O2WA
Oregon Onsite Wastewater Association

I.N.F.O. Industry News for Oregon

Fall Issue 2016

70 SW Century Dr.
Suite 100, #353
Bend ,Oregon 97702
(541)389-6692
www.O2WA.org
info@O2WA.org

EDITOR -
DENNIS BOEGER, PE

O2WA
Oregon Onsite Wastewater Association

23rd Annual Oregon Onsite Wastewater Conference

PREPARING FOR THE POSSIBILITIES

FEBRUARY 16 | 17 | 18, 2017

Valley River Inn 1000 Valley River Way , Eugene, Oregon 97401

www.o2wa.org

Rodeo Sponsored by: PETERSON CAT

INSIDE THIS ISSUE

Clean Water Loans make septic repair affordable

Shawna and her family didn't know what to do when their septic tank collapsed—they didn't have the money to replace it. That's where Craft3 came in.

Knowing how important running water and flushing toilets are to a family of six, Craft3 worked quickly to approve a Clean Water Loan and get the contractor to work.

Craft3 is a nonprofit community lender that puts people, the environment and the economy first. It gave Shawna an affordable loan—and didn't require any money upfront.

Homeowners in Oregon can now use the Craft3 Clean Water Loan to fix failing septic systems. Visit www.Craft3.org/CleanWater to see how Craft3 can be part of the solution for you and your customers.

"The biggest benefit of the Clean Water Loan is that it is affordable—the rate, payments and payback. We love that a portion of our loan also covers future maintenance costs."
Shawna Hager-Crase, Portland Homeowner

CRAFT3

www.Craft3.org/CleanWater | Craft3 is an equal opportunity lender, provider and employer. | NMLS ID #390159

Willamette Graystone
Better Selection, Family Owned

www.WillametteGraystone.com

With over 65 years of experience we offer:

Tanks ranging from 500-3000 gallons

Applications include septic, dosing, water, and custom tanks

Residential and commercial treatment systems

Now stocking Roth Tanks

The best one piece plastic tank in the industry.

Ideal for those hard to access locations.

The only plastic tank that is approved by Orenco.

Roth

Orenco Systems® Incorporated

OREGON LOCATIONS:	CORVALLIS	GRANTS PASS	NORTH BEND	SALEM	WOOD VILLAGE
	541 752 3456	541 479 1323	541 756 6413	503 585 1323	503 669 7612
BEND	EUGENE	MEDFORD	ROSEBURG	TUALATIN	
541 388 3811	541 726 7666	541 773 4575	541 673 3322	503 692 0150	

Willamette Graystone

President's Message by Erin Mick, REHS

Winter Season's Greetings everyone!
Hopefully you all have found some time to exhale and recharge with your families by now. I know it's still plenty busy out there, but the weather will force us to slow down even more, if we're lucky.

Your O2WA board has been working hard on quite a few projects that are up and coming. First, our annual conference! We can all benefit from "Preparing for the Possibilities", both good and not so good. We have a variety of new speakers and topics and we are looking forward to another outstanding year of visiting with our members, talking with our vendors, and learning from each other. Yes, that is what it's all about. We thank you for being a part of the membership and the commitment to continually learn about our industry. So get registered and start getting excited. J

Second, our website. Belinda has been working on a few finishing touches while still getting our winter conference in order. We have moved to a new platform that will be more user friendly, have sections for members only and will be much easier to keep updated. It's been a long process to switch and we will be grateful to have it completed. (Although, like all technology, minor changes will be ongoing and hence why we switched.)

Third, O2WA has entered into a "Memorandum of Understanding", MOU, with DEQ to revise and update the Installer and O&M Certification program. We are very excited for DEQ's agreement to update and revise the material. It will ultimately serve all of us in the industry for many years to come. Stay tuned for more details in future newsletters.

Fourth and finally, as my tenure as President comes to a close in February, I am more than pleased to announce Doug Diley as the President Elect. Doug is a real go-getter and knows many people in the industry. As such, he has repeatedly brought great insight and fair representation to our board and is a member we turn to make things happen. He is one of the main reasons why the mini-fall conference was such a great success. (Trent Clinkscales was the other half of that success. Nice job to both of you!) May we all give Doug a warm welcome and congratulations on being nominated and willing to serve all of us.

