H_2Oregon

Spring 2026
Vol. 48, No. 2

48th Annual Management & Technical Conference

Highlights

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H2Oregon

Spring 2026
Vol. 48, No. 2

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Cover photo of the Willamette River near Albany, OR by Mike Collier

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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.

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Welcome to Team OAWU!

by Jason Green, Executive Director

Brieanna Howard graduated Summa Cum Laude from Western Oregon University in 2025. There she worked part time as an information desks employee and student building manager while being a full-time student. She then joined the OAWU team as an office assistant in January of 2026 where she utilizes her bachelor's degree in English. She enjoys spending time with her family, including the four-legged members. Brieanna is a dog mom to her golden retriever Chloe. She recently taught herself to cross stitch, embroider, and crochet. Some of her other hobbies include

going to Dutch Bros, reading, buying books, and watching TV shows and movies. We have been thrilled to learn of her positive work ethic. She is a quick study, intelligent, and detailed in her work with a very warm heart and a hilarious touch of that dry, bet you didn't see that coming, bust your gut humor. B is the voice of the Association when you call the front office or shoot an email in. A wonderful idea person with a can-do attitude - we are thrilled to work with her, and to watch how she so enjoys serving the membership! Welcome to TEAM OAWU Brieanna! Bonus: Take a look at her Canva site to see a touch of her crochet skill and art.
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48TH ANNUAL

Management & Technical Conference HIGHLIGHTS

SUNRIVER, OREGON

This year's conference was a great success, and we were blessed with a beautiful week. Many of the attendees were able to catch up with old friends and make new ones within the industry. OAWU staff enjoyed serving the members of the Association and providing assistance to those in need. Sunriver staff again provided genuine, friendly, excellent service, and great food.

The conference sessions were led off by Jason Green, OAWU Executive Director, Micah Olson, OAWU Board President, and Russ Cooper, NRWA Director. They welcomed attendees, discussed the state of the Association, and provided an update on the issues the industry is facing at a national level. This was followed by Mark Landauer who presented an update on legislative issues at the state level.

The OAWU annual business meeting was held after class sessions ended on Tuesday. President Micah Olson presided over the meeting as attending members heard committee updates and participated in board member elections. The slate of board members who were submitted by the Nomination and Development Committee and re-elected to the board were:

- **Matt Johnson, Region 5, expires 2029**
- **Craig Sheldon, Region 2, expires 2029**
- **Travis Gibson, Region 2, expires 2029**
- **Marc Caldwell, Region 3, expires 2029**

At Wednesday's regular board meeting, annual officer elections for 2027 occurred. They are: Micah Olson as President, Craig Smith as Vice President, Luis Milera as Secretary/Treasurer, and Matt Johnson as the Past President. We would like to thank and recognize them for their leadership and service to OAWU.

Many attendees were present at the awards banquet on Wednesday evening, and several visiting attendees' families joined us. The roast and

salmon were great, we had fun and many good conversations could be heard throughout the Great Hall.

The 2026 award recipients are:

The Manager of the Year: Erica Jo Anderson, Christmas Valley Domestic Water Supply District

The Wastewater Operator of the Year: Chris Hunt, City of Lebanon

The Water Operator of the Year: Rick Saldivar, Chenowith Water PUD

The Associate Member of the Year: Oregon Meter Repair & Water Solutions, LLC

The Friend of Rural Water: Russ Cooper

The Office Manager of the Year: Holly Glaze, Ice Fountain Water District

The Rookie of the Year: Devon Keene, City of Lebanon

The Rookie of the Year: Mathew Spurlock, City of Drain

Congratulations to all of our award recipients. These awards recognize the dedication and commitment made by those who choose to serve the communities of Oregon every day. Don't forget, if you have an employee who you would like to nominate for next year's awards, submit the information to the OAWU office for consideration.

The Best Tasting Water award recipients this year were the City of Astoria for Best Surface Water and Deschutes Valley Water District for Best Groundwater. The submissions are tested by 3 judges from the water community of Oregon,

continued next page

SUNRIVER CONFERENCE continued

and they decide the best groundwater and surface water, then these winners go head-to-head for best overall water in Oregon. The 2026 winner of the Overall Best Water category is Deschutes Valley Water District. Their water will be flown to Washington DC and submitted for judging in the Best Water in the Nation contest.

At the Exhibitors' Hospitality Night Thursday, there was good food and drink, many door prizes, raffles, and an auction. We wish to extend a special thank you to all of those that took part in this year's auction. The money goes to support the Jeff Swanson Memorial Scholarship fund. The selected candidate for this year's Jeff Swanson Memorial Scholarship for $2,000 was Olivia Manson, whose father works for Green Area Water and Sanitary Authority. The application for the 2026/27 academic year can be found on our website, please apply if you have a dependent that is currently attending or going to attend college.

Congratulations to our raffle winners. Raffled items were:

A LG 75-Inch Class QNED evo AL 4K TV, 1,000 rounds of 223 ammo was donated by Oregon Meter Repair & Water Solutions, a Kimber Hunter Pro .308Win Rifle with a Burris Fullfield 3-12x42MM Scope, and a S&W PC M&P Shield 9MM Pistol.

The winners of the ping pong, cornhole and cribbage tournaments were announced. First place in ping pong was Justin Conner, Darryl Walker, came in second, and Joel Gehrett came in third. Don Monroe came in first for cribbage, receiving the championship board. Jason Devine came in second and Dan Bruce came in third. Dalton Knight came in first for the Cornhole tournament, Donald Derosin came in second, and Clint Hatch came in third. Find the Logo contest winner was Garret.

We wish to thank our Associate Members for their donations, time, and support of this conference and of course to the members who continue to believe in and support the Oregon Association of Water Utilities. Additionally, we would like to especially thank this year's Diamond sponsors: TAG, Core & Main, Advanced Control Systems, HD Fowler Company and Ferguson Waterworks; our Gold Sponsor: NW Hydrovac; our Silver Sponsor: Owens Pump and Equipment; and our Bronze Sponsors: PACE, Bancorp Insurance, Anderson Perry, Reiner Pump, and Zenner USA. Be sure to sign up for the Annual Conference next year, the first full week of March 2027, as there will be a slate of new classes to attend, people in our industry to visit, food to eat, and fun to enjoy. See you there! Best wishes to you, our friends.

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The Necessity of Water and Wastewater Operators

by Keith Bedell, Wastewater Technician

Every time we turn on a tap or flush a toilet, we trust that clean water will flow in and wastewater will safely flow away. This daily convenience is so reliable that it often fades into the background of modern life. Yet behind this invisible system stands a highly skilled workforce whose role is absolutely essential: water and wastewater operators.

Water and wastewater operators are, first and foremost, protectors of public health. Drinking water systems must remove pathogens, chemicals, and contaminants that can cause serious illness or long-term health problems. Wastewater systems must treat sewage before it returns to rivers, lakes, or groundwater, preventing the spread of disease and protecting downstream communities.

History provides clear evidence of their importance. Outbreaks of cholera, typhoid, and dysentery declined dramatically after professional water treatment and wastewater management became standard. Operators ensure treatment processes function correctly every hour of every day, monitoring water quality, adjusting chemical dosages, and responding immediately to any irregularities.

Wastewater operators play a critical role in environmental stewardship. Without proper treatment, untreated sewage and industrial waste would pollute waterways, destroy aquatic ecosystems, and contaminate drinking water sources. Operators ensure that discharged water meets strict regulatory standards, reducing nutrient pollution, limiting toxic substances, and safeguarding wildlife habitats.

As environmental regulations evolve and climate pressures increase, operators must manage more complex systems designed to protect fragile ecosystems. Their expertise directly affects the health of rivers, lakes, and coastal waters.

Water and wastewater systems are among the most critical pieces of public infrastructure. Unlike roads or bridges, these systems must operate continuously without interruption. A single failure can disrupt hospitals, schools, businesses, and emergency services.

Operators maintain pumps, valves, treatment equipment, and control systems that are often decades old, requiring deep technical knowledge and problem-solving skills. During storms, power outages, or natural disasters, operators are frequently among the first responders, working long hours to keep systems operational and prevent public health emergencies.

Modern water and wastewater operations demand far more than basic mechanical skills. Operators must understand chemistry, biology, hydraulics, automation, and data analysis. Many facilities now rely on advanced monitoring systems and treatment technologies that require continual training and certification.

The industry faces a growing workforce challenge. Many experienced operators are nearing retirement, while fewer young professionals are entering the field. This shortage makes the remaining workforce even more essential and highlights the need for investment in training, education, and workforce development.

Despite their vital role, water and wastewater operators often work behind the scenes with little public recognition. Their success is measured by what does not happen—no outbreaks, no contamination, no system failures. This invisibility can lead to underinvestment and undervaluation of their work.

