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Pacific Northwest Section

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Pacific Northwest Section – AWWA

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May 1-3, 2024 | Spokane, WA

- ▶ **Member Engagement and Development Committee (MEDC)**
- ▶ **Utility Management Committee**
- ▶ **Water Conservation Committee**
- ▶ **Water Quality and Research Committee**
- ▶ **Young Professionals Committee**

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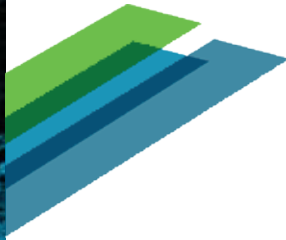
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Community Impact
Doug Schlepp was named the Top Fundraiser across all North America for the AWWA WE Walk! 2023 event.



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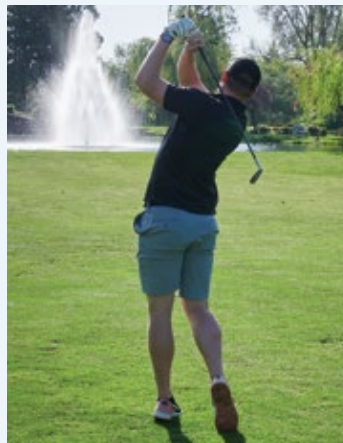


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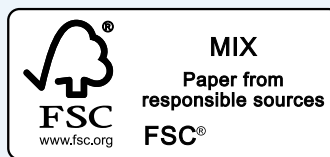
Feature

WELCOME TO THE
PNWS-AWWA'S ANNUAL CONFERENCE 20



Departments

Message from the Chair 6
 PNWS Association Director Report 8
 Committee Reports 10
 Advertiser Product & Service Center 38





A Year in Review

As we all work through these long, dark winter days with the anticipation of spring, we do so with great excitement. The ability to get a new golf season underway, the fresh smell of grass, the flowers in bloom, and birdies in the air! It's my time to reflect on the past year as your Chair of the PNWS-AWWA, and with that comes many thanks as well as a few small victories.

The incoming speech that I gave in Kennewick was one of hope, togetherness, and serving the greater good, to which I feel much gratitude, so with that I would like to highlight just a couple of things that I feel are in a better position after my year as Chair.

Financial Responsibility

One of the first things we tackled as a Board was conference registration rates and the methodology around reviewing and revising them.

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This was not a popular subject to broach but one that needed to be addressed for the long-term financial viability of our Section. Rates had not been raised in several years even though costs had risen significantly. With the recovery of the global pandemic, I felt it necessary to address the need to increase conference registration rates and how we would apply them in the long term. After some passionate discussions, our Board made the tough decision to raise rates prior to the 2023 Spring Conference. The results were astonishing; a record turnout in Kennewick led to a robust Section bottom line, which, in turn, will enable future Boards to focus on membership engagement and philanthropy.

Ad-Hoc Committee

An Ad-Hoc Committee was formed around the long-term methodology for future conference rates and individual CEU rates for training that is offered across our great Section. This Committee was kicked off under my leadership and passed along to Chair-Elect Belmont. The Board will be anxiously awaiting the recommendations from the Ad-Hoc Committee.

Diversity, Equity, and Inclusion

Our Board took immediate action by taking the DEI subcommittee under the Membership Engagement and Development Committee (MEDC) and

making it a stand-alone committee. I am pleased to report that this Committee is thriving with monthly meetings and new tracks that will be presented at our upcoming and future Spring Conferences.

Appreciation

Last but certainly not least, I want to express my sincere gratitude to everyone in the Pacific Northwest Section for their exceptional commitment to the overall betterment of the Section. Your dedication to maintaining and improving our water infrastructure plays a critical role in supporting public health. Thank you for your tireless efforts, professionalism, and passion for our industry. Our work is vital to the well-being of our communities, and I am grateful to have been your Section leader. To my Board of Trustees, thank you for coming to the table with positive intentions and an open mind. The issues we tackled were not easy, but everyone stepped up and did so with grace and integrity. A special thanks to Michelle Cheek for helping the two initiatives that were important to me. You got the ball rolling, and I was fortunate to take it and score. And finally, Chair-Elect Belmont, good luck with your year and your vision; enjoy; it goes quickly. 🙏

Dan Sleeth
PNWS-AWWA Section Chair

I want to express my sincere gratitude to everyone in the Pacific Northwest Section for their exceptional commitment to the overall betterment of the Section.



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Association Finances Remain Strong, and Water 2050 Initiative Takes Center Stage



The Association kicked off 2024 with the winter Board meeting held in Sedona, Arizona, January 11-13. The main topics of focus for the meeting were the elections of new officers, the 2030 Strategic Plan, and the Water 2050 initiative.

The Board was presented with an impressive list of candidates to choose from for the positions of Vice-President, Treasurer, Director at Large, and President-Elect.

