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**Pacific Northwest** Section

SPRING 2016

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The Official Magazine of the  
Pacific Northwest Section – AWWA

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Cover Photo: Summer flowers and a train depot in Boise, ID. © Charles Knowles





## Time Flies When You're Having Fun

Last May at the Bellevue Conference, I spoke to all of you about growing our membership and the serious crisis facing our industry because of the many baby-boomers looking to retire over the next five to seven years. From my own utility's stand point, in the next seven years, we will have a third of our staff retiring. This presents a real crisis in that there is 1) a true "generation gap" in our staff between the retiring veterans and the newer, younger staff; and 2) there is a real deficit of individuals applying to fill the positions being vacated by the retiring veterans. To address this very real need to fill these vacancies, I sat down and thought about effective ways to bridge that gap between the utilities needing qualified staff and new, potential water professionals looking for good work. How do we find educated, trained professionals and operators, then find utilities needing them, and then figure out a fluid, efficient way to strategically link them together? To answer this question, I first sat down with the Young Professionals Committee and together we developed the 2020 Vision Plan (2020). I'm so proud of the progress we've made thus far on the 2020 project.



The 2020 initiative is a five-year plan, with its full implementation in the year 2020. There will be many facets

to its implementation over the next few years. In 2015, we formed a subcommittee for the planning, implementation, and oversight of 2020; identified two YP liaisons and one seasoned professional from each subsection; and generated opportunities for each subsection to host a career fair (or hopefully two) in collaboration with YPs and students each year. We are currently developing and implementing a plan that specifically reaches out to water operators, and those in other technical training programs, to foster a more effective connection for them to our industry.

As we speak, work is moving forward in developing a blend of three initiatives under the 2020 Vision Plan – connecting professionals with utilities, membership, and the hiring of veterans. Funds have been dedicated to addressing these three initiatives as a whole because of how closely related they are to each other. The fact we have made such progress to date is truly remarkable, and a testimony to the hard work of the 2020 subcommittee; its first chair, Meredith Noble, who recently took on new career opportunities in Alaska; and the leadership of the new chair, Rich Reavis. There is no doubt in my mind we will continue to see further substantial progress as we move forward because of the goals, objectives, and vision of these committed young men and women.

The Board of Trustees is committed to the continued progress of all three initiatives as well. I am personally committed to seeing the 2020 Vision Plan become a model for not only the Pacific Northwest Section, but also possibly for all of the American Water Works Association. I'm very grateful that incoming Chair Lacey Gores and Chair Elect Dan Kegley are dedicated to further promoting and seeing

through to reality the 2020 Vision Plan.

On the grow-our-membership front, the Membership Committee has been working on a Subsection recruitment package to meet the goal of a 5% membership increase in 2016. While the final numbers are not in yet, the indication is very positive as it relates to the recruitment of new members. A package of recruitment documents will be made available to Subsection officers. These documents will include templates to use to contact potential new members. These documents will reflect both the Subsection and Section logos to present a personal invitation to join our Section. Once approved, these recruitment packages will be distributed to the Subsections for their use as an aid in attracting new members. I'm very proud of the work done and the accomplishments made by the Membership Committee in meeting this goal.

I want to welcome the newest Trustees from the 2015 elections: Dan Kegley from the City of Spokane, WA, who will be Chair Elect; Chris Young, Regional Manager for DN Tanks, who will be the Oregon-Idaho Trustee; James Dean, from the City of Yakima, who will be the Washington Trustee; and Stephanie Raddatz, with the Suez Water Utility, who will be our Trustee at Large. I sincerely want to thank all the other candidates who ran for these positions for their willingness to avail themselves to serve as trustees. I would encourage them to consider running again sometime soon, because I feel they all would be very capable in serving as trustees.

It's hard to believe the spring PNWS Conference is once again upon us. This year's conference is in Boise, ID, from May 4–6, and the theme for the conference is "May the Source be with

You!" Conference arrangements are in the final stages; and the event is shaping up to be an experience you won't want to miss! Registration for the conference is now open. You can go to the Section's website at [www.pnws-awwa.org](http://www.pnws-awwa.org) and click on the Registration link on the main page. The Local Arrangements Committee, chaired by Camille Cegnar, has worked feverishly to ensure the conference arrangements will be memorable—including activities to take advantage of the beautiful surroundings in Boise—and sure to impress all who attend. Some things to make note of for this conference are: the golf tournament, which will be at the Quail Hollow Golf Course not far from the downtown area of Boise; the orienteering event, which will be held instead of a fun run this year; and the return of Beer & Brats! Last year at the Bellevue conference, it was cost-prohibitive to have our customary Beer & Brats, however, at this year's conference, you'll be able to enjoy them once again during the tapping and meter madness competitions. Fun Night will be at a brand new downtown facility called JUMP

(Jack's Urban Meeting Place). This is a not-for-profit, interactive, creative center for community gathering. From what folks are saying about this new facility, we will be one of the first to rent it.

As you know, the conference will be an opportunity to network, renew old acquaintances, as well as meet new utility professionals in our Washington, Idaho, and Oregon Pacific Northwest Section. This year will be a first for our Section. As many of you are aware, we have partnered with the Pacific Northwest Clean Water Association (PNCWA), and we will be able to offer a six-hour track on wastewater topics at the conference. We're all very proud of this track and our new relationship that will provide another added benefit of being a member of both organizations. Of course, we'll have a full boat of pre-conference classes on Wednesday, before the main conference program begins Thursday morning. You can take advantage of this comprehensive list of timely topics that are relevant to utilities and water professionals. I look forward to seeing you in Boise!

Finally, I can't begin to adequately describe what a privilege it has been to be Chair of the Pacific Northwest

Section this past year. I'm in awe of the amount of work and dedication put forth by the entire Board of Trustees, along with all of the 12 Subsections and 40 Committees that make up our Section. I have never been more proud to be a member of an organization with such levels of service and accomplishment. Our Section is nationally recognized and is so highly regarded in the American Water Works Association. This is truly by way of the men and women who have come before us, and those of us who continue to make the Pacific Northwest Section one its members can truly be proud of. I want to thank all of you for your support and assistance to me as Chair. I personally have grown, and my life has been enriched by my experiences as Chair. I look forward to continuing my work with the 2020 Vision, and being a part of this organization in whatever way I can to help us continue to be the very best Section in the American Water Works Association. 🙏

Randy Black  
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March 2016

# Women's HISTORY Month



*Photos courtesy of Library of Congress (top) and Philadelphia Water Department (left)*

**Spouse. Colleague. Leader.** AWWA and our members celebrate Women's History Month. Women's History Month recognizes the contributions of women who have broken the precast mold of history within our industry and paved the way for women to occupy every possible space within the world of water.

Join us in paying tribute to the many contributions that women have made to our industry, country, and world.



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## From Peer to Prez: Congratulations Brenda Lennox

**P**resident Brenda Lennox...it has a nice ring to it, don't you think? Now before you begin to consider starting a write-in campaign for President of the United States, let me be perfectly clear, I'm referring to AWWA President Brenda Lennox.

In case you haven't heard, at the January AWWA Board Meeting our very own Section Director, Brenda Lennox, was named incoming President Elect of our Association. This means at ACE16 in Chicago this June, Brenda will become President-Elect of AWWA, and then at ACE17 in Philadelphia she will assume the office of President. She will be just the fifth AWWA President from the Pacific Northwest Section since the Association began in 1881. Past Presidents from our Section include:

- 1957 – Fred Merryfield
- 1964 – Jerry Allen
- 1994 – Bob Wubbena
- 2000 – Bob Willis

Additionally, Brenda will be just the third woman to lead our Association, following in the footsteps of:

- 2004 – Kathryn McCain, Texas Section
- 2016 – Jeanne Bennett-Bailey, Virginia Section

Let's face it, those of us in our Section have always known how great Brenda is. She is incredibly down to earth and has the ability to communicate well with any audience. The fact that the Association realized this in just the three years since she has been on the Board is a reflection of her character and presence. This is a huge honor for both Brenda and our Section.

However, you may be saying to yourself, "This is certainly wonderful news Kyle, but how does all this affect you?" An excellent question and one that I have been giving a lot of thought to. I have come to the realization that as the only employee for the Section, this effectively makes me Chief of Staff to the President. As such I thought it prudent to draw upon the experiences of my peers who have held this esteemed position. When I say peers, of course I am assuming my peers in the White House, those high ranking national officials who keep the President of the United States's White House staff running at top efficiency. The pillar of strength that the President can lean on when times get tough, the organized, quick-thinking individual who plays such a pivotal role in our nation's rich history. These are the folks I wanted to model myself after, to help Brenda reach new heights and accomplish all her objectives during her year in office. So I looked back during my lifetime, beginning in the 1970s, at White House Chief of Staffs and this is what I found:

- President Richard Nixon – Chief of Staff H.R. Haldeman: Was sent to prison for perjury, conspiracy and obstructing justice as a result of the Watergate Scandal.



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- President Gerald Ford – Chief of Staff Dick Cheney: This speaks for itself – no need to comment on Mr. Cheney.
- President Jimmy Carter – Chief of Staff Hamilton Jordan: The media repeated rumors of coarse and even criminal behavior by Jordan, including supposed cocaine usage and anonymous sex at the infamous Studio 54 discotheque in New York City.

About this time, I have to admit I got a bit depressed and deciding to call it quits researching past White House Chief of Staffs. While I am sure they could have taught me a few things, I was beginning to question if I really wanted to know what they could teach me. It was then that I had an epiphany . . . *It takes a village*. Not the Hillary Clinton version but the African parable. In essence . . . it doesn't matter what I do or don't do for Brenda during her tenure as AWWA President, because I'm just one person. The power that she really has that will keep her on course and help her reach her objectives is due to the support of our Section. All 2,600 of us have her back and will assist her however we can. Rest assured that is what we do as a Section and an industry. Brenda we have your back!



This edition of *Water Matters* is all about the upcoming Section Conference May 4–6 in Boise, ID. This year, we are honored to host AWWA Vice-President Warner Palermo. Mr. Palermo is the President of Integrated Global Solutions in Puerto Rico, a company that serves the environmental industry in the Caribbean and South America. I know you will give him a warm Pacific Northwest welcome!

If you haven't registered for the conference yet, I encourage you to do so. The headquarters hotel is already filled but

If you haven't registered for the conference yet, I encourage you to do so.

we have many additional hotel rooms reserved within walking distance of the convention center. When you finish registering, make sure that you download **the free conference smart phone app** ([www.pnws-awwa.org/conference/download\\_app](http://www.pnws-awwa.org/conference/download_app)) as it is the only tool that will give you session descriptions in advance of the conference so you will know what sessions you should attend.

Of course I would be remiss if I didn't touch on several of the networking events going on throughout the conference. Don't miss the Section Meet and Greet at Fun Night on Wednesday evening. Join your peers for Beers & Brats, and Tapping and Meter Madness finals, just outside the convention center beginning at 5 p.m. Then we will walk across the street for dinner at JUMP, a beautiful new community center in the heart of Boise, for an evening of food, dancing and networking. This of course all follows several earlier events during the day on Wednesday for those not attending pre-conference sessions, including golf and an orienteering challenge; both should be a kick! I look forward to seeing everyone in Boise. Travel safe! 🇺🇸

Kyle Kihs, Executive Director

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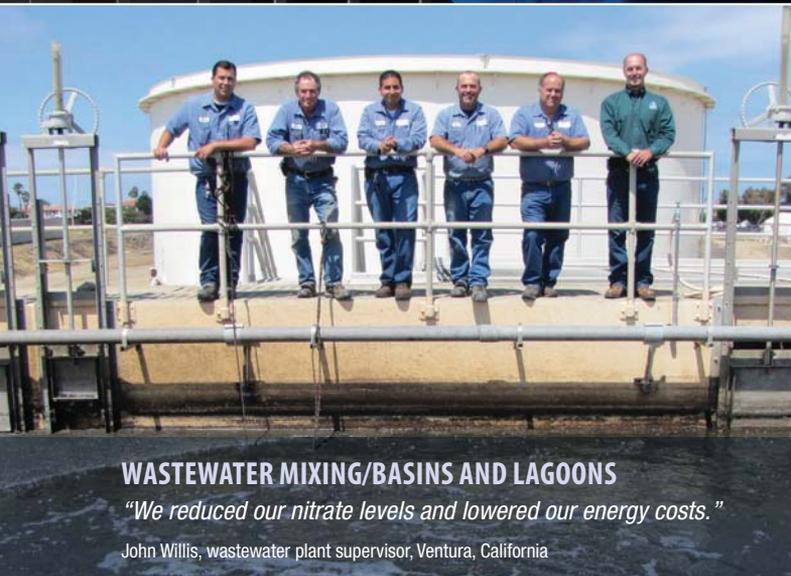
Cary Johnson, water operations mgr., Rochester Public Utilities, Rochester, Minnesota



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John Willis, wastewater plant supervisor, Ventura, California



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James A. Brown, water production manager, Newton County, Georgia



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Curtis Rooth, foreman, Sewer Dept., Cromwell, Connecticut

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## See You Soon

**A**s I write my final column as your Association Director, and reflect on the past three years, I am reminded of Winnie the Pooh. "How lucky I am to have something that makes saying goodbye so hard." And then, as I look at future opportunities, I realize this anonymous quote speaks to my new beginning. "Today I close the door to the past, open the door to the future, take a deep breath, step on through and start a new chapter in my life."

### Association Updates

What is amazing to me is the way the water community rallies when adversity occurs. The recent water crisis in Flint, MI, has brought the leadership of eight water and wastewater organizations together to develop a collaborative and unified response. AWWA and Association of Metropolitan Water Agencies (AMWA) are providing resources and guidance on how to respond to questions and water quality, see [www.awwa.org/lead](http://www.awwa.org/lead).