Yet society cannot function without them. Clean water and safe wastewater treatment are not luxuries; they are foundational to public health, economic stability, and environmental protection.

Water and wastewater operators are indispensable to modern life. They protect public health, preserve the environment, and ensure the reliability of essential infrastructure. Recognizing their importance—and supporting them through proper funding, training, and public awareness—is not optional. It is a necessity for the health and resilience of our communities, today and for generations to come.

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Low Snow but Not Low Flow

by Sam Waller, Circuit Rider

While most of the country has been hit extra hard with snow and cold, here in Oregon we have had less than average snowfall. What does this mean for your water system? Possibly nothing as we have had years like this before, but it could mean water shortages come summer. Even if you are in a system that isn't drastically impacted by my low snowpack it brings up some good talking points and a chance to think about what to do if it does start to impact our system.

Diversifying our water sources can be a big help in the event of a water shortage. The first place to look is at current resources. Are you a surface water plant with backup wells? If so, are the wells ready to be turned on? Have they been maintained? Have they been tested?

The next overlooked option is a tie-in with neighboring systems. While this isn't always an option it is certainly something to look into especially if you have different water sources. Having a tie-in can be beneficial for both systems in emergency events and times of drought.

Also educating the public to conserve water during dry times can be beneficial. When starting an educational program, it is best to start early and not wait until water levels are dangerously low. Do you have a Water Management and Conservation Plan? If so, are you familiar with it?

For small systems that don't have backup sources or a tie-in it is important to look at other options. Hauling water by truck, while expensive, could help get the system through a dry season. This is something you will want to pre-plan and have a trucking company in mind or even an agreement to haul set up ahead of time.

This type of emergency planning is important to do before an event occurs. Even if this year doesn't cause water shortages for you having a backup plan is still an important exercise. How would you react if your main source wasn't able to produce? Even if it is a short emergency, preplanning is key.

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What Does Your Workspace Say

by Heather Davis, Apprenticeship Coordinator

When was the last time you really took a look at your workspace, whether it is your desk, office or workshop? If you were to take a really good look at it, what would it say about you? Does this space truly represent you as a person and as an employee?

Recently I have been traveling with our field staff visiting systems in order to learn more about how different systems operate and how we can help get apprentices into the industry. As I have been visiting systems and getting tours of water and wastewater plants, something that I have been noticing is when I see people's desk or workspaces, I get a glimpse of their personality and values. Did you ever think of that?

Using myself as an example, I will tell you about two items that I like to keep on my desk. What can you tell about me from just those two items? The first item is a sign that says, "You don't have to be crazy to work here… we'll train you!" The second item is a plastic death star from Star Wars. Look at what else I have on my desk in the attached pictures. What else did you learn?

In my travels with my coworkers, I have been able to see different operators' interests. It could be from a picture on the wall, a trinket on their desk, a sign in the system somewhere, or even how their system is set up and organized. I love it when

I see pictures of family or friends, or a drawing from someone's child. Seeing the love and pride of one's family or friends is very touching. I have seen funny signs, a dog bed, and some unique artwork. Making your workspace your own is a good way to bring a smile to your face during a long hard day at work.

The term I like to use is "move-in." What I mean by move-in is taking a space and making it your own. Whenever I travel, the first thing I have to do is unpack my suitcase. I have to move into my hotel room and make it my space. Get everything just how I like it, so it will work best for me. It is the same thing with a workspace

About You?

if you are given this ability. When I moved into my new position, we were not sure where I was going to have an office. When we got things figured out and I was able to move into my new office, I was so happy, because I was able to finally move-in. I was able to make the space my own, putting everything where I needed it and putting up all my cute little knick-knacks.

What does all this say about a person as an employee? It can help to show whether a person is playful, organized, creative, or mission driven. It can reveal pride in the job, pride in family, or pride in the team. A photo of a kid possibly tells you what someone works for. A funny sign can tell you how they cope with stress. A dog bed says something about who their favorite coworker might be. For an employer seeing an employee move-in is a good sign. It shows that they are not just passing through but are investing themselves into their job.

Okay, do yourself a favor now look at your own workspace with fresh eyes. What is your workspace saying about you?

Is your workspace showing accurately who you are as a person and as an employee? And if it doesn't say what you want it to, maybe it's time to "move in."

Rubbish

by Mike Collier, Deputy Director/Source Water Specialist

Some would see an old 1960s rusted muscle car as something to throw away or is ugly, and yet – many others would see this as a diamond in the rough. I know I would like to have a Camaro from 67 or 68, a mustang fastback, or few other cars from that era.

One person's trash can easily be another's treasure – my wife would be glad to get rid of many items that I have, junk, clutter, things that aren't used; that is why I have a shop that she does not care to go into. I save a lot of these types of items; some of my favorites are nuts, bolts, screws, and tools – many people would describe these as trash, but a tool that still works and is from 1960, is a great tool too me. A high-quality product that is also made with high quality material.

This also goes for water and wastewater systems. There are multiple times where a system's going to discard, mothball, or shelve an old part, monitor, or treatment technology for new or different technology. This could be great for them, but there are other systems that may not be as fortunate and may not even be using the technology in their system, yet. Maybe they don't have that equipment or theirs is in even worse condition.

When you see us let us know if you need or if you have extra equipment that you no longer use/or need and we will keep our eyes and ears out for these opportunities to have the unwanted go to someone who could use it. Thank you for giving these opportunities to the communities throughout Oregon and thank you for allowing OAWU to help.

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Mastering Project Management 101: Your Firs

by Jason Brooks, Small System Circuit Rider

As a board member or dedicated individual overseeing a small water system in Oregon, you might suddenly find yourself staring down a big infrastructure project—a water treatment upgrade, reservoir overhaul, or major distribution infrastructure replacement. Maybe you've never managed anything like this before. The anxiety is real: budgets to juggle, contractors to hire, regulations to follow, and funders watching closely. But, just like hearing about a key operator's retirement can open the door to capturing vital knowledge, facing a project like this breaks the routine and gives a rare chance to build stronger systems for the long haul.

This article is designed especially for beginners. We'll walk through the basics step by step, share real-world expectations, and provide clear dos and don'ts. Think of it as your friendly guide—because you're not alone. OAWU is here with on-site help, training, funding advice, and peer support to make this manageable.

Understanding your role: What does "Project Manager" really mean for a small system? You don't need an engineering degree or years of experience. Your main job is to be the steady coordinator who keeps everyone aligned and the project moving safely toward the goal: reliable, safe water for your community.

Basic responsibilities include defining what success looks like, keeping track of time, money, and progress. Making sure everything follows Oregon rules (OHA for drinking water, DEQ for environmental impacts). Communicating clearly, so no one is left guessing. Reporting to funders if you're using grants or loans.

Real talk: You'll make mistakes—everyone does the first time. The key is asking questions early and documenting everything. "You don't know what you don't know," as one seasoned operator once said. Use this project to learn and capture lessons for the next one.

Project Management 101: Start simple and build from there. Break it into easy phases anyone can follow planning (the most important step!) Write down the basics: What problem are we solving? What's the scope? Rough timeline and budget? List risks (like rainy Oregon winters delaying construction). Use simple tools, like a notebook or spreadsheet. Involve your board and any operators early. Getting help and funds apply for support: Oregon's Safe Drinking Water Revolving Loan Fund, USDA Rural Development loans/grants, or Business Oregon programs. OAWU can guide you on blending sources. Hire contractors carefully—get multiple bids and check licenses (Construction Contractors Board in Oregon). Doing the work: hold regular check-ins (weekly emails or short meetings), visit the site yourself when possible, and watch for changes. Wrapping up and learning: do final inspections, test everything, and report to funders. Then sit down as a team: What went well? What would we do differently? Write it down!

Managing funds: treat every dollar like community trust. Money often comes from a mix—your local budget, state grants, or low-interest loans. Expect delays in reimbursements (sometimes months), so plan cash flow carefully. Simple tips: build a clear budget with a 10-20% buffer for surprises (material costs rise, weather hits), track spending weekly—use basic software or even paper ledgers, follow funder rules strictly (e.g., audits for grants, prevailing wages for federal loans), and ask OAWU for guidance.

Real expectation: funding isn't guaranteed or instant. Have a backup plan and celebrate when dollars arrive!

st Steps into Oregon Water System Upgrades

What to expect from everyone involved. Your water system and board: they want minimal service interruptions and clear updates. Share progress regularly to build trust and reduce surprises. Vendors/contractors: they bring the know-how but may push for add-ons. In Oregon, verify they're licensed and insured. Weather or supply issues can cause delays—build in extra time. State/federal funding programs: agencies like OHA, DEQ, Business Oregon, or USDA focus on accountability. Expect paperwork, site visits, progress reports, and milestone checks. Grants feel "free," but come with strings; loans are affordable but require repayment. They're partners in success, not just check-writers.

