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Vol. 35, No. 3

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

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photo by Mike Collier

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

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Benefit of Doubt

by Jason Green, Executive Director



I have never been a fan of jumping to conclusion, nor appreciated being on the receiving end of an unjust accusation. Most of us are guilty of one of these in some form or another. Maintaining composure and not becoming defensive is easier said than done when falsely accused; when someone wrongly associates us with something; when words are placed in our mouths or are taken out of context; or assumptions are made on our behalf. What is the full story? What is truth and why is it so important? Our character is connected to truth, the full truth and nothing, but the truth. But then, there is perspective and assumption. I was told many years ago “there is my story, the other person’s story and then there is God’s story.”

A co-worker, subordinate or the boss rolls into work fifteen minutes late. Without hearing the “why,” we think or state “They are late because...” and never think twice about the attack of their character. “She did that because” or “he said that because” are strong statements without the details. Dangerous ground we tread when we fill in the void without the facts. Filling in the void or the unknown gap does injustice to the other’s character and furthers gossip, slander, discord, possibly insubordination, etc. Additionally, when I am on the receiving end of such, and likely many are like myself, I tend to become defensive. Of course, there is the issue with those that have not such a good reputation at the workplace; hopefully we address those actions timely before they become habits.

Rather than the boss being fifteen minutes late, it is you who are late. How does this compare? We quickly note that when the other person rolls in late, it is because they are poor managers of time, they didn’t get up early enough and therefore are not committed to their job. They are distrustful, they have poor judgment, etc. But when it is me, it’s environmental – something or someone else’s fault. The dog ate my homework or I had a flat tire scenario.

A mature and responsible person will own up to the gap that others might be inclined to fill. They make a habit and practice of being responsible, though not in a false sense, even when certain events are truly out of their control. “I apologize for being late.” This is a great indicator of one’s character. On the spectator side of this, it is also a mature person who does not first, almost as an impulse, jump to conclusions and provides the offender the benefit of doubt before judgment is passed – waiting for the details and facts or simply keeping their nose out of another’s business. Filling the unknown informational gap with assumptions often does much harm to the team, unity, and certainly begins to tarnish and at the very least, question the person’s character. It attacks the very heart of truth and trust.

Checking oneself is important. The ability to identify another’s shortcomings is often much easier than recognizing our own faults. The answer to controlling this and changing the practice and habit is to simply stop, don’t participate in it and don’t allow it. It is challenging to captivate thoughts before we speak. Is it truth we seek? Are we just? Do we first give the benefit of doubt to another? ♦





Everyone Can Be a Protector

by Jack Hills, Source Water Specialist

When I say “Source Water Protection,” what does one think about? Drinking water is taken for granted. There is not much awareness of Source Water Protection. I pay good money for my water bill; it’s someone else’s responsibility. What can I possibly do? That’s too big of a subject for one individual person.

The topic of source water protection usually draws an inquisitive look when someone asks what I do for work. It is not often on the most recent news list, unless there is an emergency crisis going on that causes a water purveyor to issue a “boil water” notice. That quickly draws their attention and often ire toward whomever might be responsible. In an emergency, source water protection (i.e. prevention of water problems) is not the issue; we need resolution, “Fix the problem!” Resolutions always cost money and lots of it.

That’s why keeping an “ear to the ground,” paying attention to what is going on around you, is so important to source water protection; watching out for and being aware of the things that can damage a water supply. Just like maintaining a vehicle or home, we should do preventative maintenance and take care of those things that will reduce the life or value of the investments (in this case, your water supply). Do you remember back when you were a first time auto-owner, a first time home owner? Did you know how to take care of and maintain your possession? How did you learn what you were supposed to do? Did you follow the advice and do the “preventive maintenance” that would extend the life and value of your auto or home?

The value of a good source of drinking water is becoming more and more

important. Maybe even, like the media ads say, “Priceless.” The costs of fixing contamination of drinking water supplies is extreme, especially when it comes to either replacing the source (if that is even an option) or having to install some kind of treatment facility to remove a contaminant.

The EPA directed states to assess the sources of drinking water supply to the public water systems. This resulted in most every system receiving a “Source Water Assessment” that reviews physical characteristics of the water source and evaluates the “Potential Contaminant Sources” inherent to each system. With this “handbook” or manual of things that could damage the source of supply, the system owner / operator can look more closely at what actions can be taken as “preventative maintenance” toward assuring that the potential contaminate sources are mitigated and decreases potential damage to the water source.

A Source Water Protection Plan prepared from the original Source Water Assessment will review the current status of potential contaminants and provide an updated list of Best Management Practices that will reduce the risk of the water supply being contaminated and the related costs that could be incurred. It also gives the owner/operators of the system confidence that they are providing their best efforts to maintaining the value of the system and protection of their public consumers.

Even though there will continue to be many customers who are unaware of Source Water Protection or take it for granted, there are many common place activities and actions that the average resident can participate in and be

Oregon Association of Water Utilities

or of Source Water

informed of through mailings, websites and public meetings. Here are just a few that may or may not apply to all systems, but do apply to protecting our drinking water.

1. Watch for community drug “take back” and collection events. These are important to keep pharmaceuticals and drugs out of our water supplies by not “flushing” them either to a private septic tank or public sewer system. Note that neither of these treatment systems is capable of removing these chemicals from the wastewater. As a result, the chemicals are then introduced into the water not only to be ingested by the animals we may consume, but

into the source water of the drinking water supply.

2. Where applicable, maintain septic tank systems as recommended so that they are operating as designed and not adding nitrates to the ground water aquifers.
3. Pay attention to lawn and garden fertilizer and pesticide application recommendations. With over application, nitrates can migrate beyond the useful plant root systems and into the groundwater.

Increasing nitrate levels in our water supplies are becoming more and more prevalent and endangering our aquifers. Granted, these major issues may be

related to larger commercial or agricultural activities and are being addressed on a regional basis, it makes sense to be sure we aren’t individually contributing to an area-wide problem. We need to be aware and not take for granted that the wonderful drink of water out of our tap requires “preventative maintenance” to assure the continued availability and value of our source of water.

Would you like some assistance in reviewing your source water protection plan or developing one beyond the scope of Source Water Assessment? Remember, this assistance is available to you through congressional funding from the USDA- FSA program; without direct cost to you. Just call OAWU. ♠



Rex Lesueur,
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A New Beginning

by David Branham, Wastewater Technician

I am back. Well, to quote John Steinbeck from his famous novel *Of Mice and Men*:
“The best laid plans of mice and men often go awry. “

Boy is that ever a true statement. After reexamining my retirement plans, it became painfully apparent that some of my calculations were just a little short of the mark. That medical insurance is a real killer. So with that being said, I will be pleased and proud to be able to work for OAWU for the rest of this year.