Take care everyone. Be safe, enjoy the slower time of year, and see you at the conference.

Erin Mick
REHS, Onsite Sanitation
O2WA President

Q&A by Brian Rabe, CPSS, WWS

Question: My pump seems to be running longer than it used to, even in the summer. I have checked all my fixtures and none of them are running, leaking, or dripping. What do you think is going on?

Answer: There are still several possibilities. Since you have checked all of your fixtures, we can rule out inflow. If you are not in an area with a high water table, we can rule out infiltration. That narrows our focus to issues related to the pump and piping. Normal wear and tear can reduce the capacity of the pump. The inside diameter of the piping can decrease as coatings of minerals and/or biological growth accumulate, thus increasing the friction and reducing the flow rate. If pumping to a pressurized network or hydrosplitter, some or all of the orifices may be partially plugged. It is important to evaluate everything before doing anything. It may be a combination of things and it isn't always as obvious as it first seems.

New Loan Makes Repairing Failing Septic Systems Affordable in Oregon

by Jennifer Janda, Marketing Manager Craft3

Floridalma Torres has lived in her East Portland home for 13 years. She shares it with her son Anthony, his fiancé Shawna and their three children. The family loves their quiet neighborhood and surrounding natural wildlife.

They first discovered a problem when plumbing started backing up into the house, even after having the septic pumped.

Shawna wasn't sure how to proceed. They were in the middle of foreclosure and a loan modification. It didn't make sense to invest in a new septic system with the possibility of a move. So they completed a temporary fix, but knew it would not last very long. The mortgage came through just as the septic tank collapsed and left a sinkhole in the backyard.

Shawna contacted a local septic professional and received an estimate for replacement, about $19,000. A web search revealed a few options. They could take out a second mortgage, but payments, if approved at all, would have been about $500 per month—more than they could afford. Then she found local nonprofit lender Craft3.

Knowing how important running water and flushing toilets are to a family of six, Craft3 worked quickly to get loan documents signed and the contractor replacing the septic. It provided them with an affordable Clean Water Loan that didn't require any money upfront and whose payments were less than half of what the other lender would charge.

"The biggest benefit of the Clean Water Loan is that it is affordable—the rate, payments and payback. We love that a portion of our loan also covers future maintenance costs," explained Shawna Hager-Crase, Portland homeowner.

Across Oregon, thousands of homeowners find themselves in situations like Floridalma and Shawna's every year.

NOW THERE IS A FINANCIAL SOLUTION – THE CLEAN WATER LOAN

A new partnership between Craft3, a nonprofit community lender, and Oregon Department of Environmental Quality helps Oregon homeowners, in both rural and urban communities, repair or replace their systems. The cost to replace a system can be burdensome, but the loan allows homeowners to finance the full project with no upfront costs and includes:

- **Relevant permits**
- **Installation of the new septic system**
- **Ongoing maintenance**
- **Essential safety measures, such as those to prevent children from falling into septic tanks**

Special rates and deferred payment options may be available for homeowners with lower incomes.

With more than 22 years of lending in Oregon, Craft3 is amplifying the state's investment with additional capital from other private sources. The partnership builds on a successful septic loan program launched by Craft3 in Washington State in 2003. Since that time, the program has seen:

- **Widespread use - 691 septic systems repaired or replaced, worth $15.2 million**
- **Significant wastewater treatment - those systems treat 85.9 million gallons of wastewater annually that would otherwise have polluted communities, local waterways and groundwater**
- **A high degree of accessibility - over 60 percent of loans have gone to low-income households or those with credit challenges**

THE CRAFT3 CLEAN WATER LOAN WORKS FOR YOUR CUSTOMERS

Eligibility

Open to residential and commercial properties in Oregon.

Properties can be owner- or non-owner occupied. Rentals and second homes are eligible.

One of the following must apply:

- **septic system is at least 25 years old;**
- **system is failing;**
- **homeowner has been contacted by Health Officials; or**
- **homeowner is under orders to fix your septic system.**

Features and Benefits

Finances the full cost of designing, permitting, installing, and maintaining your septic system.

Competitive interest rates and no up-front costs.

Highly inclusive for a range of property types and incomes.

Deferred payment options may be available for homeowners with lower incomes.