Dos and don'ts: practical advice for beginners.

Do's - Do start with a simple written plan, don't skip this! Do ask lots of questions—of contractors, funders, OAWU staff, or peers. Do communicate openly (emails, meeting notes, board updates). Do verify everything: contractor licenses, safety plans, and current regulations. Do build in buffers for time and money—Oregon projects often face weather or permitting, surprises. Do celebrate small wins and involve your community to show commitment to quality water. Do reach out to OAWU early, they offer free or low-cost help tailored for small systems.

Don'ts - don't rush into contracts without multiple bids or legal review. Don't ignore early warning signs (budget creep, delays). Don't assume funds will flow on time—plan for gaps. Don't micromanage pros—trust but check progress. Don't forget safety and compliance—fines hurt small budgets. Don't end without a quick team review—capture what you learned! Don't go it alone—OAWU and other small systems have been there.

This project is more than pipes or tanks—it's a chance to strengthen your system, team, and community confidence. By following these basics, documenting as you go, and leaning on resources like OAWU, you'll come out with, not just upgraded infrastructure, but a more prepared, resilient operation. You've got this. Reach out to OAWU today for templates, training, or a quick chat—we're here to help Oregon's small water systems thrive.

Dollars and Sense

by Tim Tice, Projects Manager

In past articles, the importance of data and managing the information were written to enhance operations routine; being the key word to emphasize forming a procedural habit. The area of data presented in this article is focused on the water rates your utility has applied. The single question associated with water/wastewater rates is: How were they designed or structured?

All to often this question goes unanswered, or is answered, "that's how we've always done it!" The design of utility rates may involve the department's lead personnel, operations manager, finance manager and decision makers. Decision makers are those people who have the final decision towards implementation, these groups are often councils or boards. The primary goal at this stage is clarifying a single total cost necessary to support operations. This point can be the most difficult as those involved have different ideals, attempting to set the perfect rate for the moment.

Utilities are responsible for recovering the operation's full cost, which is easily understood by interpreting the operational data collected throughout the year. The single total cost collects all of the required dollars, and the forecasted dollars the utility incurs to provide a service without interruption. It is the forecast of dollars that seems to be challenging to establish during the process, which can have the largest impact on forming the cost-of-service. The full cost of service primarily focuses on the demand, and how the demand matches revenue requirements.

Cash flow forecasting is an attempt to have these expenditures directly funded with rate revenues. These costs are based on three general areas, short-term or routine maintenance, medium-term or improvements to the system and long-term, major capital improvements or upgrades. Often these upgrades and costs are analyzed through an engineering firm. If such information is not available or is antiquated, develop a team to begin review of anticipated upgrades and have those conversations.

Like many tasks we are involved with, the one unknown factor is time it takes to review, discuss and apply new rates. For the upcoming fiscal year, July through June, this start should begin October the previous year. The process must allow for analysis, review of preliminary findings, requested adjustments and final report. Beginning in January for a decision in July is unrealistic as it takes time for decision makers to digest the findings. If your utility follows a calendar year, the month of April would be a good time to begin the routine review of the necessary data. A good rule of thumb is 8 to 12 months to complete the utility rate study. The wastewater rate review can parlay with the water side.

What data should be considered to shape the budget. The foundational data is personnel, materials, administrative (proportionate to the utility), debt service, contingency funds and capital improvement planning. These items create a single

dollar amount for required revenue. Additionally, water systems need to know the total figures of water produced and water sold. Both items will function as a 100 percent expense allocated per gallon, cubic foot or unit of water.

If your utility is considering a direct approach to determine utility rates, consider calling the Association office for a no-obligation discussion and to understand the work involved in outlining a utility rate specific for your entity. Most of the time our membership has similar requirements, but has different extenuating circumstances, which can create unique challenges. These challenges are simply those situations that require the group to discuss key points to reach or compromise on those ideals the group wishes to obtain. A routine rate of review will support rates from data that is defined and give reason for incremental adjustments. As most entities are tasked with an annual budget, create a more in-depth review of operational costs alongside the budget. Make this review a routine, forming a procedural habit. The best of everything life has to offer!

UPCOMING TRAINING & EVENTS

Date	Class Title	Location	CEU	Information	ESAC#	Fee/Free
April 23	Distribution Basics	Independence	0.6	Water	5986	Fee
May 12	Math for Operators	Redmond	0.4	Water/Wastewater	6104	Fee
May 12	Pumps & Pumping	Redmond	0.3	Water/Wastewater/Onsite	6216	Fee
May 20	Distribution Basics	Independence	0.6	Water	5986	Fee
June 17	Math for Operators	Hermiston	0.4	Water/Wastewater	6104	Fee
June 17	Pumps and Pumping	Hermiston	0.3	Water/Wastewater/Onsite	6216	Fee
July 21-22	Water Treatment/Distribution Certification Review	Redmond	1.4	Water/0.5 Wastewater/Onsite	7548	Fee
August 4-5	Wastewater Treatment/Collections Certification Review	Independence	1.4	Wastewater/0.5 Water	6043	Fee
August 17-20	32nd Annual Summer Classic Conference	Seaside	2.0	Water/Wastewater	TBA	Fee
October 5-8	2026 Fall Operator's Conference	Canyonville	2.0	Water/Wastewater	TBA	Fee
October 13-14	Water Treatment/Distribution Certification Review	Independence	1.4	Water/0.5 Wastewater/Onsite	7548	Fee
October 15	Water T/D Level 3,4 & Filtration Endorsement	Independence	0.6	Water	7546	Fee
October 20-21	Wastewater Treatment/Collections Certification Review	Redmond	1.4	Wastewater/0.5 Water	6043	Fee
November 16-19	Spirit Mountain Casino Operator's Conference – 2026	Grand Ronde	2.0	Water/Wastewater	TBA	Fee
December 7-10	Annual End of Year Operator's Conference	Hood River	2.0	Water/Wastewater	TBA	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

Drinking Water Data Online https://yourwater.oregon.gov
Drinking Water Services https://www.oregon.gov/oha/PH/HEALTHYENVIRONMENTS/DRINKINGWATER/Pages/index.aspx

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

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

Nice vs. Kind

by Scott Berry, Operations Manager

During the opening session of our Sunriver conference, our Executive Director Jason Green mentioned the difference between being nice and being kind and it got me thinking. The group of folks I work with are a very kind group, and some of them are even nice…

Many people use the words "kind" and "nice" as if they mean the same thing, but they are actually very different ways of relating to others. Understanding this difference can change how we show up in our relationships, at work, and even with ourselves.

Being "nice" is usually about being pleasant, agreeable, and polite. A nice person tries not to rock the boat. They smile, avoid conflict, and say what they think others want to hear. Niceness focuses on appearances and short-term comfort: no one gets upset, at least not immediately, and everything looks smooth on the surface. For example, a nice coworker might tell you that your presentation was "great" even if they noticed serious problems, because they don't want to hurt your feelings or create tension.

Kindness, on the other hand, is deeper and often requires more courage. Being kind means genuinely caring about someone's well-being and acting in their best interest, even when it's uncomfortable in the moment. A kind person values honesty, growth, and respect over short-term ease. That same coworker, choosing kindness over niceness, might say, "The presentation is good but consider these changes to improve the flow and content." The feedback may sting a little, but it is offered to help you improve, not to make themselves feel or appear good.

One key difference is motivation. Niceness is often driven by a desire to be liked, to avoid rejection, or to maintain a certain image. It can slide into people-pleasing: saying yes when you should say no, laughing at jokes you don't find funny, or hiding your true opinions. In contrast, kindness is driven by concern, respect, and integrity. Kind people might still be warm and friendly, but they are willing to set boundaries, say no after consideration, and tell hard truths with compassion. Those hard truths are always more kind in the long run.

Another difference lies in impact. Niceness can sometimes protect feelings in the short term but harm growth in the long term. If no one is willing to be honest, problems go unaddressed, resentment can build, and relationships stay shallow. Kindness may feel harder in the moment—hearing a difficult truth, enforcing a boundary, or confronting a problem—but it creates trust. When you know someone is kind rather than just nice, you trust that their words and support are real.

Kindness also includes how we act when no one is watching. Being nice is often most visible in public: good manners, polite small talk, friendly behavior in professional and social settings. Kindness shows up in private: checking in on a struggling friend, apologizing when you're wrong, or choosing not to gossip even when it would make you look good. It is less about social performance and more about character.

This difference matters because many of us are taught to prioritize "being nice" over being honest, assertive, or authentic. We learn to smooth things over instead of working through them. Over time, that can lead to burnout, hidden anger, and relationships that look fine but have masked resentment that is just under the surface and can eventually surface. Shifting from nice to kind means giving ourselves permission to be real and to let others be real too.

