

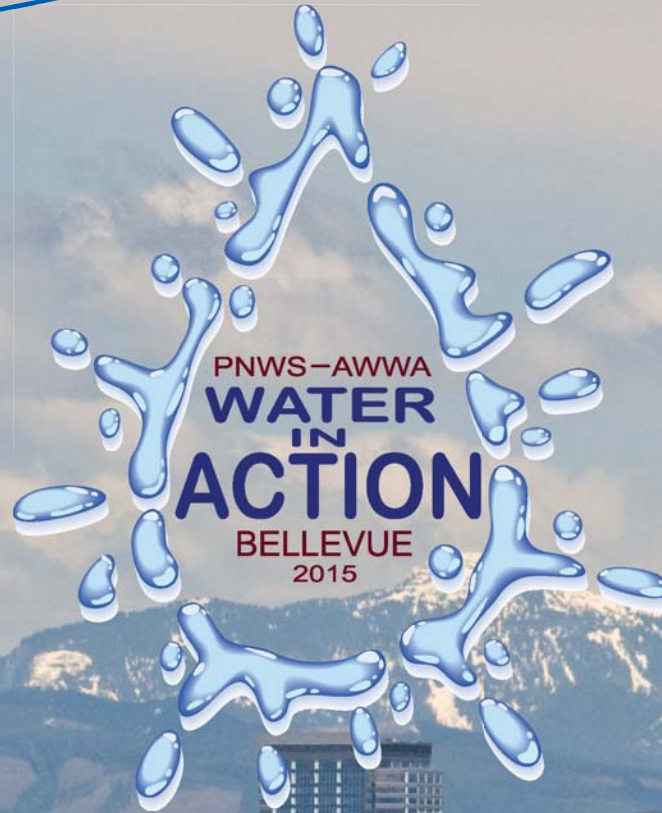


American Water Works Association  
**Pacific Northwest** Section

SPRING 2015

# **WATER** *matters*

The Official Magazine of the  
Pacific Northwest Section – AWWA



- ▶ **2015 Annual Conference Schedule and Program**
- ▶ **Lake Oswego Tigard Water Partnership's New WTP**
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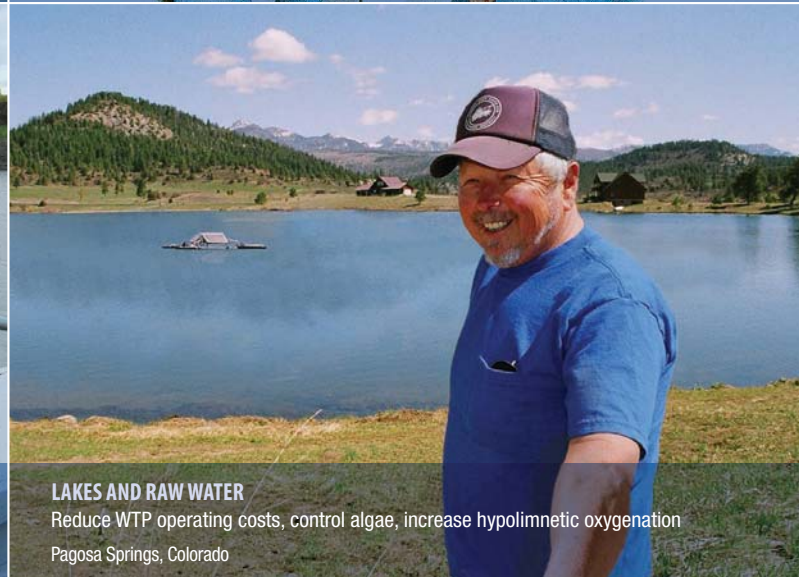
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**Cover Photo:** A view of the City of Bellevue, home to PNWS-AWWA 2015 Annual Conference. Credit: Colin Walker / City of Bellevue.©







## Looking Ahead to Bellevue – Water in Action

**A**s winter plods along in the Pacific Northwest I find myself looking ahead to the Section Conference to be held in Bellevue Washington beginning April 29, 2015. The LAC, led by Alex Gancheva, has worked exceptionally hard this year to bring us all a tremendous program and exceptional networking events all set against the backdrop of the great city of Bellevue. I feel that I would be remiss if I did not remind everyone that conference registration is now open and I encourage everyone to register early and often for this year's event! My personal goal this year is to bring one new member to the conference who has never been before and show them what a great organization the PNWS-AWWA is and I challenge each of you to do the same. Look for the registration link on the Sections website. I guarantee this year's conference will be a memorable event!

As we close out the month of February I also want to take a line or two to thank the many representatives from our 12 subsections for turning out in Portland to share their successes and challenges with their peers and the Board. It is great to see such energy and vitality driving this Section


from the roots up! It is the efforts of our subsection members that build the foundation on which this organization rests. A special shout out to Corie Peterson, Max Woody and whole SAC crew for putting on a phenomenal winter training! This is the one chance each year for the Board to get in front of every subsection, provide a forum for information sharing and I think it is one of the best meetings we have each year. It is great to see all the up-and-coming leaders and I am already looking forward to seeing you all next year!

This year's training included sessions on the Structure of the Association, the Section's and subsections role fulfilling the mission of the AWWA, how the Section can provide value to you and entice more member and Executive Director Kyle Kihs rolled out the Sections new brand for to the subsections. Look for more information regarding the rebranding of our subsections in the coming months. We also heard from our membership committee chair Pat Van Duser who showed off the many improvements to the membership database! Be sure to check out their committee page on the website for all the details on how you

can better connect to your subsection and ommittee members by utilizing the tools that Pat and his group have created.

In addition to all the great training and networking at this winter training we were pleased to host two board members from our sister organization on the other side of the pipe PNCWA. Mark Polling, Past Chair and Chris Miccolis Oregon Director came to see how the other side operates and to start discussions regarding extension of our MOU with the PNCWA in the upcoming year. It was great to see our many members reaching out to Mark and Chris and bridging the gap between our two great organizations.

Reading back though what I have written, I notice that I have mentioned our website several times. It is one of the first resources that I go to when I am looking to connect to a committee, subsection, or Section contact. Thank you to all of the many volunteers who work diligently to keep all the pages that make up our site updated with the many activities that you are involved in. Your efforts are greatly appreciated and are what make this Section the leader in the water industry that it is.

I look forward to seeing all our members in Bellevue in April! Thank you again for all that you do to make this Section great. 



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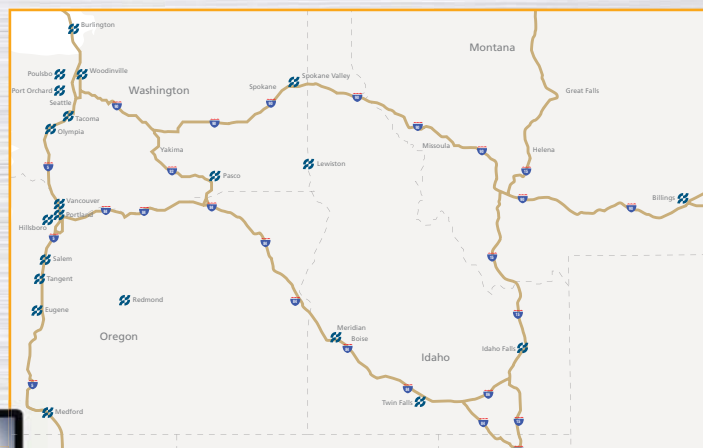
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# Spring and our Annual Conference are Upon us

**A**s you may have noticed by the cover, this edition of Water Matters is focused on our upcoming conference. I hope you plan on joining your fellow section members April 29 – May 1 in Bellevue, Washington for what is shaping up to be an excellent conference. As you will see later in this edition we have a fantastic technical program this year as well as numerous networking opportunities for you to connect with old friends and new.

Speaking of new, we have quite a few schedule changes in place for

this year's conference. Those of you who are accustomed to our traditional schedule will want to check our conference smart phone app to stay up-to-date on the daily activities. In a nutshell, we have moved many of our competitions to the lunch hour on the vendor floor.

- Wednesday evening Fun Night and Dinner – Bellevue Art Museum 5-8:30pm (no tapping or beer and brats)
- Thursday Vendor Hall – Meter Madness Competition 11am; Best Tasting Water, Excellence in

Engineering Awards and Public Information Awards 12am.

- Friday Vendor Hall – Tapping Finals 11:30am.

Additionally, we have brought back the Key Note Speaker for Thursday mornings Opening General Session. Don't miss this year's Opening Session Key Note Speaker Chad Pegracke the 2013 CNN Hero of the Year Thursday at 9am in the theatre at the Meydenbauer Center. Hear Chad's story about growing up on the mighty Mississippi and working as a commercial shell diver and how he began to notice the heaps of debris in the fabled waterway - **one that supplies drinking water to 18 million people in more than 50 U.S. cities.**

You will be amazed to hear how his crusade to pick up garbage all by himself has grown to over 70,000 volunteers who have helped him collect more than 7 million pounds of debris through his non-profit Living Lands and Waters ([livinglandsandwaters.org](http://livinglandsandwaters.org)). Chad will take you out on one of the world's greatest rivers - a journey filled with endless challenges and gripping adventures. You will find him motivating, captivating, genuine and refreshingly spontaneous.

From the darkness of underwater shell-diving to the brightness of open-air community clean-ups, Chad's tale embodies the importance of setting goals (one river and one piece of garbage at a time) and illustrates how determination, hard-work and persistence pay off.

This year we are thrilled to have AWWA Vice President Lela Perkins join us for our conference. Lela has spent her career helping water and wastewater clients plan for the future. As an Engineering Manager





AWWA Vice President Lela Perkins

for Black & Veatch Corporation, she specializes in planning studies, regulatory forecasting, and permitting. Lela graduated from Colorado State University in 1998 with a B.S. in Environmental Engineering and in 1999 with a M.S. in Civil Engineering.

Lela joined AWWA in 2001 and serves on AWWA's Strategic Planning

Committee and Governance Rewrite Committee. She is also highly engaged in the Rocky Mountain Section, having served in various committee and Board positions including Chair from 2008-2009. Lela was honored with AWWA's George Warren Fuller Award in 2013 and the Rocky Mountain Section's Lyle D. Herman Award for Distinguished Service in 2007.

Lela lives near Denver, Colorado with her husband JC, her son Sam (8) and her daughter Lydia (7).

**Section Meet and Greet at ACE**

Traveling to ACE this year? Then you won't want to miss the Section Meet and Greet, Sunday, June 7, from 5-7pm at the House of Blues in Downtown Disney. Sponsored this year by RH2 Engineering, DN Tanks, Murray Smith and Associates, CH2M Hill, HDR and Northwest Pipe Company; this is the perfect event to kick off your ACE experience. Join the rest of your Section members as gather outside on the Rose Terrace overlooking all the entertainment options of Downtown Disney. This outdoor entertainment district is loaded with

shops, restaurants, clubs and great music all within walking distance from the Hilton and Marriott hotels and Disneyland! You must RSVP to attend this event as space is limited. Look for the House of Blues registration link on our website homepage.

I look forward to seeing all of you in Bellevue in a couple of weeks! Enjoy your spring! 🌸

Kyle Kihs, Executive Director



**Calling All Water Researchers...**

**Get REAL Impact by Publishing in the Journal - American Water Works Association**

by Michael J. McGuire

Know it is a tough world out there for researchers who want the biggest audience for their published works. There are dozens of journals that publish articles about water. These days, authors may want to publish their papers in a journal with a high Impact Factor. In many fields (not just academia), the calculated Impact Factor of a journal is believed to be important.

Instead, authors should choose the journal that has the biggest actual impact in the water field. Readership of the Journal is over 96,000 each month. Water utility folks, academics, graduate students, regulators, consultants and

manufacturers read articles published in the Journal. If authors choose one of the high Impact Factor journals, the audience is much narrower.

The AWWA Journal has made a lot of important changes over the last six months that have yet to be reflected in its calculated Impact Factor. The biggest change will directly affect the number of citations for articles. Since January 1, 2015, all peer-review articles in Journal AWWA are Open Access at no charge to anyone—author or reader. Think what this means. Anyone who finds your article using Google Scholar will be able to go to the AWWA website and view and download a PDF of the article for

no charge. If more researchers can access an author's research work, citations will be greater.

Join the thousands of researchers who have published in the Journal over the past 100 years. Incidentally, all peer-review articles from 1990 to 2014 have also been made Open Access. For information on how to submit articles for peer-review, go to: [www.awwa.org/publications/journal-awwa/submission-guidelines/peer-review-submissions.aspx](http://www.awwa.org/publications/journal-awwa/submission-guidelines/peer-review-submissions.aspx).

Michael J. McGuire is the Editor-in-Chief of the Journal - American Water Works Association. Questions about submittals should be sent to [mmcguire@awwa.org](mailto:mmcguire@awwa.org).