As I have stated many times in the past, and it still holds true today, most of the water/wastewater industry personnel are older workers. It still is a puzzle to me why the industry doesn't attract younger workers.

As many of you may be aware, we have had several untimely deaths of our wastewater operators in recent times. Contemplating this has led me to ponder about life, and with that being said, I would like to dedicate the following poem to all operators working in the industry. The poem isn't signed, but I would like to acknowledge my appreciation to whoever wrote it.

WINTER

You know... Time has a way of moving quickly and catching you unaware of the passing years. It seems just yesterday that I was young, just married and embarking on my new life with my mate. Yet in a way, it seems like eons ago, and I wonder where all the years went. I know that I lived them all. I have glimpses of how it was back then and of all my hopes and dreams.

But, here it is... The winter of my life and it catches me by surprise...How did I get here so fast? Where did the years go and where did my youth go? I remember well seeing older people through the years and thinking that those older people were years away from me and that winter was so far off that I could not fathom it or imagine fully what it would be like.

But here it is ... my friends are retired and getting grey... they move slower and I see an older person now. Some are in better and some worse shape than me... but I see the great change... Not like the ones that I remember who were young and vibrant... but, like me, their age is beginning to show and we are now those older folks that we used to see and never thought we'd be. Each day now, I find that just getting a shower is a real target for the day! And taking a nap is not a treat anymore... it's mandatory! Cause if I don't on my own free will... I just fall asleep where I sit.

And so... now I enter into this new season of my life unprepared for all the aches and pains and the loss of strength and ability to go and do things that I wish I had done but never did!! But, at least I know, that though the winter has come, and I'm not sure how long it will last... this I know, that when it's over on this earth...It's over. A new adventure will begin! Yes, I have regrets. There are things I wish I hadn't done... things I should have done, but indeed, there are many things I'm happy to have done. It's all in a lifetime.

So, if you're not in your winter yet... let me remind you, that it will be here faster than you think. So whatever you would like to accomplish in your life please do it quickly! Don't put things off too long!! Life goes by quickly! So, do what you can today, as you can never be sure whether this is your winter or not! You have no promise that you will see all the seasons of your life... so, live for today and say all the things that you want your love ones to remember... and hope that they appreciate and love you for all the things that you have done for them in all the years past!!

"Life" is a gift to you. The way you live your life is your gift to those who come after. Make it a fantastic one. ♦

—Your friend Dave



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The Conservation Corner

submitted by Mike Collier, Training Specialist/Operations

A Request for Your Consideration and Input for Possible Improvements to the Guidebook for Municipal Water Management and Conservation Plans

By the Oregon Water Resources Department

It's been almost 10 years since the "Water Management and Conservation Plans: A Guidebook for Oregon Municipal Water Suppliers (May 2003)" was developed through a joint effort sponsored by the League of Oregon Cities (LOC), the Oregon Water Utilities Commission (OWUC) and the Special Districts Association of Oregon. A Review Committee (consisting of members from LOC, OWUC, the Oregon Department of Water Resources (OWRD) and representatives from municipal water suppliers) provided oversight on development and preparation of the guidance.

Since its publication many municipal water suppliers have utilized the guidebook to help prepare their Water Management and Conservation Plan (WMCP) for submittal to OWRD for review and approval. OWRD has learned a lot during this time and, while the quality of WMCPs has improved, there are opportunities to provide better direction and guidance to water suppliers that need to develop a municipal WMCP.

Over the past decade, OWRD has received 132 municipal WMCPs and has observed several areas that seem to be consistently problematic with WMCP submittals. So far these issues have been addressed by unveiling OWRD's Conservation Share-House web page and developing a template to assist water suppliers

with providing a comprehensive water right inventory. However, more can be done. Issues such as permit extensions of time, WMCP 5-year progress reports, water audits, urban reserves and climate change – are just a few of the new and ongoing considerations for municipalities.

This is where you come in. OWRD would like to invite municipal water suppliers to be involved in the process of updating the guidebook. This is a chance to voice your opinion on topics that could be addressed or better explained in the guidance document. Tell us what you think. What elements are confusing or cause you frustration? What information is missing from the guidebook? What tools would help with preparation of a WMCP?

A few of the topics that OWRD would like to update include:

More guidance for water suppliers on providing notice of the WMCP to affected local governments at least 30 days prior to submitting it to OWRD for review. What qualifies as an "affected local government?"

A more thorough description of the relationship between Municipal and Quasi-Municipal Permit Extensions of Time and WMCPs.

More information on "Development Limitations" established by Final Orders approving Permit Extensions of Time and how that affects a water

supplier's ability to divert water under those extended permits.

More detailed guidance for water suppliers on requesting access in the WMCP to permitted quantities of water beyond the specified "Development Limitations" established by a Final Order approving a Permit Extension of Time.

A discussion of the difference between "increased or expanded" diversions of water under an extended permit with resource issues as compared to "increased or expanded" diversions of water under non-extended permits, and the analysis of alternative water

sources that must be performed in each circumstance.

More direction about what to include in an updated WMCP if the previous WMCP approval was contingent upon completion of certain "Work Plan" activities. What happens if the "Work Plan" activities were not accomplished?

It is anticipated that any updates to the WMCP guidebook will, once again, be a cooperative effort. We are just in the beginning stages of the update, so any comments or suggestions you can provide will be helpful to the process. 💧

If you haven't had a chance to review the current WMCP guidebook, it can be accessed on the League of Oregon Cities' website at: <http://www.orcities.org/Portals/17/Premium/wmcpguidebook.pdf>

For more information on updates to the WMCP guidebook, or for general water management and conservation planning in Oregon, please feel free to contact OWRD staff Lisa Jaramillo at 503-986-0880 or Bill Fujii at 503-986-0887. You can also visit OWRD's Conservation Share-House web page, which includes a link to the current WMCP guidebook and the tabular water right inventory template, at: http://www.oregon.gov/owrd/Pages/Conservation_Sharehouse.aspx



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Waterborne Epidemic?

by Don Van Veldhuizen, CET

submitted by Scott Berry, Circuit Rider/Program Manager

Imagine, if you will, living in an area where the average man has less than a 50% chance of living past the age of 30. You are unable to move away and don't have the opportunity to do things that could prolong your life. Also, know that your sons will most likely suffer the same fate as your father, brothers, and most other males in your family. Now consider that kidney failure is the culprit and no one knows what is causing your kidneys to fail. They just know that once you are diagnosed with the disease, you have been given a slow death sentence.