In practice, choosing kindness over niceness might mean having a hard conversation instead of avoiding it, saying "no" when you don't have the capacity to help, or offering honest feedback with care rather than empty praise. It means balancing truth with empathy. Ultimately, niceness is about comfort; kindness is about care. When we aim to be kind instead of just nice, we create deeper, more resilient, and more meaningful connections—with others and with ourselves.

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Protecting Your Lagoons from Critters

by Jerry Smith, EPA WW Technician

It was a crisp Spring morning as I prepared my truck for the journey to Hermiston in April of 2005. Along with rubber boots and a shovel I included badger lures, beaver lures, flagging, and traps for both species. Just for good measure I threw in a few gopher traps. As I got in the truck to roll out, I grabbed one last item…my Oregon Furtaker License. As I drove the 30 miles to the Simplot Plant, I went over the details of the conversation I had with the lead wastewater operator a few nights prior: "Our wastewater lagoon was completely washed out due to a critter digging onsite, please bring traps and anything else so he doesn't ruin the other lagoons!" I'm sure today would be a site to behold.

And sure enough, I wasn't mistaken, as I rounded the corner to the lagoons area, the destruction and carnage was immense. A gaping hole at the West side of the complex greeted me with a lagoon that was mostly empty…over 78 million gallons of wastewater gone. The deep channel caused by this massive turbulent flow mowed down everything in its path including small trees, bushes, and rocks. What a mess!

After meeting and talking with the operator and asking for the lay of the land, I put on my detective hat on and started making rounds of the area to connect the pieces of the puzzle, looking for critter sign. This process included observing for tracks, scat, diggings, holes, and tufts of hair along the chain link fence. After a good amount of investigating, it became obvious to me that Mr. Badger had been very busy in search of his favorite food… the Northern Pocket gopher. You could see where he had been by how many dug holes scattered the area around the other lagoons. Luckily these holes were below and above the lagoons, but not at any of the other lagoon embankments. I soon got to work and set at least a dozen traps around any fresh sign and a few extra along paths of old rabbit and deer trails. They were later flagged for safety, and I mentioned to the operator their locations and advised to keep all pets and people away from the area until further notice.

I never did trap that badger. But I also never saw any more fresh badger sign the weeks following the lagoon breach. To this day, I'd bet that critter took a hard long swim to his death when the lagoon let loose. After all, 78 million gallons is a lot of water!

I write this as a precautionary for all WW plants out there with lagoons and critters close by; be mindful that things can go south in a hurry when Mother Nature gets involved. Always keep a sharp eye out for fresh sign especially fresh diggings during your routine inspections. We often go past these same locations 100's of times with nothing new to observe, but best to always be aware.

In the event you DO find an issue, there are steps that should be taken immediately. You can either address the problem on your own or call in the professionals.

Taking care of it alone might take a little practice and be time consuming. Waiting for the critter to show itself while waiting with loaded rifle might be a losing battle because of limited hours of daylight depending on the time of year, not to mention the daily operator duties that take up the majority of your day. Setting traps is another option but this is a big learning curve…not to mention you'll need to take an ODFW test to receive a license to set said traps. The last option is to hire a professional. Many pest control specialists mostly deal with bugs and mice. A few deal with the larger animals. Call around your area and see what's out there. Last, but not least, is a federal program run by the USDA. It is operated under the APHIS section (Animal Plant Health Inspection Services) These folks are great people to work with. Each county in Oregon has one full time trapper who will take care of your large and small animal problem at no cost to the general public. Do a search online for the operator in charge of your area.

As we roll into Spring 2026, keep your eyes peeled and your ears open around your lagoons. The critters will be waking up with all the warmer temperatures and longer days. Good luck!

To Use a Streaming Current Monitor or Not to Use a Streaming Current Monitor

by Heath Cokeley, Programs Manager/Circuit Rider

It seems as though there has been a debate among water treatment plant operators for many years now about whether a streaming current monitor (SCM) is a worthwhile tool or not. My guess is that many of you have them, haven't worked in a plant without one, and may not even know there is a debate. Others may have tried to use them or have seen them but are comfortable with how the plant is running and don't want to make waves. Still others may have never even heard of a SCM, and for those operators I will briefly describe what I am talking about.

An SCM is a tool that simply measures the charge of the water after a coagulant has been added, just after the flash mix cycle. If the SCM indicates that the water has a positive charge that would suggest that the coagulant dose is too high. If it indicates a negative charge that would suggest the coagulant dose is too low. If it indicates that the water is near neutral that would suggest that the coagulant dose is just right and I'm sure, I'm not the only one that is currently thinking about Goldilocks and the Three Bears, but I digress.

Now I'm sure the operators out there reading this that have set up their own SCM are thinking how I just oversimplified this whole thing. The whole process of installing it, calibrating it just right and then properly maintaining it is way more complicated than I just made it sound, and I would say you are correct. It is vitally important that the machine is installed correctly, getting the proper flow from the appropriate point in the process, calibrated and maintained. I think, honestly, that is where some of the question whether it is a worthwhile tool comes from. If any of those steps are not done just right the information the machine gives you will not be worthwhile and if an operator doesn't trust the data, they won't trust the tool. The old saying "good data in, good data out, but bad data in, then bad data out" comes to mind.

Ultimately what I am saying is this: an SCM is not the machine to replace jar testing, it is a tool that can be used hand in hand with jar testing to keep a plant optimized. Hooking an SCM to your coagulant through a 4-20 ma signal, allowing it to change chemical dose is not replacing the operator, it's giving the device the ability to make those chemical changes without the operator standing there doing it themselves every minute that plant is in operation. Of course I am not suggesting to throw one in, then walk away, but if you're not familiar with it, call a local treatment plant and go check out theirs. If you get a new one, put it through its paces and make sure you trust the data it's giving you before you give it the ability to make chemical changes. If you don't trust the data, then figure out why and fix it. It's a machine and like all machines, it takes maintenance and will eventually break. I had one at a system, not too many months ago, that was overdosing to the point that when we did the math and jar testing it was injecting almost 70 times as much chemical as it was supposed to. I just say that to point out that like any tool, they are not perfect, but when installed correctly and maintained properly they are an excellent addition to your toolbox and with that, I'll see you down the road.

The Final Flush of "The Wipes"

by Monty Norris, Wastewater Technician

Wipes are promoted as a cleaner and more comfortable alternative to toilet paper; they offer perceived convenience and assurances of flushability. Anybody that has worked in the collections and treatment side of this industry knows and deals with the fact they are a nuisance and problematic to our pumps and processes. Although these wipes can be physically flushed down toilets, they do not disintegrate like toilet paper and frequently lead to considerable problems and failures.

What is "Flushable?" How are the manufacturers being allowed to label wipes this way? Many manufacturers claim their wipes are biodegradable or safe for sewer systems. However, the National Association of Clean Water Agencies (NACWA) notes that no federal regulatory standards currently define "flushable." This regulatory gap enables companies to market products that do not break down under typical sewer conditions.

The Challenges

1. Clogged Household Plumbing - Wipes tend to become trapped on rough pipe surfaces or bends. Accumulation leads to dense mats, impeding flow or causing complete obstructions. Homeowners may incur high costs for plumbing repairs or emergency services. Local utilities, including those in Oregon, identify wipes as a leading cause of residential sewer backups.

2. Major Sewer Line Blockages - Municipalities nationwide report increased frequency of sewer clogs due to wipes. In several instances, wipes combine with fats, oils, and grease (FOG) to produce "fatbergs," solid masses capable of weighing hundreds of pounds. Such blockages can result in raw sewage overflows into public areas and natural water bodies.

3. Increased Utility and Ratepayer Costs - Wastewater treatment plants expend significant resources removing wipes that traverse entire pipe networks. One city documented removal of 1,600 pounds of non-flushable material per month from its system. NACWA estimates wipes contribute an additional $441 million annually in operational costs for U.S. utilities, ultimately increasing sewer rates for consumers.

4. What are we doing to our environment? Many flushable wipes contain synthetic fibers and microplastics, persisting in the environment. These materials degrade slowly, entering waterways where microplastics accumulate in aquatic life and ecosystems. Wipes escaping treatment facilities contribute to pollution of rivers and oceans.

Thoughts…plumbers and wastewater professionals strongly discourage flushing any type of wipe, regardless of labeling. Consumer Reports confirm that flushable wipes retain integrity long after toilet paper dissolves. Even so-called "biodegradable" wipes disintegrate too slowly, posing risks to both plumbing and sewer infrastructure.

What are we doing about the issues? Some states have introduced regulations mandating "Do Not Flush" labels on non-flushable wipes. Despite these measures, the industry remains largely unregulated at the federal level, permitting ongoing marketing of problematic products. We can only do what we can and continue to educate the tax residents and taxpayers on the problems wipes are creating and explain how to minimize public works issues. When we send out monthly bills, we can add flyers frequently and make suggestions such as to dispose of wipes in the trash, irrespective of labeling, utilize rapidly dissolving toilet paper, as certain brands have demonstrated faster degradation rates. To install a bidet seat, providing enhanced cleanliness without introducing non-degradable materials into waste streams.