## Spring has Arrived

I love spring! As I write this it is only mid-February and I have to say there is nothing better than the tulips coming up and horses that are shedding winter coats! We are fortunate in the Pacific Northwest to have an abundant supply of safe water, however this year the rainfall has caused a lake in my back yard, which shouldn't be there! Come on spring!

### Association Updates

The AWWA Board meeting in January had a full agenda. Just as PNWS recently elected incoming officers, the AWWA Board elected Association officers. While our Section officers are incoming at the close of our conference in May, the Association officers are incoming at the close of the Annual Conference and Exhibition (ACE) in June. Jeanne Bennett-Bailey was elected President Elect. Jeanne is from Fairfax, Virginia and currently serves as the Public Affairs Council Chair.

The four Vice Presidents elected include second year Directors Martha Segal, (KY/TY), Brian Steglitz, (Michigan) and first year Directors Steve Dennis, (CA/NV) and Jon Eaton,

(Minnesota). Sally Mills, former PNWS member and currently from the Texas Section was elected to the Director at Large position.

Efforts towards AWWA 2020 A Path to ONE are making progress. Tactics have been defined to support the five strategic themes:

- **Communication**  
Effective communication practices between the Association and Sections characterized by timely and meaningful feedback; better alignment; and delivery of value to members.
- **Education Strategic Theme**  
A smoothly delivered, relevant and financially sustainable education program in support of AWWA's mission and vision.
- **Water Exchange Program (Water X)**  
Inventory of Section training materials currently underway to develop a plan for potential sharing of relevant training curriculum.
- **Membership Strategic Theme**  
A clearly defined and easily communicated membership structure;

a stable and engaged membership base that is afforded the opportunity to understand all that is offered from the Association and Sections for the retention and attraction of members.

Board members participated in discussion to help develop a simplified membership structure that will be considered for adoption at the Board meeting in June.

Action was taken to adopt a dues category for international members.

- **Branding Strategic Theme**

If you attended the PNWS Board meeting and training in February you may be wearing apparel with our new PNWS and Subsection logo which is the outline of Oregon, Washington and Idaho with the "A" logo in the middle. Check out our new look at [www.pnws-awwa.org](http://www.pnws-awwa.org).

The common look and feel will help distinguish all 43 Sections as One AWWA.

- **Finance Strategic Theme**

A business model that allows AWWA to leverage and grow its combined Association-Section financial strength and assure that financial exchange

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maximizes member benefit and aligns with AWWA goals.

Many of you know Dean Fritzke who has served in many roles at our local, Section and Association level. I am pleased to report that Dean will be recognized this year with the Honorary Member Award.

### Section

In May we will welcome our incoming officers into their Board roles. Congratulations to the new officers, you should be proud of your accomplishment. I want to encourage those who were not elected at this time to get involved in other ways. There are so many opportunities at the local and Section level. Subsections provide great local training and networking opportunities. At the Section level we have 40+ committees and your involvement will result in opportunities that provide benefit to you and your agency. I encourage you to put your expertise and passion to work. PNWS is fortunate to have such a deep bench of qualified individuals.

If you are a 'history buff' Catherine Howells, Historian Chair has been hard at work sorting and assembling our Section history and needs our help. It seems we have hundreds of pictures from past conferences and events. Our plan is to scan the pictures for review by seasoned professionals that have been around for a while. We need to identify who is in the pictures and if they should be kept or discarded. If you want to participate please let me know and I will be sure to pass your name on. Of course we will be tapping past board members and the past chairs for this exercise!

I look forward to seeing many of you at the Bellevue Conference. The Board received a sneak-peak of the technical program and events during our winter meeting and I know we will experience an excellent event! 📷

Brenda Lennox  
Association Director PNWS-AWWA

I look forward to seeing many of you at the Bellevue Conference. The Board received a sneak-peak of the technical program and events during our winter meeting and I know we will experience an excellent event!



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#### Tom Herbert

ESI Water/Wastewater Sector Specialist  
(801) 756-4233  
tom.herbert@energysmartindustrial.com

#### Dawn Lesley

ESI Water/Wastewater Sector Specialist  
(971) 202-1625  
dawn.lesley@energysmartindustrial.com

## PNWS Engineering Committee

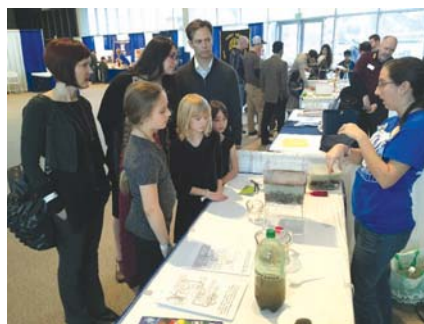
### Celebrating 2015 Engineers Week

On Saturday, February 8, the PNWS-AWWA Engineering Committee managed the AWWA booth at the Puget Sound Engineering Council's annual Engineering Fest at the Museum of Flight. The Fair is open to the public, with the target audience being K-12 students and their parents, and has about 25 display booths, staffed by practicing engineers and technical people from local chapters of engineering societies, colleges, and businesses. The Fair, which coincides with national engineers week, provides a fun, visible way to learn about the different engineering disciplines, as well as encourage students to think about engineering as a career.

The booth had two hands on exhibits. One was a model of the water cycle provided by Tacoma Water. The booth volunteers were excited to learn that most kids were already very familiar with the water cycle. The other model was a simple water filtration model that Lynn Williams and Anh Quach built using ice tea dispensers, rock, some filter media, and a little Alum from the local grocery store. The exhibits were a big success with all

groups, but the key component was the outgoing personalities of the volunteers who drew in even the shyest child.

Volunteers from the Engineering Committee and the local AWWA Young Professionals included Jim Konigsfeld from Sammamish Plateau Water and



Sewer District, Lynn Williams of Brown and Caldwell, Anh Quach of Carollo, Brian Smith of Tacoma Water, Patrick Weber of Brown and Caldwell, and Zach Weeks of PumpTech Inc.. Along with AWWA educational books and pencils, Cascade Water Alliance provided shower timers and bags to give away.

The PNWS- AWWA also sponsored this year's 51st Annual Engineers Week Banquet in Portland, Oregon. The event took place on Wednesday, February 25 at the Lloyd Center DoubleTree Hotel.

The event hosted about 350 high school students with an entire day of engineering events. There were several panel discussions, hands-on workshops, and a 3-hour field trip to one of many local engineering projects currently under construction. After the field trip the students attended the Exhibit Hall where five Engineering Committee members volunteered to talk to the students about engineering and get them excited about careers in drinking water.

A big thanks to the King County Subsection and Northwest Oregon Subsection for co-sponsoring both



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### **Tour of Ridgewood View Park Reservoir and Pump Station in Beaverton, OR on March 27**

The Engineering Committee and Young Professionals are co-sponsoring a tour of Tualatin Valley Water District's (TVWD) Ridgewood View Reservoir and Pump Station project, which is currently under construction. The tour will take place on March 27 from noon until around 3PM and will start at the TVWD main office with lunch and an overview of the project. From the office, we will carpool to the construction site.

These new facilities will serve as a seismically resilient water supply backbone to the West Hills, which includes critical medical facilities.

Work included as part of this project includes:

- Demolition of an existing 5 MG AWWA D110 style concrete reservoir
  - Temporary shoring including soil nail wall construction
  - Construction of the new 8 MG cast-in-place (5 sided) concrete reservoir
  - Construction of an 11 MGD potable water pump station
  - Construction of approximately 7,000 LF of 24-inch polyurethane coated welded steel water pipeline
  - Park restoration and improvements
- Items expected to see on the tour include:
- Rock excavation or limits of the excavation
  - Foundation forming or potential concrete pouring
  - Soil Nail wall shoring observation
  - Waterline construction (30-inch CCP tie-in)
  - Potential micropile construction
- Please contact Nick Augustus at

[nick.augustus@tvwd.org](mailto:nick.augustus@tvwd.org) for more information or register for the tour on the PNWS-AWWA website. Registration is limited to 30 people, so act quickly.

### **CALLING ALL ENGINEERS!!!**

Please join us at the conference for the annual Engineering Committee meeting! We will be discussing the conference technical sessions, potential site tours, future training sessions, engineering activities that we can support throughout the year, and Excellence in Engineering awards! We need fresh ideas and enthusiasm! The meeting will take place near the conference center on the evening of April 30. Please contact Chair Erika Murphy for more information. Erika can be reached at 503-615-6720 or [erika.murphy@hillsboro-oregon.gov](mailto:erika.murphy@hillsboro-oregon.gov). We'll see you there! 



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## PNWS-AWWA Membership Committee

### The Membership Database Available for You

The PNWS-AWWA Section membership database is being continually updated based on your input. Many of you have requested lists of your sub-section or other sub-sets of data to better engage with the current membership. The section membership database is active and available to PNWS-AWWA officers, committee members and sub-section officers. You can access this database by navigating to the [pnws-awwa.org](http://pnws-awwa.org) homepage and selecting the committee tab and clicking on 'membership.' Once on the membership page click on 'Membership Data Request' and fill out the on-line forms. You will be contacted by a membership committee representative who will provide a link for you to access the database.

Do you have a specific membership question? Please give us any information that would help us provide you the data set that you are requesting. We have a large Section, so you might not need the whole 2,500 person list!

Direct link: [https://sites.google.com/a/pnws-awwa.org/membership\\_committee/home/membership-data-request](https://sites.google.com/a/pnws-awwa.org/membership_committee/home/membership-data-request)

### New Membership Brochure – Re-printing in the Works

The fabulous new Membership pamphlet was so popular last quarter that we have run out. Do not despair. The Section is printing another batch and these will be available shortly. Simply contact the Membership committee directly or Kyle Kihs at [kkihs@pnws.org](mailto:kkihs@pnws.org) and we will send a handful to you for use at your next event. If you can't wait, the Brochure is posted online for download on the Section Membership home page.

### New Section Banners

Your Pacific Northwest Section has created a matched set of stand-up banners proclaiming the advantages of being a member of our Section and including a QR code to scan to learn more about AWWA. The banners unfurl to

about 6' high on their dedicated stands and are available for your next sub-section or committee event. Contact the Membership Committee or Kyle Kihs and they will be shipped directly to you – return postage included.



### 2014 membership goal achieved

The PNWS met the total membership goal set forth by the Membership Committee and the Association wrapping up the year with a total membership of 2,575. Great job! Newest Membership Committee member Ray Lipin attended the AWWA Membership Summit in Denver, Colorado February 4 to 6 and accepted a reward check for \$500 from the Association. This money will be re-invested in PNWS activities – e.g., printing more brochures.



Raymond Lipin accepts a \$500 recognition check on behalf of PNWS-AWWA for meeting 2014 membership goals at AWWA headquarters in Denver, CO., February 5, 2015. With him from left to right are: AWWA Chief Membership Officer Susan Franceschi, PNWS Membership Committee member Raymond Lipin, Incoming AWWA President Gene Koontz, and Deputy CEO Paula MacIlwaine.

### 2015 Conference in Bellevue, Washington

Look for the Membership Booth at the Conference this Spring in Bellevue, WA. Come share your idea for what will make your AWWA experience better and fill out our survey for a chance to win a new tablet. See you in Bellevue!  

## Chris Uber Scholarship Fund



*A scholarship fund has been established in Chris Uber's name by the PNWS-AWWA and Murray, Smith & Associates, Inc. Details of the scholarship to honor Chris and to support budding new water professionals will follow by the time of the Section conference. Donations can be made to the Section and mailed to: PNWS-AWWA, PO Box 872467, Vancouver, WA 98687 Thank you.*



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## Personal Leadership Committee

The Personal Leadership Committee is comprised of several subcommittees that sponsor events in local areas. The mission is to provide individuals with the tools to thrive both personally and professionally within the water industry.

### Seattle

The conversation buzz among attendees at the 2015 Seattle Women in Leadership Symposium was a positive sign that the event speakers provided great inspiration and

examples on successful leadership development for women. This was our second symposium and it was well attended with nearly 130 attendees. Following the success of last year's symposium, we were delighted to have more than 75% new attendees who heard about our event from word of mouth. The attendees included women in all stages of their career. The goal of the symposium is to build on important issues that inspire, nurture, and motivate today's and tomorrow's

leaders. This year we highlighted women who are blazing or have blazed new paths locally and globally. The following highlights the common thread shared by the speakers.

- The value of networking, partnerships, and mentors are key. Being present in the community is a big part of networking. One of the favorite quotes was Diana Gale's take on mentorship: you don't have to be old and well established to be a mentor "You are always older than someone else."
- Have a vision and define what drives you, then have the courage to put yourself out there. Christie True noted that persistence is part of that success "if you cannot find a way, you have to make a way" especially if you are under fire.
- "There are valid reasons to put things off. You don't have to start with anything big or new. Do something small, but start today!" was the advice shared by Pratistha Kansakar.

Additional themes heard throughout the day were 'be true to yourself' and understand that making mistakes is part of succeeding in leadership. The afternoon was filled with examples of putting leadership skills in practice – performance coaching, sustainability and innovation, and local and global partnerships.