The Board selected Andrea Odegard-Begay from the Arizona Section as Director at Large, Reid Campbell from the Atlantic Canada Section as Treasurer, Carol Walczyk from the New Jersey Section, Rebecca Venot from the Alaska Section, and Ken Kawahara for the Hawaii Section to serve as Vice-Presidents on the Association Board. Heather Collins, Assistant Chief of Operation at Metropolitan Water District of Southern California from the Cal-Nevada Section, was elected to the President-Elect position. Each of the people selected is well deserving and will represent the Association well.

Demonstrating the Board and Association's commitment to diversity, equity, inclusion, and the value of Young Professionals, the Board voted to reserve one of the four Director at Large positions for a Young Professional. This ensures that the future leaders of the Association and the Water industry will always have a voice at the table.

As I mentioned in my last article, the 2030 Association Strategic Plan was introduced at the Council Summit by the Strategic Planning Committee Co-Chairs David Rager and Keisha Thorpe. They held sessions with each of the Councils to discuss concerns and thoughts concerning the Plan. Following the Council Summit, the Committee put together a draft of the Plan, which was presented to the Board of Directors at the winter meeting. The draft included the vision statement, mission, core principles, and strategic goals that will be used to guide the Association's activities for the next few years to 2030. The Board spent several hours reviewing, discussing, and brainstorming ideas on clarifying and putting the Plan into action. Each section of the Plan was discussed in small work groups, with each Board member evaluating and giving input on each section. The strategic goals were broken down

into four sections: Member Engagement, Organizational Stewardship, Knowledge Creation and Exchange, and Water Policy and Leadership. The Board and Committee discussed actionable and measurable strategies to achieve each goal. The suggestions and thoughts for each section of the plan were discussed by the Board after the small group exercise, and the Committee will use the recommendations from the Board and present a final draft at the Board of Directors meeting at the ACE Conference in June.

The Association's finances remained strong and ended slightly above the year-end estimate. This is due in part to attendance at Association events and conferences being 103% above the year-end target number of 35,000 attendees.

One of the highlights of the two-day meeting was the time devoted to the Water 2050 initiative. Water 2050 has five key components: Sustainability and Resilience, Innovation, Finance and Affordability, One Water Policy and Equity, and Access and Community Engagement. These five components were driven by 47 recommendations that were derived from the 'Think Tanks' that were held early in the process of developing the initiative. The Board of Directors took a deep look at the 47 recommendations, prioritized them, and put together actionable items to support the key components of Water 2050. This exercise helped to clarify and define what actions will need to be taken now to ensure the sustainability of this vital resource that we all share a part in supplying to our communities and the world. I look forward to being able to share more with you about Water 2050 as this continues to evolve over the coming months.

I am looking forward to the upcoming Section Conference in Spokane and being able to network with my fellow Section members. It is an honor to be part of the best Section in the Association, and I value what you all contribute to the volunteer-led organization.

As always, thank you for allowing me the opportunity to represent the Pacific Northwest Section on the Association Board of Directors. [📧](#)

James Dean
PNWS-AWWA Association Director

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Member Engagement and Development Committee (MEDC)

MEDC Purpose: To support the Pacific Northwest Section of AWWA (PNWS) in the engagement, retention, and growth of membership.

2020 Vision: To align with AWWA's strategic initiative for a sustainable future by bridging young talent with the water industry.

Looking Forward to Seeing You in Spokane!

With the Spring Conference approaching, we look forward to seeing you in Spokane, WA, from May 1-3, 2024. MEDC will host a first-timer's meet and greet and welcome any new attendees to learn about the PNWS-AWWA and how to make the most out of the conference. Also, look out for Eddy, our favorite Water Droplet, for your photo op!

Membership Summit Highlight

Membership is the foundation of AWWA, which is the world's largest scientific and educational association dedicated to improving water quality and supply. The importance of AWWA's members and their contributions to the success of the organization was highlighted during the Annual Membership Summit in Denver on Thursday, January 25, and Friday, January 26. Rhonda Farmer and

Doug Schlepp attended along with other Association and Section membership committee members to learn about and discuss strategies to build a strong membership engagement program.

Mentorship Program Update

Thank you to all who responded. We are now in full swing with the 2023-2024 Mentorship Program, where we will develop a relationship with a fellow AWWA member and network and



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provide invaluable job and leadership skills. Mentor pairs meet about once a month over six months, with sessions on various career development topics. If you are interested in learning more about this program, feel free to contact our Mentorship Program team, Kyle Wong, at kyle.wong@spwater.org or Doug Schlepp at dschlepp@rh2.com with any questions.

Need Help With Reaching Your Subsection Members?

Let us know! We can pull member lists that are specific to your Subsection and renewal date to outreach specific members. Please reach out to the MEDC Chair, Joanie Stultz, at jstultz@brwncald.com or visit us at www.pnws-awwa.org/member-groups/committees/membership-committee.

If you know of a fellow peer or colleague who is not a member and would like to join, they can find information on the AWWA website


at www.awwa.org/membership-volunteering/join.

MEDC is Recruiting!