Finally, while flushable wipes offer convenience, they present hidden costs to households, municipalities, and the environment. The most effective guideline is clear: only flush toilet paper. All other items should be discarded in the trash.

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From Monitoring to Mastery: How Castleford and ACS Set a New Standard for Rural Water Automation

By Laura Frank, Marketing Coordinator, Advanced Control Systems (ACS)

The Rural Reliability Challenge

In the world of municipal water management, reliability isn't a luxury—it's a lifeline. For rural communities like Castleford, Idaho, the stakes are even higher. With limited staff, vast service areas, and aging infrastructure, every minute of downtime or uncertainty can ripple into costly truck rolls, emergency repairs, and shaken public confidence.

Castleford's journey from a fragmented, monitoring-only system to a resilient, fully automated, and remotely accessible operation is more than a technical upgrade—it's a blueprint for rural utilities everywhere. Partnering with Advanced Control Systems (ACS), the city transformed its water infrastructure by embracing four pillars of modern automation: Remote Diagnostics and Telemetry, Documentation and Backups, Lifecycle Planning and Vendor-Agnostic Design, and Standardization and System Architecture.

This case study explores how these principles turned vulnerability into resilience, offering practical lessons for utilities, integrators, and decision-makers across the industry. The Castleford story is a testament to the power of collaboration, technical rigor, and a willingness to rethink legacy approaches in pursuit of long-term value.

The Starting Point: Monitoring Without Control

When ACS first arrived in Castleford, they found a system that looked modern on the surface but was riddled with hidden risks. The city's SCADA environment has evolved through years of emergency fixes and ad-hoc workarounds. Pumps and processes were "always on," alarms were inconsistent, and the city council's chosen solution emphasized proprietary monitoring hardware—without true automation. As Aaron, Castleford's Public Works Supervisor, recalled, "We initially believed it was a full system, but later learned it was designed for monitoring only." This realization is all too common in rural utilities, where budget constraints and vendor promises often lead to solutions that watch but don't act. The consequences were immediate and costly. Operators faced manual interventions multiple times per week, chasing symptoms instead of solving root causes. Two separate PLCs communicated through a patchwork of radios and IP networks, tank level readings were unreliable, and—most critically—there was no documented code, no system drawings, and no technical backups. When something went wrong, troubleshooting was guesswork. The lack of transparency and control left the city vulnerable to extended outages and increased operational costs.


Justin Griggs, Control System Integrator for ACS

The ACS Solution: Consolidate, Document, Automate

ACS's approach began with honesty and relationship-building. Justin, the lead integrator, dove into the system, consolidating communications through a single edge node, relocating critical hardware to a climate-controlled environment, and tracing signal wires to correct years of bypasses and failed components.

But the real transformation came from reconstructing program logic and creating documentation from scratch. With no existing artifacts, Justin painstakingly extracted logic from legacy SCADA and HMI systems, producing the governance Castleford had never had. This process not only restored trust but also laid the foundation for future resilience. The city's operators were finally equipped with the tools and information they needed to manage their system confidently and efficiently.

The Four Pillars of Resilience

To ensure uninterrupted monitoring and control, ACS implemented secure VPN connectivity with cellular failover. Now, even if the primary link dropped, operators could maintain real-time visibility and command—no more blind spots, no more unnecessary truck rolls. This robust connectivity was a gamechanger, especially during Idaho's harsh winters and unpredictable weather, when physical access to remote sites could be delayed for hours or even days.

1. Remote Diagnostics and Telemetry—From Reactive to Proactive

- In rural settings, every mile matters. Remote access reduces truck rolls, speeds response times, and lowers costs. For Castleford, it turned a reactive operation into a proactive one.

2. Documentation and Backups—Governance Is Your Safety Net

- Documentation isn't bureaucracy—it's insurance. Without code versions, diagrams, and backups, troubleshooting is slow and risky.

3. Lifecycle Planning and Vendor-Agnostic Design—Avoid Costly Missteps

- Vendor-agnostic strategies enable flexibility and competitive sourcing. Lifecycle planning aligns upgrades with budgets and risk windows.

4. Standardization and System Architecture—Simplicity Drives Resilience

- Fragmented systems multiply failure points. Standardization simplifies troubleshooting and strengthens security.

Positioning Castleford for Success

Castleford's experience stands as compelling proof that even small communities with limited resources can achieve modern reliability by focusing on fundamental principles of proactive automation and good governance. Prior to ACS's assistance, Aaron shared, "We initially believed it was a full system but later learned it was designed for monitoring only". His early wake-up call about having only a monitoring system underscored the importance of clear scope and honest assessment, and Justin's hands-on approach highlighted the value of technical rigor and transparent communication.

As Justin shared, "When you give operators the tools and information they need, you see a real sense of ownership and pride in their system. That's when the real transformation happens." These perspectives ground the technical claims in lived experience, making the case for proactive investment in automation and governance all the more persuasive.

Continued next page

Results: Control, Confidence, and a Foundation for the Future

After implementation, Castleford's operators regained real-time control and visibility. With end-to-end integration and documented logic, alarms became actionable, calculations were corrected, and the SCADA system evolved from a passive dashboard into an operational command center. Real-time monitoring—initially not the top priority—proved indispensable, enabling immediate issue identification and resolution. The new architecture and governance strengthened uptime today and lowered risks tomorrow.

ACS's approach—engineering depth across PLC/SCADA, electrical/mechanical know-how, and a bias for vendor-agnostic solutions—delivered comprehensive functionality without superfluous proprietary hardware. For rural communities, that combination of capability and openness sets a realistic path to sustainable modernization.

The Castleford project also set a new benchmark for future upgrades and expansions. With a standardized, documented, and vendor-agnostic foundation, the city is now well-positioned to integrate new technologies, such as advanced analytics or IoT sensors, as their needs evolve.

Practical Takeaways for Industry Leaders

1. Design for Remote First: Build secure remote diagnostics into the core architecture (VPN, cellular failover). Don't treat connectivity as an add-on—make it integral to control, alarms, and maintenance workflows.
2. Document as You Build: Capture PLC program versions, alarm matrices, network diagrams, and change logs from day one. Institute off-site and versioned backups. Governance is cheaper than downtime.
3. Choose Open, Modular Components: Favor interoperable, vendor-agnostic hardware and protocols. Proprietary monitoring alone is a dead end; full automation plus transparency sets you up for the next decade.
4. Consolidate and Standardize: Reduce radios, IP fragments, and ad-hoc bypasses. A single, well-documented edge node is easier to secure, support, and scale. Relocate critical equipment to stable environments.
5. Measure Cultural Impact: Automation frees operators to plan, not just react. Track the shift in time allocation—from emergency runs to proactive optimization—as a KPI of success.

Looking to cut SCADA costs without cutting corners? Don't miss our class, "Top 10 Ways to Save on SCADA and Control System Projects," designed for water and wastewater professionals at your next conference. Learn field-tested strategies—like standardization, remote diagnostics, and phased implementation—to reduce lifecycle costs while boosting reliability and compliance. Practical, proven, and built for operators who do more with less.

A Blueprint for Resilient Rural Automation

Castleford's experience is more than a technical upgrade; it's a blueprint for rural resilience. By replacing monitoring-only assumptions with automation-first design, anchoring architecture in remote diagnostics and failover, and institutionalizing documentation and backups, the city transformed vulnerabilities into durable strength. ACS's work—spanning engineering excellence and customer advocacy—demonstrates how thoughtful design and proactive problem-solving deliver confidence today and adaptability tomorrow.

For communities modernizing water infrastructure, Castleford proves that the path to reliability is clear: consolidate, document, automate, and connect. The lessons learned here are not just for one city—they are a call to action for rural utilities everywhere to invest in the foundations of resilience and future-readiness.

This article is based on the case study "ACS & Castleford – Remote Monitoring Transformation."