La Isla, Nicaragua is such a place. The community with approximately 400 homes is referred to as the "City of Widows." It is in the agriculture region in Northwestern Nicaragua. The nearest large town is Chichigalpa with approximately 60,000 people. It is an area known for growing sugar cane, since the cotton industry went bust in the late 1980s.

The disease is known as Chronic Renal Insufficiency (CRI). The local means of testing is through a blood sample and checking the level of creatinine. Creatinine is a chemical waste molecule that is generated from muscle metabolism. Creatinine is transported through the bloodstream to the kidneys. The kidneys are supposed to filter out most of the creatinine and dispose of it in the urine. Unfortunately, this test does not discover the kidney disease until you have reached stage 3. At this point you can no longer work and even simple activities have become increasingly exhausting. You lose your job and with it goes the only income available for your family, roughly \$800/year.

The cause of this disease is still unknown. Several theories have

been tested, but there has not been the "smoking gun." Theories such as: heavy metals contamination, contact with pesticides and herbicides that have been applied to the sugar cane, chronic dehydration due to the strains of working in the fields, and even the urine from cane rats entering through sores while performing work have been looked into. The kidneys themselves have given no clue to the cause through autopsies. The disease affects others as well, not just sugar cane workers. Some children younger than age ten have also been diagnosed with the disease. The one thing that has been determined is that the disease is deadly. Exact numbers of those that have died from the disease is unknown as many cannot afford medical attention. Recent estimates state that between 2004 and 2009 over 16,000 people have died in this region.

The most comprehensive study in the La Isla area was conducted by Boston University. This study was completed just last year and did not do an extensive study of the seasonal changes to the drinking water supply. It also was unable to locate the cause of the disease. However, it did discover that high percentages of women were also affected by the disease through a more complete kidney function test. This test showed that predominately women had stages 1 and 2 kidney disease. More importantly, it showed what could be eliminated as a cause.

I too am trying to figure out what has caused the disease. The theory that I am pursuing deals with a specific pesticide in the water. I am looking into the pesticide toxaphene. Toxaphene is of special interest as it is mentioned in two other studies in the general area. It is

also considered a very persistent chemical that has a half-life of 14 years. It was used extensively in the cotton industry, and combined with other chemicals such as DDT for many years. Because it is insoluble, it is transported either as a vapor or attached to the soil. I am considering the latter. The EPA states that in excess of 3 ppb, toxaphene can cause kidney and liver issues. There are also believed to be higher than normal liver disease in the area although no studies were found to substantiate the claims. Some shallow dug wells experienced seasonal toxaphene levels in excess of 80 ppb in the area just north of La Isla according to a study by Josh Moncrieff conducted in 2005. Another study conducted in 2003 showed high levels of toxaphene in the estuaries downstream of the affected area.

I personally have been working on solving this mystery for three years.



My theory is that toxaphene is being transported to the wells during the rainy season with sediment. The water table changes dramatically between dry season and the wet season, typically 25 feet. The worst hit areas have two things in common. First, is that they have shallow hand dug wells which have no well seal and secondly these wells are located near streams or dry stream beds. In the many interviews I have conducted, the locals

say the disease exploded around the year 2000. A giant mud flow, called a lamar, occurred in late 1998 which filled most wells with sediment. These wells were cleared of the mud and put back in use. The health department also stated there were only isolated cases prior to the lamar.

I have a deep feeling of compassion for the people in La Isla and the surrounding area. As I build relationships with the people there, I realize what an isolated comfortable existence I am living. What I experience here in the United States is not the normal world. I am crazy blessed when it comes to lifestyle, health, and many other areas. I have no reason to complain about anything. I have hope that this mystery will be solved and do not care by whom.

I am scheduling my fourth trip to the region for June or July this year. I am willing to bring a team of 3 or 4 individuals that want to try to make a difference and solve this mystery. It is best to reach me by email at vanvfam@yahoo.com if interested. This trip will not be for the faint of heart and I strongly encourage doing some research about the disease and the area before responding. Thank you for your time. 💧





Our Veterans' Next Battle

by Hans Schroeder, Circuit Rider

There has been a lot of talk from the federal level down to the local level about the Hire a Veteran program. I came across an article about the program in the newspaper while staying in Salem. After reading the article, I discovered just how much this really hit home with me.

I guess I didn't realize just how difficult it is for our veterans, who come home from protecting our nation and our freedoms, to find employment. This is just one story of many that explains how difficult it is for

our veterans who come home to fight yet another battle in searching for employment in the civilian job market.

I can explain one reason this hit home with me, it is because this article is actually written about my cousin, retired US Navy Chief Petty Officer Courtney Wynia.

I would like to share an article with you that was first printed in the Salem, Oregon *Statesman Journal* on March 10, 2013 by Saerom Yoo (syoo@StatesmanJournal.com) in her column *Raising a Community*:

Military, Civilian Culture Gap Challenging for Unemployed Veterans

Courtney Wynia drops his girls off at school, then spends a few hours every day at WorkSource Oregon, searching for jobs and getting advice from staffers. Later, he does laundry, and takes the children to gymnastics, doctor appointments and whatever else they need.

It's quite a transition from his life in the Navy.

Wynia, a North Salem High School graduate, retired from the Navy in January after 22 years of service.

He enlisted at 19 and worked in the Naval Construction Force as a Seabee. He has worked in supervisory roles around the world, overseeing facilities maintenance for major operations, including the U.S. Naval Academy. He has been deployed to Spain, Scotland, Guam, East Timor, Somalia, Japan, Kuwait and Afghanistan.

He knows he has top training and a strong set of skills. So he didn't expect it to be this hard to find a job out of the military, and he's frustrated.

Wynia has applied for 60 jobs and has been called back for 10 interviews since October. But he has not landed an offer.

Wynia isn't the only one. The unemployment rate for veterans ages 20 and older in Oregon is 9.2 percent as of 2012. That's slightly higher than the unemployment rate for nonveterans as well as the national average.

According to the 2010 Census, 333,800 veterans live in Oregon.

Phil Maas, northwest region associate for the U.S. Chamber of Commerce's Hiring Our Heroes division, said there's a disconnect between the military and civilian worlds.