The AWWA Board meeting in January had a full agenda. It was great to attend with Kari Duncan, Incoming Director and Marshall Thompson who was on the Director at Large (DAL) ballot. While Marshall was not selected as the DAL, he made quite an impression and represented PNWS proudly. Lindsey Olson, New Jersey, was elected and brings a lot of experience as a past Young Professional Committee Chair. Kari has already met many new acquaintances that I am confident will become lifelong friends. After having some fun with it, Kari and I cleared up the confusion that her husband Ken was really "hers" and not mine! As always Ken was a good sport! It was great to have PNWS well represented.

There were four Vice-Presidents elected out of seven qualified candidates for the upcoming year. Incoming at the end of ACE 16 will be: Kevin Bergschneider, Rocky Mountain, Mitch Kannenberg, South Dakota, Terry McGhee, Illinois, and Jacqueline Torbert, Florida.

The Standards Council presented 21 standards for approval. The Board approved 16 revisions to Current

Standards, four new first edition standards (B114, B507, C671, and C751), and one (C707) as a reaffirmation without revision. The latter, C707, is being reaffirmed without revision as it covers a mature meter technology that has remained unchanged. The technology is still used and available which necessitates reaffirming the standard as an active ANSI/AWWA Standard.

1. B100 Granular Filter Material
  2. B101 Precoat Filter Media
  3. B114 Reverse Osmosis and Nanofiltration Systems for Water Treatment
  4. B507 Phosphoric Acid
  5. B600 Powdered Activated Carbon
  6. B603 Permanganates
  7. C215 Extruded Polyolefin Coatings for Steel Water Pipe
  8. C217 Microcrystalline Wax and Petrolatum Tape Coating Systems for Steel Water Pipe and Fittings
  9. C541 Hydraulic and Pneumatic Cylinder and Vane-Type Actuators for Valves and Slide Gates
  10. C671 Online Turbidimeter Operation and Maintenance
  11. C707 REAFFIRMATION: Encoder-Type Remote-Registration Systems for Cold-Water Meters
  12. C751 Magnetic Inductive Flowmeters
  13. C904 Crosslinked Polyethylene (PEX) Pressure Tubing, 1/2 In. (13 mm) Through 3 In. (76 mm), for Water Service
  14. C909 Molecularly Oriented Polyvinyl Chloride (PVCO) Pressure Pipe, 4 In. (100 mm) and Larger
  15. D106 Sacrificial Anode Cathodic Protection Systems for the Submerged Surfaces of Steel Water Storage Tanks
  16. D107 Composite Elevated Tanks for Water Storage
  17. D115 Tendon-Prestressed Concrete Tanks
  18. C104/A21.4 Cement-Mortar Lining for Ductile-Iron Pipe and Fittings
  19. C517 Resilient-Seated Cast-Iron Eccentric Plug Valves
  20. C542 Electric Motor Actuators for Valves and Slide Gates
  21. C750 Transit Time Flowmeters in Full Closed Conduits
- Revision of the Asset Management and Fluoridation of Public Water Supplies was approved along with a new policy statement for Qualifications-Based Selection of Professional Services. Other actions taken included approval of AWWA's philanthropic and charity designation and Membership Plan with Streamlined Benefits.

### PNWS Section

We have just completed another successful Winter Trustees Meeting. The engagement by Section Officers, Committees, and members was impressive. The quality of our members and their unselfish contributions have

Service to others is the  
rent you pay for your room  
here on Earth.  
- Muhammad Ali

Thank you for having the confidence in me to allow me this opportunity. This is not 'goodbye' but rather, 'see you soon.'

created a strong foundation that contributes to the continued success of our Section. Thank you for your contribution to protecting public health.

**Parting Thoughts**

Serving as your Director has been an unforgettable experience and I thank you for allowing me this opportunity. I am honored to represent one of the most respected Sections in AWWA. As I begin this "new chapter" I will retire from a rewarding, 26-year career at Tualatin Valley Water District. The support of my Board, staff and management is much appreciated. As Muhammad Ali said, "Service to others is the rent you pay for your room here on Earth." I look forward to the upcoming three years of service as an AWWA Presidential officer. And again, I thank you for having the confidence in me to allow me this opportunity. This is not "goodbye" but rather, "see you soon." 🙏

Brenda Lennox  
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### Water Conservation Committee

#### Conference Track for Boise Conference in May

The Conservation Committee has selected the following speakers to present during the water conservation track on Friday at the 2016 Boise PNWS Conference:

- Michelle Harvey  
Flexible & Affordable Meter Reading Technology
- Mike Buettner  
Integrating AMI Data and Water Conservation Programming
- Jeff Shaw  
Making Infrastructure Intelligent: Irrigation Modernization in California
- Julie Smitherman  
A Proactive Approach to Surviving Drought –  
A Water Conservation Success Story
- Racquel Rancier  
Drought in Oregon and the State's Response:  
The Role of Water Conservation
- Stephanie Raddatz  
United Water Idaho Demonstration Garden Partnership
- Mike Buettner  
Targeting Peak Day Demand with Irrigation Inspections
- Brett Forman  
WaterSmart Software

#### Fall Committee Meeting – December 1, 2015

The Water Conservation Committee held a conference call and webinar on Tuesday, December 1. There were 14 Committee members on the call. During the meeting we discussed takeaways from the WaterSmart Conference held

in October, the upcoming 2016 budget, the PNWS conference in Boise, and the presenters for the conservation track on Friday at the conference. The second half of our meeting featured Clay Kraus from Rachio, who led a very informative webinar on Rachio Irrigation Controllers. The group also discussed smart controller incentive programs and the increased interest in Rachio brand controllers from customers in certain cities offering rebates. For a full description of the meeting, see the attached meeting minutes.

#### Next Committee Meeting – March 2016

The Water Conservation Committee will be holding our next meeting and webinar this March. The topic will include either water auditing, water loss, or AWWA's G480 Conservation Standards, and the partnership with the Alliance for Water Efficiency. Check the Conservation page at [www.pnws-awwa.org](http://www.pnws-awwa.org) for more information about the next Committee meeting and webinar.

#### Information Sharing

Members of the Conservation Committee frequently send items of interest to the Chair to be shared with the rest of the group. This is a wonderful way for members to keep in contact with each other and share information, thoughts, and opinions. If you have information that you would like to share with the Conservation Committee, please contact Committee Chair, Julie Smitherman [smithermanj@ashland.or.us](mailto:smithermanj@ashland.or.us) or Vice-Chair, Mike Buettner, at [mbuettner@bendoregon.gov](mailto:mbuettner@bendoregon.gov) for more information. 

### Customer Service Committee

There are some exciting changes coming to the AWWA Customer Service Certificate Program that we have been promoting throughout the PNWS for the last six years. Last year, the AWWA received a grant to update the program. Because of the successes that the PNWS has had with the program there were several people from our Committee, and others across the US, that worked to update it. The new program update is moving along and we are patiently waiting for it to be user ready. We are currently working with the existing program, and scheduling training as the need arises. We are pleased to say that the program already has many of the updates in it due to the fact that it has always been important to our Committee that we reach both office and field staff, and bring to light the importance of internal and external customers. Currently we have training opportunities scheduled for:

#### Customer Service Program - 2016 Courses

- **Course 2: The Business of Customer Service**  
Spanaway, WA                      March 3 and 4
- **Course 3: Water Industry Operations  
& the Vital Importance of Teams**  
Central Point, OR                      March or April  
Moscow, ID                              October  
Spanaway, WA                              Fall TBD

We are currently working on the schedule for 2017-18. Both Spokane, WA, and Wenatchee, WA, have expressed interest in bringing the program to their area. Contact Tonya Reiss, [treiss@spokanecity.org](mailto:treiss@spokanecity.org) if you would like to be added to our email list to receive information about upcoming training. If you are interested in having the training in your area, let us know. These are exciting times for our Committee and the program. We look forward to bringing the AWWA Customer Service Certificate Program to you and your organization. Everyone needs to have great customer service skills. 

### Engineering Committee

The Engineering Committee is continuing to support its adopted initiatives, and work toward its goals for the year, with a number of exciting events and activities scheduled for this spring.

On February 11, the Engineering Committee, in conjunction with the YPs, hosted a tour of the Ridgewood View Reservoir and Pump Station, which has been under construction for more than a year. Last spring, when the Engineering Committee toured the site, the excavation had just been completed for the reservoir. Construction has progressed significantly, and Nick Augustus (TVWD) led a large group around the construction site, sharing all of the progress that has occurred.

On February 18, the Engineering Committee, in conjunction with the Public Information Committee, put out a training opportunity called "Communications Training for Engineers and Other Techies." This all-day event, held at the Water Resource Center in Vancouver, WA, offered useful information for all water professionals. Featured topics included: "Crisis Communications for the Technically Minded", "Using Social Media to Tell Your

Story", "Communications Beyond Words", "Using Brain Connections for Better Communications", and "Theories Behind Visual Communication and Graphics."

The Engineering Committee is once again supporting the Engineer's Week activities in both Seattle and Portland this spring. We will be manning informational booths at both events, giving away some swag, and sharing our passion for engineering and the water industry. Over 350 high school students attended each of these events last year to learn about careers in drinking water.

The Engineering Committee has also planned an exciting presentation track for the 2016 PNWS-AWWA Conference in Boise, ID. The Committee will be hosting a pre-Conference technical session on drought planning and resiliency as well as full-day technical sessions on Thursday and Friday, and an early bird session on Thursday. Topics include emergency response, risk management, pipelines, and water treatment plant design. Winners have been chosen for this year's Excellence in Engineering Awards. Find out whose projects won big following the Best Tasting Water Competition at this year's Conference on Friday, May 6. 

### Oregon Water Utility Council – Wants You to Get Involved

The Oregon Water Utility Council monitors legislation and regulations that could impact the water industry, giving members the ability to help shape these kinds of issues. In addition, it provides its members with the ability to network with other water utilities of all sizes. The legislative activities are closely coordinated with policies of the AWWA when applicable.

If you want to know more about:

- Municipal Access to Stored Water in the Willamette Basin
- What potential bills in the Legislature could impact Oregon water providers

Then contact Kim Swan at [kims@clackamasproviders.org](mailto:kims@clackamasproviders.org) for more information about how to get on the OWUC email distribution list, and how to get more information about OWUC's monthly meetings. Meeting location rotates between Eugene and Salem and a couple of times each year meetings are held in other parts of the state to allow member outside of the Willamette Valley to participate without having to travel so far. If you are not able to travel to meeting sites, you can always participate through teleconference. 



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## Water Quality Committee

### Winter Committee Activities

As of this writing, the Water Quality Committee (WQC) is preparing to participate in the PNWS-AWWA Winter Trustee Meeting's first ever speed-dating night! The event, organized by Lacey Goeres-Priest, is an opportunity for Subsection officers to get to know the Committees that make up the Pacific Northwest Section. Jessica Dorsey, WQC Vice-Chair, and I will be there to represent the WQC. Hopefully it goes well, this is the first date I have been on in quite a while!

### Training

The WQC has begun planning training opportunities for the upcoming year. We

anticipate offering a class in the Puget Sound area and possibly in Central/Southern Oregon in the fall. Stay tuned for updates as plans come to fruition.

### Best Tasting Water Competition

Competition time is fast approaching. Subsections that have not already held their Best Tasting Water (BTW) competitions have until April 1 to do so. Winners must be registered for the Section competition by April 15. More information on entry eligibility and test requirements can be found on the WQC website at <https://sites.google.com/a/pnws-awwa.org/water-quality/home/water-taste-test>.

Good luck to all the participants, feel free to contact the WQC if you have questions!

### Get Involved

Want to join the Water Quality Committee? By doing so you will receive email updates about upcoming meetings and events. **We are currently seeking a volunteer to fill the position of Secretary and welcome inquiries.** Please contact Committee Chair, Kyle Thompson ([kyle.thompson@msa-ep.com](mailto:kyle.thompson@msa-ep.com)) or Committee Vice-Chair, Jessica Dorsey ([jessica.dorsey@hillsboro-oregon.gov](mailto:jessica.dorsey@hillsboro-oregon.gov)) for more information. 

## Training Coordination Committee

The Training Coordination Committee (TCC) has a mission to help coordinate training for water professionals in the Northwest. To meet this mission, we have developed "Training in a Box" courses for Arc-Flash Awareness and Basic Water Works. These courses are

fully developed with the materials, instructors, and approved CEUs waiting to be used. Both of these courses have been given multiple times throughout the Section with great success, and we are constantly tweaking the courses based on attendee input. All

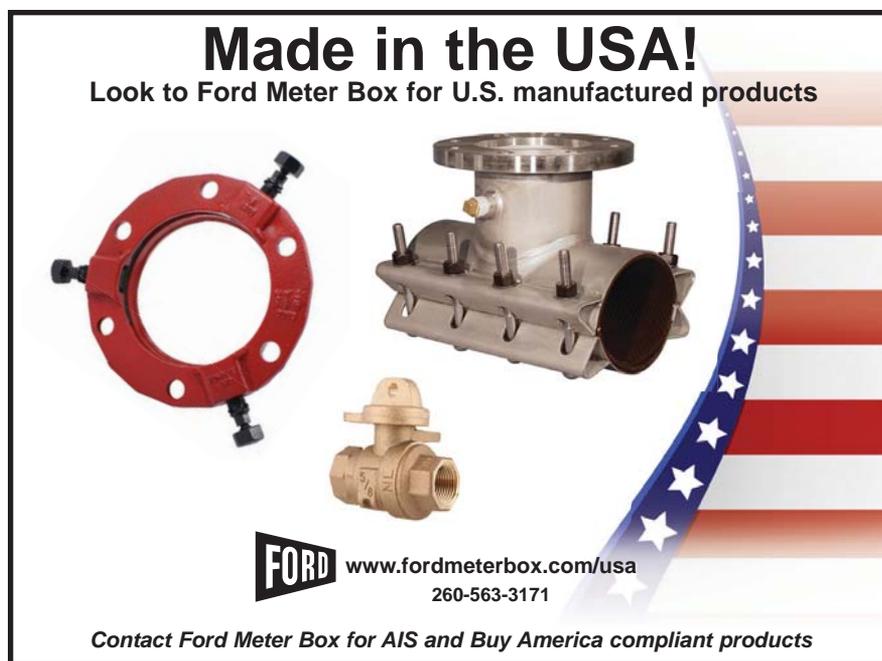
a Subsection needs to do is ask for the training and we can contact the instructor from your area. The Subsections must coordinate a facility, any refreshments, and registration. The TCC takes care of the rest.