On behalf of the planning committee, we are grateful for the opportunity to present a day of inspiration for developing leadership among women. If you are interested in planning next year's event, please contact Lara Kammereck ([lkammereck@carollo.com](mailto:lkammereck@carollo.com)).



Planning committee members starting from the left. Front Row: Ann Hajnosz, Katy Isaksen, Lara Kammereck, Lish Moreau, Alma Rettinger. Back row: Colleen Petilla, Diane Pottinger, Kelly Boswell, Mary Dahl. Not shown Lynne Danielson and Erica Haenggi.


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**Portland**

Aqua Athena's' final 2014 event was networking on November 5, 2014 at Lotus Cardroom & Café. The 26 attendees discussed hidden biases and shared insights on how to overcome them.

Look for our Early Bird session at the PNWS-AWWA Annual Conference in Bellevue on Thursday, April 30. An hour-long workshop for women to create their own personal brand will be led by Nicki Pozos of HDR, Inc.

Aqua Athens is also organizing a mentoring program, and are looking for interested women. If you would like to be involved or receive notices about future events please contact Adrienne Lindsey at [alindsey@gsiws.com](mailto:alindsey@gsiws.com).

If you are interested in getting involved, please contact our leadership team:

Kristel Fesler (Chair) – [Kristel.fesler@hillsboro-oregon.gov](mailto:Kristel.fesler@hillsboro-oregon.gov), 503-615-6735

Jim Meierotto (Vice-chair) – [jimm@tvwd.org](mailto:jimm@tvwd.org), 503-848-3036

**2015 Women in Leadership Portland Symposium**

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Keynote Speaker  
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Complete Agenda and Speaker Information will be available in February.

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## Water Conservation Committee

### Winter Conference Call

On Thursday, December 11, 2015 the PNWS-AWWA Conservation Committee held a conference call. Thirteen committee members participated in the conference call.

### Discussion

Landscape Contractor's Work Group – Steve Carper, Conservation Specialist at TVWD.

We think the Landscape Contractor's Board (LCB) should be retained as the regulatory agency as opposed to the Construction Contractors Board. Continuing Education Hour (CEH) requirements should follow the LCB recommendation supported by Oregon Water Purveyors. Individuals


licensed for 0-5 years take 16 hours must obtain CEH credits per two-year reporting period. Individuals actively licensed for more than 5 years take 8 hours of CEH credit per two year reporting period. Language will be developed that establishes these requirements as a minimum standard in statute, thereby removing the possibility that the requirements could be further reduced via the rule making process (i.e., outside of legislative action).

We discussed the sustainable Water Management Conference held in Portland, OR on March 15-18, 2015 and asked for room moderators and volunteers. Steve Carper is the contact for volunteers, [steve.carper@tvwd.org](mailto:steve.carper@tvwd.org).

### Training

We discussed participating in a commercial/industrial conservation training by Roger VanGelder from Lane Community College. Training will take place at during the summer meeting usually held in early to mid August. Dates and location of training will be posted on the PNWS-AWWA water conservation webpage when details are completed.

### Next Meeting

The water conservation committee will hold a committee meeting at the Bellevue PNWS-AWWA conference at 11:00 a.m. on Friday, May 1 between the morning and afternoon sessions. 







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## Water Resources Committee

The PNWS-AWWA Water Resources Committee (WRC) is and has been actively engaged in developing educational and professional networking opportunities to share experiences and expertise among water providers and among other water stakeholders in the Pacific Northwest.

### Leadership Transition

All is well. Due to a change in employment, committee chair Justin Iverson felt that it was best for the WRC for him to step into the role of Past Chair a few months early. Rob Annear has agreed to continue to serve as a Past Chair as well until at least May when Officers normally rotate through a 4-year cycle. John Lambie is stepping in as Chair of the WRC now, a few months early. Jill Hoyenga is stepping in as Vice Chair and Treasurer. The committee opened the search for an incoming Secretary and DeEtta Fosbury volunteered and the WRC Executive Committee of Officers met and unanimously accepted her. We are thankful to Justin that he is willing to continue to serve in an advisory capacity. We wish him all the

best in his new job with OWRD. Justin Iverson and Rob Annear are both serving as Past Chairs to continue their involvement in WRC planning and programs, and to assist as needed with the transition. Many thanks to Rob as well for his dedication and hard work on behalf of PNWS- AWWA and the WRC.

### Winter Social at the Yardhouse

Following the January 15, 2015 monthly meeting, those attending the meeting in Portland walked to the Yardhouse for conversation and brew. The event was attended by eight people who spent time networking on a variety of things and had a good time. The committee typically hosts two or three socials a year to provide networking opportunities, end of summer, winter, and at the annual section meeting.

### AWWA Sustainability Conference March 2015 and WRC Pub Tour

The WRC is again organizing a pub tour in conjunction with the national AWWA Sustainability Conference in Portland, March 15-18, 2015. The event in 2013 was a great success during the

2013 Sustainability Conference, with dozens of attendees from all across the country enjoying craft beers from three local brewpubs. Details are posted on the WRC website at <https://sites.google.com/a/pnws-awwa.org/water-resources-committee/home/announcements>. The event will be held on March 16 from 6:30 to 9:30 pm. The details will also be posted on the Section website.

### Lunch N Learn Webinar March 3, 2015

#### Municipal Permit Extension: Cottage Grove Case

Richard Glick of Davis Wright Tremaine LLP, graciously accepted our invitation to present a case history and lessons learned regarding the the City of Cottage Grove and lower Clackamas River municipal permit extension cases for March 3, 2015. Oregon Water Utilities Council (OWUC) and the League of Oregon Cities have been represented by Mr. Glick as amici curiae when these cases were taken to the Oregon Supreme Court. Mr. Glick shared background and recent developments in this potentially precedent setting case for municipal water rights. In December 2013 the Oregon Court of Appeals issued a ruling interpreting the amended ORS 537.230(2) condition for the City of Cottage Grove. In that ruling the Oregon Court of Appeals reversed and remanded the Oregon Water Resources Department final order for municipal permit extension. Information on Mr. Glick's presentation should be available on the PNWS-AWWA Water Resources Committee web page under Workshops and Webinars by the time you are reading this.

### Bellevue 2015 Water Resources Tracks

The WRC is looking forward to moderating three Technical Sessions at PNWS Annual Conference in Bellevue, WA and an Early Bird Session. The Technical Sessions are

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focused on: regional water resource project planning among stakeholders; mitigation methods in water rights and transfers; and source-water-protection program development.

### Monthly Committee Meetings


The committee meets by electronic conference across the PNWS region the third Thursday of the month from 3:30 to 4:30 pm Pacific Time to discuss water resource issues in the PNWS region and to plan educational activities. All interested parties are encouraged to join us, listen in, and provide input on water resource planning issues of interest to the region and its water purveyors.

The committee will be focusing on developing timely learning events during 2015 and will begin planning themes for the 2016 Annual in Boise

during April 2015. During the WRC Monthly meeting in January the planned focus for the coming year and over to Boise 2016 seemed to fall on adding

- Redundant supply development as a topic, and
- nexus of water quality and water supply.

If you have ideas or suggestions on themes or topics please relay them to John Lambie or any of the WRC Officers.

For more information on WRC events please visit the website <https://sites.google.com/a/pnws-awwa.org/water-resources-committee/home>. To join into the WRC or get onto our e-mail distribution list please contact Committee Chair John Lambie at [jlambie@e-purwater.com](mailto:jlambie@e-purwater.com) to be added to the WRC roster or call him at 503-954-2096. 

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### YP Committee

#### Engage Your Local Young Professionals

The Pacific Northwest Young Professionals (YP) have been very busy organizing fun and educational activities this past winter and are continuing to plan for the upcoming spring. YP events are a great opportunity to learn powerful skills to enhance your career and network with other like-minded professionals and students. Think about what you could do in your area to increase YP participation.

#### Chambers Creek Tour



The King County Young Professionals and the University of Washington WEF-AWWA student group toured the Chambers Creek Wastewater Treatment Plant in Pierce County to see the construction project first hand. The \$350 million project includes water reuse (increased recycling and reduced discharge), increased energy recovery from solids handling processes, and nutrient removal including the addition of a sidestream treatment system using anammox technology. The plant is in the middle of construction, so the group was able to see the facilities early on in the construction process.

A special thanks to Jeff Morgan, Adam Klein, and Gwen Flora (Brown and Caldwell) and Amanda Summers (Pierce County) for giving the tour.

#### Southern Oregon Sub-Section Lunch 'n Learn

The Southern Oregon Sub-Section Young Professionals hosted a Lunch 'n Learn on December 4, 2014.



The Sub-Section had its quarterly meeting followed by a presentation and tour of Martin Pump Station. Afterward, we enjoyed a friendly bowling competition between the YPs and SPs (Seasoned Professionals)! Young Professionals and Students from the area attended this event. It was a great opportunity to network and learn from water industry professionals in our region and to have some fun! Who won the bowling competition? We're calling it a tie. For more information on future Southern Oregon events please contact [julie.smitherman@ashland.or.us](mailto:julie.smitherman@ashland.or.us)

#### At a Career Fair Near You!



Young professionals are ramping up their presence at career fairs across the section. Kevin Wycoff of the Cascade to Coast Subsection has tabled two career fairs so far, with another two to go this year! Lynn Williams, Brian Smith, and

other active members of the King County Subsection tabled an interactive booth at the Museum of Flight on February 7. Julie Smitherman and representatives from the Southern Oregon Subsection tabled at the Oregon Institute of Technology career fair on February 25.

Information was provided on the types of jobs that are available in the water industry, how to get involved in the Young Professionals Committee, how to start a Student Chapter, and how to participate in the AWWA Fresh Ideas Poster Competition at the Annual Conference in Bellevue, WA. For more information on how you can participate in local career fairs please contact Meredith Noble at [meredith.noble@stantec.com](mailto:meredith.noble@stantec.com)

#### Student Chapter Events

*Dracida Chernishov, President of the Clackamas Community College AWWA Student Chapter, recently hosted an event with over 30 students participating and five presenters. Below is a summary Dracida provided of what the guest speakers discussed with students.*

*Christine Hollenbeck, Public Outreach and Education Coordinator, Clackamas River Water Providers* Christine started off by telling us a little bit about herself and how she got into the water industry. She started by going into landscaping. She then took some water classes which eventually got her a job working for a family operated consultant company which works with public water systems. Christine furthered her career by going into public water distribution, where she is now working as a public outreach and education coordinator for the Clackamas River Water Providers.

*Dave Davis, Plant Operator Manager, North Clackamas County Water Commission* Dave started operating heavy equipment in the Air Force. After his enlistment ended he worked construction jobs in southern Oregon, which is where he got hired on at a small water district. After a



few years with Clackamas Water District, he went to work for Mt. Scott Water District. Mt. Scott had bought in to Oak Lodge's Treatment plant that was being built. Dave was asked to do some odd jobs at the treatment plant near the end of construction. He was asked if he was interested in a job at the plant, of which he replied "no," he wasn't interested in treatment. A few weeks later he was asked how he would finish up a few jobs at the treatment plant. Unknown to him, this was an interview for the plant supervisor job. A few weeks later he was called into the office at Mt Scott where he was offered the Supervisor job at the plant. He asked if this was his interview and they replied, "No, you had that a few weeks ago." The rest is history Dave has been working at the plant now for 16 years.

*Don Calkins, Plant Operator,  
Sunrise River Water*

Don Calkins started off in construction. His work always slowed down during Christmas. He was tired of wondering if he would have enough work to get him by. He started looking into water jobs and landed a job in distribution. He eventually started working for Sunrise River Water. One of the things Don is most known for is his invention of a tool that makes opening valve cans a lot easier.

*Amy Kim, Water Master*

Amy worked for the Water Resources Department for five years before leaving to stay home with her child. After being a stay at home mom for a couple of years she decided to go back to work. Amy then heard about a water master position that had opened up. She was skeptical at first but her friend that was also a water master talked her into applying for the job. Amy got the job and loves it because she gets to work with the public on so many levels. She gets faced with many challenging situations where people are upset or angry, and she can help make those interactions as positive as possible.

*Suzanne DeLorenzo, PhD, Water Quality Manager, Clackamas River Water*  
Suzanne was in school for a while before she really knew what she wanted to

do. She applied for a couple of jobs when she got out of school, but was turned down after being told she was overqualified. Finally Suzanne was able to secure a job with CRW where she now does water quality sampling. She is currently working on testing for different types of fecal matter to determine which type (i.e. human, agriculture, bird, etc.) has a higher content in the rivers.