Loan rates and terms (including deferred payments) are determined by the applicant's annual household income; the owner does not need to be low-income to qualify. For rates and terms visit www.Craft3.org/CleanWater.

Visit www.Craft3.org/CleanWater to see how Craft3 can be part of the solution to your customer's financial problem. You can also contact us at CleanWater@Craft3.org or 888-231-2170 to learn more.

Soils on the Horizon by Brian Rabe, CPSS, WWS

Saturation. This is the condition in soils when all of the available pores are filled with water. Under natural conditions the most common cause of saturation is heavy or prolonged rainfall, or rapid snowmelt. Saturation is evidenced at the surface by standing water and/or runoff. Some soils are more susceptible than others to this condition. In general terms, soils with a higher pore volume and a larger effective pore size can absorb more water than soils at the other end of the spectrum (lower pore volume and smaller effective pore size).

Pore size affects permeability, or the rate at which water can be absorbed and move through soil. At the extremes, sandy soils typically have a relatively high permeability and clayey soils typically have a relatively low permeability. In the middle, represented by the loamy soils (and with some clayey soils), the type and grade of structure affects the permeability. Structure is where individual soil particles are combined into groups, or aggregates. The aggregates behave like larger soil particles. For example, pallets of bricks, covered with a pile of sand, and a pile of cement can be "aggregated" to become a building with rooms including hallways and openings for windows and doors. The structured version of the particles will pass water more effectively than the unstructured version.

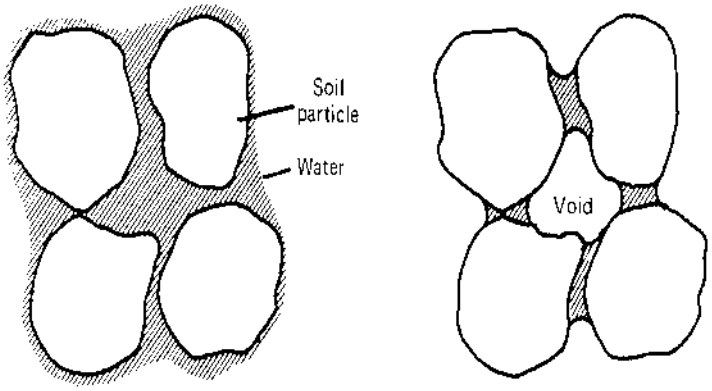
Pore volume affects the amount of water that can be absorbed before becoming saturated. The primary factor that affects volume is depth. However, as we have discussed before, compaction can increase the bulk density of the soil and reduce both the size and volume of pores. The average density of soil particles is about 2.6 to 2.7 grams per cubic centimeter (no pore space). Structured soils typically have a bulk density (with pore space) that is about half the particle density, or about 1.3 grams per cubic centimeter. If a soil were compacted to the point where it had a bulk density of 1.95 grams per cubic centimeter, it would have half as much pore space and would therefore take twice as much depth to achieve the same pore volume.

The soil below a functioning drainfield can be expected to operate just above field capacity. Field capacity is defined as the moisture content where water is held in relatively thin films against the force of gravity. Ideally, a drop of effluent at the top of the soil profile enables a drop of pore water to be released from the bottom of the profile. As the water content increases toward saturation, the manner in which the effluent moves through the soil has a negative impact on treatment. The goal is to have unsaturated flow, preferably in thin films, over the surface of soil particles and aggregates. This increases the travel time through the soil, provides lots of opportunities for fine solids and pathogens to get trapped along the way, and maintains air in the balance of the space as a source of oxygen to support the beneficial (aerobic) organisms doing the treatment. When soils are saturated, the effluent can move preferentially in larger pores with little contact with soil surfaces, thus reducing treatment potential and enabling contaminants to travel longer distances in a shorter amount of time. This risk increases as the pore size gets larger – rodent burrows will enable more effluent to move further and faster than a comparable volume of worm channels.

Although we can't control the weather, there are several things we can do to minimize the occurrence and duration of saturated flow conditions. These include grading the area above the drainfield to reduce the potential for overland flow, installing a groundwater interceptor or curtain drain to intercept both surface and subsurface water moving laterally downslope toward the drainfield, and using small doses to limit the amount of effluent introduced into the soil at any given point in time.