The Committee also continues to develop more training. We have a Chemistry for Operators course that we hope to have available very soon, and we are starting to develop both an Emergency Preparedness course and a Water Storage course.

### How to Get Involved With the Training Coordination Committee

If you have the expertise and a desire to spread your knowledge to others, we are always looking for more instructors for any of our developed courses, as well as the ones in development. We are also looking for more Committee members with a desire to promote quality training.

We meet the third Thursday of the month via conference call. We discuss the progress of the training opportunities, coordinate where the next ones will be held, and look at new courses that we can develop. If you have an interest in joining our efforts please contact Loren Searl, Committee Chair at 509-625-7960 or [lsearl@spokanecity.org](mailto:lsearl@spokanecity.org). 



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### Subsection Advisory Council

At the beginning of each year, we embrace the change in leadership by providing new and current Subsection officers with training and insight to better lead and guide their local members. With this in mind, the Subsection Advisory Council (SAC) developed and provided a training session which included presentations about the AWWA, Section goals, missions and visions.

At the Winter Trustee meeting, held at Vancouver's Heathman Lodge, Brenda Lennox, who is Section Director and AWWA President Elect, and works for the Tualatin Valley Water District, illuminated those in the dark regarding the function and structure of the AWWA. Given that many of the utility members provide both water and sewer service, the AWWA is moving towards a total water solution concerning services provided. With the dire need for infrastructure improvements in underserved US communities, the AWWA, American Society of Civil Engineers (ASCE) and Engineers without Borders, have joined forces to address this concern. The Community Engineering Corps has been created to assist such communities.

Max Woody, SAC Chair, from Central Point, set forth the SAC goals and mission for the PNWS Subsections, and was followed by the Section Chair, Randy Black, of the Lakewood Water District. He illustrated the 2020 Vision, and its effort to invigorate the water industry with bright, young, new professionals. Two such individuals are Rich Reavis and Kevin Wyckoff, who have taken over the leadership of the Young Professionals (YPs) and the drive to support the 2020 Vision. Each subsection has or will provide a YP Liaison, YP, and a Seasoned Professional (SP), with the goal of supporting this vision. Andreu Ferrero, straight from the field and in muddy boots, described how the Membership Committee is working within the Section to attract new members to complement this effort.

Kyle Kihns, our Executive Director, discussed the US Water Alliance's **Value of Water Coalition Toolbox**, which is part

of an initiative to educate and inspire the nation about how water is essential, invaluable, and in need of investment. Kyle further emphasized the need for good communication between the Subsections and Section regarding local training classes and events. The ever-important IT training included a discussion by Ronda Farmer, of the Spanaway Water District, concerning the value and benefits of social media. Loren Searl, of Spokane Water Department, spoke about the Training Coordination Committee (TCC) and its efforts to bring forward a wide variety of established training classes to better serve remote areas of the Section.

With the goal of greater participation by all the Subsections at the upcoming conference in Boise, ID, emphasis was placed on the competition coordinator presentations during the training session. Tonya Reiss of Spokane WA, opened with a discussion about hosting competitions at each Subsection, giving each Subsection the opportunity to describe what events they are hosting followed by each of the training coordinators:

- Mike McClenathan of Central Point, OR, illuminated the value of Gimmicks and Gadgets, with the Section providing 2017 Spring Conference graduated scholarships to the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> place winners;
- Gerald Arredondo of Salem OR, brightened the hour with a live presentation of the irrepressible Meter Madness, with the Section providing a 2016 ACE scholarship to the Section winner;
- Loren Searl of Spokane WA, reviewed the team-building character of the Tapping Contest, with the Section providing 2016 ACE scholarships to the men's 1<sup>st</sup> place team and coach;
- Doug Priest of Salem OR, expounded on the wisdom of Top Ops and the ease of putting a team together, with Section providing 2016 ACE scholarships to the 1<sup>st</sup> place team;
- Kyle Thompson of MSA, quenched the Subsection officer's thirst for the Best Tasting Water, with the Section

providing a 2016 ACE scholarship to the competition winner.

To be successful, all of these events must begin locally, with passion and promotion at the Subsection level. To further support managing events, the SAC has improved its website to include a brief summary and links to either the Section or National website, where the competition criteria is provided. Furthermore, the SAC members are available to assist and provide tools to help make these events a success.

At the end of another successful Winter Trustee Meeting and Subsection Training, we look forward to the Spring Conference in Boise being filled with spirited competition, and full representation across the Section.

In closing, we want to acknowledge the enthusiasm and verve that Brian St. Clair brought to the Tapping Team competition during the many years that he was the coordinator. And to Mr. Bill Beckman, who served the Section in so many ways, including as the Gimmicks and Gadgets coordinator for so long that no one really knows when he began (because we were not born yet). Words can't describe the gratitude that is owed Mr. Beckman and Mr. St. Clair for the inspiring leadership both provided in service to the Section. Thank you, Brian and Bill. 🙏

If you have any questions about the SAC, or the Subsection training events, please contact one of the following officers:



Max Woody, Chair  
[max.woody@centralpointoregon.gov](mailto:max.woody@centralpointoregon.gov)

Tonya Reiss, Vice-Chair  
[treiss@spokanecity.org](mailto:treiss@spokanecity.org)

Doug Schlepp, Secretary  
[dschlepp@rh2.com](mailto:dschlepp@rh2.com)

### Young Professionals Committee

The Pacific Northwest Young Professionals (YPs) are a dedicated group of young professionals and students who are excited to spread the word about the benefits of AWWA. Young professionals throughout our Section have organized several fun networking and educational activities this past winter, and are continuing to plan events for the spring. These events are a great chance to learn powerful skills to enhance your career and network with other like-minded professionals and students in the water industry. There are many ways to participate in activities. Check out some of the past events and future opportunities coming up for the PNWS YPs!

#### PNWS YP Subsection Events

*Southwest Idaho Subsection*

*Young Professionals – Boise State*

*University Engineering Career Fair*



The Southwest Idaho Subsection YPs hosted a booth at the Boise State University Engineering Career Fair on November 12. It was a great opportunity to let students in the Engineering Department know about AWWA and what we do. Local members staffed the booth and collected student contact information to keep them informed about our events. We hope to continue strengthening our relationship with BSU and growing AWWA's membership.

*Northwest Washington*

*Subsection Young Professionals –*  
*Diamond Knot Networking*

On November 18, approximately 20



YPs and SPs, along with five students from the University of Washington, gathered at the Diamond Knot Brewpub in Mountlake Terrace for the Northwest WA Subsection's first-ever YP networking event. While enjoying quality beverages and great pizza, YPs were encouraged to engage with SPs through the use of raffle tickets that required an SP's signature. During the raffle drawing toward the end of the event, four lucky YPs got to take home their choice of gift card. The Subsection would also like to thank event sponsors: Whitney Equipment and Beaver Equipment. Overall, the event was a success and the Northwest Subsection has begun planning several field trips and network events for 2016, so stay tuned!

*King County Subsection –*

*Seattle Central College Mentoring Night*

Students from Seattle Central College went around talking to various engineering disciplines to learn about future career opportunities. Michael Norton (Seattle Public Utilities), Steve Lee (Covington Water District), and Lynn Stephens (Brown and Caldwell)

had a great time talking with students. They shared what their jobs were like, why they got into the water industry in the first place, then fielded questions from students about which degree programs would help them. Several students were enthused about a career in water! This is the second year that the King County has participated in this event.



If you want to volunteer at future events, please contact Lynn Stephens, [lstephens@brwncald.com](mailto:lstephens@brwncald.com).

#### PNWS Upcoming YP Events

*2016 Boise Conference*

*Fresh Ideas Poster Competition*  
*in Boise, ID –*

*Now Open to All Young Professionals*



The Young Professionals Committee is soliciting poster applications for the Fresh Ideas Poster Competition at the upcoming 2016 Annual Conference in Boise, ID. The Competition is a unique opportunity for all young professionals, not just students, to present their research to a diverse audience,

and have their work judged by a field of experts. The winner will represent PNWS at ACE16 in Chicago. Additionally, cash prizes will be provided for first, second, and third place.

Application, submittal, and scholarship information can be found at <https://sites.google.com/a/pnws-awwa.org/young-professionals/home>. Interested students and young professionals need to submit an application with an abstract describing the subject of the poster presentation to Dan Reisinger at [dreisinger@carollo.com](mailto:dreisinger@carollo.com). The deadline for submissions is March 31, 2016.

#### 2016 Young Professionals Scavenger Hunt- Boise, ID, Conference



The 12th Annual PNWS-AWWA YP Scavenger Hunt will start at 6:30 p.m., in the main lobby of the Grove Hotel on Thursday, May 5, 2016. Join us for a fun evening of networking, scavenging for clues, enjoying refreshments, and engaging in a little friendly competition. The Scavenger Hunt is a great opportunity to come together with other regional young professionals and make entertaining memories, while also developing solid connections with water industry colleagues who will be valuable resources to you throughout your career, and beyond. The PNWS-AWWA YP Committee would like to extend a special thank you to

our sponsors for their generous donations, and to MSA and RH2 for hosting this year's Scavenger Hunt venues. We appreciate your continued support! For more information, please contact [kysa.cronrath@hillsboro-oregon.gov](mailto:kysa.cronrath@hillsboro-oregon.gov).

#### Career Fairs

##### At a Career Fair Near You!

Young professionals have been making



great strides towards our goal of participating in a Career Fair in every Subsection. As part of this objective, we have built a Career Fair Toolkit that makes hosting a booth much easier. This set of resources is available to anyone wishing to coordinate participation in a career fair in their area. The toolkit consists of documents that illustrate the materials necessary for a booth at career fairs. Additional displays and giveaways such as pencils, pens, bookmarks etc are available by emailing Kevin Wyckoff [kwyckoff@pnws-awwa.org](mailto:kwyckoff@pnws-awwa.org).

#### YP Profile –

*Mike Blake, City of Central Point, OR*  
Mike Blake is the inventor of "The Claw," which won him the Gimmicks and Gadgets competition at the 2015 PNWS-AWWA Annual Conference in Bellevue, as well as a second place finish at the AWWA National Conference competition. Mike is a customer service technician with the Central Point Public Works Department ([www.centralpointoregon.gov](http://www.centralpointoregon.gov)) and a member of PNWS, Southern Oregon Subsection (Southern Oregon Mafia).



#### About the Claw

Utility operations frequently require staff to enter valve vaults, a task that presents hazards and draws on limited resources. What if the necessary data could be obtained without entering a vault or requiring another person?

The Claw allows this to occur. By using this device, operators can reach down and, if he or she is able to grab something, anything, metal, perform a locate on his or her own without entering the vault.

#### Construction and Use

"The Claw is a recycled trash picker with the mechanism reversed so it's clamped shut all the time. I installed an oversized spring for greater tension. I also attached 20 feet of tracer wire to the side of the tool, as sometimes it may be necessary to get farther away from the device. I also attached a steel washer next to the handle to connect locator leads."

Congratulations Mike Blake!

#### Follow us on Social Media

The Young Professionals Committee continued a steady presence on social media throughout the year. The Facebook page is updated at least weekly with upcoming events, job openings, and training announcements. Our page has seen a 10% increase in followers in the past year, with each post reaching 70 people on average. Visit our Facebook page: PNWS of AWWA Young Professionals to stay connected.

Also, check out our events calendar on the PNWS website ([www.pnws-awwa.org](http://www.pnws-awwa.org)) for information on upcoming YP and student events. To submit information on events, or event pictures, email Kristen Brastad, [kristen.brastad@gmail.com](mailto:kristen.brastad@gmail.com).

#### Participate and Stay Connected

Want to join the YP Committee in its efforts to connect students and YPs with PNWS-AWWA? There are lots of ways you can help including: event planning, leadership roles, career fairs, scavenger hunt planning, helping get a student chapter going, and more. Contact YP Committee Chair Julie Smitherman for details, [smithermanj@ashland.or.us](mailto:smithermanj@ashland.or.us). 

## Water For People Committee

Want to donate to Water For People, but don't know where to start? Visit the Water For People Crowdrise page at [www.crowdrise.com/waterforpeople](http://www.crowdrise.com/waterforpeople) or start your own Crowdrise fundraiser.

### Kenneth J Miller Award

Nominations have been received for the Kenneth J. Miller Award. Please join us in congratulating the following nominees:

- **Vanessa Calderon**-NW Oregon Subsection Water For People Committee Chair  
Vanessa works tirelessly to ensure our events run smooth, are enjoyable, and raise the most money possible for Water For People. Her dedication and time commitment is unparalleled in our Committee, and she is very deserving of the award.
- **Bill Carr**-Southwest Idaho Subsection Past Chair and Trustee



Bill created, and has sustained for three years, the Southwest Idaho Subsection's Wine for Water event. For a small Subsection with not a lot of active members, raising around \$4,000 from these events is impressive. Bill deserves this award for his vision and drive to get something off the ground.

- **Cindy Foss**-PNWS Water For People Past Chair  
Cindy successfully led the PNWS Water For People committee from 2010 through 2015. She assisted all of the Subsections who choose



to fundraise for this awesome cause and was always available to provide inspiration and assistance when needed. Her enthusiasm and dedication to this worthwhile charity is a great benefit to our Section. The 2016 winner will be recognized at the Section banquet and at the National Awards Ceremony held at ACE16.

