mapleton Water District
 Maupin, City of
 McKay Acres Improvement District
 McKenzie Palisades Water
 McLain Village Water
 McMinnville Water & Light
 McNulty Water PUD
 Merrill, City of
 Metolius, City of
 Metolius Meadows Prop. Owners Assn.
 Midland Water Association
 Mill City, City of
 Milo Adventist Academy
 Minikahda Water District, Inc.
 Mitchell, City of
 Modoc Point Sanitary District
 Molalla, City of
 Monmouth, City of
 Monroe, City of
 Monument, City of
 Moro, City of
 Mosier, City of
 Mossy Brae Water District
 Mt. Angel Abbey
 Mt. Angel, City of
 Mt. Ashland
 Mt. Bachelor, Inc.
 Mt. Shadows HOA
 Mt. Vernon, City of
 Mulino Water Dist. #23
 Myrtle Creek, City of
 Myrtle Point, City of
 Nantucket Shores Water Company
 NeahKahNie Water District
 Nehalem, City of
 Nesika Beach-Ophir Water District
 Neskowin Regional Sanitary Authority
 Neskowin Regional Water District
 Netarts Water District
 Netarts-Oceanside Sanitary Dist.
 Newberg, City of
 Newport, City of
 North Corvallis Mobile Home Park
 North Hill Water Corporation
 North Plains, City of
 North Powder, City of
 Northwest Newberg Water Association
 Nyssa, City of
 Oak Lodge Water District
 Oakland, City of
 Oakridge, City of
 Oaks Mobile Home Park
 Oceanside Water District
 Ochoco West Water & Sanitary Authority
 Odell Sanitary District
 Odell Water Company

Olney-Walnutski Water Association
 OPRD Main Office – Salem
 Orchard Heights Water Association
 Oregon Caves Nat. Monument & Preserve
 Oregon Shores Beach Club, Inc.
 Oregon Water Wonderland II Sanitary District
 Orient Drive Mobile Estates, LLC
 Otter Rock Water District
 Pacific High School
 Paisley, City of
 Paradise/Rogue Meadow WS
 Parkdale Water Company, Inc.
 Perrydale Domestic Water Association
 Pete's Mt. Water Company, Inc.
 Philomath, City of
 Phoenix, City of
 Pilot Rock, City of
 Pinecrest Water Company
 Pine Grove Water District
 Pioneer Park Water Co-op
 Pioneer Village Water Company, Inc.
 Pleasant Valley Water Company
 Pleasant View Water Company
 Polehn Heights Water Association
 Ponderosa Pines Water Company
 Port of Morrow Commission
 Port of Tillamook Bay
 Port Orford, City of
 Power City Water Co-op
 Powers, City of
 Prairie City, City of
 Prineville, City of
 Pristine Water Source
 Quincy Water Association
 Rainier, City of
 Redmond, City of
 Redwood Water Service, Inc.
 Reeder Ranch, Inc.
 Reedsport, City of
 Rhododenron Summer Homes Association
 Richland, City of
 Rickreall Community Water Association
 Riddle, City of
 Rimrock West Improvement District
 Riverfront RV Park
 River Meadows Improvement District
 River Point Farms, LLC
 Riverbend-Riverbank Water District
 Rivergrove Water District
 Riverside Water District
 Riverview Trailer Park
 Roats Water System, Inc.
 Roberts Creek Water District
 Rock Creek Water District
 Rockaway Beach, City of
 Rocky Pointe Marina
 Rogue Community College
 Rogue Lea Estates MHP LLC
 Rogue River, City of
 Rogue River – Siskiyou National Forest

Roseburg Forest Products Company
 Round Lake Water Utilities
 Rufus, City of
 Running Y Utility Company
 Salem, City of
 Salem-Keizer School District
 Salmon River Mobile Village
 Sandy, City of
 Scappoose, City of
 Scio, City of
 Scotts Mills, City of
 Scravel Hill Water Co-op
 Seal Rock Water District
 Seneca, City of
 Shadow Hills Park Water Cooperative
 Shangri-La Water District
 Sheridan, City of
 Sherwood, City of
 Siletz, City of
 Silver Falls School District 4J
 Silverton, City of
 Sisters, City of
 Skylane Farm
 Skyview Acres Water Company
 Sleepy Hallow Phase 1 Water
 Sodaville, City of
 South Fork Ranch Homeowners, Inc.
 South Fork Water Board
 South Hills Water System, Inc.
 Southwest Lincoln County Water District
 Southwood Park Water District
 Spirit Mountain Gaming, Inc.
 Sportsman's Park Water Association
 Springwater Estates HOA
 Spray, City of
 Squaw Creek Canyon Development
 Staffordshire Water System, Inc.
 Stanfield, City of
 Star Satellite Improvement District
 Stayton, City of
 Steeves Mobile City
 Storlie Water Company Inc.
 St. Paul, City of
 Sublimity, City of
 Suburban East Salem Water District
 Sumpter, City of
 Sunridge Estates
 Sunrise Water Authority
 Sunriver Environmental LLC/Sunriver Water LLC
 Sunset Acres Water Company
 Sunset Lake RV Park
 Sunset Water Systems, Inc.
 Sunshine Village Water Association
 Sutherlin, City of
 Sweet Home, City of
 Talent, City of
 Terrace Mobile Plaza
 Terrebonne Domestic Water District
 The Dalles, City of
 Three Rivers School District
 Tierra Del Mar Water Company
 Tigard, City of
 Tillamook, City of