Even the best soils can be tested by major storm events. Some point to this as a negative attribute of onsite systems. However, I would contend that the cumulative risk to our downstream neighbors from a short term saturated flow event is far less than the risk from most municipal systems during a similar event. For example, the City of Salem released raw sewage to the Willamette River in late November as a result of a 24-hour rainfall event that slightly exceeded 2 inches.

That's all for now. Remember, Soil Rocks!



Illustrating the effect of two different water contents on the degree of filling of soil pores. On the left, a saturated condition wherein all pores are filled; and at the right, an unsaturated condition wherein water is retained principally in the narrower necks of pores and as very thin films over particle surfaces.

Avoid the Service Nightmare of Frozen Pipes By Jim Anderson and David Gustafson

Story reprinted courtesy of Onsite Installer magazine, November 2016 issue and COLE Publishing copy writes.

Try these pipe-insulation tactics to make sure irate cold-climate customers aren't calling you to thaw out their onsite systems in the dead of winter.

Last winter we were involved in online discussions about freezing pipes and insulation. We stressed that the best way to avoid freezing problems is to bed and slope piping to ensure that air is the only thing left in the pipes between water usage events. However, we recognize — and it was pointed out to us — that in some situations in our northern climate it's necessary to insulate the pipes to prevent freezing.

Some situations that call for insulation come to mind:

- A shallow house sewer line to a septic tank passing under a sidewalk or path that is kept open for the winter
- Sewer lines between multiple sewage tanks, such as septic tanks in series or septic tank to pump tank or media filter
- Where the supply line runs from a septic tank under a driveway or other areas where topography or soils limit the depth the pipe can be buried
- Sewer connections coming out of mobile homes (How often do you have to crawl under a mobile home to thaw the pipes?)

We regularly discuss three ways to insulate piping in these situations:

- Sleeve the pipe in a larger pipe to create insulating air space
- Use polystyrene sheets over the top of the pipe
- Use pre-insulated pipe with urethane foam surrounding the pipe and encased in a polyethylene sleeve

EXPLORE YOUR OPTIONS

Our preferred method is using pre-insulated pipe, which may be a bit more expensive but is worth the investment. This is based not only on our experience in Minnesota, but also when we have troubleshot systems in various areas. We have found the sleeve technique lacking in areas of extreme and prolonged cold like northern Minnesota. So while it may be effective in areas to the south or out west, not so much where we live. Also, when insulation sheets are used, we often see the mistake of choosing a material not rated for soil burial. During the discussion, colleagues from Wisconsin, Colorado and other states provided very good information. While everyone agreed that pre-insulated pipe was probably the best choice, it's not always available when and where it's needed, so another method is used. Let's expand on the discussion of alternative solutions:

When using expanded polystyrene sheets over the top of the piping, 1 inch of high-density, closed-cell, extruded foam equals the insulation value of approximately a foot of soil cover. So check in your state plumbing codes to see the thickness of insulation needed based on frost or freeze protection zones. Also, the sheets should be laid 6 inches above the crown of the pipe. It is projected that the zone of protection extends down and inward from the edge of the insulation, toward the pipe, at approximately a 45-degree angle. This is important when considering the necessary coverage of insulation over the pipe. In Minnesota, where cold spells can be colder and last longer than in other regions, a common error is not insulating a wide enough area over the pipe.

A little different but similar approach is to create a box around the piping using the polystyrene sheets. There should be a minimum of 6 inches of backfill aggregate around the piping between the sheets and the pipe. Thickness of the insulation sheets will depend on the type of original soil, depth of bury and projected frost depth. Check the plumbing codes for water supply or sewer pipes for the ratings in your area.

PLAN AHEAD FOR WINTER

Another suggestion is to use heating cables in troublesome areas such as crossing driveways. This involves using the pipe within a larger pipe, using Fernco or other quick-disconnect couplings so a new heating cable can be slid into the pipe when necessary. To the extent it's possible — depending on the depth of bury — also consider laying polystyrene sheets over the top. On a personal note, a neighbor of Jim's in northern Wisconsin successfully used this approach where his sewer pipe crossed from the septic tank next to the house under the driveway to a pump tank. Before this solution, the piping froze periodically.