### Looking Forward

Contact Kristin Young [kyoung@rh2.com](mailto:kyoung@rh2.com) to find out how you can get involved in the Water For People Committee at the Section -or local-event level! We are looking to expand our awareness efforts, grow our existing events, and help Subsections with new events. Have an idea? Let us know!

### Want to Be In the Know About Water For People Events?

Be sure to visit the Water For People Committee website (under the Committees tab of [www.pnws-awwa.org](http://www.pnws-awwa.org)) for all the latest throughout the Section. All our summer fundraising events, from golf tournaments to beer tastings and wine gatherings, are sure to please. 🍷

Interested in starting a Water For People event? Please contact one of the following officers:

Kristin Young, Chair  
[kyoung@rh2.com](mailto:kyoung@rh2.com)

John Roth, Vice-Chair – Oregon  
[john.roth@cityofwashougal.us](mailto:john.roth@cityofwashougal.us)

Jolene Gibson, Vice-Chair – Washington  
[jgibson2@cityoftacoma.org](mailto:jgibson2@cityoftacoma.org)

Erin Nishikawa, Secretary  
[enishikawa@aesgeo.com](mailto:enishikawa@aesgeo.com)

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## Water Resource Committee

The Water Resources Committee (WRC) has organized a full slate of events for the 2016 Boise Conference, ID to support communication, and provide education, on timely and relevant water resources topics. Among our events in Boise are five conference sessions, and webinars on drinking water supply and utility resilience.

### WRC Social at the 2016 Boise Conference

The WRC will host a social for Committee Members and those wishing to learn more about our Committee on Thursday May 5, from 5 to 7 p.m., ahead of the YP event and hosted socials. The venue will be announced on our webpage: <https://sites.google.com/a/pnws-awwa.org/water-resources-committee/home>.

Plan to join us for a beverage, a bite, and a chance to network.

### WRC to Host Four Sessions at the 2016 Boise Conference

The Boise Conference theme of "May the Source Be with You"

feels like a great fit with the WRC's current resilience themes. Please plan on attending one or more of our interesting sessions:

- Pre-Conference Workshop – **The Three States' Perspectives on Climate Change Science and Impacts**
- Thursday Afternoon Technical Session – **Water Quality Considerations in Developing and Maintaining Water Supply (Co-sponsored with Water Quality Committee)**
- Friday Early Bird – **Decentralized Approach to Non-Potable Water Management**
- Friday Morning Technical Session – **Supply Security through Portfolio Diversity**
- Friday Afternoon Technical Session – **Water Supply Resiliency: Adaptive Management through Creative Planning**

The WRC recently hosted a Lunch-n-Learn webinar on resilient water supply planning, featuring a presentation: "Willamette Water Supply, Our Reliable Water" which discussed a project

being planned – and built – as a joint partnership between the Tualatin Valley Water District and the City of Hillsboro, OR. These webinars are part of our regular efforts to inform, educate, and collaborate among regional water utilities and service providers. More talks are planned for the coming year on water supply planning resiliency for topics such as infrastructure concepts and climate change adaptations. Registration information and announcements for upcoming events are available on our webpage. You can also join our monthly web-hosted meetings to keep up with planning, and lend your ideas.

The Committee continues to meet regularly on the third Thursday of each month from 3:30 to 4:30 p.m., to prepare for the 2016 Boise Conference, plan social events, and organize Lunch-n-Learn webinar events. For more information on attending via teleconference, please visit the Water Resources Committee webpage or contact John Lambie, Committee Chair, at [jlambie@e-purwater.com](mailto:jlambie@e-purwater.com). 



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## Inland Empire Subsection

Our 12th annual Truck Rodeo took place on March 9, at the Spokane Arena in Spokane, WA. In addition to the main event, this fun day included classes, networking, contests, lunch, vendors, and T-shirts. We also announced our Muddy Boots Award winner. This honor is awarded to the "Best Operator" in our region, and announced during Truck Rodeo, then again at our Spring Banquet.

We have a flagging recertification class on April 6, in Liberty Lake for any operators that need to be

recertified. This is a six-hour class. Plans are also underway for our next No Water No Beer Event. This will be held on May 20, at the Down Draft Brewery in Post Falls, ID. We hope to have vendors at this function, along with a silent auction to benefit Water for People. Last year's event was a big success, and a fun night! 📺



Check our website for updates at <https://sites.google.com/a/pnws-awwa.org/inland-empire-subsection/home/announcements>.

## Northwest Washington Subsection

### 2016 Training Schedule

The Northwest Washington Subsection will be sponsoring training for operators, engineers and managers in spring, summer, and fall of 2016. Events scheduled so far include:

#### *Water Treatment Workshop*

Spring and fall, locations TBD.

This annual workshop will focus on

treatment topics of interest and practical application for treatment plants in the region. Past topics have included: filter operations, maintenance, and optimization; start-up of Tacoma's new filter plant; and current and upcoming regulatory issues from DOH. 0.6 CEUs.

#### *Basic Waterworks Workshop*

Thursday, March 24, 2016, Anacortes, WA. This workshop will provide an orientation to water utilities and water quality protection for new employees to the utility, including: treatment plant staff, distribution crews, office staff, engineers and others. 0.6 CEUs.

#### *2016 Western Washington*

##### *Short School And Trade Show*

Tuesday and Wednesday (June 14,15) at the Lynnwood Convention Center, Lynnwood, WA. The Short School is co-sponsored by the Northwest Washington Subsection, PNWS-AWWA and the Western Washington Region PNCWA-WEF. Registration will open in early April and a link will be posted on the Northwest Washington Subsection webpage. 1.2 CEUs.

The annual Short School will include four to five concurrent

classes on a variety of topics for water and wastewater operators, engineers and managers. Along with presentations, the Short School will also feature water and wastewater treatment plant tours (tour locations TBD) and a trade show for equipment manufacturers, service providers, and consultants.

#### *Water Quality Communication Workshop*

September 2016, location TBD. 0.6 CEUs.

#### *Emergency Preparedness Workshop*

Fall, location TBD. 0.6 CEUs.

#### *Basic Waterworks Workshop*

Fall, location TBD.

The workshop will provide an orientation to water utilities and water quality protection for new employees to the utility, including: treatment plant staff, distribution crews, office staff, engineers and others. 0.6 CEUs.

For additional information or to sign up for email notification for these or any Northwest Washington Subsection workshops go to the subsection webpage on the Section's website ([www.pnws-awwa.org](http://www.pnws-awwa.org)) or contact Jeff Lundt: [jeff.lundt@kingcounty.gov](mailto:jeff.lundt@kingcounty.gov) or 260-477-5582. 📺

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## Northwest Washington Subsection Event Highlights

### Water Regulations Update

**Workshop**, February 24, Skagit County PUD No. 1, Mount. Vernon, WA.

The workshop covered a review of recent and proposed changes in water regulations including:

monitoring, the Revised Total Coliform Rule, cross connection, water main break protocol, sanitary surveys, changing views on manganese, and the regulatory horizon. Attendees earned 0.6 water CEUs.

To sign up for email notification about future Northwest Washington Subsection workshops go to the Subsection webpage on the Section's website ([www.pnws-awwa.org](http://www.pnws-awwa.org)) or contact Jeff Lundt: [jeff.lundt@kingcounty.gov](mailto:jeff.lundt@kingcounty.gov) or 260-477-5582. 

## Southern Oregon Subsection

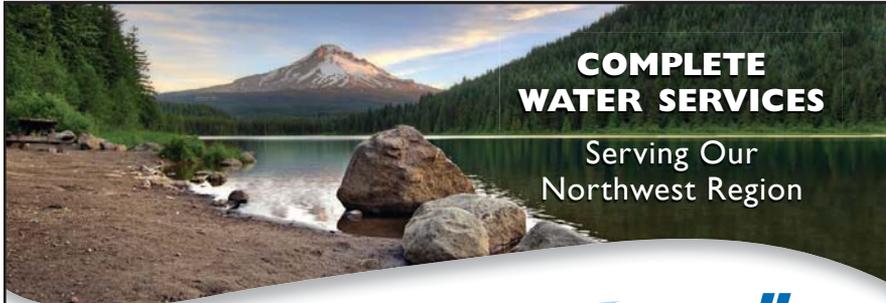
The Southern Oregon Subsection officers have been trained. Rubbing shoulders with the Section leadership and other Subsections can only result in increased motivation to improve our programs. The training, food and facility was great. Our next Subsection meeting, was held at the drinking water plant in Grant Pass on March 3, and included our Best Tasting Water and Meter Madness contests. This meeting put FUN as an agenda item.

We have a new website coordinator. Sara Bristol of the Medford Water Commission has stepped in to add some *zing* to our site.

The Subsection continues to prepare for our Golf Tournament in support of Water For People. This year's tournament will return to Stone Ridge Golf Course. August



12 will be the salmon feed and August 13 will be the shotgun start. Lunch, a raffle, and prizes will follow. Vendor support is welcome. Registration opens on April 1. So don't be a FOOL and miss out on the fun. 



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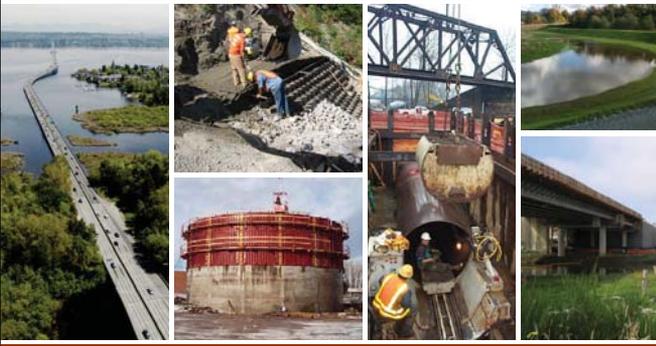
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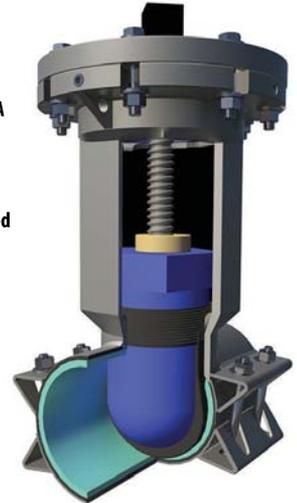


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# MAY THE PNWS - AWWA SOURCE BOISE 2016 BE WITH YOU

BOISE CONVENTION CENTRE | MAY 4 - 6, 2016

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# MAY THE SOURCE BE WITH YOU

## CONFERENCE SCHEDULE

### TUESDAY, MAY 3RD

Registration & Information	3:00 to 6 pm	Lobby
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### WEDNESDAY, MAY 4TH

Registration & Information	7:30 am to 6 pm	Lobby
Continental Breakfast	7:30 to 8:30 am	Vendor Hall
Golf Tournament	8:00 am to 2:00 pm	Quail Hollow
Orienteering Challenge	9:00 to 11:00 am	Ann Morrison Park
Pre-Conference Seminars	8:30 am to 4:30 pm	Convention Center
Lunch	12:00 to 1:00 pm	Vendor Hall
Tapping Contest & Meter Madness	5:00 to 6:30 pm	Grove Plaza
Fun Night	6:30 to 8:30 pm	JUMP, 1000 W Myrtle Street

### THURSDAY, MAY 5TH

Registration & Information	7:00 am to 6:00 pm	Lobby
Breakfast	7:00 to 9:00 am	Vendor Hall
Opening Ceremony	9:00 to 10:30 am	Summit Auditorium
Vendor Exhibits Open	10:00 am to 5:00 pm	Vendor Hall
Water for People Silent Auction	8:00 am to 5:00 pm	Vendor Hall
Lunch with Vendors	10:30 am to 1:30 pm	Vendor Hall
Fresh Ideas Poster Contest	10:30 am to 1:30 pm	Salmon Room
Technical Sessions	1:30 to 5:00 pm	Convention Center
First Time Attendee Meet & Greet	5:00 to 6:00 pm	Grove Hotel Terrace (4th Floor)
YP Scavenger Hunt	6:30 to 10 pm	Grove Hotel Lobby

### FRIDAY, MAY 6TH

Registration & Information	7:00 am to 4:00 pm	Lobby
Breakfast	7:00 to 8:30 am	Vendor Hall
Early Bird Technical Sessions	7:15 to 8:15 am	Convention Center
Technical Sessions	8:30 am to 5:00 pm	Convention Center
Vendor Exhibits	7:00 am to 1:30 pm	Vendor Hall
Water for People Silent Auction	8:00 am to 3:00 pm	Vendor Hall
Lunch with Vendors	12:00 to 1:00 pm	Vendor Hall
Gimmicks & Gadgets	1:30 to 2:30 pm	Summit Auditorium
Top Ops Competition	2:45 to 3:45 pm	Summit Auditorium
Water for People Auction Reception	5:00 to 6:30 pm	Lobby
Best Tasting Water Contest	5:00 to 6:30 pm	Lobby
Engineering & Public Information Award Presentation	5:00 to 6:30 pm	Lobby
Banquet	6:30 to 9:00 pm	Convention Center

## LIVE, FROM TREASURE VALLEY...

Boise, ID, is pleased to host the Pacific Northwest Section of the American Water Works Association conference May 4-6, 2016. The source is essential to us in the water industry. We invite you to celebrate the source during an exciting week

of training, idea sharing, career building and fun.

Located in the heart of downtown Boise, the Boise Convention Centre is within walking distance to the conference hotels, many first-rate restaurants, coffee houses and taverns.

Spend your time strolling through the city, or stay the weekend and whitewater raft or take a bike ride on one of the many mountain trails.

Here is all the information you need to make the most of your time at the conference.

## CONFERENCE HIGHLIGHTS

### OPENING CEREMONY

Get inspired at the opening ceremony. Join us in the Summit room Thursday morning for an exciting opening ceremony. Kick off the conference in style.