Tillmook County Creamery Association
 Timber Water Association
 Toledo, City of
 Tollgate Water Company
 Tone Water
 Trappist Abbey
 Tri City Water District
 Troutdale, City of
 Tualatin Valley Water District
 Turner, City of
 Twin Island Community Water
 Twin Rocks Sanitary District
 Tygh Valley Water District
 Ukiah, City of
 Umatilla, City of
 Umpqua Basin Water Assn.
 Union, City of
 Vale, City of
 Valley View Water Co-op
 Valley View Water District
 Veneta, City of
 Vernonia, City of
 VIDA-LEA Community Co-op
 Vineyard Mountain Water & Improvement District
 Waldport, City of
 Wallowa, City of
 Wallowa Lake Co. Service District
 Warm Springs Conf. Tribes Reservation of OR
 Warren Water Association
 Warrenton, City of
 Wasco, City of
 Water Wonderland Improvement District
 Wedderburn Sanitary District
 Weiss Estates HOA Inc.
 Welches Water Company
 Weldon Mobile Home Park
 West Hills Water Company
 West Linn, City of
 West Slope Water District
 West Yamhill Water Company
 Western Heights Water Association
 Westfir, City of
 Weston, City of
 Westport Water Association
 Wheeler, City of
 Whispering Pines #4
 Wickiup Water District
 Willamette Water Company
 Willamina, City of
 Wilson River Water District
 Wilsonville, City of
 Winchester Bay Sanitary
 Wi-Ne-Ma Christian Camp, Inc.
 Winston-Dillard Water District
 Wood Village, City of
 Woodburn, City of
 Yachats, City of
 Yamhill, City of
 Yoncalla, City of
 Young Life's WA Family Ranch
 Young's River Lewis & Clark WD
 Zig Zag Water Cooperative, Inc.

WELCOME, NEW MEMBERS!