"When you take somebody who just got back from Iraq or Afghanistan and they were a squad leader in charge of 11 people, you might be talking about a 21- or 22-year-old man or woman who was in charge of a budget in the hundreds of thousands of dollars," Maas said. "That's a whole different applicant than someone walking off a college campus."

Maas, though based in Salem, handles Hiring Our Heroes job fairs in 10 states. Salem will host the veteran-focused job fair for the first time Thursday. It's one of hundreds throughout the country.

It's true that jobs are difficult to come by for anybody these days. But veterans have the added challenge of translating their skills to the civilian workforce.

"It really is like bridging the abyss," Maas said. "The employers want to hire veterans and their family members, but we have to be very careful about how the veterans word what they've done in the military. Civilians don't speak military jargon and in acronyms. In the military, acronyms are everything."

There's also a cultural barrier.

Wynia, for example, has had to learn not to come off as rigid and inflexible to interviewers. When they ask how he would handle a situation where he receives negative feedback about his decisions, his military instinct is to demand obedience from his subordinates, which doesn't translate well in the civilian workforce.

"This is what I've learned my whole adult life of how things operate," he said.

But he's learning to adapt and adjust his expectations with the help of the veterans program at the employment department. He's learning about interviewing techniques, writing resumes and cover letters, and the reality that perhaps he might have to start at a position that's lower than he's used to.

Maas says that's often difficult for veterans to come to terms with, and his office tries to prepare them as they leave the service.

Hiring Our Heroes started in spring of 2011 with 100 job fairs in the first year. This year, the goal is 400. The next goal, Maas said, will be reaching 500,000 jobs for veterans and family members.

So far, Maas estimated 83,000 veterans and their family members have secured jobs through Hiring Our Heroes. In fact, two years ago, Maas attended a Hiring Our Heroes event at Clackamas Community College and it ultimately landed him his current job.

Looking back, Wynia says he could have prepared better. He could have taken a resume training class. He should have started looking sooner.

You can count on him being at the job fair Thursday, but he's already considering other options. He said if he doesn't have an offer by March 19, he'll enroll at Chemeketa Community College.


"So what am I going to do? I'm going to be an educated guy with experience," he said.



I would like to thank Saerom Yoo, a reporter for the *Statesman Journal*, for allowing me to re-print her article. —Hans Schroeder ♦

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On September 28, 2012, Engineering America announced that it has recently acquired the assets of Aquastore NW, Inc. of Donald, Oregon. Max Marcott, President and Principal owner of Aquastore NW, Inc., will continue to manage the construction field operations and Kendall Smith, National Sales Manager of Engineering America, will manage all sales activities for this newly acquired division of Engineering America.



Tony Belden and Max Marcott

Max Marcott commented, "This transaction with Engineering America allows continued successful long term service to our valued customers in Oregon, Washington, Idaho and Alaska, and meets both my personal and business visions for the future."

Engineering America is a 100% employee owned business, originally incorporated in 1980. The corporation is headquartered in Oakdale, Minnesota, and has regional offices in Colorado, Kansas, Arizona and now Oregon.

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An Extra Set of Eyes

by *Heath Cokeley, Circuit Rider*



What would you think if I said that A/C pipe is the best pipe to use in the water industry?

Would you have a different opinion? Would you voice that opinion? Even to someone in a position of authority that had a different opinion?

If everyone in the water/wastewater industry had the same opinion we would not have much advancement in the industry. Of course, I do not actually believe my first statement; I was just hoping to catch your attention. I have written in previous articles about involving everyone in the utility with all the relevant information on decisions. This will make sure that everyone is on the same page, but it also has another very beneficial side affect. You get another set of eyes on the matter and with another opinion and possibly additional solutions to a problem. That, of course, is not to say that some things are only for the supervisors and or manager to know, but in a trouble shooting situation an extra set of eyes is almost always beneficial.

Not too long after I got into the water industry I had a great opportunity to see this in action. I was the manager of a water district just outside of Monmouth and I had several OAWU staff members in my office for a meeting about an issue. A customer had brought in a vial of what looked like small black rocks. These had come out of their irrigation system and they said that the rocks kept plugging the system up. This was only happening in the landscaping irrigation in the island on their wrap-around driveway and the customer was saying the water system was at fault. Just for fun I had installed a strainer at their meter to verify what I already knew: the issue was not on my side of the meter, but even with this, the resident thought it

was our fault. Is this sounding familiar to any situation you have encountered? Anyway the OAWU guys were in my office and I figured it would not hurt to ask them what they thought. The vial was passed around and no ideas came to anyone's mind until the vial hit Jeff Swanson's eyes. With just a brief glance he knew the little black balls were cation resins from a water softener. This seems obvious to me now, but at the time having never worked with a water softener I had no clue where they were coming from. The screen meant to hold the resin back in the customer's water softener had degraded and allowed the resin to get through. Why they had their irrigation water routed through their water softener I do not know. Still this was not my issue, but I now had a good answer to give the customer and this came about because I asked for an extra set of eyes on the issue.

So what issues have you been dealing with recently? Would it help to get another set of eyes on it to help find a solution? Have your other employees looked at it or have you called your neighboring water utility to come take a look? Of course you can always call a Circuit Rider and we would be happy to come take a look and give you our two cents free of charge. I truly enjoy getting to visit with systems and tour their facilities and occasionally give some advice, though I am convinced that I learn far more from the systems than they learn from me. So, no matter what you have going on, be it a system survey coming up or a new policy or program you have to write; don't be afraid to ask for an extra set of eyes. I look forward to any and all calls for assistance and until then, I'll see you down the road. ♦





Normative Times

by Tim Tice, Projects Manager

Chocolate or vanilla? Baseball or football? Country or rock? Quick to decide or hem and haw? I am a little of both. Forty years ago we only had to decide between three television channels or find out who stole our baseball glove. Today is much different! We have many decisions before us right at the breaking of each new day.

Resiliency is an admirable trait in the lives of the youth today. As they have to tend with more than ever before, it is a complicated world. After the Boston bombings there was considerable news coverage on the topic of, "how parents should talk to their children." Experts explained various levels of communication based on the child's age. Wow! Why do we need such reporting?

As events unfold, it is shocking as to how such things can happen, yet that bar of atrocity is raised again and again, often by the very next event. Instantaneous information supplied by today's technology keeps us up to date on world occurrences; this technology is often a major distraction to the task at hand.

It is realized that "dirty" laundry sells, but to what extent do we allow the shock factor to be continually raised, thus becoming the norm?