### Upcoming Events at the Annual Conference

*Young Professionals Scavenger Hunt*  
Join us for the 11th Annual Scavenger Hunt in Bellevue, WA! All Young Professionals interested in participating should meet in the Lobby of the Hyatt Regency at 7:00 p.m. to join in the festivities. This will be a great opportunity to get to know other Young Professionals as well as network with seasoned water professional in the water industry. The Young Professionals Committee continues to look for sponsors to be part of one of the most exciting event of the conference! Thank you to those who have already signed up! If you are interested in being a sponsor, please email Lynn Williams at [lwilliams@brwnccald.com](mailto:lwilliams@brwnccald.com).

### Fresh Ideas Poster Competition

Fresh Ideas is a student poster competition open to both graduate and undergraduate students to present on a topic related to the drinking water industry. Students will share their ideas with water professionals from around the Pacific Northwest


and will have the chance to compete in the national conference! Join us at the Meydenbauer Convention Center on April 30 in room 303 anytime between 10:00 - 1:30 to view "fresh ideas" from students from around the Pacific Northwest Section. For more information please contact Julie Smitherman at [julie.smitherman@ashland.or.us](mailto:julie.smitherman@ashland.or.us).

### Participate!

Want to join the YP Committee in its efforts to connect students and YP's with PNWS-AWWA? There are lots of ways you can help, including website work, event planning, leadership roles, Scavenger Hunt planning, helping get a student chapter going, and beyond! Contact Meredith Noble, YP Committee Chair, for more information ([meredith.noble@stantec.com](mailto:meredith.noble@stantec.com)).

### Follow us on Social Media

The Young Professionals Committee has increased its presence on social media. With an active Facebook and Twitter account, we are working to reach more people in real time. By posting directly to the pages of colleges and universities around the section, we can extend our message to a wider student audience. We keep you up-to-date on YP events around the section, training opportunities, job opportunities, and relevant industry news.

Follows us on Twitter @PNWSYP and visit our Facebook page *PNWS of AWWA Young Professionals* to stay connected! 



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### Subsection Advisory Council

The Subsection Advisory Council (SAC) hosted the 2015 Subsection Training on Thursday, February 5, 2015 at the Embassy Suites - Portland Airport. It was followed on Friday with the Winter Trustee meeting. The training was well attended with over 50 people in attendance for most of the day. This training is very useful in educating the officers of the various subsections on their current roles, upcoming roles and expectations as they represent their subsection at the Section level. One comment I heard during the training was "I wish I would have come to this SAC training at least once before I was the current subsection Chair so I could have better understood my role within the Section before I am a few months from finishing up my term as a subsection officer and required to report before the Board tomorrow."

The SAC training started off with a subsection brainstorming period. Lots of great ideas were shared as well as a few challenges/learning opportunities. An item worth mentioning that was discussed during this period was the idea of subsection succession planning. This means having 2-3 people with the role of Director or Officer at Large, learning the roles and responsibilities within the subsection and Section, in preparation for moving into an officer position of subsection Secretary, Vice Chair or Chair. Lack of succession planning has caught a few subsections flat footed when an officer has had to resign or step down on short notice.

There were great presentations given throughout the day. Current Section Chair Jason Canady discussed the Section mission as well as the new AWWA branding, including the Pacific Northwest Section (PNWS) brand. Be sure to watch for the new Section logo tailored for each subsection that will be coming out soon. Another great presentation was done by the newly elected 'Chair elect' Lacey Goeres-Priest on the issue of updating your subsection by-laws or at least looking at them every 3-5 years to see if they need any revamping. Lacey took what could be a very boring subject of by-laws and made it interesting and something that each subsection could take back to their officers for discussion.

There was also a presentation by Brenda Lennox on the AWWA structure from the National level down to the Section and also how the subsection fits into the big picture. Randy Black talked about his focus for the next year as the incoming Chair at the May conference in Bellevue, WA. Loren Searl discussed how each subsection can share their training opportunities with the Training Coordination Committee (TCC) and they will promote those trainings as well as keep a calendar on the TCC website which will hopefully become a one stop shop for training opportunities. Marshall Thompson and Kyle Kihs discussed subsection finances with the ultimate message of "it is NOT your money!" The money generated by your subsection is ultimately the money of the AWWA-

National. Pat Van Duser and his group have worked hard to make available to anyone in the Section, especially the subsections, the ability to request a member list for your area to use for subsection business is now available on the Membership website.

Kyle Kihs then talked about the various types of social media that the Section uses to push information out to its members and even the subsection. He talked about how the Section uses Facebook, Twitter, LinkedIn as well as the e-newsletter and quarterly magazine, *Water Matters*. John Roth gave a talk about the upcoming small system training that is mandated by the EPA and how the Section is coordinating this training. There is a free class scheduled for April 8, 2015 at TVWD and John asked for the subsections to help with getting the word out to the small systems in your subsection. We finished the afternoon with Rob Barrett, Ronda Farmer and Marshall Thompson leading some hands on training on updating your subsection or committee website and the importance of visiting your website on a regular basis and keeping the information current. It was a great day of training and networking and a lot was accomplished in a short amount of time. All of the presentations are available to view on the SAC website.

On Friday was the Winter Trustee meeting and amongst the committee report and various other business, each subsection Chair/President (or subsection representative) gave their annual report to the Trustees. Kudos go out to the subsection officers as all twelve subsections were represented both Thursday at the training and also at the Trustee meeting on Friday.

The SAC would like to remind all of the subsections that there are scholarships available for the Section conference, but you need to submit an application very soon! They will be given out until the funds are distributed. Do not wait until the last minute! Applications can be found on the SAC website and need to be turned in to Corie Peterson at [corie.peterson@aecom.com](mailto:corie.peterson@aecom.com). Also, if you have someone that goes above and beyond on a regular basis or has been involved with your subsection for many years, the SAC would encourage you to nominate them for the Subsection Activity Award. This award will be given out at the Section conference during the banquet on Friday night. You can find this application on the SAC website as well and these need to be submitted to [corie.peterson@aecom.com](mailto:corie.peterson@aecom.com) by March 10.

#### **Bellevue Conference** – April 29 – May 1, 2015

The SAC will be sponsoring the competitions at the Section conference again this year and would like to point out that there are some changes to the competition scheduling this year. The Meter Madness and Tapping contests will not be held on Fun Night as they have been for years.



## Central Washington Subsection


Competitions schedule:

- Wednesday night, April 29 from 5:00 – 8:00pm will be the Fun Night ONLY, repeat NO COMPETITIONS!
- Thursday, April 30 at 11:00am – noon will be Meter Madness at the Meydenbauer Center Vendor Hall
- Thursday April 30 at noon – 1:30pm will be the Best Tasting Water Competition at the Meydenbauer Center Vendor Hall with the awards presented from Public Information and Engineering.
- Friday, May 1 at 11:30am – 1:00pm Tapping competition at the Meydenbauer Center Vendor Hall with Water for People trips and prizes awarded between competitions. (having these competitions in the vendor hall and during lunch time will hopefully give the competitions great visibility as well as bring people to the vendor hall)
- Friday, May 1 at 1:00pm Gimmicks and Gadgets (Field Innovations) will be held in rooms 408/409. Be sure to be early for this competition as the room always fills up quickly.
- Friday, May 1 at 2:00pm Top Ops competition will be held in rooms 408/409. Again, be sure to be early for this competition as the room always fills up quickly. 📱



### Beer for Water

The Central Washington Subsection invites you to a beer tasting and silent auction event benefitting Water for People. The event will be Saturday, May 9, 2015 at the Icicle Village Resort in Leavenworth, WA. Tickets are \$40 per person, or \$60 per couple for a fun-filled evening of local brews, food, and music. Tickets can be purchased online by visiting the Central Washington Subsection website or by contacting Jessica Shaw, [jshaw@pnws-awwa.org](mailto:jshaw@pnws-awwa.org). 📱




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## Northwest Washington Subsection

### 2015 Training Schedule

The Northwest Washington Subsection will be sponsoring training for operators, engineers and managers in the spring/fall of 2015. Events scheduled so far include:

#### Water Loss Prevention Workshop

Wednesday, March 18, 2015 @ the Brightwater Environmental Education & Community Center, Woodinville WA. Fee is \$65/person for AWWA & WEF members, \$75 for non-members. 0.6 CEUs. The workshop is jointly sponsored by the Northwest Washington Subsection, the PNWS Water Distribution Committee and King County Wastewater Treatment Division. Registration is now open on the Northwest Washington Subsection webpage.


Presentation topics include:

- Water Loss Control Programs for Water Utilities
- Water Use Efficiency
- Top-Down Water Audit and Validation
- Management of Apparent and Real Loses
- Leak Detection Equipment

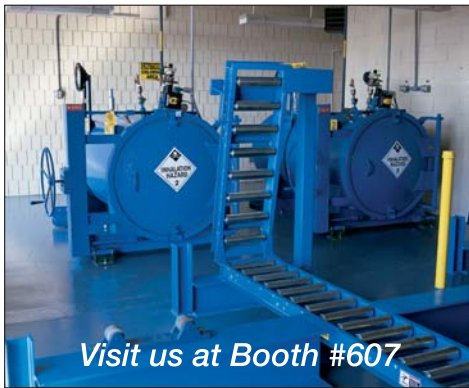
#### 2015 Western Washington Short School & Trade Show

Tuesday and Wednesday, June 2 and 3, 2015 @ 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 4 - 5 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.

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 at - [jeff.lundt@kingcounty.gov](mailto:jeff.lundt@kingcounty.gov) or 260-477-5582. 

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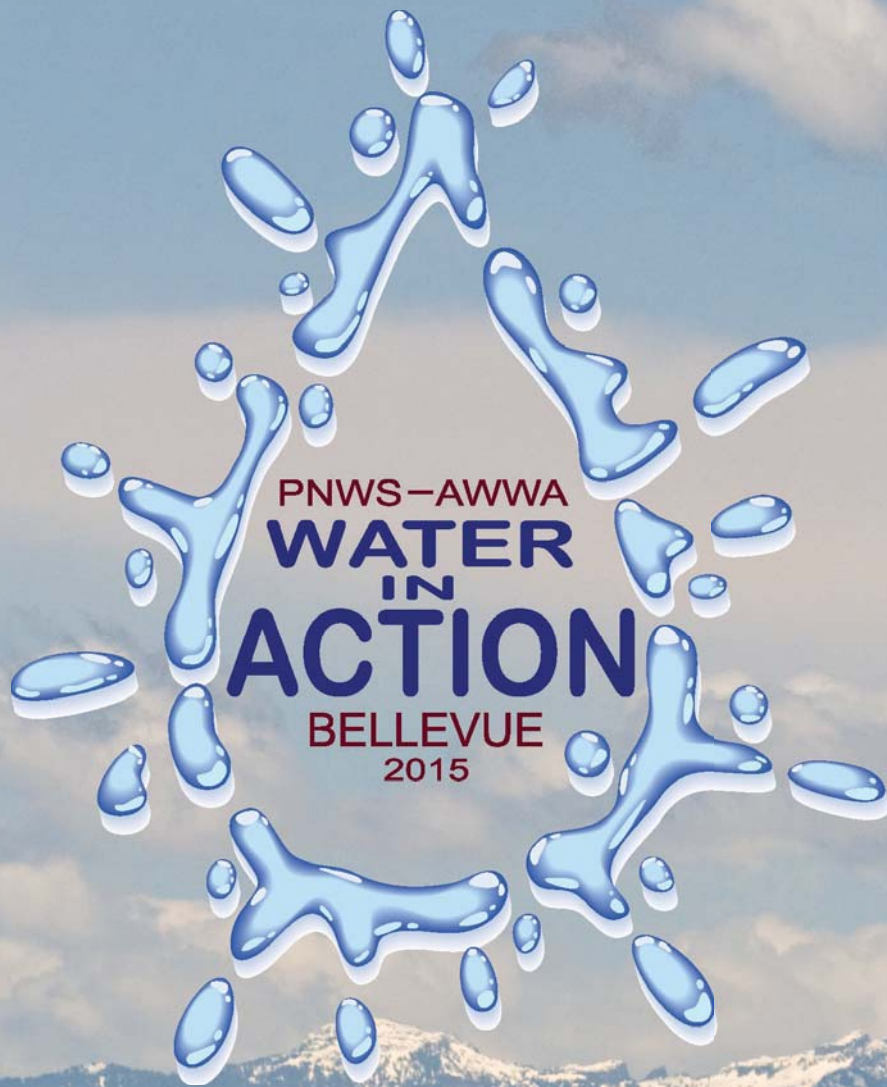
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## Conference Schedule

### Tuesday, April 28

Registration & Information	3:00 pm to 6:00 pm	Meydenbauer
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### Wednesday April 29

Registration & Information	7:30 am to 6:00 pm	Meydenbauer
Continental Breakfast	7:30 am to 8:30 am	Meydenbauer
Golf Tournament	8:00 am to 2:00 pm	Mercer Slough Nature Park
Pre-Conference Seminars	8:30 am to 4:30 pm	Meydenbauer
Lunch	12:00 pm to 1:00 pm	
Fun Night	5:00 pm to 8:00pm	Bellevue Arts Museum