Another pipe-within-a-pipe suggestion from an installer was to wrap the sewer pipe in bubble wrap and duct tape inside the larger pipe. The issue with this approach is we're uncertain whether bubble wrap provides more insulation value than simply using a double pipe, and whether all bubble wrap products provide the same insulating value. It's better to use rated materials for your area that have proven results.

Always remember that the best time to insulate is during the initial installation rather than after the fact. So for problem areas, it's best to discuss pipe insulation with the homeowner during the project bid process.

501c3 Charitable Organization - O_2WA Scholarship Fund

Back in October 2015 the O_2WA Board agreed to form a separate 501c3 Charitable Organization. The decision was based on member feedback that they would like to make a tax deductible contribution to the scholarship fund. The board enlisted the services of Atkins and Associates located in Eugene to facilitate the application process.

The purpose of this scholarship program is to:

- **Promote the education of members of the Oregon Onsite Wastewater Association (O_2WA) and their sons or daughters in any field of higher education, and**
- **Promote education in the environmental sciences or other related academic pursuits that apply to the field of onsite wastewater treatment.**

Thank you to the many individuals and company's that have donated to the Annual Auction and Raffle.

Jeff Strasheim will be our auctioneer again this year. It is great fun to be apart of the action!

DONATION FORM 2017 AUCTION AND RAFFLE
Any donation of items for our raffle or actionable items is appreciated. An acknowledgement of donations will be made at the conference, mention in our quarterly newsletter and on our website.

Please send the Donation Form by February 6th. NEW - Pre-printed list of items up for bid!

Learning How to Say NO by Aaron Dennis

The past few years have seen a resurgence of permits in many areas of Oregon which has put a strain on regulators and industry professionals. The simple fact is that you will actually be less productive and your work quality will suffer if you spread yourself or your company too thin. I am as guilty as anyone in that I have struggled with saying no over the years and this has led to poorer work and physical ailments due to the stress. So here are eight helpful tips on how to politely and professionally tell customers "no" to their requests.

1. **Your time is valuable. You should know your commitments and how valuable your time is so when someone asks you to dedicate your time to a new job you can know where you stand. It is OK to say "I'm not able to commit myself to that project right now and still provide the quality of work I am expected to provide".**
2. **Know your priorities. On the rare occasion that you might find yourself with some spare time, are new commitments really how you want to spend that time? It's OK to give some spare time to taking care of yourself and your loved ones.**
3. **Practice saying no. This seems so simple but saying no is really hard for many of us, so it's a good idea to practice. We all have those persistent customers who just won't take no for an answer so practice by repeating "no" until they finally get the message.**
4. **Don't apologize. Politeness is important, but saying "I'm sorry but…"makes your stance seem less firm to many customers. You need to be firm and unapologetic about valuing your time and priorities.**
5. **Stop being so nice. Being polite and being nice are two different things. Making commitments you cannot fulfill because you think saying "yes" is the nice thing to do doesn't help the customer or yourself. Be polite but firm in saying "no".**
6. **Getting back to a customer. It's OK to not have an answer right then and there. You can ask to get back to them and give the request some thought and consideration. If it turns out you don't have the time then at least you considered it.**
7. **Maybe later. This may be an opportunity to keep the door open for a customer. You can say no today, but have them get back to you in a (insert time frame). Then when they get back to you it might be a better time for you to say yes.**
8. **It's not you, it's me. The classic relationship breakup line can work in the work environment as well. But make sure you're being sincere because people can sense when you are insincere. It's OK to tell someone that their project or request is important, but you simply just wouldn't be able to give your best to accomplish it.**

-Aaron

23rd Annual Oregon Onsite Wastewater Conference

PREPARING FOR THE POSSIBILITIES

FEBRUARY 16 | 17 | 18, 2017

Valley River Inn 1000 Valley River Way , Eugene, Oregon 97401

www.o2wa.org

EARN 1.2 CEUS FOR YOUR DEQ CERTIFICATION

The Oregon Onsite Wastewater Association (O_2WA) conference offers an excellent opportunity for any interested party to gain access to the active wastewater professional. Persons, companies and publications should consider exhibiting, sponsoring, and/or donating auction/raffle prizes.

ABOUT THE CONFERENCE: 12 Hours of Continuing Education are available at the two day conference. This conference is for industry professionals including public health officials, O&M service providers, engineers, consultants, installation contractors, septic pumpers, and others interested in onsite wastewater management. You will learn about the latest in onsite wastewater industry issues and approaches to onsite wastewater management.