Oregon Caves National Monument & Preserve
Twin Island Community Association

Dustin Cady
Stephanie Cellucci
Rich Knudson
Ray Schuhmann
Gregory D. Whittenburg

INDIVIDUAL MEMBERS

Alexander, Sandra	Buckley, John	Estrada, David	Hecox, Thomas C	LePine, Theodore	Powers, Ron D.	Stevens, Brian
Anderson, Brian	Burgeson, Robert	Evans, Peter	Heide, Tracy	Lewis, Mark	Rader, Jonathan	Stone, Brian
Anderson, Frank	Burton, Howard	Farris, Randy	Hildebrandt, Jamie	Lyon, Nathan	Reick, Brice	Strassner, Bob
Anthony, Joe	Cady, Dustin	Folsom, Jamaal	Hodge, Patrick R.	Marshall, John	Rettke, Timothy	Tabrum, Walter
Asghari, Mark	Caldwell, Kevin	Foster, Rob	Hubbard, Tom	McClenathan, Mike	Risley, Michael	Tew, Shawn
Ashenberger, Jacob	Cass, Bradley	Free, Derek	Huff, Zach	McFadden, Tim	Rumpel, Doug	Thayer, Brandley
Bain, Jason	Christensen, Brian	Gammell, Patrick	Hume, John	McKinney, Donald	Schaefer, John	Thiramoke, Warampa
Barnes, Chase	Clement, Tony	Geiman, Dave	Humphrey, Mark D.	Mecham, Jade	Schmidt, Lonny	Thompson, Kamen
Barnes, Hogan	Close, Greg	Georgeades, Jonathan	Jauron, Scott	Mergel, Kyle	Schmittle, William	Thompson, Matt
Bartlett, Nathan	Cox, Hanna	Gibson, Travis	Johnson, Brandon	Mettall, Thomas	Schroder, Michael C	Tupper, Sean
Bartlett, Randy	Crites, Robert	Gill, Jeff	Johnson, Grady	Moffit, Jeremiah	Schuhmann, Ray	Turner, Susan
Bateman, Jim	Crum, Dale	Ginter, Brian M	Jones, Randall	Moniz, Garrett	Scowden, Mark	Ulrich, William
Bathke, Vernon	Dammeyer, Scott	Greene, Mike	Judah, Dave	Mooney, Ronald W	Seelye, Shawn	Vanderkin, Rick
Beck, Joshua M. Gatov	Daniel, Morgan	Grell, Jack	Kash, Stella	Morgan, Daniel	Sellers, Ricky	Wabschall, Steve
Bedell, Keith	Davis, Guy P.	Griffin, Beverly "Bev"	Katrena, Scott	Morris, Brady S	Shaw, Brady	Wainwright, Timothy
Bell, Ron	Desroche, Ron	Halverson, Bruce	Kelso, Josh	Nagle, Kevin	Sheppard, Neal F.	Wanner, Ron
Benham, Lonnie	Dillard, Bob	Hamilton, Howard	King, Andy	Neal, David	Simpson, Steve	Ward, Kyle
Biamont, Tony	Dix, Edgar	Hanes, Cameron R.	Klinger, Martin	Nelzen, Jerry	Smith, Bobby	Warrick, Logan
Bicknell, Roy	Dolbow, Elizabeth	Hanks, Kevin	Kneaper, Jason	Odell, Mark	Smith, Craig	Wheatley, Jim
Blake, Mike	Dunn, Frank	Hannen, Scot	Knudson, Rich	Overstreet, Joe	Smith, Larry	Whitlock, George
Bock, Paul	Durfee, Kenneth	Hart, Steven	Kunders, Aaron	Parent, Kenny	Spaulding, Claudia	Whittenburg, Gregory
Boyd, Jeff	Eells, Lannie	Hartley, Stewart	Kyniston, Everett	Pendell, Keith	Spellman, Larry	Williams, Benjamin
Bradshaw, Dave	Elder, Dave	Hathaway, Travis	Lactzsch, Dawna	Perry, Richard	Stark, Chris	Wolford, Paul
Brenneman, Scott	Enrico, Daniel	Hawkins, David	Lawson, Brian	Pinson, James	Steele, Mark	Woodward, Steve
Brown, Jeffrey M.	Estes, Larry	Hawkins, Michael	Leeper, Clifford	Porter, James	Steidler, Matthew B.	Woody, Max

ASSOCIATE MEMBERS

4B Engineering & Consulting	Ditch Witch Northwest	Jordan Ramis PC	Schoen's Motors
Abbey Systems, Inc.	DN Tanks	Kennedy/M&H Valve	Schroeder Law Offices, PC
Advanced Control Systems	EA Engineering, Science and Technology, Inc.	Lakeside Industries/EZ Street	Sensus USA
American AVK Company	Edge Analytical Laboratories	League of Oregon Cities	Shearer Tanks
American Flow Control	EJ	Master Meter, Inc.	Slatercom-WCD
American Leak Detection	Engineering America	Mueller Company	Special Districts Assn of Oregon
Anderson Perry & Associates	Enviro-Clean Environment, Inc.	MULTI FITTINGS	Taylor Made Pump Stations
Backflow Management, Inc. (BMI)	EPA Water Security Division	Nelson Environmental Inc.	Tesco Controls, Inc.
Badger Meter, Inc	Ferguson Enterprises	Neptune Technology Group	The Automation Group
Bainbridge Associates, Inc	FloHawks	Northwest Pump & Equipment Company	The Chlorine Div of The American Chemistry Council
Bancorp Insurance	Frank J. Martin Company	Olson Engineering	The Ford Meter Box Co., Inc.
Bend Winsupply	Frost Engineering Service Company NW	Oregon Business Development Dept.	The Sherwin-Williams Company
BergerABAM	Furrow Pump, Inc.	Oregon Meter Repair	Thompson Pipe Group-Flowtite
BioLynceus, LLC	GC Systems, Inc.	Oregon Public Utility Commission	TMG Services
BMS Technologies	General Pacific, Inc.	Owen Equipment Company	Tripac
Branom Instruments Co.	Glatfelter Public Practice	OXARC Inc.	True North Environmental
Cascade Columbia Distribution Co.	HASA Inc.	PACE Engineers, Inc.	Trumbull Industries
CB Pacific	HD Fowler Company, Inc.	Pittsburg Tank & Tower Co.	Umpqua Insurance Agency
Ch2M Hill - Lebanon	HD Supply Waterworks	PIXIS Laboratories, LLC	Umpqua Research Co.
Chlorinators Incorporated	Hydra-Stop	Pollardwater.com	US SAWS
CIMCO Sales and Marketing	HydroTech	Public Works Supply	USABluebook
CoBank	HYMAX by Krausz	PumpTech Inc	Utility Service Company, Inc.
Consolidated Supply Co.	Ipex USA, LLC	RH2 Engineering Inc.	Waterlab Corp
Correct Equipment, Inc.	Itron, Inc.	Romac Industries, Inc.	Whitney Equipment Company, Inc
CUES	JB Water & Wastewater	Rosemount Analytical & Detection	Xylem, Flygt Products
Davis Sales		Schneider Water Services	