### Thursday April 30

Registration & Information	7:00 am to 6:00 pm	Meydenbauer
5K Fun Run/Walk	7:00 am to 9:30 am	Wilburton Hill Park
Continental Breakfast	7:00 am to 9:00 am	Meydenbauer
Early Bird Technical Sessions	7:30 am to 8:30 am	Meydenbauer
Water For People Auction	8:00 am to 5:00 pm	Vendor Hall
Opening Ceremony	9:00 am to 10:30 am	Meydenbauer
Vendor Exhibits	10:00 am to 5:00 pm	Meydenbauer
Fresh Ideas Poster Contest	10:30 am to 1:00 pm	Meydenbauer
Vendor Visit and Lunch	10:30 am to 1:30 pm	Meydenbauer
Meter Madness Competition	11:00 am to 12:00 pm	Meydenbauer
Best Tasting Water Judging, Engineering & Public Information Awards	12:00 pm	Vendor Hall
Technical Sessions	1:30 pm to 5:00 pm	Meydenbauer
1st Time Attendees Meet & Greet	5:00 pm to 6:00 pm	Hyatt - Maple Room
YP Scavenger Hunt	7:00 pm to 10:00 pm	Hyatt - Maple Room

### Friday May 1

Registration & Information	7:00 am to 4:00 pm	Meydenbauer
Continental Breakfast	7:00 am to 8:30 am	Meydenbauer
Technical Sessions	7:00 am to 11:00 am	Meydenbauer
Water For People Auction	8:00 am to 3:00 pm	Vendor Hall
Vendor Exhibits & Lunch	10:30 am to 1:30 pm	Meydenbauer
Tapping Finals Competitions	11:30 am to 1:00 pm	Vendor Hall
Technical Sessions	1:30 pm to 5:00 pm	Meydenbauer
Water For People Auction Reception	5:00 pm to 6:30 pm	Hyatt Hotel
Banquet	6:30 pm to 9:00 pm	Hyatt Hotel





## Conference Highlights

### Technical Program

This year's technical program showcases "Water in Action" with five preconference sessions starting Wednesday morning, followed by up to nine concurrent sessions Thursday and Friday. The preconference sessions are hosted by the King County Subsection, the Engineering Committee, the Water Loss Control Group, the Distribution Systems Committee, and the Water Treatment

Committee. The Water Treatment Committee will be holding their preconference track at the Green River Filtration Facility. Make sure to register early, if you haven't already, to ensure your spot

Early birds on Thursday morning can select between six different tracks, while all nine tracks (38 total topics) fill out the afternoon session starting at 1:30 pm following the opening


ceremony. Friday morning kicks off at 7:30 am and attendees can select between 46 different topics over the nine tracks. Friday afternoon closes the conference out strong with seven tracks featuring 33 different topics. Flip over to the detailed schedule to start planning your conference, download the app below, or visit the conference website! See you in Bellevue!

### Activities

This year's conference features many fun and exciting activities where attendees can network and compete with other utilities and members. Test your knowledge by sitting in on the college-bowl style **Top Ops** competition. Cheer on your favorite team as they go for fastest time during

**Pipe Tapping.** Think you can put together a water meter fast? Just wait until you see **Meter Madness.** Treasure hunt and donate to a great cause in the **Silent Auction for Water For People.** Attend a **committee meeting**, join a committee, and get plugged in with fellow members

who share similar interests in the water field. Hang out with the Young Professionals Thursday night as they hunt for clues and people as part of their annual **Scavenger Hunt.** Additional activities and networking opportunities can be found in the Conference Schedule.



To register for the conference, or find additional information about the conference schedule, lodging, parking, and transportation, please visit our website: <http://www.pnws-awwa.org/training-events/conference>

### Lodging and Accommodations

This year's headquarters hotel is the Hyatt Regency Bellevue with the overflow hotels being the Red Lion Hotel Bellevue and the Sheraton Bellevue Hotel. Rooms will be filling fast, be sure to make your reservations!



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## Conference Networking

### Golf Tournament

This year's golf tournament is being held Wednesday, April 29 at the Willows Run golf complex, located in Redmond, WA. This complex boasts two, full-length, links-style 18-hole courses, a 9-hole executive course, an 18-hole putting course, and practice facilities including a driving range, practice putting green and bunker.

The \$95 entry fee per person, includes cart, lunch and fabulous prizes! Shotgun start at 8:00 am - Don't be late!

### Fun Run

Get your cardio workout in and have fun doing it - don't miss the Fun Run/Walk at 7:00 am Thursday, April 30 at Mercer Slough Nature Park. Carpool with a friend and meet the group at the Wilburton Hill Park information sign to the left of the soccer field. The entrance to the park is at the corner of Main St. and 124th Ave NE. Follow the road to the left and park near the soccer field. The park is less than two miles from the Meydenbauer Convention Center.

### Fun Night

Kick off the 2015 PNWS Conference with the annual Meet and Greet. Connect with old friends and make new ones at the Bellevue Arts Museum Wednesday, April 29 from 5:00-8:00 pm. Join us for drinks and dinner while enjoying this unique museum - wear your conference badge for free admission! The Bellevue Arts Museum is located just a few blocks away from the Conference Headquarters Hotel - The Hyatt Regency. We will be offering a shuttle for those attendees who are staying at either the Red Lion or the Sheraton.

### Gimmicks And Gadgets 2015

Now is the time to be thinking Gimmicks and Gadgets for the upcoming Spring Conference. Remember first place will win a paid registration to the 2016 Boise Conference, second place \$200 toward registration, and third place \$100 toward your registration. Please help me

make this the best ever Gimmicks and Gadgets Competition and submit your entries to [bbeckman@rh2.com](mailto:bbeckman@rh2.com).

After many wonderful years of having the privilege of being your Gimmicks and Gadgets Coordinator I will be stepping down after the

Bellevue conference and introducing your new Coordinator. I am really looking forward to seeing everyone in Bellevue, so again please help me make this another fun and successful event. I just may even have a few surprises for you

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### Banquet

Don't miss our closing night awards banquet at the Hyatt Regency, Friday, May 1. The evening kicks off at 6:30 pm with closing of the Water For People silent auction and champagne reception. This is the time to stake your claim to that one item or three that you cannot live without! Our awards dinner immediately follows. This special evening recognizes the hard work and dedication of our AWWA members as the Section presents its highest awards, culminating with the presentation of the AWWA Fuller Award. Stick around following the banquet and join us as we celebrate the passing of the gavel from PNWS Section Chair Jason Canady to incoming Section Chair Randy Black.





## Technical Program Wednesday, April 29

Morning Room	401	402	403	404	405	406	407	408	All Day Seminar
Hosting Committee			King County Sub-section 3 Approaches to Asset Management, Part 1	Engineering Emergency Preparedness & Disaster Response, Part 1	Water Loss Control Water Loss Control, Part 1	Distribution Systems Asset Management: From Retrofit to Rehab			Bus Pick-Up Zone Water Treatment Green River Filtration Facility Tour
Moderator			<b>Scott Jonas</b>	<b>Kyle Thompson</b>	<b>Patti Godwin</b>	<b>Pat Everham</b>			<b>Bill Evans,</b> <b>Enoch Nicholson</b>
8:30 - 9:00	Empty	Empty	Sammamish Plateau Water & Sewer District - <b>Jillian Hostenske, Tammy Whipple, Kyle Wong, Dalton Langlois</b>	Resilience Planning - A State and National Level Perspective - <b>Kent Yu</b>	Water Loss Auditing & Water Leak Detection: How Much is Being Lost & Where Does it Go? - <b>Michael Grimm</b>	Seismic Retrofit of Steel Water Reservoirs - <b>Jon Conner, Mike Craig</b>	Empty	Empty	History & Contracting Method for Tacoma Water's 150 MGD Green River Filtration Facility - <b>Randy Krueger</b>
9:00 - 9:30	Empty	Empty		Tualatin Valley WD's Approach to Seismic Resiliency - <b>Michael Britch</b>					
9:30 - 9:45 Break									
9:45 - 10:15	Empty	Empty	Sammamish Plateau Water & Sewer District - <b>Jillian Hostenske, Tammy Whipple, Kyle Wong, Dalton Langlois</b> (continued)	Earthquakes & Water Storage Reservoir Design - <b>Travis McIntosh</b>	Real Water Loss Control: Pressure Management Case Studies - <b>Andrew Chastain-Howley</b>	Seismic Retrofit of Steel Water Reservoirs - <b>Jon Conner, Mike Craig</b> (continued)	Empty	Empty	
10:15 - 10:45	Empty	Empty		Seismic Options for New & Old Reservoirs - <b>Lance Stevens, Myron Basden</b>	Show Me the Money! Apparent Loss Reduction Equals Revenue Recovery for Water Systems - <b>Brian Skeens</b>	Anode Retrofitting: Lengthen Pipe Service Life At a Fraction of the Cost of Replacement - <b>Matthew Palmer</b>	Empty	Empty	Tacoma Water Green River Treatment Facility Plant Overview/Description - <b>Gary Fox, Hilary Lorenz</b>
10:45 - 11:00 Break									
11:00 - 11:30	Empty	Empty	City of Bellevue Utilities (Part 1 of 2) - <b>Bill Heubach, Kip Fockler, Martin Chau</b>	Seismic Planning & Mitigation Programs - <b>Brian Knight</b>	Washington's Water Use Efficiency Program Implementation: Case Studies - <b>Cynthia Nelson</b>	Water Well Rehabilitation - Understanding the Science and Synergy in Chemistry and Processes - <b>LeRoy Palmer, Todd Eden</b>	Empty	Empty	Operations in Engineering and Engineering in Operations - <b>Alicia Leeds, Jeff Bolam</b>
11:30 - 12:00	Empty	Empty		Assessing Seismic Risk of Water Systems: Application of AWWA J-100 - <b>Donald Ballantyne</b>	Case Study: Non-Revenue Water Loss in the City of Wala Wala - <b>Adrian Sutor</b>				
CEUs			ID/OR/WA 0.3/0.3/0.3	ID/OR/WA 0.3/0.3/0.3	ID/OR/WA 0.3/0.3/0.3	ID/OR/WA 0.3/0.3/0.3	ID/OR/WA 0.3/0.3/0.3	ID/OR/WA 0.3/0.3/0.3	Lunch 12:00 - 12:45



## Technical Program Wednesday, April 29

		Afternoon Pre-Conference Seminar - Must Attend All 3 Hours for CEUs							
Afternoon Room	401	402	403	404	405	406	407	408	
Hosting Committee			King County Sub-section 3 Approaches to Asset Management, Part 2	Engineering Emergency Preparedness & Disaster Response, Part 2	Water Loss Control Water Loss Control, Part 2	Distribution Systems Asset Management: From Maintenance To Replacement			Lunch 12:00 - 12:45
Moderator			<b>Scott Jonas</b>	<b>Anh Quach</b>	<b>Steve Hancey</b>	<b>Jeff Austin</b>			
1:00 - 1:30	Empty	Empty	City of Bellevue Utilities (Part 2 of 2) - <b>Bill Heubach, Kip Fockler, Martin Chaw</b>	EWEB's Approach to Resiliency Through Master Planning & Emergency Preparedness - <b>Mel Damerwood, Wally McCullough</b>	New Tools For the Water Loss 'Tool Box' - Helping North American Water Utilities Analyze Their Leakage - <b>Reinhard Sturm</b>	ASR Well Maintenance: What Happens When ASR Wells Stop Giving - Idaho Case Studies - <b>LeRoy Palmer</b>	Empty	Empty	
1:30 - 2:00	Empty	Empty		Tualatin Valley WD's Framework for Emergency Preparedness - <b>Michael Britch</b>					
2:00 - 2:15 Break									
2:15 - 2:45	Empty	Empty	Tacoma Water - <b>Heather Pennington, Mike Gray, Seth Doull, Todd Shepherd</b>	Watershed Protection From Wildfire - <b>Tom Hickmann</b>	Distribution System Pressure Management - <b>Ryan Withers</b>	Water Well Asset Management Programs: A New Sustainable Approach to Maintaining Well Performance and Water Quality - <b>Ray Reece, Randy Moore</b>	Empty	Empty	
2:45 - 3:15	Empty	Empty		Seattle Public Utilities' Experience With Water System Depressurization Events - <b>Jim Nilson</b>	Critical Transmission Mains Monitoring: Innovation in Leak Detection - <b>Carl Sharkey</b>	Asset Management: How Do You Prioritize Pipeline Replacement? - <b>Michelle Johnson</b>			
3:15 - 3:30 Break									
3:30 - 4:00	Empty	Empty		Retrospect: Lessons Learned From Emergency Replacement of a 54" Butterfly Valve - <b>Tyler Wubbena, Matthew Duffy</b>	New Leak Detection Technology Using Helium - <b>Randy Moore, Dawn Halpern</b>	Asset Management: The Importance of Collaboration Between Operations, Maintenance & Engineering - <b>Bill Heubach</b>	Empty	Empty	Solids Handling Using Screw Presses: A Case Study - <b>David Whitbeck</b>
4:00 - 4:30	Empty	Empty		Gas Spill Threatens Water System - Response Roadmap - <b>Patrick Craney</b>	The Decision Behind Our Technological Revolution: Could A ML Work For You? - <b>Ian Black</b>				Q&A
CEUs			ID/OR/WA 0.3/0.3/0.3	ID/OR/WA 0.3/0.3/0.3	ID/OR/WA 0.3/0.3/0.3	ID/OR/WA 0.3/0.3/0.3			ID/OR/WA 0.6/0.6/0.6