CONTINUING EDUCATION UNIT REQUIREMENTS

DEQ: Under OAR 340-071-0650, installer and maintenance provider recertification is required every three years following initial certification. 18 hours (1.8 Continuing Education Units, CEUs) of approved continuing education are required.

CCB: For more information on requirements for Commercial & Residential Contractors go to http://www.oregon.gov/CCB. The CCB will be advising if the program is approved for continuing educational hours.

EHS: Environmental Health Specialists and Wastewater Specialists must complete 2.0 credits or 20 contact hours every two years as specified under Oregon Administrative Rule (OAR) 338-020-0050.

LOCATION: The Valley River Inn 1000 Valley River Way, Eugene, OR 97401

LODGING: O_2WA rates at the Valley River Inn are $129.00 plus tax. A limited number of rooms are available at this discounted rate. Call 800-543-8266 by January 27, 2017.

NEW! THURSDAY NIGHT WELCOME RECEPTION: Join us Thursday night from 5:30 -7:00 pm for a reception with Check in at the registration desk. Exhibits will be open. Light hors d'oeuvres will be served with a no host bar.

EXHIBITS: Exchange ideas and discuss new products and/or services.

FRIDAY EQUIPMENT RODEO - EVERYONE is welcome to compete for prizes!

FRIDAY RECEPTION | DINNER | AUCTION: Included with Full Conference Registration. Guests will pay an additional fee.

REGISTRATION: Registration includes Sessions, session materials, Friday and Saturday Continental Breakfast, Friday and Saturday lunch. Only Full Conference registration includes all meals + Reception & Dinner on Friday. Space is limited - early registration is encouraged. Registration will be accepted on a first come, first served basis. Registrations received after January 19, 2017 will pay a late registration fee. Onsite registration will pay a higher registration fee. Please refer to the registration form. Cancellation by February 2, 2017 will receive a full refund. Cancelations must be in writing and sent to the O_2WA office.

AUCTION/RAFFLE: The auction and raffle is how O_2WA funds the Scholarship Program. The purpose of this program is to (1) promote education in the environmental sciences or other related academic pursuits that apply to the field of onsite wastewater treatment, and (2) promote the education of members of the O_2WA and their direct relatives in any field of higher education.

23rd ANNUAL OREGON ONSITE WASTEWATER CONFERENCE PROGRAM

NOTE - Program and Speakers subject to change without notification.

February 16th – Thursday
5:30 – 7:00 Registration - *NEW Welcome Reception

February 17th - Friday
7:00 Registration – Breakfast - Exhibits

8:30 8:45 Welcome & Instruction

8:45 9:45 Key Note Presentation - 0.1 CEU
Michael Hines, M.S., P.E. IL- Preparing for the Possibilities in the Future Onsite Industry Over the last 30 years, the onsite wastewater management industry has changed markedly in many ways. Onsite technology, regulation, land use policy, public utility involvement, and practitioner education have all evolved. Already, many of the policies and practices in these areas are beginning to evolve further and we can expect the future onsite industry to look much different than today. New or modified physical, chemical, and biological treatment units are increasingly favored by developers. Some states and local jurisdiction are adopting performance based regulatory programs to replace cookbook fixed prescriptive regulations. Land use planners, zoning authorities, and the general public are favoring developments that preserve green space and reduce environmental impacts from onsite systems. Increasingly, public utilities, privately or publically owned, are moving into management of onsite systems or encouraging new developments to utilize clustered or distributed systems instead of onsite. Finally, the existence of science and engineering educational curricula at the college level focused on onsite, decentralized, or other small wastewater systems peaked in the 70s and has been declining since. The onsite industry must remain aware as these changes come and be prepared to adjust practices to stay relevant and remain successful.

9:45 Break with Exhibitors

10:15 11:15 General Session - 0.1 CEU
Oregon DEQ & Desiree Sideroff, Craft 3 - Customer Loans - The Clean Water Loan Program
Overview of the bill passed funding repairs and the options for loans through the state program.

11:15 12:15 General Session - 0.1 CEU
Erin Mick, REHS, Multnomah County - Sanitary Preparedness
CASCADIA RISING: How a massive quake would alter life here. How will the onsite industry be impacted?