What is the normal daily life for someone in the field of water /wastewater utilities? How wonderful would it be to have the time necessary to complete each task? The automotive industry has a "flat rate." Imagine if each and every procedure was completed in the same amount of time as was predicted. If we could place an exact time allotment for each task in the utility business, planning for the future would be straightforward. Dream, dream, dream!

One task entrusted to utility personnel is the ability to sustain the water or wastewater system in proper functioning form for an indefinite time. How many tasks does it take to accomplish this feat? One task, that is often neglected, is a review of the rates that supply the revenue necessary to cover the system's expenditures.

As one discovers that the alignment of expenditures and revenues is skewed, the current rates must be reviewed. If two plus two equals three, then adjust for more income and move on. Easier said than done!

The level of difficulty or lack of time often challenges our ability to make an accurate decision. A decision on where to set utility rates is based on what? Setting rates can be an undertaking that seems daunting, yet, when based on "is it the right thing to do?" we realize that it is necessary.

In all aspects of our lives, we have decisions to make, some tougher than others, but it seems like those that are often ignored become our Achilles' heel. Look around the world today; it appears that major decisions are often overlooked, intentionally or not. As decisions are made or not made, the fulcrum is repositioned, then the not-so-wrong becomes the adjusted right and a new norm is set.

Now more than ever youth have the ability to multi-task as they, literally, have had access to computers since they were born. I admire this aspect, yet I often wonder how they understand what is "normal" in this multi-tasking world? I believe in the youth of today; as they deal with the complex ways of today's world, to carry this planet deeper into this century.

Our focus for water and wastewater utilities and for our youth is the sustainability of each, using a set of principles that will nourish and carry them into the future by basing decisions, not on doing things right, but on doing the right thing. We cannot produce decisions solely for those who make wrong decisions. We can only make decisions that are founded on integrity, because "it is the right thing to do." If the utility is seemingly sinking in the financial red sea due to not making a difficult decision, then base the choice on the often forgotten entity, the water system itself. If water systems were to become non-operational, then we have a much bigger concern than just rates.

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Oregon Association of Water Utilities

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OREGON ASSOCIATION OF WATER UTILITIES 2013 TRAINING & EVENTS SCHEDULE

Date	Class Title	Location	CEU Information	ESAC#	Fee/Free
August 7	Well Performance Issues	Bend	0.4 Water	2059	FREE
August 7	Taking care of Your Wtr Rights: Permits, Extensions, & Certs	Bend	0.2 Water	2522	FREE
August 13	Excavation Safety and Confined Space Entry	Island City	0.4 Water	2530	FREE
August 19	Developing Your O&M Manual	Seaside	0.6 Water/Wastewater	2113	Fee
August 19	Small Water Operator Training Course	Seaside	0.6 Water / 0.4 Wastewater	2379	FREE
August 19-22	Summer Classic XIX Conference	Seaside	1.7 Water/Wastewater	2592	Fee
September 12	Control Valves	Newport	0.7 Water / 0.7 Wastewater	2286	FREE
September 17-19	Water (WT/WD) Certification Review	Grants Pass	1.8 Water/0.7 WW	2112	Fee
September 25-26	Utility Management Certification	Willamette Valley	1.4 Water/Wastewater	TBA	Fee
September 26	Activated Sludge Process	Springfield	0.6 Wastewater	TBA	Fee
October 8-10	Water (WT/WD) Certification Review	Salem	1.8 Water/0.7 WW	2112	Fee
October 15	Excavation Safety & Confined Space Entry	Independence	0.6 Water/Wastewater	2356	Fee
October 23-24	Wastewater (WWT/WWC) Certification Review	Salem	1.4 Wastewater/0.6 Water	2295	Fee
November 4-7	Small System Operator's Conference	Florence	2.0 Water/Wastewater	2259	Fee
November 20	Water Operators Review	Grants Pass	0.6 Water	2564	Fee
December 9-12	15 th Annual End of Year Operator's Conference	Hood River	2.0 Water/Wastewater	TBA	Fee
December 17	Developing Your O&M Manual	Fairview	0.6 Water/Wastewater	2113	Fee
December 18	Excavation Safety & Confined Space Entry	Fairview	0.6 Water/Wastewater	2356	Fee

2013 State Water exam dates

May 16, 2013

October 17, 2013

For additional water exam information, please visit <http://oregon.gov/DHS/ph/dwp/certif.shtml>

2013 State Wastewater exam dates

March 29, 2013 (statewide)

April 4, 2013 (Pendleton)

Year round, open schedule

For further wastewater exam information, please visit <http://www.deq.state.or.us/wq/opcert/opcert.htm>

Application Deadline

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August 15, 2013

Application Deadline

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

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

Crystal Meth and Your System!

By Rick Allen of Biolyneus and Mark Court, Circuit Rider at WARWS

Information you should know about what Crystal Meth (CM) will do in your wastewater system and how to recognize the signs you may have it in your wastewater process.

We are starting to see more and more issues with CM chemicals showing up in rural wastewater systems. This is probably due to the manufacturers of CM thinking they are safer and less detectable in these small communities. Less of a police presence is usually true in small towns and in some cases the only law enforcement is the deputy sheriff who has too many miles to cover in one shift. The other issue is the use of mobile CM labs. We are seeing an escalation in the use of mobile CM labs, in the form of campers, motor homes, RV's and travel trailers. This allows the CM cooks to move from town to town and create less suspicion. Also, they can discharge chemicals at any RV dump station or, in some cases, any manhole in the street.



What are some of the indications you may have been hit with CM chemicals? The first one is that your system has died. This can happen to any type of system from lagoons to mechanical. There are reports of 2MGD activated sludge plants being killed with CM. Across the west, we are seeing several lagoon systems impacted each month. In some cases, there are systems that are being killed monthly.

If your system loses its biological activity and/or you are not meeting discharge, these are both signs that you may have a problem. If your system changes color, it could be another sign. Color changes will range from a pinkish chalk color to a white chalk color in the early stages to black in the later stages. Once the system turns black it will usually create a lot of odor; this is when you start to get complaints from citizens. If this happens you will need to reactivate your system's biology as quickly as possible. One formula for doing this is described below.

Other signs of CM in your system can be found in your bar screens or lift stations. These are usually things like an abundance of rubber gloves, blue shop towels, used t-shirts and hypodermic needles. Any of these are suspect, but if you get two or more at one time, then I would call your local law enforcement division. If you are seeing these items in a malfunctioning lift station, use extreme caution when working on it. In a recent incident of a lagoon system with CM issues, we could actually see blue shop towels floating in the number one cell. As you might expect the system did not have bar screens at the head works.