Biography

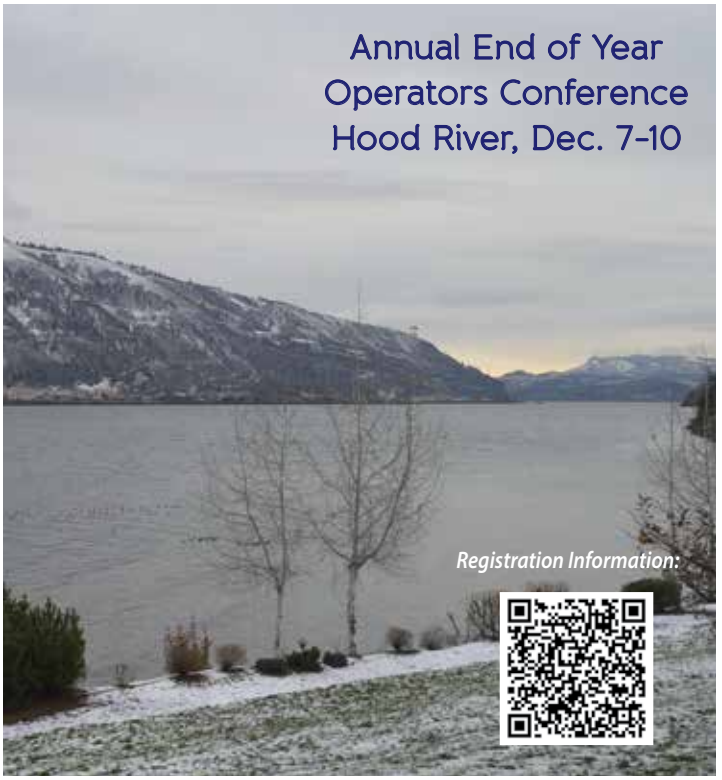
Laura Frank joined ACS in late 2024 and was recently promoted to Marketing Coordinator for her exceptional customer service skills. In this role, she champions ACS's values of quality, innovation, and doing what's right, helping the team make every client interaction simpler, warmer, and more effective. Outside of work, Laura is a dedicated mother of three and an active community member who believes small acts of kindness can create meaningful change.

Jonathan Frank joined ACS in 2022 as Director of Business Development, where he enjoys helping clients achieve success through ACS's unique control system solutions. He brings over 30 years of experience in the technology industry and is a Business Administration graduate of Boise State University. Jon is known for building strong partnerships and actively contributing to industry associations. Outside of work, he enjoys spending time with family, riding his motorcycle, and exploring the outdoors.

Want to learn more?

Contact Jonathan Frank, Director of Business Development, to schedule a consultation, inquire about our next class available, or arrange a lunch-n-learn webinar on "Remote Diagnostics and Lifecycle Planning" or any of our previous topics with our Account Manager.

UPCOMING CONFERENCES



MARK YOUR CALENDAR!

QUIZ CORNER

1. The average speed of a spinning vinyl (78) record is:
   A. one-half MPH
   B. one- foot per second
   C. two MPH
   D. one MPH

2. The average weight of soil per cubic foot is ___lbs:
   A. 100
   B. 125
   C. 75
   D. 50

3. Material Safety Data Sheets (MSDS) are required for?
   A. All chemicals used in the workplace regardless of hazard
   B. All chemicals that OSHA requires MSDS for
   C. Chemicals known to cause adverse health effects
   D. None of the Above

4. What type of fire hydrant has no main valve, but has a separate valve for each nozzle?
   A. i-Fire Hydrant
   B. Super Fire Hydrant
   C. Wet-Barrel
   D. Dry-Barrel

5. What is a measure of materials opposition to the flow of electric current?
   A. Voltage
   B. Ohms
   C. DC Current
   D. AC Current

6. The rated flow of a water meter, as stated by the manufacture, is based on:
   A. Hot Water
   B. Cold Water
   C. Continuous Flow
   D. Sporadic Flow

7. What is the typical strength of calcium hypochlorite?
   A. 5-15%
   B. 65-70%
   C. 20-25%
   D. 75-99%

8. Most water systems use hydrants with two nozzles. What are the diameters of the two nozzles?
   A. 2" and 3"
   B. 2.5" and 4.5"
   C. 1 1/2" and 2 1/2"
   D. 6" and 8"

9. By what process do cyanobacteria, a species of bacteria which are ubiquitous in marine environments, obtain energy? Some of these species can produce powerful toxins, called cyanotoxins, that can harm people and animals.
   A. Electrolysis
   B. Decomposition
   C. Mitosis
   D. Photosynthesis

10. Most weather phenomena occur in what lowest layer of the Earth's atmosphere, which begins at the surface and extends three to eleven miles above the earth, depending on latitude?
    A. Stratosphere
    B. Troposhere
    C. Katyperrysphere
    D. Thermosphere

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

2026 OREGON ASSOCIATION OF WATER UTILITIES

MEMBERSHIP APPLICATION

Member Name: _____

Mailing Address: _____

City/State: _____

County:_____ ZIP: _____

Email: _____

Phone: _____

Contact Person:_____

Number of Hook-ups: _____

Were you referred? By whom _____

Type of System:

❑ Water ❑ Wastewater ❑ Both

Membership Category	Membership Dues
❑ Regular Member	$_____ See schedule below
❑ Associate Member	$700.00
❑ Individual Member	$100.00

Regular Member Dues Schedule

1 to 100	$75 + 53 cents per connection
101 to 500	$85 + 53 cents per connection
501 to 1,000	$90 + 53 cents per connection
1,000 and up	$100 + 53 cents per connection
Maximum dues is	$1,600.00

☐ **Please Invoice** ☐ **Payment Enclosed**

Credit cards: please call 503-837-1212 for processing and receipt.

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

MB26

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 Regular Member 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. Annual Dues $700.00 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 $100.00 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 about upcoming training courses in your area
- 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
- Positive contacts with other organizations
- Camaraderie with water and wastewater professionals
- Operator Of Record services
- Job referrals, announcements and searches
- Well testing, plan review, rate studies, WMCP plans
- System performance evaluation and options
- Additional programs and services
- Disaster response assistance and planning

MEMBERS

62nd Court Mutual Water Company
Adair Village, City of
Adams, City of
Adrian, City of
Agate Creek Water Association
Agate Water System
Albany Rifle & Pistol Club
Albany, City of
Alfalfa Water LLC
Alpine Crest Improvement Dist.
Amity, City of
Ananda Center at Laurelwood, Inc.
Arch Cape Water & Sanitary District
Arlington, City of
Arrowhead Mobile Home Park
Aspen Lakes Utility Company, L.L.C.
Astoria, City of
Athena, City of
Aumsville, City of
Aurora, City of
Avion Water Company
Baker City, City of
Bandon Dunes Resort
Bandon, City of
Banks, City of
Barlow Water Improvement District
Barlow, City of
Bay City, City of
Bay Hills Water Association
Bayou Water Improvement District
Beaver Water District
Beaverton, City of
Bend, City of
Benton County Service District
Bents Court Water Co.
Berndt Creek Water Corp.
Beverly Beach Water District
Biggs Service District
Black Butte Ranch
Black Mountain Water District
Blue River Water and Sanitation District
Blue Spruce Estates
Bly Water & Sanitary Dist.
Boardman, City of
Bonanza, Town of
Boring Water District #24
Brandy Bar Landing, Inc.
Breitenbush Hot Springs
Bridge Water District
Brightwood Water Works
Brooks Community Service District
Brownsville, City of
Buell-Red Prairie Water District
Bunns Village Properties, LLC
Burlington Water District
Burns, City of
Burnside Water Association
Butte Falls, Town of
Camp Baker BSA
Canby Utility
Canby, City of
Cannon Beach, City of
Cannon View Park, Inc.
Canyon City, Town of
Canyonville, City of
Carlton, City of
Cascade Locks, City of
Cave Junction, City of
Cedarhurst Improvement Club, Inc.
Central Coast Clean Water Company
Century Meadows Sanitary System, Inc
Century Meadows Water System, Inc.
Charles Tracts Water Company
Chart Water Supply, Inc.
Chehalem Mt. Sun Ridge Association
Chenowith Water PUD
Chiloquin, City of
CHR Dist. Improvement Co.
Christmas Valley Domestic Water
Cimmarron City Water Co., Inc.
Circle C Improvement Dist.
Clackamas River Water
Clarks Branch Water Association
Clatskanie, City of
Clayton Creek Water Association
Cline Falls MHP
Cloverdale Sanitary District
Cloverdale Water District
Coburg, City of
Collins Products LLC
Colorado Lake Co-Op
Colton Water District
Columbia City, City of
Columbia Hills Homeowners Association
Columbia River PUD
Condon, City of
Coos Bay, City of
Coquille, City of
Corbett Water District
Cornelius, City of
Corvallis Waldorf School
Cottage Grove, City of
Country Club Water District
Country View Estates Water System
Country View Mobile Estates
Cove Orchard Water Association
Cove, City of
Crater Lake National Park
Crescent Sanitary District
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
Deer Creek Estates Water Association
Delphian School
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
Dietz Airpark Water System
Donald, City of
Drain, City of
Drifter's MHP
Dry Creek Airpark HOA, Inc.
Dufur, City of
Dundee, City of
DWF Round Lake Utilities
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
Emerald Meadows HOA
Emerald Valley Wastewater Co.
Enterprise, City of
Estacada Mobile Village, Inc.
Estacada, City of
Eugene Mobile Village
Fairview Water District
Fairview, City of
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 Grove HOA
Fir View Water Company
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
Government Camp Water Company
Grand Prairie Water Supply Company
Grand Ronde Community Water Association
Grand Ronde Sanitary District
Grants Pass, City of
Grass Valley, City of
Green Area Water & Sanitary Authority
Green Oaks Park
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 PUD
Helix, City of
Heppner, City of
Hermiston, 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 Co.
Hubbard, City of
Hunnell Hills Community Water System
Huntington, City of
Ice Fountain Water District
Idanha, City of
Idleway Improvement District, Inc.
Imbler, City of
Independence, City of
Indian Meadow Water Company
Inn at Otter Crest
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 Water District
John Day, City of
Johnson Creek Water Services Company
Joseph, City of
Junction City, City of
Keizer, City of
Kelly's Brighton Marina, LLC
Kelso Water Association
Keno Water Company, Inc.
K-GB-LB Water District
Kilchis Water District
Klamath Falls, City of
Klippel Water System
Knappa Water Association
Knoll Terrace Park
L.A. Water Cooperative
La Pine, City of
Labish Village Water Commission
Lady Creek Water System
Lafayette, City of
Laidlaw Water District
Lake Creek Lodge
Lake Grove Water District
Lake of the Woods Resort, LLC.
Lake Oswego, City of
Lakeside Water District
Lakeside, City of
Lakeview, Town of
Lakewood Homeowner's, Inc.
Lamb Weston
Lamontai Improvement District
Lamplighter Water Association
Lane County Parks
Langlois Water District
Laurelwood Water User's Co-op
Lawrence Subdivision Water Assn., Inc
Lawson Acres Water Assoc.
Lebanon, City of
Lexington, Town of
Lincoln City, City of
Little Beaver School, Inc.
London Water Co-op