12:15 Lunch, Exhibits & Rodeo

2:00 3:00 Classes - 0.1 CEU
TRACK 1 Lisa MacGregor, Oregon DEQ - An over view of the DEQ Onsite License and Certification Program with Q & A Understanding the DEQ Onsite rules pertaining to the different license and certification types and which you need for each project. There will be an opportunity to ask questions, as well.

TRACK 2 Jeff Pringle, Orenco Systems - Greywater Treatment Application of Technology The course will cover types and purpose of greywater separation, treatment, current state of affairs and approval processes in California, and application.

TRACK 3 Kevin Bissel, 811 Center - Call Before You Dig. It's The Law! The Utility Notification Center is the one-call agency dedicated to safeguarding citizens and construction personnel who work around utilities, as well as the underground infrastructure itself. Learn how the Center works and get tips for successfully submitting Locate Requests.

3:00 Break

3:20 4:20 Classes - 0.1 CEU
TRACK 1 Paula Hartland, ODOT - Preparedness & ODOT Updates - How do you prepare for an inspection or audit by ODOT? In this course we will discuss how you can best prepare yourself, your records, your drivers and your vehicles for an audit or inspection by ODOT.

TRACK 2 O&M Round Table

TRACK 3 Cheryl Martinis, Oregon Construction Contractors Board - CCB Updates - The CCB has 10 field investigators that make random job site checks. What should you expect if they show up on your job? We'll also cover some other tips on how to keep your license in good standing, and explain a proposal to revamp the residential continuing education program. This class counts for one hour of CCB laws, regulations and business practices credit.

4:30 5:30 Classes - 0.1 CEU
TRACK 1 Paula Hartland, ODOT -Regulation Updates from ODOT and Q&A - With regulations constantly changing you need to be aware of what applies to you and how you can remain in or gain compliance. In this course we will go over several major updates/changes and finish up with a questions and answer session.

TRACK 2 O&M Round Table Continued

TRACK 3 Daniel Bush, REHS, - Field Math - Get the basics of math for use in the field in calculating things like tank capacity, draw down, pump discharge rate, recirc ratio and the like, plus learn some short cuts to save time and some measurable criteria that can help in monitoring, inspecting and troubleshooting systems.

5:30 Reception – Dinner – Auction Guests welcome!

NOTE - All meals are apart of the each attendees conference registration.

February 18th – Saturday ***(* Classes were presented at the 2016 Fall Mini Conference.)***
7:30 Registration – Breakfast - Exhibits

8:30 9:30 Classes - 0.1 CEU
TRACK 1 Scott Hammerschmith, Orenco Systems - *Why ATT Systems? - This course discusses operation of primary septic tanks, drain field sizing/layout for standard systems, operation and effluent quality of secondary treatment systems, needs for treatment, and drain filed sizing behind secondary treatment. The presentation uses excerpts from OAR341-071 and we discuss how and why the secondary treatment systems effect drain field sizing and approvals. A short Q&A session is provided after the presentation.

TRACK 2 Daniel Bush, REHS, - Special & Unique Techniques of Maintenance - Presentation on techniques, methods and tricks of doing system maintenance and some operations that you won't necessarily find in a class, book or manual. Based upon experience with a broad range of systems and various components and from making a lot of mistakes and mis-judgements. The intent being to help you avoid going thru the same hassles with your field work and to save you time and trouble.

TRACK 3 Brannon Lamp, REHS, Aqua Resource Design & Consulting - *Septic Systems 101?—Back to Basics A holistic understanding of Onsite Wastewater Treatment (Septic) Systems requires one to look beyond the system itself, and to the source(s) of the inputs, as well as the surrounding environment. Only then can a practitioner look at the system itself to better understand why a system functions as it does, and under certain conditions, may function poorly. Often, when troubleshooting a system, we are investigating the wrong elements altogether. The goal of this presentation is to expand our understanding and to better stock our 'toolkit' as professionals.

9:40 10:40 Classes - 0.1 CEU
TRACK 1 Doug Dilley, Willamette Graystone Concrete Septic Tank Standards & Installation - The goal of this presentation is to explain tank construction standards and installation guidelines. What they are and why they are important.