GLASS-FUSED-TO-STEEL BOLTED MODULAR TANKS

Operate at a higher level.

Specifying Glass-Fused-to-Steel tanks means specifying the lowest total life cycle cost to tank owners. No other tank company can match the longevity and quality of our low maintenance tanks that can be constructed in 1/3 of the time it takes to build concrete and welded tanks, and we do it with our own expert crews.

- ▶ **36 years of experience**
- ▶ **1,200 tanks and counting**

NO PAINTING ▶ NO FADING ▶ NO CHALKING ▶ NO DEGRADING ▶ NO WORRIES

On average, we build a tank every 4-5 days.



Engineering
America



PERMASTORE®
TANKS & SILOS

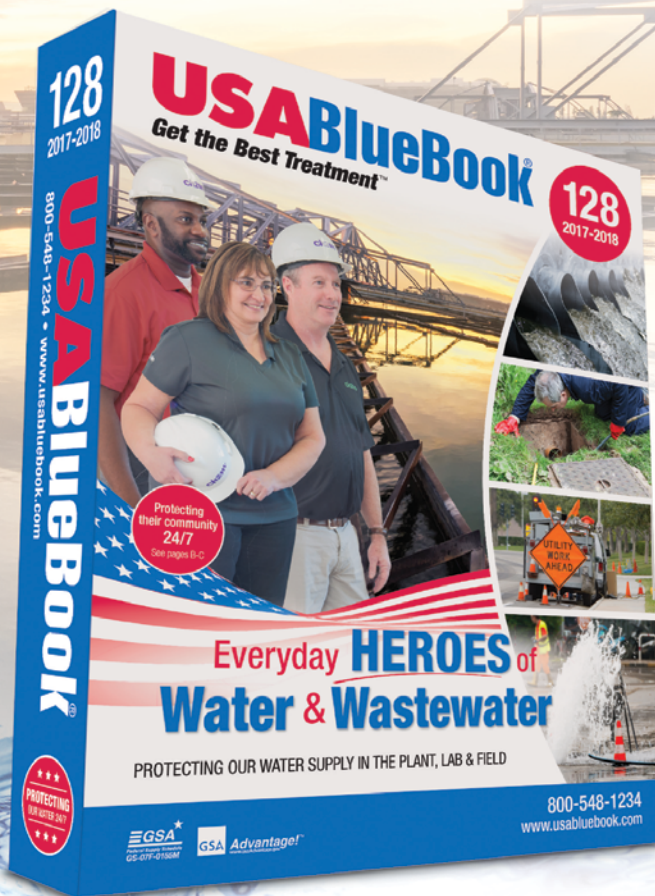
The Tank Industry's Leaders have Joined Forces!

Engineering America is now partnering with PermaStore, the global market leader in modular tank and silo design, to bring the innovative PERMASTORE® products and services to the U.S. water, wastewater, and industrial markets. This partnership expands Engineering America's regional coverage to 24 states. Expanded coverage provides significant new customer benefits, including an enhanced ability to serve customers with multiple locations in the United States. It also allows us to offer the highest value products from the global leader to the U.S. market, including to our existing base of over 1,000 customers. Visit Engineering America and PermaStore at local and national tradeshow around the country!

Oregon Association of Water Utilities
935 N. Main St.
Independence, OR 97351
503-837-1212 Fax 503-837-1213
Address Service Requested



PRSRT STD
U.S. POSTAGE
PAID
SALEM, OR
PERMIT NO. 463



PROUD TO SERVE

Everyday
HEROES of
Water and
Wastewater

**Your #1 Source for
Operations & Maintenance Supplies**

USABlueBook is proud to serve the heroes of water and wastewater who work to keep our water supply clean and safe every day. Since 1991, USABlueBook has provided operators with the highest quality supplies, service and support. With 64,000+ products available, USABlueBook delivers 95% of in-stock orders in 1 to 2 days—all backed by a 100% Satisfaction Guarantee.

Request your **FREE** catalog today!

800-548-1234  www.usabluebook.com

USABlueBook®
Get the Best Treatment™