If you have an RV dump station or allow for septic haulers to discharge to your system, you may be setting yourself up for a CM hit in the future. If you have an RV park in your community that discharges to your system, you should also be cautious.

In a recent case, in a small Colorado town, suspicion was raised when an RV was parked next to the WWTP for three days. They were asked to leave and the police later found Crystal Meth manufacturing materials around the parking site. This could be a good place to setup a mobile lab. Odors would be masked by the plant odors, so try to be observant of your surroundings and what is happening in your town.

More indications of CM in your community are that you might see aluminum foil or blankets covering the windows, as people exposed to CM chemicals are literally paralyzed by light while under the influence. On the old aluminum siding of mobile homes you will often see streaks of red rust corrosion running down the siding from the deterioration of the screws that are holding the siding in place.

One town in Wyoming was hit by a meth lab dump in 2012. What they decided to do was add potassium permanganate to re-oxygenate the lagoon at a rate of 9.3 pounds per ac-ft of water also adding ProBiotic Scrubber® at a dosing rate of 0.2 gallons per ac-ft, each for 3 days. They found the lagoons recovered in less than 10 days, not the typical 60 to 180 day recovery period. This treatment also prevented the shock from



entering their other 2 lagoon cells and helped them stay in compliance with their WYPDES discharge permit.

If you think you have been hit with a CM dump and your police force is skeptical, then please have them contact us. We will be happy to provide them with any information that might help them.

For any additional information, feel free to contact Rick Allen at rick@biolynceus.com or 970-586-3391.



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Is the Tank Contaminating the Water?

By Erika Henderson, *Pittsburg Tank & Tower*

Many water system operators realize the risks for contaminated water, but pathogenic microorganisms that create water borne diseases are still sometimes found in public water systems. Pathogenic microorganisms are in human and animal feces, and they invade the body when water contaminated with them is consumed. An infection is often created by the bacteria, virus, fungi or protozoa. These infections can spread rapidly, and sometimes even create an epidemic. So how do these pathogenic microorganisms get into the drinking water system? Is there anything that can be done to prevent their invasion?

Water is treated and tested for microorganisms during the water treatment process. But, if the clean and healthy water is stored in a contaminated water tank, then all the water becomes contaminated, and people's lives may be put at risk. If the water stored in the water tank is not tested and treated regularly, then the risk for waterborne diseases

increases. But how did the water in the tank become contaminated if only healthy treated water is stored there?

Well, something as simple as a damaged screen on a vent or overflow pipe could allow the water in the tank to become contaminated. Birds and insects can easily get into a tank through a defective screen. If birds are in the tank, then there are also bird feces and probably dead birds in the tank. The dead birds and insects attract other animals, and before long the water tank could contain a party of growing bacteria and toxins created from the feces and decomposing animal parts. The most disturbing part is that usually, a damaged screen is not noticed until an inspection is performed on the water tank. E-coli, Cholera, Dysentery, Salmonellosis, Campylobacteriosis, Leptospirosis, Botulism, and Vibrio are just some bacteria that could be present in the tank water.

Tank openings and animals are not the only way the water in a water tank

could become contaminated. Stagnant water containing parasites can also cause parasitic infections to occur in those who encounter the contaminated water. Dracunculiasis, Taeniasis, Fasciolopsiasis, Hymenolepiasis, Echinococcosis, Coenurosis, Ascariasis, and Enterobiasis are parasitic infections that could occur from stagnant water. Stagnant water can occur in water that has become stratified, or separated into layers. These layers are normally arranged according to density, with the least dense and warmer water sitting above the denser cooler layers of water coming in. The layers are caused by differences in temperature, pressure, and pH. These unmixed layers cause water quality to deteriorate and age, increasing bacterial growth.

Many water tanks are getting mixing systems installed to prevent this stratified water. Water temperature can be checked every five foot during the inspection to determine whether stratification is a problem. If a mixing



system is needed or desired, it should be designed according to the tank's unique dimensions and needs. Water from the bottom of the tank should be pulled to the surface, and mixed with the incoming water. This process should increase contact time and prevent the development of biofilms. It should also reduce the level of trihalomethane (TTHM) and halo-acetic acids (HAA) which are formed easily by chlorination in slightly acidic water, or water with high organic matter content and elevated temperatures.

Deaths and illnesses occur daily from unhealthy water, and water operators can lose their license to operate a water system if unhealthy water is found in

their system. The best way to prevent the spread of infection and diseases linked to drinking water is to have public water storage tanks inspected, cleaned, and disinfected regularly to prevent the growth of pathogenic microorganisms.

America Water Works Association (AWWA) states that, "Tanks should be washed out and inspected at least once every 3 years, and where water supplies have sediment problems, annual washouts are recommended." (AWWAM42-88).



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Wet Wells

by Mark L. Taylor, Taylor Site Development, Inc., EZZ Klean — Contractor for 35 years and OAWU member

The contents in a Waste Water Pump Station include decomposing organic products such as human fecal matter, chemicals, and industrial waste by-products. This mixture of hazardous waste requires a Wet Well that is functional at all times; which means that cleaning and maintenance, with attention to detail of the Pump Station, is of utmost importance.

Keeping the Pump Station slab above the Wet Well and the Pump Station structure (if there is one) clean and maintained is very important and adds to the mindset of the maintenance personnel to keep things clean and in proper working condition. At times the nature of the contents in the Wet Well itself discourages maintenance crews from paying too much attention to its maintenance.

Lack of proper maintenance procedures can cause overflow conditions. Such things as stuck floats, pump impeller jam-ups, and corroded, broken or disconnected electrical cables can lead to overflow situations. For example: floats will

cease functioning properly if they are shrouded with rags, waste paper, other debris, and coated with scum. Periodic spraying from above with a strong stream of water from a hose will prevent this. Pump impellers can be jammed by rocks, sticks, rags, etc.

Cleaning a wet well can be a simple process. There are products available locally that supply a permanent HDPE wide mouth intake and HDPE pipe to the top with an easy connection to a VAC Truck or similar equipment to suck out debris and muck. Having a sloped floor towards the wide mouth intake adds significant efficiency. All this is done safely from above. HDPE is corrosion resistant to Wet Well contents. Efficiency is greatly enhanced if the Wet Well floor is sloped towards the wide mouth intake device.