### TECHNICAL PROGRAM

Training starts off with five must-attend Wednesday pre-conferences offered by the Water Resources, Distribution, Engineering, Personal Leadership and Water Treatment Committees. Register early for these sessions.

Planning to join the conference later? With eight concurrent tracks on Thursday and Friday, there will be plenty of CEU-approved topics from which to choose. And, if you are an early riser, consider attending the early bird sessions Friday morning.

**New this year!** The Pacific Northwest Clean Water Association (PNCWA) is offering an all-day track! Be sure to check it out during Friday's session.

### ACTIVITIES AND COMPETITIONS – TAPPING, TOP OPS, METER MADNESS, GIMMICKS AND GADGETS, BRATS . . . BEER AND MORE

All work and no play is not good. That is why you are invited to participate in all the exciting activities offered at this year's conference. Who will win the tapping contest and meter madness? Grab a beer and brat on Wednesday evening and watch the winners emerge from the fast-paced competitions. And, since we are

celebrating the source, find out who has the best water in the region during the best tasting water competition Friday night. Interested in new gadgets? Watch the Gimmicks and Gadgets demonstration for new ideas. Think you know everything about the water industry? Test your knowledge against the Sections top competitions during the ever-popular top ops.

### SILENT AUCTION IN SUPPORT OF WATER FOR PEOPLE

Do your Mother's Day shopping at the Water For People auction and reception immediately before the Friday banquet. Be sure to stay close to the items you want, you could be out-bid during the last frenzied minutes before the auction's close.



## The conversation starts here

In Brown and Caldwell's new online series, water leaders around the country are talking about ways we can all advance One Water thinking to secure water for generations to come.

Join the conversation, and share your insights so we can all learn from each other at: [bc1Water.com](http://bc1Water.com)



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# MAY THE SOURCE BE WITH YOU

## CONFERENCE HIGHLIGHTS

### DOWNLOAD THE MOBILE APP

Have you tried the conference app yet? We encourage you to download the mobile app ([www.pnws-awwa.org/conference/download\\_app](http://www.pnws-awwa.org/conference/download_app)) to stay current on conference happenings. With the app you can:

- \* See which vendors are exhibiting in the Vendor Hall
- \* View all the technical sessions, add to your schedule directly from the app, and sync between your multiple devices
- \* Stay up-to-date with real-time alerts
- \* Take photos and share directly through the app

### GOLF TOURNAMENT



Scenic Quail Hollow is the location for this year's tournament. Nestled in the Boise foothills, this course is fantastic in the spring. Come out and network on May 4; shotgun start at 8 a.m. Tournament entry fee is \$95 per person and includes cart, lunch and prizes.

### ORIENTEERING CHALLENGE

Show off your map reading skills at the first ever orienteering event. The fun begins early Wednesday morning at beautiful Ann Morrison Park. Enjoy the morning running, walking, or even skipping around the park as you find check points. All entrants will receive a goody bag to help them through the course.

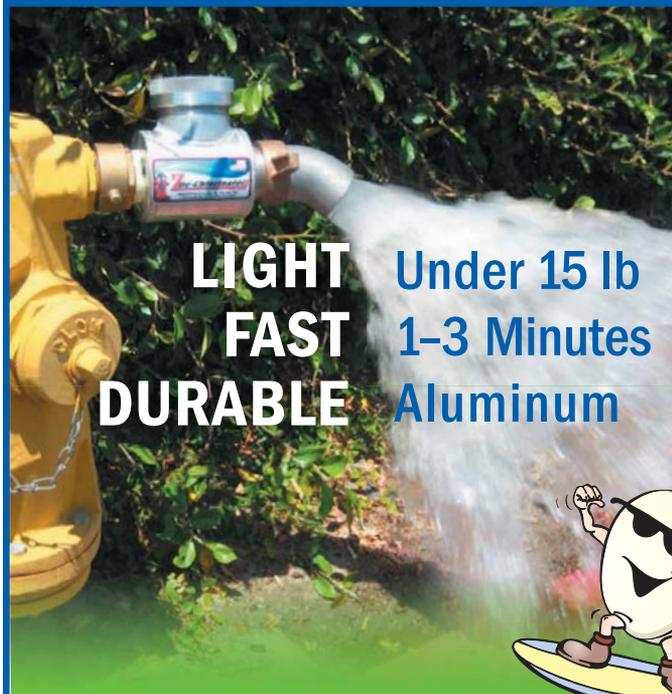
### FUN NIGHT

Come celebrate the source in our festive cantina during Fun Night on Wednesday, following the Tapping

and Meter Madness competitions. Be one of the first in the new JUMP Building. A short walk from the convention center, the JUMP Building has something for everyone. The PNWS-AWWA will take over the 6th floor of this unique, interactive creative center and community gathering place. Connect with old friends and make some new ones over drinks and hors d'oeuvres. Take home a memory from the night in the interactive photo booth. And, you just might run into a character or two...



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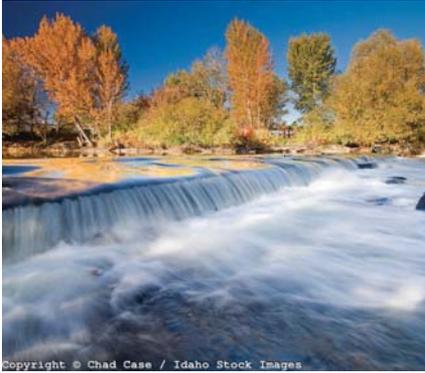
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# BOISE, ID | MAY 4-6, 2016

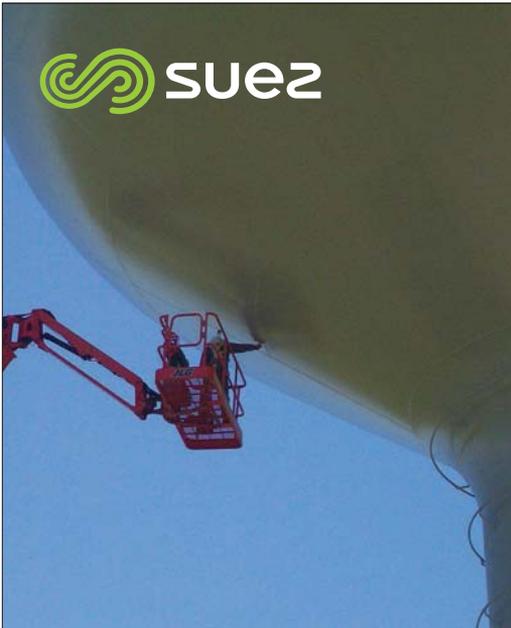


## BANQUET

The conference closes with the awards banquet on Friday, May 6. After placing your last bids during the Water For People silent auction and champagne reception, make your way into the ballroom at the Boise Centre. The Section will thank Chair Randy Black as he passes the gavel to incoming Chair Lacey Goeres-Priest. As well, winners of the Heart and Soul, Pioneer, and prestigious George Warren Fuller Awards will be announced.

We look forward to seeing you in Boise. And, **May the Source be With You!**

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## CONTROL IN ALL SIZES

Available in several configurations, our CP800 is the pup of the pack. It provides communications to standalone third-party devices that need to be tied into a system such as flow meters and data loggers. Our versatile CP820, the working dog, is ideal for controlling water supply wells, storage tanks, PRVs and small lift stations. And our CP850, the big dog in the pack, is designed for large lift stations and booster stations.

In short, we have you covered – at a cost that works. Both the CP820 and CP850 can be used as standalone controllers. But their advanced capabilities are best utilized when bundled with Affordable SCADA's Machine-to-Machine (M2M) Network and hosted HMI. This connection brings the pack together and gives you the control and instant information you need to efficiently keep your system going.

With this complete package, the communications network and HMI are constantly monitored and maintained by AFFORDABLE SCADA. The whole pack works together to ensure robust and secure operation of your system. And expanding the pack can be done one dog at a time or several, whatever works best for you to accommodate your budget, your needs and your peace of mind.

## RTUs Controlling Your Infrastructure

### CP800

Like the whimpering pup of the pack, it gets the message across

- Power Management & Communications only
- No Control
- Ideal for standalone devices such as flowmeters, data loggers, etc.
- Multiple Protocols

### CP820

This working dog will flush out most any problem

- Full Control Capabilities
- Full Power Management & Filtering
- Ethernet Communications
- Ideal for Wells, Tanks, PRVs
- Multiple Protocols

### CP850

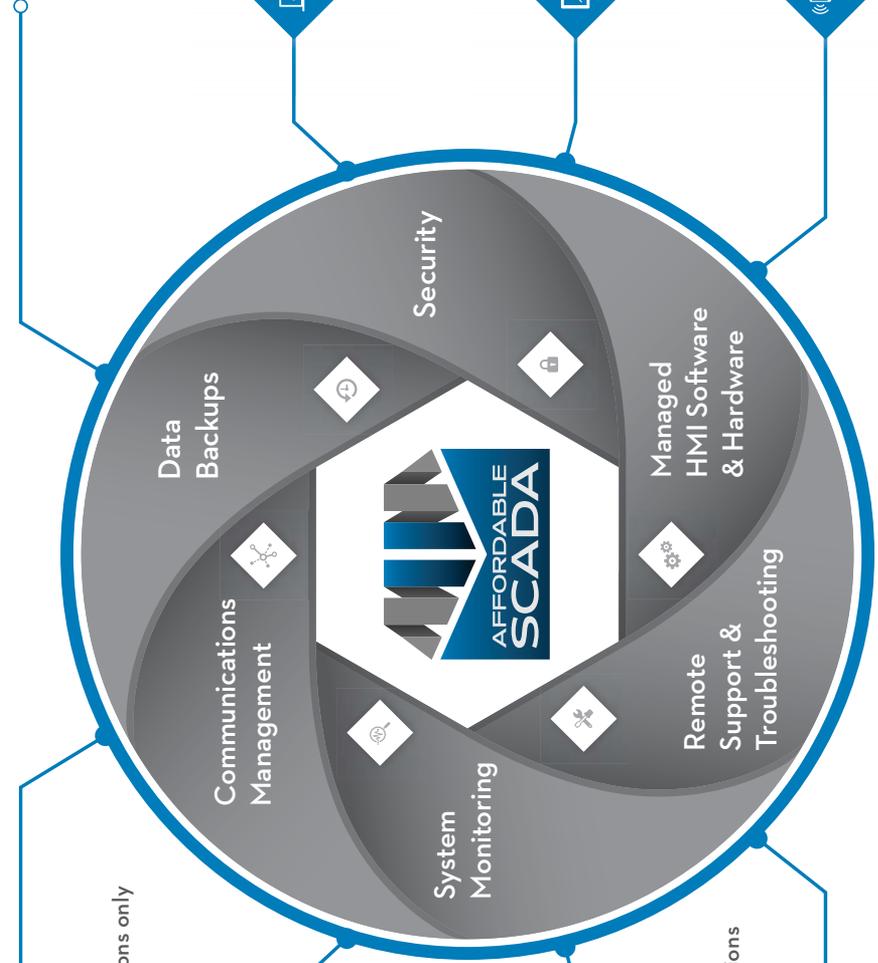
The big dog of the pack

- Full Control Capabilities
- Full Power Management & Filtering
- Ethernet Communications
- Ideal for Lift Stations & Booster Stations
- Multiple Protocols

### CP700

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- Alarm & Event History

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- HMI Full Control
- Predefined Trends
- Alarm History

### Smart Phone

- Text Alerts
- Email Notifications

## TECHNICAL PROGRAM WEDNESDAY, MAY 4, 2016

Wednesday, May 4, 2016 - Morning Pre-Conference Seminar - Must Attend All 3 Hours for CEUs						Full Day Seminar
Room	Summit	Pines	Willows	Snake	Payette	
Hosting Committee	Water Resources	Personal Leadership	Engineering	Distribution	Water Treatment	
	Drought and Climate Change - Better Planning Or The New Normal? (Part 1)	Find The Leader Within You (Part 1)	Regional Water Planning / Drought Planning - Drought & Water Supply	Asset Management For Distribution Facilities	Membrane Water Treatment (FULL DAY SEMINAR)	
Moderator	Rob Annear	Jim Meierotto	Jim Konigsfeld	Jamie Porter	Scott Johnston	
	Oregon's Perceptions on Drought: Processes, Planning, Communication <i>Racquel Rancier (No CEUs)</i>	Find the Leader Within You: An Exploration of the 5 Practices of Leaders At Their Best <i>Mark Poling, Jadene Stensland, et al. (No CEUs)</i>	Drought 2015: Small, Rural System Preparation In Mason County, Washington <i>Jocelyne Gray, Corina Hayes</i>	Standards and Guidelines for Utility Work and Asset Management <i>Marshall Thompson</i>	King Abdullah Economic City: Pretreating Seawater with Ultrafiltration Membranes <i>Kemeth Packard (30 minutes)</i>	
	Washington's Perceptions on Drought: Processes, Planning, Communication <i>Jeff Marti (No CEUs)</i>		Managing Multiple Stakeholders on an Emergency Drinking Water Project <i>Jeff Ballard, Morgan Wayman</i>	Seismic Resiliency Planning for Water Distribution Systems: Lessons Learned from the TVWD Water Master Plan <i>Josh Miner, Rachel Lanigan, Peter Boone</i>	Ceramic UF membranes: Latest Innovations & Pilot Test Results <i>Brian Wise, Judith Herschell (60 minutes)</i>	
8:30 -12:00, with two 15-minute or three 10-minute breaks	Idaho's Perceptions on Drought: Processes, Planning, Communication <i>Jeff Peppersack (No CEUs)</i>		Quantifying Uncertainty Through Position Analysis In Drought Water Supply Planning: Examples from California <i>Thomas Fitzhugh</i>	Condition Assessment and Rehabilitation of Pumps, Valves, & Meters <i>Dan Buonadonna, Jeff Sanford</i>		
	How State Agencies Work With Different User Groups Across the State <i>Panel Discussion (No CEUs)</i>		Long-Range Reuse Planning to Improve Water Quality & Reduce Thermal Impacts <i>Rachel Lanigan, Steve Kebbe, Bob Einstad</i>	Not Just for the Dogs: Inspection, Maintenance & Data Management of Hydrant Assets <i>Ronan Igloria, Nathan Endicott, Juston Marville, Dennis McGrath</i>	On-Demand, Gravity Powered Ceramic Filtration Facility: Forget What You Know About How AWWTP is Supposed To Operate <i>Nathan Kutil (60 minutes)</i>	
	Oregon's Perspectives on Climate Change Science and Impacts <i>Phil Mote (No CEUs)</i>		To Meter or Not to Meter, That Is The Question <i>David Stengel</i>	What's The Status Of Your Vertical Assets? Use Repeatable Condition Assessment To Track Changes Over Time <i>Dale Jutila, Jeff Sanford</i>	Tracking the Performance Of Your Membranes Using The MEMBoard Database System <i>Bill Carr, Anne Braham (30 minutes)</i>	
CEUs	Washington's Perspectives on Climate Change Science and Impacts <i>Lara Whitey Binder (No CEUs)</i>	No CEUs	2 Valves Down, 2000 Services Out: Seattle's High Impact Shutdown Block Analysis <i>Cheryl Capron, Jim McMerney, Lili Li</i>	Water Well Asset Management Programs <i>Dawn Halpern</i>		
	No CEUs	No CEUs	ID-0.3 / OR-0.3 / WA-0.3	ID-0.3 / OR-0.3 / WA-0.3		

CEU Information - All Wastewater CEUs pending. Late abstracts pending. ID & WA approved except as noted below.