Tour of the Green River Treatment Facility - **Gary Fox, Chris McMeen, Hilary Lorenz, Jason Moline, Randy Krueger** (12:45 - 3:00)



## Technical Program Thursday, April 30

Thursday Morning Early Bird Session									
Morning Room	401	402	403	404	405	406	407	408	409
Hosting Committee Moderator	Water Resources	Water Resources	Historian	Engineering	Water Quality	Distribution Systems	Personal Leadership		
	<b>Rob Amear</b>	<b>Catherine Howells</b>	<b>Colin Sherrill</b>	<b>Kyle Thompson</b>	TBD	<b>Doug Schlepp</b>	<b>Adrienne Lindsey</b>		
7:30 - 8:30	Innovative Legal Mechanisms to Protect Source Waters: 3 Case Studies - <b>Dan Seligman</b>	Histories of Our Utilities - <b>Catherine Howells</b>	Recommended Procedures & Use of Fire Hydrant Flow Tests - <b>Kyle Thompson</b>	Fire Suppression Systems & Water System Design & Operation - <b>Steve Swarouth, Travis Ripley</b>	Mercer Island E-Coil Event of 2014 - <b>Steve Deem, Bob James</b>	Innovative Approaches for Watershed Protection - <b>Janet Cherry, Conna Hayes</b>	Aqua Athenas Event for Women: A Discussion on Personal Branding - <b>Nicki Pozos</b>	Empty	Empty
CEUs	ID/OR/WA 0.1/0.1/0.1	ID/OR/WA 0.1/0.1/0.1	ID/OR/WA 0.1/0.1/0.1	ID/OR/WA 0.1/0.1/0.1	ID/OR/WA 0.1/0.1/0.1 pending	ID/OR/WA 0.1/0.1/0.1	No CEUs		
Thursday Afternoon Regular Technical Session									
Afternoon Room	401	402	403	404	405	406	407	408	409
Hosting Committee Moderator	Public Information	Water Resources (Mitigation As Tool in Water Rights Planning)	Water Treatment	Engineering	Water Quality	Distribution Systems	Customer Service	Public Officials	Water Information Technology
	<b>Libby Barg</b>	<b>Justin Iverson</b>	<b>Matt Maring</b>	<b>Nick Robertson</b>	<b>Kim Ervin</b>	<b>Laurelin Ward</b>	<b>Daneka Keith</b>	<b>Len Englund</b>	<b>Ronda Farmer</b>
1:30 - 2:00	State Route 520 Eastside Transit & High Occupancy Vehicle Project - Utility Agreement With WSDOT for Relocations & Replacements - <b>Jay Hummel</b> (No WA CEUs)	Washington's Water Right Mitigation Program - Policy & Practice - <b>Thomas Pors</b>	Filter Media Asset Management: A New Sustainable Approach to Maintaining Filter Performance - <b>Chadd Matthews, Randy Moore</b>	Developing & Rehabilitating Water Supply Wells - <b>Kriss Schneider, Steve Schneider</b>	The Baker City Water Crisis: Emergency Response & Accelerated Implementation of Treatment - <b>Michelle Owen, Anna Zakutkowsky, Bryan Black</b>	Getting Creative in Bellevue: A Unique Approach to Evaluating & Improving a Critical Storage Tank & Pump Station Within a Residential Neighborhood - <b>Tom Lindberg, Jim Nicolls</b>	EVERYONE Needs Customer Service Skills! - <b>Jacki Masters</b>	Panel Discussion: Managing Utilities in the "New Normal" - <b>Angie Sanchez, Vmnoche, Nav Ota</b> (No OR CEUs)	The How, What, When, Where & Why of Communication Protocols & Topologies Between SCADA, PLCs & Control Devices - <b>Rob Barrett</b>
2:00 - 2:30		Securing Water Right Mitigations for Source Development Projects - <b>Joe Plahuta</b>	Replacing or Topping Off Filter Media: Theory & Practical Experience - <b>Alex Chen</b>			Placing a 6 MG Tank & Pump Station Within a Residential Neighborhood - <b>Tom Lindberg, Mark Handzik</b>			
CEUs	ID/OR/WA 0.1/0.1/0.1	ID/OR/WA 0.1/0.1/0.1	ID/OR/WA 0.1/0.1/0.1	ID/OR/WA 0.1/0.1/0.1	ID/OR/WA 0.1/0.1/0.1	ID/OR/WA 0.1/0.1/0.1	ID/OR/WA 0.1/0.1/0.1	ID/OR/WA 0.1/0.1/0.1	ID/OR/WA 0.1/0.1/0.1
2:30 - 2:45 Break									
2:45 - 3:15	Growing Social Media Followers Through Emergency Communications - <b>Justin Finestone</b>	Current Impediments & Future Opportunities for Water Rights Issuance in Oregon - <b>Adam Sussman, Dwight French</b>	Cleaning Up Someone Else's Mess: Well-Head of Treatment of PCE - <b>Shawn Kohztz, Bill Carr, Roger Greaves</b>	Construction Sequencing Plan Minimizes Service Disruption - <b>Laurie Fulton, Jay Gibson</b> (No WA CEUs)	Portland Water Bureau's Experience With a Non-Acute Total Coliform Rule Violation in September 2013: Part 1 of 2 - <b>Kimberly Gupta</b>	What Do You Mean, We Can't Use HDD (Horizontal Directional Drilling)? Have You Seen the Site? - <b>Matt Hickey</b>	Credible or Approachable, What's Your Message? - <b>Brian Murphy</b> (No ID, WA CEUs)	Water is Life - <b>Catherine Howells</b> (No OR CEUs)	Smart Grid for Distribution System Water Quality Management - <b>Michael Karl</b>
3:15 - 3:45			Biological Filtration: Methods for Monitoring & Control - <b>Jennifer Smith</b>	We Are All In This Together: How Great Communication Between the Contractor, Engineer & Owner Helps Build a Successful Project - <b>Joelle Bennett, Arin Atiyeh, Jeff Fuchs</b> (No WA CEUs)	Assessing a Non-Acute Total Coliform Rule Violation at Portland Water Bureau: What Happened, What Worked, What Didn't, & Why? Part 2 of 2 - <b>Melinda Friedman</b>	Resilient Lane County: A Partnership to Cultivate a Culture of Preparedness - <b>Jill Hoyenga</b>			Making Water Systems Smarter Using M2M (Internet of Things) Technology - <b>Michael Karl</b>
CEUs	ID/OR/WA 0.1/0.1/0.1	ID/OR/WA 0.1/0.1/0.1	ID/OR/WA 0.1/0.1/0.1	ID/OR/WA 0.1/0.1/0.1	ID/OR/WA 0.1/0.1/0.1	ID/OR/WA 0.1/0.1/0.1	ID/OR/WA 0.1/0.1/0.1	ID/OR/WA 0.1/0.1/0.1	ID/OR/WA 0.1/0.1/0.1
3:45 - 4:00 Break									
4:00 - 4:30	Idaho's Water Right Mitigation Program: Creative Approaches for Municipal Water Providers - <b>Scott King</b>	2nd Year of Construction: Start-Up or New Pre-Treatment & Solids Handling Processes at the LOTWTP - <b>Austin Peters, Kari Duncan, Kevin Batridge</b>	The Challenges a CM/GC Must Face with Changing Project - <b>Thomas Paul</b> (No OR, WA CEUs)	Evaluating a System-Wide Boil Water Notice Through A Customer Service - <b>Scott Bradway</b>	Ashtand Emergency Supplemental Water Source Transmission Line - <b>Tony Pardi, Jeff Ballard</b>	Shying Away From Introvert Stereotypes: Impacts On Workforce Dynamics - <b>Andrew Mishihara</b> (No ID, WA CEUs)	Coal Creek Parkway Culvert Replacement Project - <b>Bruce Jensen</b> (No OR, WA CEUs)		
4:30 - 5:00	The Challenges of Public Participation in Project Development - <b>Teresa Elliott, Catherine Howells</b> (No WA CEUs)	Can You Get More Out of Your WTP? Optimize It! - <b>Craig Anderson, Michael Grimm, Jerry Elliott, Lee O'Dell</b>	Panel Discussion: Contractor's Perspectives on Construction - <b>Slayden Construction Group &amp; Mortenson Construction</b> (No CEUs)	Guideline Development for Managing Microbial Water Quality in Healthcare Facility Potable Water Distribution Systems - <b>Alex Moridi</b>	Two Treatment Facilities In One: Conducting Direct Filtration & Conventional Filtration At the Same Location On the Same Water Source - <b>Charlie Bromley</b>	The Merits, Demerits & Inevitability of Point-of-Use Water Treatment - <b>Paul Berg</b> (No WA CEUs)			Automating Security & Connectivity For Industrial Control Systems - <b>David Mattes</b>
CEUs	ID/OR/WA 0.1/0.1/0.1	ID/OR/WA 0.1/0.1/0.1	ID/OR/WA 0.05/0.0	ID/OR/WA 0.1/0.1/0.1	ID/OR/WA 0.1/0.1/0.1	ID/OR/WA 0.05/0.1/0.1	ID/OR/WA 0.1/0.1/0.1	ID/OR/WA 0.1/0.1/0.1	ID/OR/WA 0.1/0.1/0.1