Overflows, of course, are environmental hazards that will be scrutinized by regulatory agencies. Fines and clean-up can lead to extraordinary costs. A well planned Cleaning and Maintenance program is essential.

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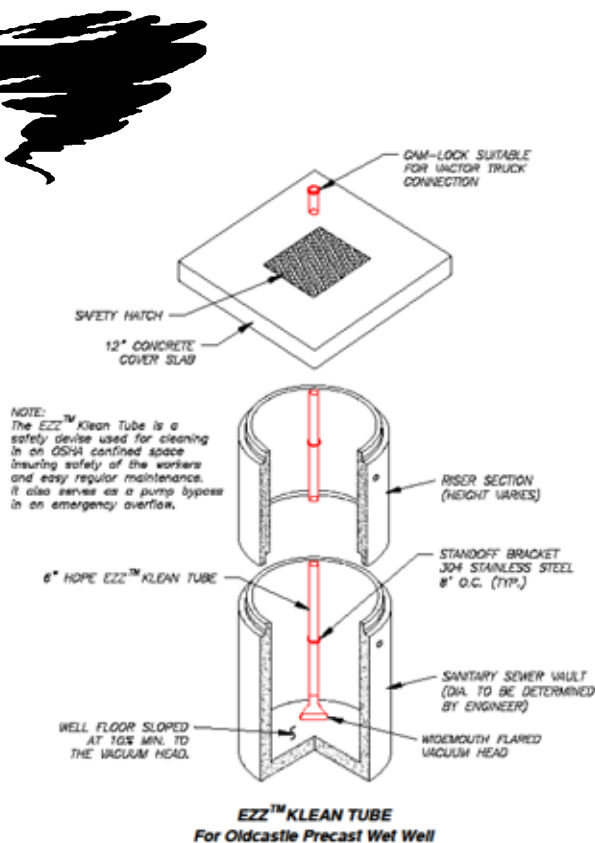
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QUIZ CORNER

1. The threshold limit value concentration for chlorine vapor is _____.
A. 0.1 ppm C. 0.5 ppm
B. 0.3 ppm D. 1.0 ppm
2. Acids should never be added to chlorine solutions because they...
A. Cause chlorine gas to be released
B. Corrode or "eat away" the solution tank
C. Decrease the disinfecting properties of chlorine
D. Result in the formation of a chloride precipitate
3. Presently a Source Water Protection Plan through OAWU will cost a 250 connection system how much?
A. \$5.00 per connection or \$1250.00
B. \$0.50 per connection or \$125.00
C. No direct charges. It's a congressionally funded program through USDA – FSA
D. Flat fee of \$6500.00
4. In the world of Source Water Protection, what does BMP stand for?
A. Basic Metabolic Panel
B. File Image BitMaP
C. Best Management Practices
D. Bio Mechanical Process
5. What is the Drinking Water Standard for Nitrate?
A. "Blue Baby" disease C. Nitrite
B. 10 mg/L Nitrate – N D. Septic Tanks
6. Which is the largest zone in a conventional clarifier?
A. Inlet Zone C. Outlet Zone
B. Sludge Zone D. Settling Zone
7. What generally accounts for the greatest use of household water? (according to environment.nationalgeographic.com)
A. Washing machine C. Shower
B. Dishwasher D. Landscaping
8. How many gallons does the average washing machine use per load? (according to environment.nationalgeographic.com)
A. 8 C. 41
B. 25 D. 84
9. How many gallons of water are wasted in an average home each year due to leaky household pipes? (according to environment.nationalgeographic.com)
A. 3,000 C. 9,000
B. 5,000 D. 11,000
10. If 40 pounds of chemical are added to 120 gallons of water, what is the percent strength of the solution by weight?
A. 2.1% C. 5.2%
B. 3.8% D. 8.4%
11. What is the purpose of the Surface Water Treatment Rule?
A. Develop regulations for treating surface waters
B. Ensure that pathogenic organisms are removed and/or inactivated by the treatment processes
C. Identify appropriate locations for application of disinfectants
D. Remove turbidity from surface water
12. How many feet are in 1 mile?
A. 4260 feet C. 5280 feet
B. 4725 feet D. 6000 feet

1-C, 2-A, 3-C, 4-C, 5-B, 6-D, 7-D, 8-C, 9-D,
10-B, 11-D, 12-B
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Leadership?

*Throwing My Loop
by Michael Johnson*

What is that? Leadership...what does that mean? At one time, I knew.

I knew all about it. But like Dylan said in a song once, "I was so much older then."

Years ago – in the eighties - I taught in a graduate engineering program conducted jointly by the Department of Defense and Texas A&M University. One of my subjects was Leadership, and I thought I did a good job. My lectures included such topics as inventory, profit and loss, delegation, planning, organizing, decision-making, and more. I thought my words, lesson plans, and tests had value. It comes to me now that I should send all those students their money back. I never taught them anything about Leadership at all.

Fast forward with me twenty-five years. At a recent conference this year, instead of "telling" the participants about Leadership, I asked them to tell me about it - to share an experience when a "leader" came into their lives. For fun, I offered ten bucks to anyone who would share their story about when someone made them better – when someone made them more. The first hand that went up belonged to a young man sitting on the front row. He was about thirty or so – a nice looking fellow with the body of an athlete.

"When I was seventeen," he began, "I went to Yellowstone to work for the summer. The boss I was assigned to didn't like me from the first moment he saw me. I didn't know why, but I just knew...this fellow didn't like me at all."

Sure enough, the young man's intuition proved correct. The boss yelled at him on the first day, cursed him on the second, wrote him up twice on the third, and reported him to the park rangers three times by the end of the first week.

"I spent a miserable weekend full of dread," he said. "I arrived early at the work site that following Monday morning, knowing I would be fired, but to my surprise, there was someone else already there. An old cowboy stood waiting...and he was waiting on me. He said, 'You'll be with me from now on.' " And the young man telling the story paused. We knew he was fighting emotion.

"We spent the rest of the summer in that beautiful place," he said. "The old fellow didn't say much. When he told me to do something, he might say I did okay, and if I didn't, he would show me how to fix my mistake. I was just a kid, but he didn't treat me like one. He asked me where I was from and why I was there. He would point out an eagle or an elk on occasion that I would have never seen unless he made me aware of their presence. At the end of each day, he would say, 'See you tomorrow, son.' And he called me by my name." The young fellow paused again.