TRACK 2 Brian Rabe, CPSS, WWS, Cascade Earth Sciences Hydrosplitters – The Power of Pressure-Assisted Distribution This talk focuses on the benefits and mechanics of hydrosplitters, including where and why they are a useful tool for managing the distribution of effluent within a soil absorption system. Important considerations will be discussed related to design, construction, installation, and serviceability.

TRACK 3 John Thomas, WA On-Site Sewage Association - Potential Health Hazards with working on Onsite System

10:40 Break

11:00 12:00 Classes - 0.1 CEU
TRACK 1 Mark McCollum, SJE-Rhombus, Inc. - Analog vs. Microprocessor Based Controls - What are the differences Plus Best Installation Practices for Trouble-free Pump Control – General and technical information regarding differences between an analog control panels (relay logic) vs microprocessor (computer) control panels. 2nd Half General and technical information on best methods for installing wastewater pump control panels and float switches for installers, inspectors, and operations and maintenance personnel.

TRACK 2 Robb Barnes, Kings Pumping - WHAT? The evaluation is now 8 pages long? - Almost three years into the DEQ ESER program and we still hear that from realtors from time to time. Come and be ready to share your adventures in the ESER process and get some new ideas on how to stay on top of the ESER game. Ways to make the process more streamlined, pitfalls to watch out for and ideas for improving the process are all topics to be touched during the class.

TRACK 3 John Thomas, WOSSA - Potential Health Hazards with working on Onsite System Continued

12:00 Annual Members Meeting - Lunch

1:00 2:00 Classes - 0.1 CEU
TRACK 1 Aaron Dennis, Clackamas County - Soils 101 - Septic test pit location as it applies to topographic features, setbacks, and soil types.

TRACK 2 Dan Buss, SepTech Consulting Service - Employee Handbook - Do you need one? Get the latest scoop on the employee handbook. Do you need one? What should be included and where you might go to get started putting one together. Are we giving our new employees what they need to be successful?

TRACK 3 Michael Hines, M.S., P.E. IL - History of the Recirculating Gravel Filter - Because of the prevalence of soils poorly suited for land based disposal, residential sewage system failures were common. To address the small system problems, Favreau and Hines developed the concept of using surface sand filters to treat septic tank effluent by dosing the filter with a mixture of septic tank effluent and recycled filter effluent.

2:00 Break

2:20 3:20 Classes - 0.1 CEU
TRACK 1 Brannon Lamp, REHS, Aqua Resource Design & Consulting & Steve Humphreys, Coffman Excavation - Installer Round Table - Anecdotes from Experience

TRACK 2 Larry O'Connor, RepCo Sales - Effluent Filters - Why we should use them. Even though this is not a OR DEQ requirement we will cover the benefits for customers, ground water and your business.

TRACK 3 Desiree Sideroff, Craft 3 & Panel The Clean Water Loan Program – How does it work?

3:30 4:30 Classes - 0.1 CEU
TRACK 1 Brannon Lamp, REHS, Aqua Resource Design & Consulting & Steve Humphreys, Coffman Excavation - Installer Round Table – Continued.

TRACK 2 Trent Clinkscales, Clinkscales Portable Toilets & Robb Barnes, Kings Pumping – Pumpers Best Practices & Round Table

TRACK 3 Paul Chierichetti, Mr. Rooter - The 3 Things We Need to Do to Make Money in Our Businesses

RepCo
SALES AGENCY

POLYLOK Inc.
Innovations in Precast, Drainage & Wastewater Products
Zabel® A Division of Polylok Inc.

- SEPTIC FILTERS
- RISERS AND LIDS
- PUMP SYSTEMS

Champion Pump

- EFFLUENT PUMPS
- GRINDER PUMPS
- SEWAGE PUMPS

SPI
Septic Products Inc.

- ALARMS
- FLOATS
- PUMP PANELS

JACKEL

- SUMP BASINS
- CHECK VALVES
- SLIDE RAIL ASSEMBLIES
- SEPTIC LIDS

Quanics
Engineering Water Solutions

- SEPTIC COMPONENTS
- ADVANCED TREATMENT SYSTEMS
- DRIP DISPOSAL SYSTEMS

(503)-720-7186
www.RepCoSalesAgency.com

Hand Insert 2 Docs...

Donation Form
2 Sided Print - Registration Form and
Classes at a Glance

Should we include a return envelope?