## Technical Program Friday, May 1

		Friday Morning Regular Technical Session							
Morning Room	401	402	403	404	405	406	407	408	409
Hosting Committee	Water Conservation	Water Resources (Integrated Planning For Municipal Water Supply)	Water Treatment	Engineering	Water Quality	Distribution Systems / Small Systems	Utility Management	Research (Climate Change)	Safety
Moderator	<b>Jeff Petersen</b>	<b>John Lambie</b>	<b>Mitt Larsen</b>	<b>Nick Augustus</b>	<b>Mike Grimm</b>	<b>Don Poproff</b>	<b>Dan Sleeth</b>	<b>Sam Perry</b>	<b>Mike Jacobs</b>
7:30 - 8:00	Using Objectives Prioritization to Drive Alternative Rate Structures - <b>Chris Gonzalez</b>	Collaborative Planning to Support Improved Water Resources Management for Municipal Water Supply Needs - <b>Dave Christensen</b>	Methods Used to Collect & Interpret Raw Data From a GAC Adsorption Pilot Plant Study to Identify Fundamental Design & Operating Criteria - <b>Bill Persich</b>	Centrifugal Pump Hydraulics - <b>Joe Evans</b>	Ice Pipping: An Innovative Method of Cleaning Water Lines (Case Studies) - <b>Randy Moore, Jeff Austin</b>	Groundwater Overlapping: Searching For Innovative Solutions in Eastern Washington - <b>Daniel Seligman</b>	Using Program Management to Identify & Address Organizational Development Needs - <b>Dele Jutila</b>	Climate Change & Water in the Pacific Northwest: Recent Research & Implications - <b>Guillaume Mauger</b>	Contractor & Visitor Environmental, Health & Safety Program Orientation - <b>Bill Carr</b>
8:00 - 8:30		Clark Public Utilities Supply Needs in the Lewis River Planning Unit - <b>Doug Quinn</b>	Water Source Selection to Control Disinfection By-Products in Astoria, Oregon - <b>Paul Berg</b>	Reducing Existing Pump Station Energy Consumption - <b>Tino Senon</b>	Implementation of a Unidirectional Flushing Program - Great Way to Flush - <b>Susan Femaus, Daniel Reisinger, Lara Kammereck</b>	A Tale of Two Treatment Plants - <b>Allida Leeds, Austin Peters</b>	Impacts of Extreme Events on Water Utilities - <b>Kenan Ozekin</b>		Security Master Planning to Protect Water Resources - <b>Lara Kammereck, Dave Sobock, John Saunders, Hannah Pierce</b>
CEUS	ID/OR/WA 0.1/0.1/0.1	ID/OR/WA 0.1/0.1/0.1	ID/OR/WA 0.1/0.1/0.1	ID/OR/WA 0.1/0.1/0.1	ID/OR/WA 0.1/0.1/0.1	ID/OR/WA 0.1/0.1/0.1	ID/OR/WA 0.1/0.1/0.1	ID/OR/WA 0.1/0.1/0.1	ID/OR/WA 0.1/0.1/0.1
8:30 - 8:45 Break									
8:45 - 9:15		Addressing Regional, Local and Municipal Water Supply Needs: Idaho's Comprehensive Aquifer Planning and Management (CAMP) Program - <b>Neely Miller</b>	UV Disinfection: Design Assumptions vs. Real-Life Operations - <b>Qianru Deng</b>	Turn-Key Factory Built (TKFB): Complete Stations Utilizing Packaged Equipment & Building Systems - <b>Jack Boyd, Joe Evans</b> (No WA CELS)	Accumulation & Mitigation of Metals on Plastic & Cement--lined Pipe - <b>Andrew Hill</b>	Asset Management is Not Just For the Big Utilities: How Olathe, Kansas Public Works is Achieving Benefits From Comprehensive Asset Management - <b>Nick Pealy, Scott Parker, Sarah Doherty</b>	Presenting to Municipal Committees: Tips & Tricks - <b>Brian Sheets</b>	From Assessment to Decision-Making: Mainstreaming Climate Change at Seattle Public Utilities - <b>Paul Fleming</b>	Water System Electrical Safety - <b>Mike Hetzler</b>
9:15 - 9:45		Municipal Water Supply Perspective On the Treasure Valley Comprehensive Aquifer Management Plan (TV Camp) - <b>Warren Stewart</b>	Submerged Membranes - Then, Now, & What's Next - <b>Mark Graham</b>	Nonstructural Bracing Per 2012 International Building Code - <b>Mark Nelson</b> (No ID, WA CELS)	The Science of Mixing & Improving Water Quality in Storage Tanks - <b>Mike Duer</b>		Water Utility Planning Strategies to Mitigate Impacts of Climate Change - <b>Lynn Williams</b>		
CEUS	ID/OR/WA 0.1/0.1/0.1	ID/OR/WA 0.1/0.1/0.1	ID/OR/WA 0.1/0.1/0.1	ID/OR/WA 0.05/0.1/0	ID/OR/WA 0.1/0.1/0.1	ID/OR/WA 0.1/0.1/0.1	ID/OR/WA 0.1/0.1/0.1	ID/OR/WA 0.1/0.1/0.1	ID/OR/WA 0.1/0.1/0.1
9:45 - 10:00 Break									
10:00 - 10:30		Oregon's Place-Based Planning Program & Its Role in Municipal Water Supply Planning Among Competing Regional Water Needs - <b>Alyssa Mucken</b>	Corrosion Control - Beyond pH & Alkalinity - <b>Russell Porter</b>	Your Beautiful Pump Station, The Distribution System Heart Architecture, A/C, Mechanical & Construction Lessons From the Bonita Pump Station Project - <b>Taylor Stockton</b>	Solutions for Water Quality Issues in Your Water Storage Tank - <b>Mark Moore</b>	My Concrete is Cracked! Is That OK? - <b>Matthew Perkins</b>	Narrowing the Funnel: Making Decisions in a Complex World - <b>Nicki Pozos, Mark Knudson, Kevin Hanway</b>	Establishing a Watershed Monitoring Program in the North Santiam Watershed - <b>Lacey Goeres-Priest</b>	Water Storage Tank Safety Standards - <b>Tim Tobin</b>
10:30 - 11:00		Evaluating Conservation Investments in An Era of Declining Demands - <b>Edward Cebron</b>	Corrosion Conditions & Mitigation in a Reclaimed Water Facility - <b>Milton Larsen</b>	Meeting the Challenges of In-Water Design & Construction: The LDT WRP River Intake Pump Station - <b>Jamie DuBois, Nick Robertson, Patrick Van Duser, Dave Prock, Kevin Batridge</b>	Increases in Finished Water Retention Times & the Effects on Water Quality - <b>Kristel Fesler</b>	GASB 34 Compliant Asset Management Programs for Potable Water Storage Tanks - <b>Jeff Austin, Randy Moore</b>	Third Party Solar Array, Financing, Installation & Performance - <b>David Peters</b>	Effective Water Storage Tank Inspections - <b>John Kitchen</b>	
CEUS	ID/OR/WA 0.1/0.1/0.1	ID/OR/WA 0.1/0.1/0.1	ID/OR/WA 0.1/0.1/0.1	ID/OR/WA 0.1/0.1/0.1	ID/OR/WA 0.1/0.1/0.1	ID/OR/WA 0.1/0.1/0.1	ID/OR/WA 0.1/0.1/0.1	ID/OR/WA 0.1/0.1/0.1	ID/OR/WA 0.1/0.1/0.1



## Technical Program Friday, May 1

Friday Afternoon Regular Technical Session						
Afternoon Room	401	402	403	404	405	406
Hosting Committee	Water Conservation	Water Resources (Source Water Protection)	Water Treatment / Research / Water Quality	Engineering	Water Information Technology	Distribution Systems
Moderator	<b>Jeff Petersen</b>	<b>Rob Amear</b>	<b>Kim Gupta</b>	<b>Jim Konigsfeld</b>	<b>Rob Barrett</b>	<b>Dave Stanley</b>
1:30 - 2:00	Case Studies: Working With Customers & Contractors to Improve Irrigation Scheduling Management - <b>Jenna Smith</b>	Source Water Protection Planning: A New Tool For Long Term Sustainability of Source Water Quality - <b>Rob Amear</b>  How Eco-System Service Valuation & Quantification Tools Can Support Municipal Drinking Water Source Protection - <b>Rowan Schmidt</b>	How Accurate is Your Turbidity Data? Findings From Washington State's Turbidity Project - <b>Steve Deern</b> , <b>Nancy Feagin</b>	Large System Planning - Hydraulic Model & Water Master Plan Development for United Water (Iaho) - <b>David Stangel</b> , <b>Dan Brown</b>  Using Hydraulic Modeling to Support Operational Decisions & To Solve Water Quality Challenges - <b>Jennifer Henke</b>	Seattle Public Utilities' I-SCADA IMS Data Portal: Making All That Data (& More) Accessible To Corporate Users - <b>Bill Broadnax</b> (No WA CEUs)  From Typewriters to Tablets: How the Engineering Industry & Its Workforce is Changing & What This Means for Today's IP - <b>Kysa Cronrath</b> (No ID/WA CEUs)	Condition Assessment of Bellingham WTP's Almost 100-Year Old Intake Portal - <b>Daniel Buonadonna</b> , <b>Jerry Duppong</b>  Condition Assessment of High Consequence Pipes: Portland Water Bureau's Efforts to Assess Its Pipes - <b>Jeremiah Hess</b>
2:00 - 2:30						Knowledge Gained Through Water For People (Malawi) Impact Tour - <b>Lynn Williams</b> (No WA CEUs)
CEUs	ID/OR/WA 0.1/0.1/WA pend	ID/OR/WA 0.1/0.1/WA pend	ID/OR/WA 0.1/0.1/WA pend	ID/OR/WA 0.1/0.1/WA pend	ID/OR/WA 0.05/0.1/0	ID/OR/WA 0.1/0.1/WA pend
2:30 - 2:45 Break						
2:45 - 3:15	Re-Invigorating Long-Standing Toilet Programs, With An Emphasis on 1.06 gpm Premium WaterSense Toilets - <b>Billie Fisher</b> (No WA CEUs)	Ground Water Contamination From UICs - <b>Tom Hickmann</b>	Critical Alarm Setup & Testing at the City of Anacortes Filtration Plant - <b>Nancy Feagin</b> , <b>Jeff Marrs</b>	The Cost-Effective Use of Computational Fluid Dynamic Modeling to Determine T10 Times for Disinfection Compliance - <b>Paul Berg</b> , <b>Adam Nielsen</b> , <b>Chris Irvin</b> , <b>Ray Leipold</b>	Mobility: iPhone & iPad Applications for Utilities - <b>Michael Karl</b>	Building & Calibrating the New Bellevue Water System Model - <b>Ed Wicklein</b> , <b>Doug Lane</b> , <b>Auruelle Nabonnand</b>
3:15 - 3:45	Evaluation of the Water Efficiency of Zhome - <b>Michael Brent</b> (No WA CEUs)	First Steps to Implement a Source Water Protection Program For A Surface Water System - <b>Kristel Fessler</b>	Assessment of Arsenic Treatment: Detailed Mathematics of Treatment Approaches & Review of Operations Monitoring - <b>Russell Mau</b>	Optimizing Water Supply Operations: Beat the Heat Through Short-Term Demand Forecasting - <b>Nick Augustus</b>		Balancing the Hydraulic Grade Line in a Large Pressure Zone - <b>Josh Miner</b> , <b>Peter Boone</b>
CEUs	ID/OR/WA 0.1/0.1/0	ID/OR/WA 0.1/0.1/0.1	ID/OR/WA 0.1/0.1/0.1	ID/OR/WA 0.1/0.1/0.1	ID/OR/WA 0.1/0.1/0.1	ID/OR/WA 0.1/0.1/0.1
3:45 - 4:00 Break						
4:00 - 4:30	Water Demand Trend: Bellevue's Story - <b>Doug Lane</b>	Use of Voluntary Incentives to Protect Drinking Water in the McKenzie Watershed, Oregon - <b>Karl Morgenstern</b>	Assessment of Arsenic Treatment: Detailed Mathematics of Treatment Approaches & Review of Operations Monitoring - <b>Russell Mau</b>	Taking Your Hydraulic Model to the Next Level - <b>Joseph Foote</b> , <b>Chris Peterschmidt</b>	Intelligent Water & Organizational Culture - TBD	Water-Tight Reinforced Concrete Structures - <b>Dust Roongsang</b> (No WA CEUs)
4:30 - 5:00	New Smart Metering Options For Small-to-Medium Utilities - <b>Dan Carrazuola</b> , <b>Randy Moore</b>	What is Source Water Protection Planning? And Why Go Beyond the State Guidelines & Rules? Current Status & Future Plans for the Clackamas River Water Providers - <b>Kimberly Swan</b>	Benefits of Hydraulic Model Integration with GIS: TWW's Move Towards a Ubiquitous Model - <b>Josh Miner</b> , <b>Peter Boone</b>	Benefits of Hydraulic Model Integration with GIS: TWW's Move Towards a Ubiquitous Model - <b>Josh Miner</b> , <b>Peter Boone</b>		Optimizing the Guam Water System With a Hydraulic Model - <b>Colin Ricks</b> (No WA CEUs)
CEUs	ID/OR/WA 0.1/0.1/0.1	ID/OR/WA 0.1/0.1/0.1	ID/OR/WA 0.1/0.1/0.1	ID/OR/WA 0.1/0.1/0.1	ID/OR/WA 0.1/0.1/0.1	ID/OR/WA 0.1/0.1/0.1
						Technology Innovations for Rural Water Systems: Lessons From Peace Corps Dominican Republic - <b>Joshua Kennedy</b>
						Components and Benefits of Properly Constructed Wells - <b>Steve Schneider</b>
						Top Ops
						ID/OR/WA 0.1/0.1/0.1
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## Vendor List/Booth Map

### Vendor Schedule


**Display Set-Up:** Wednesday, April 29, 2:00-5:00pm | Thursday, April 30, 7:00-9:00am  
**Display Hours:** Thursday, April 30, 10:30am-5:00pm with exclusive vendor visitation from 10:30am to 1:00pm  
Friday, May 1, 11:00am-1:30pm  
**Display Tear-Down:** Friday, May 1, 1:30-3:30pm