"Over the course of that summer, I changed from a boy to a man. I began to believe in myself, and that old fellow had something to do with all that. On the day I left, he came to say good-bye. He told me I would do well in life, and that I had some sense, and that he wished the best for me. Now all these years later," he continued, "I still think about him sometimes. I find myself being so grateful to him. I would like to give him something in return. I wish I could find him and give him my thanks, my loyalty, my gratitude, and my ... " He stopped again.

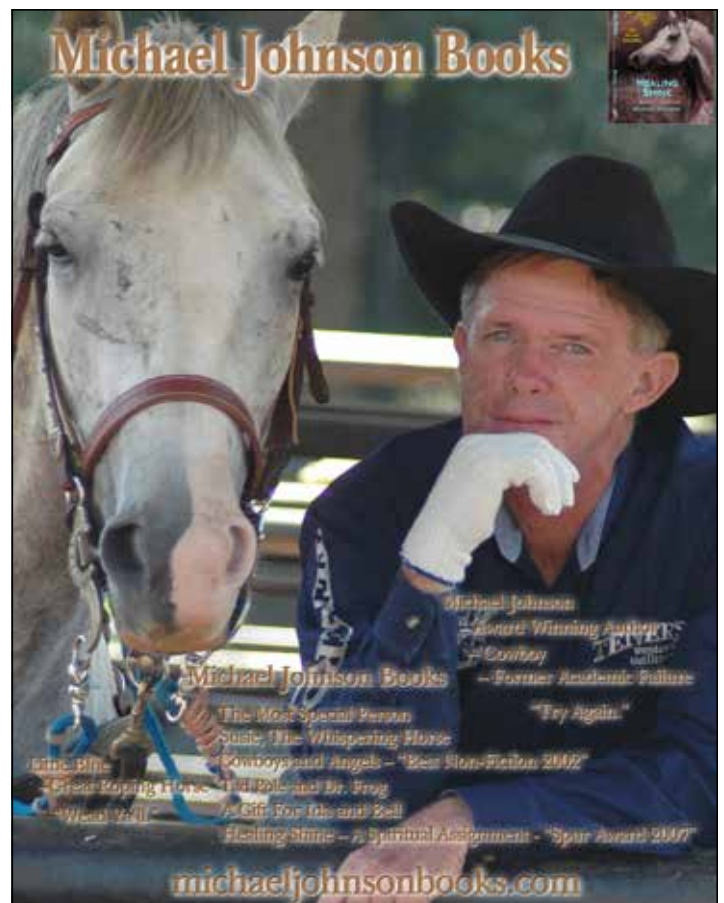
"I can't believe I'm going to say this in front of people I don't even know, but I wish I could send him my love...and if I heard of his passing, I would try to get to him before they put him in the ground." Then he said, "And that's my story about when a "Leader" came in my life - when someone made me better - when someone made me more. That's what Leadership is...when people do that to us."

And he sat down.

He's right.

Ain't it a shame I didn't tell my students that.

— Michael Johnson



System O&M Manuals Required

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

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

This class will assist the water and wastewater system operator in outlining the specific points in

developing the draft of the O&M manual. Step by step, each attendee will create their draft as it relates to their utility system during class. The e-file may then be completed back at the system office.

Class cost is \$155, or if you are unable to attend a class you may purchase a thumb drive with e-files for \$155.



To sign up for the class, or to have a thumb drive mailed to you, contact your Association for further information. ♦

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Phone: _____ Fax: _____

Operator: _____

Contact Person: _____

Number of Hook-ups: _____

Were you referred? By whom _____

Type of System:

☐ Water ☐ Wastewater ☐ Both

Membership Category Amount of Dues

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

Regular Member Dues Schedule

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

Annual Dues - See Dues Schedule

Associate Member

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

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- Legislative representation at state and federal level
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 Springbrook Water Association
 Squaw Creek Canyon Development
 St. Paul, City of
 Staffordshire Water System, Inc.
 Stanfield, City of
 Star Satellite Improvement District
 Steeves Mobile City
 Storlie Water Company Inc.
 Sublimity, City of
 Suburban East Salem Water District
 Sumpter, City of
 Sunridge Estates
 Sunriver Water LLC
 Sunset Water Systems, Inc.
 Sutherlin, City of
 Sweet Home, City of
 Talent, City of
 Terrace Mobile Plaza
 Terrebonne Domestic Water District
 The Dalles, City of
 Three Rivers School District
 Tierra Del Mar Water Company
 Tigard, City of
 Tillamook Bay, Port of
 Tillamook County Creamery Association
 Tillamook, City of
 Timber Water Association

Timberline Rim Water Company
 Tingley Lake Estates
 Toledo, City of
 Trappist Abbey
 Tri City Water & Sanitary Authority
 Troutdale, City of
 Tualatin Valley Water District
 Tumalo Rim Water Impr. Dist.
 Turner, City of
 Twin Rocks Sanitary District
 Tygh Valley Water District
 Ukiah, City of
 Umatilla, City of
 Umpqua Basin Water Assn.
 Union, City of
 Valley View Water District
 Veneta, City of
 Vernonia, City of
 VMWID
 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
 Watseco-Barview Water District
 Wedderburn Sanitary District
 Welches Water Company
 Weldon Mobile Home Park
 West Hills Water Company
 West Linn, City
 Westport Water Association
 Wheeler, City of
 Wickiup Water District
 Willamette Water Company
 Willamina, City of
 Wilson River Water District
 Wilsonville, City of
 Wi-Ne-Ma Christian Camp, Inc.
 Winston-Dillard Water District
 Wood Village, City of
 Woodburn, City of
 Yachats, City of
 Yamhill, City of
 Young's River Lewis & Clark W.D.
 Youth With A Mission
 Zig Zag Water Cooperative, Inc.

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Rick Baltzor
David Jacob

Tim Martin
Tim Smith
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Labish Village Water Comm
Riverfront RV Park

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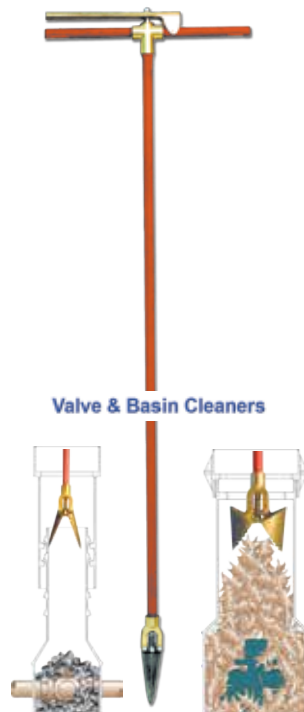


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