# MAY THE SOURCE BE WITH YOU

## TECHNICAL PROGRAM WEDNESDAY, MAY 4, 2016

Wednesday, May 4, 2016 - Afternoon Pre-Conference Seminar - Must Attend All 3 Hours for CEUs					Snakes	Willows	Pines	Summit	Room	CEUs
Hosting Committee	Water Resources	Drought and Climate Change - Better Planning Or The New Normal? (Part 2)	Find The Leader Within You (Part 2)	Personal Leadership	Engineering	Regional Water Planning / Drought Planning - Resiliency	Asset Management Implementation	Distribution	Snake	CEUs
Moderator	Rob Amear	Idaho's Perspectives On Climate Change - Science and Impacts <i>John Abatzoglou (30 minutes) (No CEUs)</i>	Jim Meierotto	Jim Meierotto	Nathan Abercrombie	Becoming the Model For Regionally Redundant, Resilient Infrastructure in The Pacific NW <i>Jude Grounds, Todd Parimon, Dave Kasaka, Jenn Minton</i>	Pairing The Right Technology With The Level Of Risk: A Defensible Way To Approach Condition Assessment <i>Logan Fesemair</i>	Tom Keown	All Leads	CEUs
1:00 - 4:30, with two 15-minute or three 10-minute breaks		What Resources & Tools Exist To Allow Water Users To Take Advantage Of The Best In The Climate Science? <i>Panel Discussion (30 minutes) (No CEUs)</i>				Will It Fall Down? City of Vancouver Seismic Study <i>Nick Robertson, Patrick Craney</i>	Should I Turn My Water System into A Power Plant? Uncovering the Hidden Costs Of Micro-Hydro in A Water Supply System Requires A Thorough Preliminary Design <i>Scott Duren, Peter Brooks</i>		Columbia Membrane Facility Tour & Pinning Demonstration (2 hours)	CEUs
		City of Portland Water Bureau's Perspectives On Drought & Climate Planning <i>Kristin Anderson, Dave Peters (45 minutes) (No CEUs)</i>				Seismic 101 - How To Choose Seismic Performance Criteria & What That Means <i>Matthew Perkins</i>	Drilling Down: Evolution Of A System-Wide Modeling Analysis From An Optimized Capital Improvement Program To A 3-Zone Pump Station Design <i>Dave Harris, Denny Clause</i>			CEUs
		Seattle Public Utilities' Perspectives On Drought & Climate Planning <i>Paul Fleming (45 minutes) (No CEUs)</i>				Seismic Resiliency Of Dams: A Reliable Drinking Water Source For The City Of Newport, OR <i>Verena Winter, Tim Gross</i>	Maximizing Your Utility Assets While Meeting The Changing Telecommunications Needs: A Successful Partnership Between The Owner, Engineer & Telecommunication Companies <i>Diane Fatzinger, Shannon Emerick</i>			CEUs
		What Was The Biggest Challenge For Your Organization, Now, In The Near Future, & Long-Term, Regarding Droughts Or Climate Change? <i>Panel Discussion (30 minutes) (No CEUs)</i>				Resilience Planning: Dependancies and Cascading Effects <i>Kent Yu, Jim Newell</i>	Laying A Solid Foundation For The Willamette Water Supply Program's Seismic Resiliency <i>Matt Duffy, Mike Britch, Mark Harekost</i>			CEUs
		No CEUs	No CEUs	No CEUs	ID-0.3 / OR-0.3 / WA-0.3	ID-0.3 / OR-0.3 / WA-0.3	ID-0.3 / OR-0.3 / WA-0.3	ID-0.3 / OR-0.3 / WA-0.3	ID-0.5 / OR-0.5 / WA-0.5	CEUs

CEU Information - All Wastewater CEUs pending. Late abstracts pending. ID & WA approved except as noted below.

# TECHNICAL PROGRAM THURSDAY, MAY 5, 2016

Thursday, May 5, 2016 - Afternoon Regular Technical Session									
Room	Salmon	Summit	Firs	Pines	Willows	Snake	Payette	Perch	
Hosting Committee	Water Resources	Tri-State WARN	Research	Small Systems	Engineering	Distribution	Customer Service	Public Information	
Moderator	Water Quality Considerations In Developing & Maintaining Water Supply	The WARN Initiative and Utility/Emergency Response	Water Reuse	Small Systems	Trenchless Technologies	Water Loss Control	Customer Service	Communicating About Water Quality - Where Truth & Trust Collide	
	Mike Grimm	Mary Ellen Collettine	Damon Roth	Don Popoff	Adam Crafts	Doug Schlepp	Tonya Reiss	Libby Barg	
	Maintaining A Sustainable Potable Water Supply: Investing In Multi-Level Groundwater Monitoring Wells Provides Water Quality Certainty Prior To Production Well Construction <i>Kevin Boggis, Kyle Hadek</i>	Idaho, Oregon & Washington Water/Wastewater Agency Response Networks (WARN) Overview <i>Shelley Roberts, Bill Carr</i>	Integrated Water Management: What's Next? <i>Lynn (Williams) Stephens, Cindy Paulson, John Whittier (No ID CEUs)</i>	40 Years and Counting... How to Keep a Good Tank Going <i>Lael Alderman</i>	Large Water Supply/Pipeline Calls For Challenging Trenchless Installation In Lake Oswego, OR <i>Kimberla Steheli, Brad Moore, Aaron Eder, Jon Holland, Joel Komazek, Dennis Koelmeier (No ID CEUs)</i>	Distribution Network Monitoring - Dawn Halpern, Paul Meschino	Engineers Got Customer Service <i>Jennifer Gabely (No WA CEUs)</i>	Big Project = Big Communication Challenges For The Willamette Water Supply Program <i>Nicki Iverson (No WA CEUs)</i>	
1:30 - 2:30	Like New! - Renewal & Operation Of Auburn's Wells <i>Susan Fenhaus, Daniel Reisinger</i>	Developing Tools For Surface Water Nutrient Loading Attributable To Reclaimed Water <i>Joan Oppenheimer (No ID CEUs)</i>	Sultan's Dam Failure & How It Improved Their Treatment <i>Joyn Leslie, Mick Matheson (No ID CEUs)</i>	Why Go Trenchless? Case Studies on the Use of Trenchless Technologies <i>Tom Bailey, Greg Harris (No ID CEUs)</i>				Help Us, Communications Team - You're Our Only Hope: Navigating Communications for a Multi-City Water Project <i>Katy Fulmer (No CEUs)</i>	
CEUs	ID-01 / OR-0.1 / WA-0.1	ID-0.0 / OR-0.1 / WA-0.1	ID-0.0 / OR-0.1 / WA-0.1	ID-0.1 / OR-0.1 / WA-0.1	ID-0.0 / OR-0.1 / WA-0.1	ID-0.1 / OR-0.1 / WA-0.1	ID-0.1 / OR-0.1 / WA-0.0	ID-0.05 / OR-0.05 / WA-0.0	
2:30 - 2:45 Break									
2:45 - 3:45	Hydrodynamic & Temperature Modeling To Support Reservoir Operations <i>Jacob Krall, Rob Amnear, Kristin Anderson</i>	Christchurch Earthquake & Lessons For The Pacific Northwest - Carmen Merlo	Direct Potable Reuse: Progress & Implementation In Oregon, California, New Mexico, & Texas - Andrew Salveson, Mark Jockers, Adrienne Merritt, Bob Baumgartner, Rick Shanley	The Importance Of Contractor Prequalifications <i>Corie Peterson (No ID CEUs)</i>	City of Everett Pipeline 5 River Crossing, Using An Open Trench - Carla Talch, Rich Hefti <i>(No ID CEUs)</i>	Skegit PUD's Emergency Replacement Of A Portion Of The Sedro Woolley Transmission Pipeline - George Sidhu, Mike Fox, Mike Benton	Working Towards The Utility Workforce Of The Future By Understanding & Addressing Bias - Nicki Pozos <i>(No ID, WA CEUs)</i>	Why Clean Waters Is Important & Why We Should Talk About It - John Hendron	
	Assessment Of Potential Source Water Quality Risks Using APollutant Load Modeling Tool <i>Brian Apple, Rob Amnear, Kimberly Swan</i>	Porable Reuse - Treatment Issues & Health Risks <i>Pierre Kwan, Al Verovs</i>	Storage Tank Alternatives: The Weights and Bolts <i>Michelle Johnson</i>	Take Me To The Other Side: The Importance of Trenchless Crossings in Routing Water Supply Transmission <i>Joelle Bennett, Todd Perimon, Mark Harekost (No ID CEUs)</i>	Zero-Discharge Distribution System Mains Flushing Planning & Implementation <i>Alex Moridi</i>				
CEUs	ID-0.1 / OR-0.1 / WA-0.1	ID-0.1 / OR-0.1 / WA-0.1	ID-0.05 / OR-0.1 / WA-0.1	ID-0.0 / OR-0.1 / WA-0.1	ID-0.0 / OR-0.1 / WA-0.1	ID-0.1 / OR-0.1 / WA-0.1	ID-0.0 / OR-0.1 / WA-0.0	ID-0.1 / OR-0.1 / WA-0.1	
3:45 - 4:00 Break									
4:00 - 5:00	Killing Two Birds With One Stone: Improving Storage & Water Quality With A New Reservoir <i>Matthew Hickey</i>	Damage Assessment Basics For Engineers & Operators - How To Set Up, Train & Deploy To Respond To An Emergency Event <i>Teresa Elliot</i>	Recycled Water: America's Resilient Water Supply <i>Dan Vizzini</i>	Developing & Rehabilitating Water Supply Wells <i>Steve Schneider</i>	Finding the Right Route: Planning a Large-Diameter Transmission Pipeline Route Through 6 Communities (& 2 Counties) <i>Todd Perimon, Joelle Bennett (No ID CEUs)</i>	Assessment Of A Leaky Transmission Main & The Next Step(s) <i>Jeff Jones, Brendan O'Sullivan</i>	Getting the Community Involved in Addressing Water Quality Issues In A New Water Supply <i>Dale Julia, Amy Blain (No WA CEUs)</i>	Trouble & Trust: How to Communicate With The Public In Emergency Situations <i>Mark Strider</i>	
	Distribution System Nitritification: Causes and Controls <i>Pierre Kwan</i>				Crossing The Lake Washington Ship Canal: The Complexities Of The Fremont Siphon Project <i>Jeff Schmidt (No ID CEUs)</i>	Incorporating Helium Leak Detection Technology To Improve Distribution Leak Detection Programs <i>Jeff Austin, Jaim Kitchen</i>	Using The Third Point <i>Brian Murphy (No ID, WA CEUs)</i>		
CEUs	ID-0.1 / OR-0.1 / WA-0.1	ID-0.1 / OR-0.1 / WA-0.1	ID-0.1 / OR-0.1 / WA-0.1	ID-0.1 / OR-0.1 / WA-0.1	ID-0.0 / OR-0.1 / WA-0.1	ID-0.1 / OR-0.1 / WA-0.1	ID-0.05 / OR-0.1 / WA-0.0	ID-0.1 / OR-0.1 / WA-0.1	

CEU Information - All Wastewater CEUs pending. Late abstracts pending. ID & WA approved except as noted below.