### Exhibitors

American Ductile Iron Pipe Co.  
American Leak Detection  
AmeriWest Water Services Inc.  
Ameron Water Transmission Group  
Antec Corporation  
APSCO LLC  
Aquionics  
Arch Chemicals, Inc., a Lonza company  
Armorcast Products Company  
Badger Meter  
Beaver Equipment  
Branom Instrument Company  
Business Oregon  
CB Pacific  
Century West Engineering  
Consolidated Supply Co  
Continental Utility Solutions  
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Farwest Corrosion Control Co.  
FCS Group  
Ferguson Waterworks  
Ferguson Waterworks, Meter & Automation Group  
Fine Line, Division of PCE Pacific, Inc.  
Flomotion Systems Inc.  
Frank J. Martin Co.  
Furrow Pump  
General Pacific  
Goble Sampson Associates  
H.B. Jaeger  
H.D. Fowler Co. Inc.  
HACH Company  
Harmsco Filtration Products  
Hasa, Inc  
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Mueller Systems  
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MWH Americas, Inc  
Neptune Technology Group  
Northwest Pipe Company  
Oldcastle  
Owen Equipment Company  
PACE Engineers, Inc.  
Pacific Test and Measurement  
Pall Membranes  
Parametrix  
PumpTech Inc.  
Pure Technologies  
Ranney Collector Wells - Layne  
RH2 Engineering  
Roamc Industries Inc  
Rosemount Analytical  
RPS Industries  
SAF-T-FLO Water Services, Inc.  
Schneider Water Services  
Sensus, USA  
Shannon & Wilson  
Skillings Connolly  
Specialty Controls Inc  
Specification Rubber  
Specified Fittings, LLC  
Stantec  
Sutron Corporation  
Sybis LLC  
Tank Industry Consultants  
Tempered Networks  
TGO Technologies  
The Ford Meter Box Company  
Tinnea & Associates, LLC  
TRIPAC  
Tyler Union / McWane Ductile  
Urecon Pre-Insulated Pipe  
US EPA Water Security Division  
Utility Service Co., Inc.  
Utility Services Associates  
VSL/Structural Technologies  
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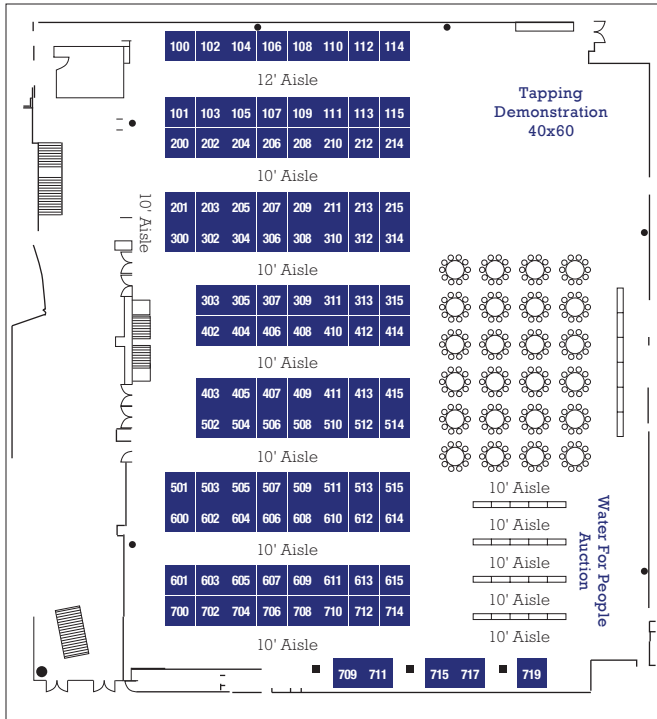
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# Rewards and Challenges of Constructing the Lake Oswego Tigard Water Partnership's New Water Treatment Plant

## **The Lake Oswego Tigard**

Water Partnership is midway through construction on most facilities that will increase the system capacity from 16MGD to 38 MGD and provide a reliable source of high quality water to more than 90,000 customers in two communities. But, how do you construct a new water treatment plant around an existing plant that needs to keep delivering water to customers? According to Kari Duncan, Lake Oswego's Water Treatment Plant Manager, it's a bit like replacing your car's engine—while it's running! The rewards of a new, seismically resilient, reliable, and economical system, however, are worth the temporary headaches according to Duncan.

The water treatment plant, located in an established neighborhood in West Linn for nearly 50 years, is the focal point of the \$254 million water construction program that includes:

- A new river intake on the Clackamas river in Gladstone,
- A new water treatment plant in West Linn,
- A new 3.5 MG reservoir in Lake Oswego,
- A new pump station in Tigard, and

- 10 miles of pipeline in four communities, connecting all facilities.

## **Rewards:**

### **Improved treatment processes**

The current plant uses direct filtration, which provides seasonal challenges for the water treatment operators due to the variable water conditions of the Clackamas River. The new plant will use a ballasted flocculation process for enhanced solids removal, intermediate ozonation for taste and odor control and high-rate filtration through granular activated carbon filters. The treatment technology was selected for its compact footprint and enhanced treatment capabilities. Water from the new system will be delivered to Lake Oswego and Tigard customers starting in 2016.

### **Saving money for customers**

Having a cost sharing partner for the needed upgrades and joint system operations enables both communities to do what neither could on its own while keeping costs down in the long run. The infrastructure upgrades will treat and deliver water to homes and businesses year-round, 24 hours a day, all for about a penny per gallon.

## **The new plant and facilities will be seismically resilient**

All new facilities are designed and constructed to withstand a 9.0 Cascadia Subduction Zone earthquake.

- Critical treatment facilities and pipelines at the new water treatment plant are supported by 1,100 deep, reinforced concrete piles to keep them in place during shaking. A fully redundant electrical supply from PGE will also be in place.
- A new, reinforced concrete river intake pump station is anchored to basalt bedrock with 14 ground anchors and retractable fish screens to protect against river debris flows. Like the plant, a fully redundant electrical supply will keep power flowing to the facility if the primary supply is out.
- New, large diameter water pipelines will be made from steel with double-welded joints for added strength. Design of these pipes is based on the performance of similar large pipelines that survived large earthquakes in Japan.
- A new, 3.5-million-gallon reservoir under construction in Lake Oswego includes: seismic cable connections between tank walls and a foundation specially designed to move without cracking or leaking, pre-stressed concrete to increase resiliency, and seismically-activated closure valves on inlet and outlet pipes to protect against emptying of the tank should connecting pipes be damaged.



Foreground: 2 MG clearwell (to be buried) and finished water pump station. Left to right: electrical building, existing filters and sedimentation basins (to be removed), ballasted flocculation, chemical building. Right of yellow crane: solids handling, screw press and gravity thickener.



The new Waluga Reservoir 2 in Lake Oswego contains state of the art seismic design features.





The new river intake pump station on the Clackamas River is held into bedrock with 14 ground anchors.

### Good neighbor approach

When the Lake Oswego Tigard Water Partnership decided to share the costs of upgrading Lake Oswego's aging facilities and share water, remaining a good neighbor was important. Since the existing plant lies in the middle of a residential neighborhood, the Partnership started working early-on with neighbors to make sure the new plant provided amenities, integrated into the community through site planning and design, and would be a good neighbor during construction. The new facility will include a pathway connecting the two frontage streets, a three acre park-like setting on one street and landscaped sitting areas for neighbors and employees.

### Challenges:

During the next 18 months of construction, Duncan and her staff has to maintain reliable water treatment and distribution to Lake Oswego residents and wholesale customers. Since the new plant is being built at the existing plant site, it makes operating the plant tricky.

There are several ways we are keeping the plant operating during construction: construction phasing, creating temporary processes, and working closely with plant designers and contractors at every step.

### Phasing

Construction is being done in three phases, which allows portions of the treatment process to be gradually phased in while older facilities are phased out.


### Creating temporary processes

In preparation for the first phase of construction (August 2013 - December 2014), our operators installed a temporary corrosion control system utilizing Sodium Hydroxide so that the plant's old lime saturation system could be removed, making way for construction of new facilities. Once this temporary system was online, operators performed two rounds of lead and copper sampling to ensure the new corrosion control system was working. Results show the temporary system is working properly and water quality meets all regulatory requirements. A second round of testing will occur this spring.

The existing filter backwash and solids handling system also had to be reduced in size to free up space for the first phase of construction. Two of the four large filter backwash and sediment drying ponds have been demolished so a new mechanical dewatering system can be built in their place.

### Working with designers and contractors

Operations staff are working closely with project designers, construction managers and contractor to ensure the new plant, intake and distribution facilities can be built around the old one while maintaining operations—it's all about teamwork.

Temporary, planned treatment plant shutdowns along with good communications between the contractor, plant staff and project manager, are helping the project go smoothly. Plant staff have worked with the contractor and engineers to develop safety protocols that allow systems to be drained and deactivated, worked on by the contractor, and placed back online with minimal interruption to the water system operation while protecting the safety of the contractor and operations staff. Coordination among the many projects simultaneously under construction is a key element to the project's success. 

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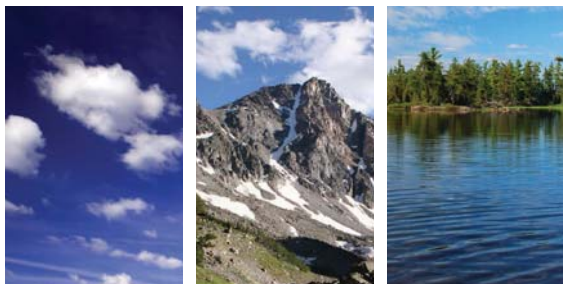
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At one of the national AWWA conferences I heard the keynote speaker, Dr. William Boast, report that:

- More than 50% of the great artists of the Western World lived in Northern Italy, and knew each other during the renaissance period.
- More than 60% of the great composers lived in Vienna.
- 98% of the greatest scientists in the history of the human race lived in the US during the first half of the 20th century.

His point was that quality is drawn to communities of quality, and in an organization of quality there are role models of people of quality who make up the organization.



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AWWA at all levels (National, Section, Sub-section) is a quality organization because it is made up of quality people. So why wouldn't you want to hang out with them, and join them in their various activities?

Hopefully, you know that you are making valuable personal connections by networking with other industry personnel who are willing to share their experiences. The conferences, committees, meet and greets, and newsletters all provide great opportunities to share new concepts, and learn of innovative best practices. The educational opportunities that the association offers from webinars, workshops and conferences provide excellent learning opportunities including time and cost saving ideas.

What you may not realize, is that by belonging to AWWA, you are also an advocate for the industry. Various Utility Councils and committees monitor proposed legislation and regulations and are involved in the decision making process (participating on workgroups, commenting onto drafts, testifying), and letting you know what's being discussed. As the need arises, suggestions for legislative or regulatory improvements are also made on behalf of the industry.

### Thank you

In addition to congratulations for being a member of the quality organization that brings us together, I want express my thanks to those of you who making are an investment of time and effort in being an active member by participating on various committees. I hope you realize that what you get out of the organization is directly related to what you put into it... this is true for all levels of AWWA.



Benjamin Franklin once stated that an investment in knowledge pays the best interest. Think of your professional association membership, and active participation, as an investment in knowledge and your career. So, if you are not an active member, consider making a larger investment, and be prepared to receive a larger return.

Get Involved: If you are interested in becoming more involved in Section activities, checkout the complete listing of committees and their chairs in the last issue of Water Matters .... or look at the Committee listing on the PNWS web page for a listing of committees, a brief description of what they do and their contact info. If you interested in getting more involves locally, refer to the Subsection listing on the website for a map of each state and information regarding each subsection.





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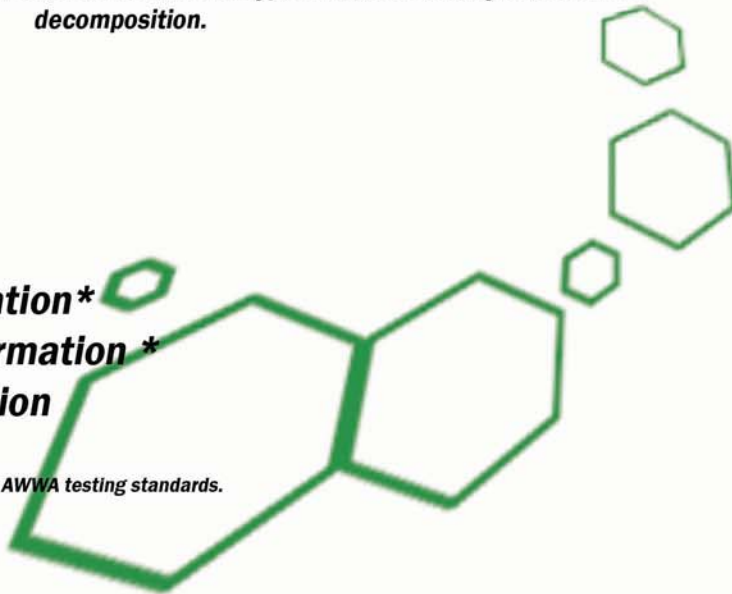
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## History of our Utilities

### SAVE THE DATE during the PNWS Conference

Thursday, April 30, 7:30 - 8:30 am  
History of Our Utilities

#### Water Is Public Health

As many of you know, the history sessions at our annual conferences know, is a lively opportunity to learn about the history of our local utilities. This year we will be highlighting the histories around the Puget Sound — each one of which varies in its source water and challenges. Every water system is unique: dependent on geography, climate, and political will. We forget sometimes to talk about the people who built the systems. There are legendary characters

in each water utility and some might even exist today. These are the men and women who laid the pipes, designed the distribution systems, and kept up with the growth. They took enormous pride in providing safe water to their communities. Outside of the water industry people have almost forgotten why safe and consistent water was so crucial to the growth and economic prosperity of cities.



Seattle's Cedar River Pipeline 1 (1899)

I am reminded of this as we follow the current measles outbreak and the discussions about vaccination. We seem to have forgotten the havoc and heartbreak that epidemics wreak. The great urban epidemics of the 19th Century were from waterborne diseases (cholera, dysentery, typhoid, giardia). Our water systems were created to overcome these diseases and to provide fire flow because conflagrations were also endemic. We in the Northwest had the luxury in the late 1800s to go far afield to find sources of clean water. It is why many of our systems remain unfiltered.

Citizens often forget that clean water is a public health service, but I have yet to find anyone who works in the water industry who doesn't take pride in the fact that they are helping to provide for a healthy and safe community. The risk of waterborne disease is still out there — safe drinking water just keeps it at bay.

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Catherine Howells  
PNWS Historian

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