MEMBERS

Long Creek, City of
Lostine, City of
Lowell, City of
Luckiamute Domestic Water Co-op
Lusted Water District
Lyons-Mehama Water District
Madras, City of
Madrone Hill Mobile Home Park
Madsen Springs Water Assn.
Malin, City of
Manzanita, City of
Mapleton Water District
Maupin, City of
McKay Acres Improvement District
McKenzie Palisades Water
McMinnville Water & Light
McNulty Water PUD
Merrill, City of
Metolius Meadows Prop. Owners Assn.
Metolius, City of
Midland Water Association
Mill City, City of
Milo Adventist Academy
Minikahda Water District, Inc.
Mitchell, City of
Molalla, City of
Monmouth, City of
Monroe, City of
Moro, City of
Morrow Commission, Port 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
Nesbitt Water Management
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 Powder, City of
Northwest Newberg Water Association
Nyssa, City of
Oak Lodge Water District
Oakland, City of
Oakridge, City of
Oakwood Water Systems, Inc.
Oceanside Water District
Ochoco West Water & Sanitary Authority
Odell Sanitary District
Olney-Walluski Water Association
OPRD Main Office – Salem
Orchard Heights Water Association
Oregon Cascade RV Co-op.
Oregon Shores Beach Club, Inc.
Oregon Shores II
Oregon Water Utilities-Cline Butte
Oregon Water Utilities-Mtn. Lakes
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
Philomath, City of
Phoenix, City of
Pilot Rock, City of
Pine Grove Water District
Pioneer Park Water Co-op
Pioneer Village Water Company, Inc.
Pleasant Home Water District
Pleasant View Water Co.
Polehn Heights Water Association
Ponderosa Pines Water Company
Port of Columbia County
Port Orford, City of
Power City Water Co-op
Powers, City of
Prairie City, City of
Prineville, City of
Quincy Water Association
Rainier, City of
Red Hills Estates HOA
Redmond, City of
Redwood Water Service, Inc.
Reeder Ranch, Inc.
Reedsport, City of
Reehers Homestead, Inc.
Rhododenron Water Association
Richland, City of
Rickreall Community Water Association
Riddle, City of
Rieth Water & Sanitary District
Rimrock West Improvement District
River Meadows Improvement District
River Point Farms, LLC
Riverbend-Riverbank Water District
Rivergrove Water District
Riverside Water District
Roats Water System, Inc.
Rock Creek Water District
Rock of Ages
Rockaway Beach, City of
Rockwood Water PUD
Rocky Pointe Marina
Rogue Community College
Rogue Lea Estates MHP LLC
Rogue River – Siskiyou National Forest
Rogue River, City of
Round Lake Water Utilities
Rufus, City of
Salem, City of
Salishan Sanitary District
Salmon Valley Water Company
Sandy, City of
Scappoose, City of
Scio, City of
Scotts Mills, City of
Scravel Hill Water Co-op
Seal Rock Water District
Seaside, City of
Seneca, City of
Shadow Hills Park Water Cooperative
Shangri-La Water District
Shelley Road Crest Acres W.D.
Sheridan, City of
Sherwood, City of
Siletz Community Water System
Siletz, City of
Silver Falls School District 4J
Silver Valley Water District
Silverton, City of
Sisters, City of
Skylane Farm
Skyview Acres Water Company
Sodaville, City of
South Fork Water Board
South Hills Water System, Inc.
South Suburban Sanitary District
South Umpqua Water Assn.
Southview Improvement District
Southwood Park Water District
Spirit Mountain Gaming, Inc.
Sportsman's Park Water Association
Spray, City of
Springwater Estates HOA
St. Paul, City of
Staffordshire Water System, Inc.
Stahlman Summer Homes
Stanfield, City of
Star Satellite Improvement District
Stayton, City of
Steeves Mobile City
Storlie Water Company Inc.
Sublimity, City of
Suburban East Salem Water District
Sumpter, City of
Sun Mountain Water System
Sunny Acres Water Co.
Sunridge Estates
Sunrise Water Authority
Sunriver Water LLC/Sunriver Utilities
Sunset Acres Water Company
Sunset Hills Domestic Water Assn.
Sunset Lake RV Park
Sunset Water Systems, Inc.
Sunshine Village Water Association
Sutherlin, City of
SW Lincoln County Water PUD
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 Bay, Port of
Tillamook County Creamery Association
Tillamook, City of
Timber Water Association
Toledo, City of
Tollgate Water Company
Tone Water
Tooley Water District
Trailer Park Village
Trappist Abbey
Tri City Water & Sanitary Authority
Troutdale, City of
Tualatin Valley Water District
Tualatin, City of
Turner, City of
Twin Island Community Water
Twin Rocks Sanitary District
Tygh Valley Water District
Ukiah, City of
Umatilla Indian Conf. Tribes Reservation
Umatilla, City of
Umpqua Basin Water Assn.
Umpqua Indian Utility Co-op
Union, City of
Vale, City of
Valley View Water Co-op
Valley View Water District
Valley Vista Estates Water Improv. Dist.
Vernonia, City of
VIDA-LEA Community Co-op
Waldport, City of
Wallowa Lake Co. Service District
Wallowa, City of
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 Water System
Welches Water Company
Weldon Mobile Home Park
West Hills Water Company
West Linn, City of
West Slope Water District
Western Heights Water Association
Westfir, City of
Weston, City of
Westport Water Association
Westridge HOA, LLC.
Westridge Water District
Westwind
Wheeler, City of
Wickiup Water District
Willamette Water Company
Willamina, City of
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
Young's River Lewis & Clark WD
Zig Zag Water Cooperative, Inc.