# MAY THE SOURCE BE WITH YOU

# TECHNICAL PROGRAM FRIDAY, MAY 6, 2016

Friday, May 6, 2016 - Early Bird Session									
Room	Salmon	Willows	Pines	Firs	Willows	Snake	Payette	Perch	Perch
Hosting Committee Moderator	Water Resources John Lambie	Engineering Kysa Connath				Distribution Bill Reynolds		Utility Management Dan Sleath	
7:15 - 8:15	Evaluating The Decentralized Approach To Non-Potable Water Management <i>Zha Yi (No ID CEUs)</i>	NSF Certification for Hydraulic Concrete Structures <i>Travis McIntosh, Bruno DelBello (No ID CEUs)</i>			Keep My Hand-Dug Well Or Drill A New Hole? Bryan St. Clair			Taking On A \$250M Water System Expansion Program? How Do You Stay 1 Step Ahead Of Managing Your Assets Before They Manage You? <i>Michael Pratt (No ID CEUs)</i>	
CEUs	ID-0.0 / OR-0.1 / WA-0.1	ID-0.0 / OR-0.1 / WA-0.1			CFD Model To Optimize Hydraulic Design Of River Intake Pump Station, Lake Oswego Tigard Water Partnership, City Of Oswego, Oregon <i>Liqat Khan (No ID CEUs)</i>			ID-0.0 / OR-0.1 / WA-0.1	
Friday, May 6 - Morning Regular Technical Session									
Room	Salmon	Willows	Pines	Willows	Snake	Payette	Perch	Perch	
Hosting Committee	Water Resources	Water Information Technology	Water Information Technology	Engineering	Distribution	PNCWA - Waste Water Track	Utility Management	Utility Management	Grove Hotel - River Fork Room
Moderator	Jason Melady	Josh Kennedy	Rob Barrett	Rayley Voorhies	Logan Fesenmair	PNCWA	Eric Schey	Dan Sleath	Drought in the Pacific Northwest & Recycling Water Julie Smitherman
8:30 - 9:30	Implementing The Perfect Long Term Water Supply Strategy for Bend Oregon <i>Patrick Griffiths (No ID CEUs)</i>	Year In Review: PCE Contaminated Well-Head Treatment Performance After 1st Year in Operation <i>Kristofor Sluder, Bob Lawrence</i>	To Manage You Must Measure <i>Keith Kolkbeck</i>	3D Models: A New Dimension of Understanding <i>Jennifer Minon, Ron Whitlatch, Rom Emmons, Mike Trippett, Wayne Gresh (No ID CEUs)</i>	Pipe Thrust Restraint Buried <i>Douglas Schleppe, Daniel Kegley (No ID CEUs)</i>	CSO - Mitigation through Planning, Storage & Treatment <i>Harold W. Perry (CEUs pending)</i>	Executive Utility Management: How Do You Become A General Manager (Or Director), And What Does She Do For A Living? (Part 1 of 2) <i>Peter Fernandez (No ID CEUs)</i> <i>Must attend both hours to get credit.</i>	Executive Utility Management: How Do You Become A General Manager (Or Director), And What Does She Do For A Living? (Part 2 of 2) <i>Peter Fernandez (No ID CEUs)</i> <i>Must attend both hours to get credit.</i>	Flexible & Affordable Meter Reading Technology <i>Michele Haney</i>
CEUs	ID-0.0 / OR-0.1 / WA-0.1	ID-0.1 / OR-0.1 / WA-0.1	ID-0.05 / OR-0.1 / WA-0.1	ID-0.05 / OR-0.1 / WA-0.1	ID-0.0 / OR-0.1 / WA-0.1	ID-0.0 / OR-0.1 / WA-0.1	ID-0.0 / OR-0.1 / WA-0.1	ID-0.1 / OR-0.1 / WA-0.1	ID-0.1 / OR-0.1 / WA-0.1
9:45 - 10:45	Building On The Success & Reliability of ASP: City Of Beaverton's Critical Supply Infrastructure <i>Ronani Igloia, Brian Barnett, David Winship, Larry Eaton</i>	Carcinogenic VOC's: Vancouver's 25 Year Treatment History <i>Tyler Clary</i>	Leveraging GIS For Yearly System Flushing Start To Finish <i>Shane Lim</i>	Commissioning, Start-up, and Training Of Booster Pump Stations: Lessons Learned from Recent Pump Stations <i>Nicholas Augustus</i>	Pipe Thrust Restraint Exposed <i>Daniel Kegley, Douglas Schleppe (No ID CEUs)</i>	How To Read PID Diagrams <i>Harold W. Perry (CEUs pending)</i>	Executive Utility Management: How Do You Become A General Manager (Or Director), And What Does She Do For A Living? (Part 2 of 2) <i>Peter Fernandez (No ID CEUs)</i> <i>Must attend both hours to get credit.</i>	Executive Utility Management: How Do You Become A General Manager (Or Director), And What Does She Do For A Living? (Part 2 of 2) <i>Peter Fernandez (No ID CEUs)</i> <i>Must attend both hours to get credit.</i>	Integrating AMI Data & Water Conservation Programming <i>Mike Buehler</i>
CEUs	ID-0.05 / OR-0.1 / WA-0.1	ID-0.1 / OR-0.1 / WA-0.1	ID-0.1 / OR-0.1 / WA-0.1	ID-0.05 / OR-0.1 / WA-0.1	ID-0.0 / OR-0.1 / WA-0.1	ID-0.0 / OR-0.1 / WA-0.1	ID-0.0 / OR-0.2 / WA-0.2 pending	ID-0.0 / OR-0.2 / WA-0.2 pending	ID-0.1 / OR-0.1 / WA-0.1
11:00 - 12:00	Developing A Water Resources Portfolio With Recycled Water <i>Christopher Stoff (No ID CEUs)</i>	Beginning The Treatment Journey: The Story Of The City Of Meridian Idaho's Path To Bring Online Their First Drinking Water Treatment Plant <i>Enoch Nicholson, Clint Worthington, Penin Robinson, Lee Otell</i>	Optimizing Operations & Saving Energy at SUEZ (United Water Idaho) <i>Elizabeth Kaddy</i>	Commissioning & Start-Up Of A WTP Backup Power Facility <i>Erika Murphy, Wayne Gresh (No ID CEUs)</i>	Leveraging GIS For Cross Connection <i>Shane Lim</i>	Reliability & Redundancy In Equipment Evaluation For CSO Facilities <i>Jeff Lundt, Bruce Main (CEUs pending)</i>	Project Management Isn't Just For Project Managers: 5 Tips for Project Team Members <i>Mark Graham (No ID, WA CEUs)</i>	Project Management Isn't Just For Project Managers: 5 Tips for Project Team Members <i>Mark Graham (No ID, WA CEUs)</i>	Making Infrastructure Intelligent: Irrigation Modernization in California <i>Jeff Shaw (No ID, WA CEUs)</i>
CEUs	ID-0.0 / OR-0.1 / WA-0.1	ID-0.1 / OR-0.1 / WA-0.1	ID-0.1 / OR-0.1 / WA-0.1	ID-0.0 / OR-0.1 / WA-0.1	ID-0.1 / OR-0.1 / WA-0.1	ID-0.0 / OR-0.1 / WA-0.1	ID-0.0 / OR-0.1 / WA-0.0	ID-0.0 / OR-0.1 / WA-0.0	ID-0.0 / OR-0.1 / WA-0.0

CEU Information - All Wastewater CEUs pending. Late abstracts pending. ID & WA approved except as noted below.

# TECHNICAL PROGRAM FRIDAY, MAY 6, 2016

## Friday, May 6, 2016 - Afternoon Regular Technical Session

Room	Salmon	Summit	Firs	Pines	Willows	Snake	Payette	Perch	Grove Hotel - River Fork Room
Hosting Committee	Water Resources	Subsection Advisory Council	Water Treatment	Water Information Technology	Engineering	Water Quality	PNCWA - Waste Water Track	Safety	Water Conservation
Moderator	Water Supply Resiliency: Adaptive Management Through Creative Planning Walt Burt	Competitions Doug Priest	Surface Water Treatment Beth Mende	Water Information Technology Rob Barrett	Storage & Treatment Erika Murphy	Regulatory Updates & Changing Views of Contaminants Patrick Weber	Asset Management & Reliability Centered Design Eric Schey		Water Meter Technology & Irrigation Modernization Julie Smitherman
1:30 - 2:30	Municipal Water Supply Planning: Inland NW Case Studies David Stangel, Phil Brown, Jason Melady (No ID CEUs)	Gimmicks & Gadgets (CEUs pending)	Balanced Clarification Optimization At The Anacortes WTP Greg Pearson, Jamie LeBlanc	Implementing A Power Monitoring & Reporting System Solution To Achieve Operational Efficiency Of Wells & Boosters Robert Barrett	Making Sense Of High Performance Coatings In Water Treatment Facilities Nicholas Fitzgerald	Implementing The Revised Total Coliform Rule In Idaho Monica Van Bussun, Jenn Henry	Asset Management: Criticality, Assetizing, Failure Modes Tina Hastings, Harold Perry, Aiden Wyma (CEUs pending)	Managing Subcontractor Safety Tony Howard (No WA CEUs)	You Already Have A Lot of Data - Let's Put It To Work! Brett Foreman (CEUs pending)
CEUs	ID-0.0 / OR-0.1 / WA-0.1		Using Zeta Potential To Optimize Coagulation For Direct Filtration & Conventional Treatment: The GRFF Experience Peter Kraft, Gary Fox	Implementing An IP Radio Communications Solution To Achieve Improved Operational Efficiency & Enhanced Diagnostic Capability At Remote Facilities Robert Barrett	Why Coat Your Concrete Tank? Jeff Austin, Dawn Halpern, Jonathan Caito	Responding To Operational Changes Following A Contamination Event Brian McDaniel		ID-0.1 / OR-0.1 / WA-0.0	
2:30 - 2:45 Break									
2:45 - 3:45	Justifying The Implementation Of Aquifer Recharge & Recovery In The Absence Of Traditional Drivers Matthew Gregg (No ID CEUs)	Top Ops (CEUs pending)	Algae Control With Dissolved Air Flotation In Bellingham, WA Kim Ervin, Enoch Nicholson	Mobile GIS based Asset Maintenance & Management Arnar Brownick	How To Cost-Effectively Add Reliability At An Aging WTP: The Chemicals WTP Experience Kenneth Packard, Pierre Kwan	HABS & EPA Health Advisories For Cyanotoxins Casey Lyon	Asset Management: Maintenance Best Practices, Risk Reduction Through Cost-Appropriate O&M Procedures Tina Hastings, Harold Perry, Aiden Wyma (CEUs pending)	OSHA's Perspective On Developing, Sustaining & Continually Improving Your Safety Culture David Keans (No WA CEUs)	An Overview Of Drought In Oregon & The State's Response: The Role Of Water Conservation Racquel Banier (No ID CEUs)
CEUs	ID-0.0 / OR-0.1 / WA-0.1		Two Better Than One: UV/Chlorine AOP Diana Deng, Andrew Nishihara	Static Calibration vs. Dynamic EPS Calibration Aurelie Nabornand, Jeremy Delmar, Alena Bennett	The GRFF Gets Real: Startup & Commissioning At A 150 MGD Water Treatment Plant Mark Graham, Gary Fox	Long-term Lead& Copper Rule Revision Update Megan Larson		Improving Emergency Preparedness Of The Public, Using Maslow's Hierarchy of Needs Nicki Pozos, Mike Britch (No WA CEUs)	ID-0.0 / OR-0.1 / WA-0.1
3:45 - 4:00 Break									
4:00 - 5:00	Best Practices In Project Planning & Implementation Elizabeth Kelly, Linda DeBolt (No ID CEUs)		Building and Operating A Slow Sand Filter At A Challenging Location Steve Tanner, Tom Peters	National Incident Management System (NIMS) & Water Utilities: Planning & Emergency Operations Matthew Bernard	New Underdrains, Media, Airscour & Seismic Upgrades Improve Performance & Extend the Life of Gravity Filters Todd Reynolds, Deborah Russell	Manganese Accumulation & Release With Distribution Systems: Not Just an Aesthetic Issue Anymore Melinda Friedman	Reliability Centered Design Based On Data & Practices From Previous 2 Sessions Tina Hastings, Aiden Wyma (CEUs pending)	Strategies For Prevention Of Fatal Accidents Kanwer Khan, Jackie Robertson (No WA CEUs)	A Proactive Approach to Surviving Drought: A Water Conservation Success Story Julie Smitherman (No ID CEUs)
CEUs	ID-0.0 / OR-0.1 / WA-0.1		Treatment Plant Washwater Recovery To Achieve Zero Liquid Discharge Alex Moffat		Best Practices for Filter Media Analysis: Using ANSI/AWWA B100 For Improved Specification & Filter Maintenance Development Rich Reavis	Evaluating Manganese Treatment to Reduce Customer Complaints Stephen Booth		Designing for Safety: Hazards and Operability Workshops Celia Schafeld (No WA CEUs)	Targeting Peak Day Demand With Irrigation Inspections Mike Buehler (No ID CEUs)
CEUs	ID-0.0 / OR-0.1 / WA-0.1			ID-0.1 / OR-0.1 / WA-0.1	ID-0.1 / OR-0.1 / WA-0.1	ID-0.1 / OR-0.1 / WA-0.1		ID-0.1 / OR-0.1 / WA-0.0	ID-0.0 / OR-0.1 / WA-0.1

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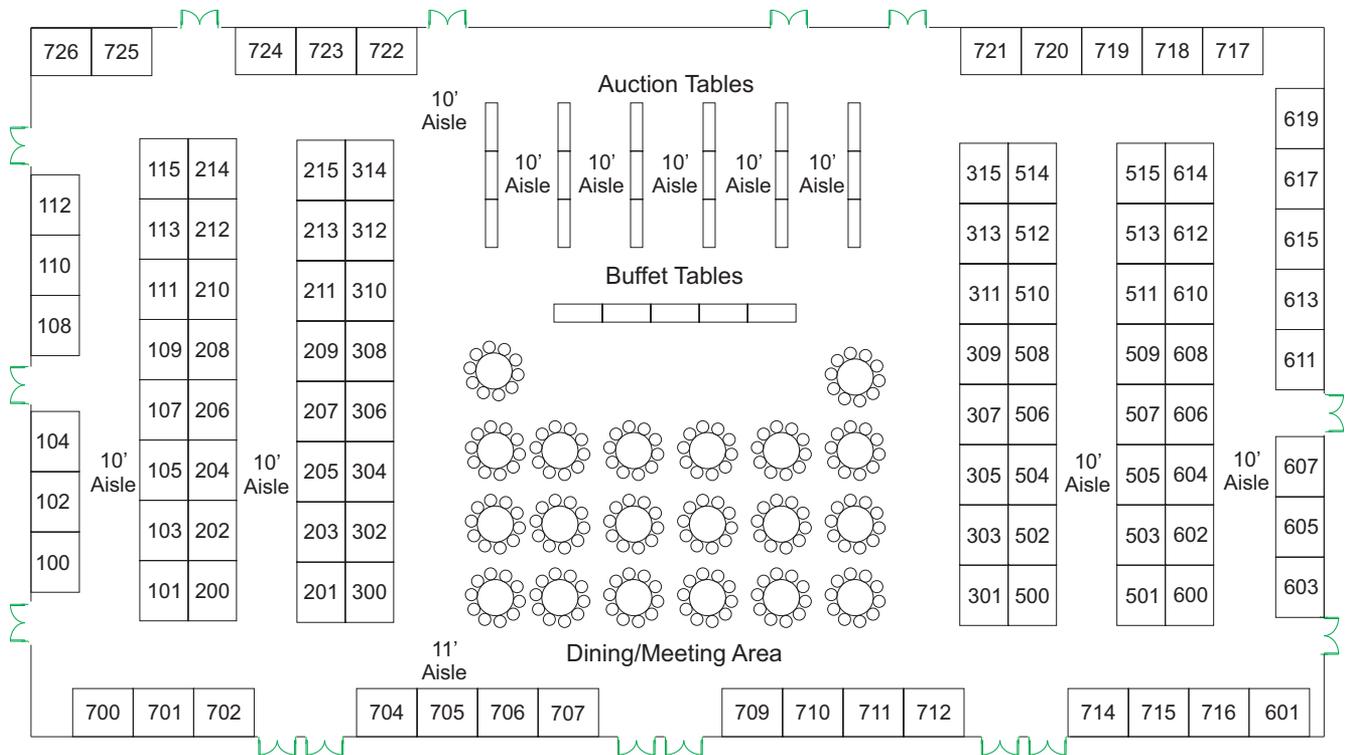
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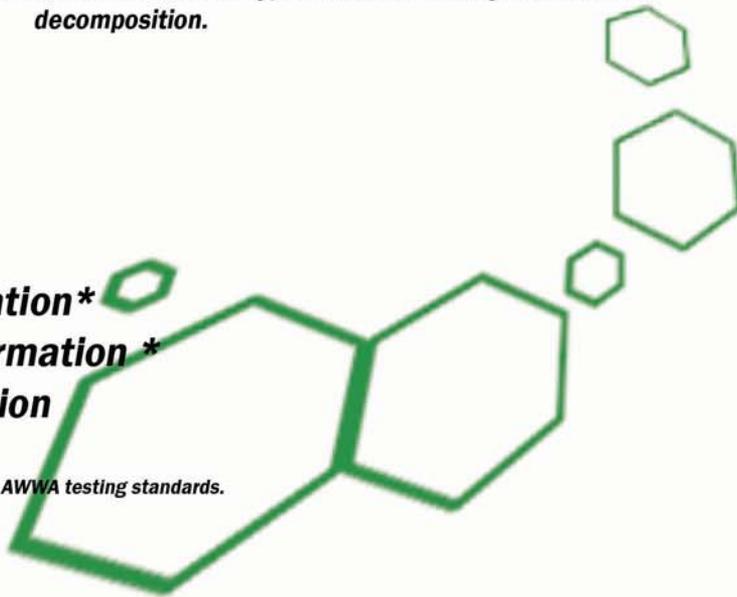
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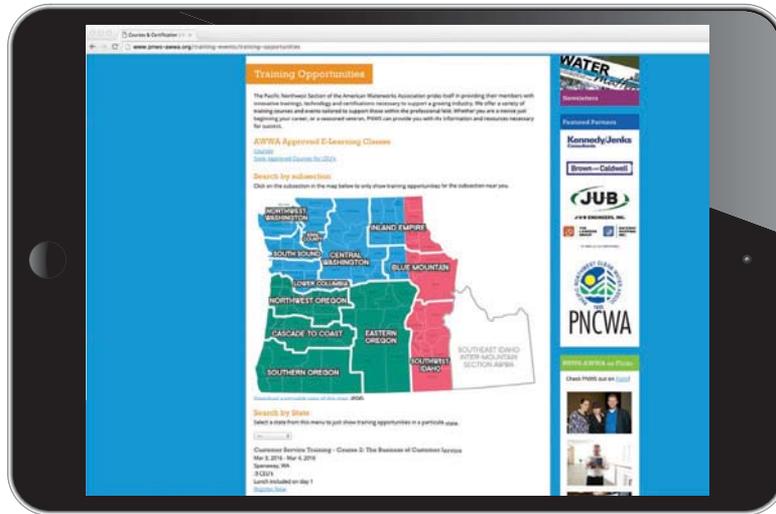
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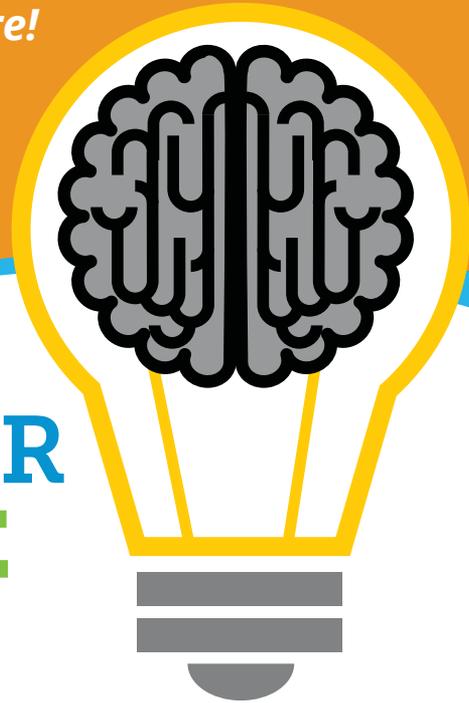
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Our Spring contributor to the history of Pacific Northwest water utilities comes from Southern Oregon. **Sara Bristol**, Public Information Coordinator for the Medford Water Commission, wrote this piece. Please send your contribution (with photos) to me, your PNWS Historian Catherine Howells, at [chowells@pdx.edu](mailto:chowells@pdx.edu).

### A Mountain Spring in Every Home

For nearly 90 years, Medford residents have been able to boast of "a mountain spring in every home." But the city's thirst for clean water was quenched only after 40 years of "desperate struggle" that saw multiple water systems built between the mid-1880s and 1927.

Medford, now the largest city in Southern Oregon, was a muddy railroad town when it incorporated in 1885. As the small town grew, the board of trustees began tackling the challenges of providing water and sewer systems, electric streetlights, and public safety. The city's first water system was completed in 1889, providing irrigation and fire protection.

This early system diverted water from Bear Creek through an open ditch to a well and two 50-foot redwood storage tanks. "This is a valuable improvement for the town and one that will be of great benefit," the *Ashland Tidings* newspaper reported.

Unfortunately, the quality of water was diminished by the livestock it passed and by the turn of the century, the open ditch was replaced with a more sophisticated pumping station and pipe.

Still, the domestic water supply came from wells. "None of these wells are deep – from twelve to twenty-five feet – and consequently are dependent upon surface water to a great extent for their supply," the *Medford Mail* reported in 1902. "One can imagine the purity of that water when it reaches those dwelling in the lowest parts of town after having filtered through all the barn yards and other premises above them. The prevalence of typhoid fever this fall in Medford is direct proof that this condition of affairs is something which requires attention."

With both the quality and quantity of the Bear Creek supply proving inadequate, the city in 1908 entered into a contract to purchase water from the Fish Lake Water Company. A 22-mile wooden stave, gravity-feed pipeline was constructed to bring water to town from the new reservoir.

The project was hailed a success: "Medford Now Has The Water," a 1909 headline in the *Medford Mail* declared. "Medford has the best grounds in the world to be proud of its



present water system – and none feel better over the present achievements than do those who have taken a hand in the past struggles . . . Medford has today one of the best water systems on the Pacific coast."

The city took great pride in this new system and, in 1910, laid over seven miles of new mains, completing a distribution system of 20 miles. "The system has cost Medford nearly \$500,000 – truly an ambitious sum for a city of 9,000 souls," the newspaper reported. The system produced four million gallons of "pure mountain water" a day, believed to be adequate for a city of 30,000 people.

However, once again dreams were dashed as water quality suffered when a dam was built to increase capacity at the lake. The land in the reservoir was not cleared of brush and trees, and the water began to exhibit a pungent taste and odor. Pollywogs, and other aquatic life that would occasionally emerge from faucets, were less than popular with local citizens, and unexpected growth in the region resulted in severe water restrictions.

The universal demand for better water service led to an election in 1922, amending the city charter and creating the Medford Water Commission to take over operation of the municipal water system. The autonomous commission set out to achieve the goal of placing "a mountain spring in every home" and obtained water rights on Big Butte Creek by 1923. Additional rights were obtained a few years later, as plans for development of Big Butte Springs proceeded. In 1925, Medford citizens voted overwhelmingly to approve the sale of \$975,000 in bonds to finance construction of a pipeline to bring the spring water to town.

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# Today, the Big Butte Springs continue to serve as Medford's primary year-round water source.

which averaged 24 inches in diameter. Underground for its entire length, the pipeline crosses nearly 75 different mountain summits, delivering cool, clear spring water to the tap.

Today, the Big Butte Springs continue to serve as Medford's primary year-round water source. To meet growing demands, a second transmission line was completed in 1951, doubling the capacity to 26.4 million gallons per day (mgd).

Over the years, the Commission has expanded to sell water to several neighboring cities and water districts. As demand increased, the Commission recognized that future water needs could not be met by the springs alone and filed for rights to divert water from the Rogue River.

The Robert A. Duff Water Treatment Plant, initially completed in 1968 with a capacity of 15 mgd, operates seasonally to treat water from the Rogue during summer months. The plant is currently undergoing a \$17.4 million expansion that will boost capacity to 65 mgd, allowing the Commission to supply reliable, clean drinking water well into the future. 

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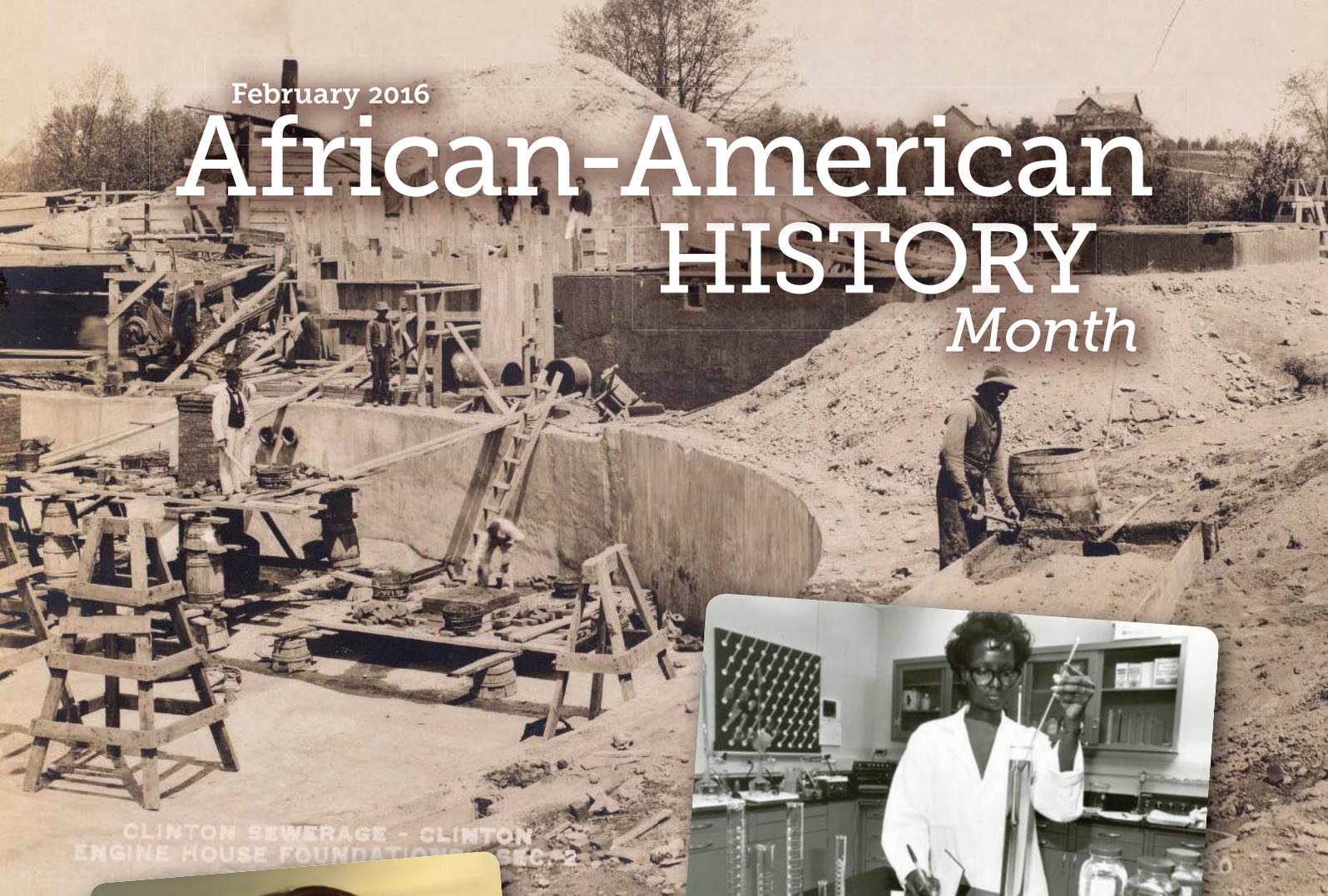
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# African-American HISTORY Month



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Historical photos courtesy of Massachusetts Metropolitan Water Works and Philadelphia Water Department



AWWA and our members celebrate African-American History Month. We pay tribute to the many contributions the African-American community has made to our industry, country, and world.

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