INDIVIDUAL MEMBERS

Allison, Danny
Allred, James
Amavisra, Devin
Ambrose, Lee
Anderson, Dale
Anderson, Dylan
Andre, Alistair
Anthony, Joe
Atchley, Michael
Baily, Drew
Barnes, Abednego
Barnes, Chase
Bauer, Kyle
Becker, Jeffrey
Beehler, Joel
Bennington, James
Benzel, Corey
Benzel, Sandy
Bernal, Antonio
Bither, Brian
Bodner, Jermey
Bohmker, Tim
Bridge, Lyle
Briesemeister, Mike
Brigham, Dustin
Brown, Joshua
Brown, Rick
Buchanan, Brent
Burg, Dennis
Buskirk, Jeff
Caldwell, Kevin
Calhoun, Christopher W.
Cameron, Zachary
Carlson, Rob
Carroll, Scott
Casale, Wes
Chambers, Sean
Chipman, Kenneth
Christensen, Jeremy
Christensen, Matthew
Christensen, Paul
Clement, Tony
Clinton, Josh
Close, Greg
Cole, Michael
Conley, Neal
Connelly, Barbara
Cooper, Mark
Crichton, Tyler
Crouse, Kenneth
Croy, Huntyr
Crum, Dale
Daily, Jerrod
Davis, Ron
Degn, Tony
DeHaan, Josh
Dewey, John
Dillard, Bob
Doud, Mackenzie
Eckstine, James
Edwards, Mark
Elliott, Gary
Ellis, Scott
Emerson, Tony
Faulkner, Dan
Flannery, Danny
Forrest, Dan
Fowler, Brian
Fraijo, Ashley
Frazier, Paul
Freel, Milton
Furnish, Allen
Gallegos, Juan
Gallino, Joseph
Gentry, Mike
Gerhard, Nathan
Getman, Tim
Gill, Riley
Gonzalez, Jeremy
Gonzalez, Payo
Gonzalez, Payo
Graue, Nick
Green, Bobby
Greene, Michael
Griggs, Charles
Grimstad, Erik
Groat, Steven
Grout, Ronnie
Halverson, Bruce
Hamill, Michael
Hamilton, Grant
Hamilton, Howard
Hamilton, Megan
Hammond, Dan
Hammond, Tim
Hanks, Kevin
Haring, Joshua
Harris, Alan
Hawkins, Michael
Heard, Richard
Heath, Corey
Heath, Corey
Helmboldt, Kyler
Henris, Nicholas
Hensley, Daryl
Hermansen, Dave
Holmes, Dwight
Horn, Casey
Houchin, Jeff
Howell, Roy A.
Howes, Timothy
Hubbard, Tom
Hubbell, Lillian
Huff, Zach
Hughes, Aaron
Hume, Jeffery
Hunt, Andrew
Hunt, John
Hunter, Mark
Hunter, Ryan
Hunzeker, Brian
Jacob, David
Jacobson, Eric
Jacops, Scott
James, William
Joers, Shiloh
Johnson, Grady
Johnson, Tim
Jones, Brent
Jones, Uriah
Jordan, Michael
Judah, Dave
Kemper, John
Kemper, Troy
Keri, Scott
Kimball, Troy
King, Jordan
King, Kara
Kintz, Brian
Kirchmann, Russell
Klann, Eric
Koellermeier, Zach
Koppel, Eric
Laetzsch, Dawna
Lane, Brian
Lankford, Mark
Laudenslager, Brian
Leach, Randall
LeBret, Dean
Lewis, Tim
Lockard, Darrel
Lueckenotte, Dustin
Lundblad, Christian
Maas, David
MacCarthy, Steven
Marshall, Chad
Mason, Keith
Mauter, Stephen
McFall, William
McKinney, Donald
Mendez, Matias
Mendoza, Cesar
Menteer, Juston
Menteer, Juston
Meskill, Garrett
Mickle, Richard
Miller, Bill
Miller, Jeff
Minica, Jason
Miranda, Michelle
Molatore, Tyler
Moretti, Garrett
Morris, Nicole
Mudra, Austin
Murillo, Fernando
Neal, David
Nelson, Ron
Niedermeyer, Hanns
Normandin, Matthew
Novac, Samuel
Nugent, Brett
Ortiz, Samuel
Palmer, Spencer
Pearson, Jeff
Pedersen, Joshua
Pesterfield, Dale
Peterson, Phillip
Pierce, Matt
Pierce, Scott
Pippenger, Jebadiah
Pippenger, Robert
Pistoresi, Michael
Polach, Ron
Powers, Ryan
Ramos-Pino, Patricio
Rand, Terry
Redondo, Aljondro
Redondo, Aljondro
Reeder, Matt
Reedy, Steven
Renhard, Chad
Rice, Shania
Richards, Paul
Rierson, Matt
Robinson, Rob
Robustelli, Jason
Rodriguez, Debra
Roe, Scott
Ruseell, Ben
Sabia, Stephen
Sawyer, Charlie
Schaafsma, Eric
Schaefers, John
Schmidt, Lonny
Schneider, Aaron
Scott, Ethan
Scott, Keri
Scranton, Keith
Sedivg, Stuart
Sewall, Andrew
Sherman, Tim
Sherriff, Kelly
Simon, Andy
Sinclair, Frank
Skaggs, Eric
Smith, Gerard
Smith, Guy
Smith, Larry
Speakman, Aaron
Springer, Rondi
Stalker, Easton
Statchwick, Jeff
Statham, Lee
Steidler, Matthew B.
Stewart, Jason
Stewart, Tyson
Stirling, Ethan
Strassel, Kristal
Stratton, Lance
Sundstrom, Daniel
Surgeon, Scotty
Tecmire, Timothy
Terrusa, David
Thayer, Bradley
Thompson, Anthony
Thompson, Branden
Thompson, Jamey
Tupper, Sean
Turnham, Chris
Uhrich, William J.
Unger, Benjamin
VonPinnon, Michael
Vorpahl, Mike
Vos, Joseph
Wabaschall, Aaron
Walsh, Tom
Ward, Chris
Webb-Dudley, Jennifer
Wesely, John
Wheeling, Hunter
White, Jacob
Whiteman, Leonard
Wiese, Michael
Williams, Scott
Wisegarver, Willard
Wiser, Mark
Witmer, Drew
Wolf, Trent
Wood, Mick
Wood, Mick
Woodward, Steve

ASSOCIATE MEMBERS

120Water
4B Engineering & Consulting
A.Y. McDonald MFG. Co.
Adkins Engineering & Surveying
Advanced Control Systems
AKTIVOV Asset Management
Alpha Guardian Networks
AMAROK
American AVK Company
American Flow Control
American Leak Detection
Anderson Perry & Associates
Aqualitec Corp.
Backflow Management, Inc. (BMI)
Bainbridge Associates, Inc
Baker Silo, LLC.
Bancorp Insurance
Baseform
Bingham & Taylor
BioLynceus, LLC
Business Oregon Development Dept.
Calhoun & DeJong, Inc.
Cascade Columbia Distribution Co.
Cascade Waterworks
CIMCO-GC Systems, Inc.
Cleanwater1
Clow Valve Company
CoBank
Columbia Laboratories
Consolidated Supply Co.
CORE & MAIN
Correct Equipment, Inc.
CUES, Inc.
Dan's Leak Detection, LLC.
Ditch Witch West
Diversified Construction and Consulting, LLC
DN Tanks
Duke's Root Control
EJ
Energy Trust of Oregon
Enviro-Clean Equipment, Inc.
Eurofins Environment Testing Northwest LLC
Ferguson Waterworks
Field Instruments & Controls
FloHawks
Frank J. Martin Company
Furrow Pump, Inc.
G.T. Gordon & Associates, Inc.
General Pacific, Inc.
Goble Sampson Associates
Granich Engineered Products
Harmsco Filtration Products
Harrang Long Gary Rudnick PC
HD Fowler Company, Inc.
Hollabaugh Brothers & Associates
Hose Solutions
HUMA Environmental
Hydra-Stop
HydroCorp
HYMAX by Mueller
Independent Rep Service
InfoSense, Inc.
Inland Environmental Recourses
Instrument Technology Corporation
Integrity Pump Solutions, Inc.
Kennedy/M&H Valve
Kleen Tides, LLC
Ladtech, Inc.
Lakeside Industries/EZ Street
League of Oregon Cities
Legacy Power Systems
Lesman Instrument Company
MacKay Sposito
Master Meter, Inc.
Metron Farnier
Morrison-Maierle
Mountain States Pipe & Supply
MSHS Pacific Power Group
Mueller Company
Neptune Technology Group
Nicor, Inc.
Northstar Chemical Inc.
Northwest Energy Efficiency Alliance
Nurnberg Scientific
NW Hydrovac
One.7, Inc.
Optimal Control Systems
Oregon Meter Repair & Water Solutions
Oregon Public Utility Commission
Orenco Systems
Owen Equipment Company
Owens Pump & Equipment
PACE Engineers, Inc.
Pacific NW Sales
Perma-Patch, LLC
Pittsburg Tank & Tower Co.
PumpTech Inc
Puttman Infrastructure, Inc.
RDO Equipment
Reiner Pump
RJM Company
Romac Industries, Inc.
Romtec Utilities, Inc.
Rose City Laboratories
Sarkinen Industrial Pipelining
Schneider Water Services
Schroeder Law Offices, PC
Seattle Pump & Equipment Co.
Sensus USA
ServPro
Sherwin Williams
SHN Consulting Engineers & Geologists
SIGMA Corporation
Silversmith Data
Smith & Loveless Inc.
SNF Water Sceience
Special Districts Assn of Oregon
Tank Maintenance Solutions
The Automation Group
The Ford Meter Box Co., Inc.
Thompson McLean Assoc.
TMG Services
Tnemec, Inc.
Treatment Equipment Company
Tripac
Umpqua Research Co.
Underground Tech.
Univar Solutions
US SAWS
USABluebook
USP Technologies
Waterlab Corp
Western Systems
Whitney Equipment Company, Inc
Wm H. Reilly & Co.
Xylem, Flygt Products
Xypex Chemical Corp.
Zenner USA

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