The MEDC is looking for new members to join our committee! With the transition of our current Chair, Joanie Stultz, this May, we welcome Doug Schlepp as the next incoming MEDC Chair! With the leadership transition, we are developing new roles for the Committee and looking for new recruits. Open roles include the following: Vice-Chair, Secretary, and program roles to support our Mentorship Program, Subsection

coordination, and career fair and student engagement.

Thanks also to our current MEDC Committee Members: **Chris Young, Joanie Stultz, Kyle Wong, Natalie Reilly, Doug Schlepp, Randy Black, DeEtta Fosbury, and Mehrin Selingir**, and support from our Trustee Liaison to the Membership Division **Chandra Hingston**.

Are you interested in learning more about the MEDC? Attend our next monthly call. We meet on the second Friday of the month from 12 pm to 1 pm. Contact jstultz@brwncald.com for the meeting invite. 



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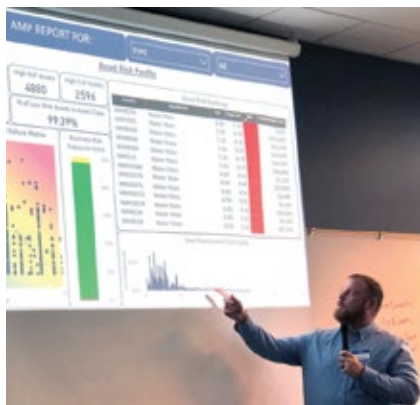
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Utility Management Committee Asset Management+ Training Success!

Sixty-eight (68) water utility staff from Washington and Oregon attended the January 24, 2024, winter training session hosted by the Utility Management Committee (UMC) at Green River College at Kent Station in Kent, WA. Speakers included staff from **Covington Water District, the City of Enumclaw, Veolia at Wilsonville Water Treatment Plant, SRT Consultants, Sammamish Plateau Water & Sewer District, the WA Public Works Board, and the WA Department of Commerce.**

Attendees listened to presentations that spanned the range of utilities' experiences from those who are new to asset management through data-integrated organizations. Other presentations covered infrastructure funding in Washington and asset end-of-life determination. An interactive tabletop exercise provided an opportunity for participants to share their perspectives and experiences on asset management.

Attendees overwhelmingly enjoyed the speakers and the session topics.



Thank you to the energetic and dedicated UMC members who organized this event, including Diane Pottinger, Kim Reid, Theresa Jurotich, Chris Guest, Kimberly Kelsey, Erin McLachlan Sanchez, and Brian Spindor. Based on the post-event survey results and other feedback, attendees overwhelmingly enjoyed the speakers and the session topics.

The UMC will be discussing a future training event at our upcoming meetings. If you are interested in helping, please join us on the third Thursday morning of each month at 9:00 am. Please reach out to the Committee Chair, Ann Hajnosz, at ann.hajnosz@weareharris.com to receive the Teams link or to find out more about the UMC.




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Water Conservation Committee

The Water Conservation Committee held our Fall Meeting on Monday, November 13, 2023. We welcomed guest speaker Laura Allen, a founding member of Greywater Action, a collaborative of educators who teach residents and tradespeople about affordable and simple household water systems that dramatically reduce water use. She has spent the past 20 years exploring simple and ecological water solutions. Laura is the lead author of the *San Francisco Graywater Design Guidelines for Outdoor Irrigation* and has additionally authored *The Water-Wise Home: How to Conserve and Reuse Water in Your Home and Landscape*

(Storey Press, 2015) and *Greywater, Green Landscape* (2017). We enjoyed learning about water conservation in the home environment from Laura's presentation and had a lively Q&A to follow!

The Water Conservation Committee has a few events to note. We scheduled our Winter Meeting for Tuesday, February 27, 2024. In this meeting, we received conservation updates from our members, and held a discussion on winter forecasting and the implications for the summer season. The conservation track at the 2024 PNWS Section Conference will include a three-hour technical session, with presentations from five

water conservation professionals, as well as a pre-conference session focused on *Water Efficiency Solutions for Commercial Properties*. We are also working on an in-person gathering at the Conference and developing a tour for our Annual Summer Meeting, so stay tuned for more information on upcoming events!

For more information about the PNWS Conservation Committee, please contact Chair Cody Scoggins at cody.scoggins@medfordwater.gov, Vice-Chair Brittany Contreras at brittany.contreras@hillsboro-oregon.gov, or Secretary Amy Meaut at amy.meaut@hillsboro-oregon.gov. 

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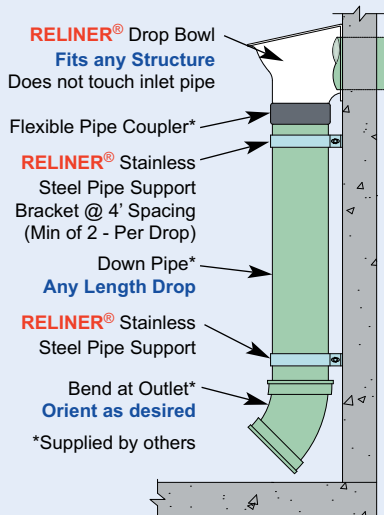
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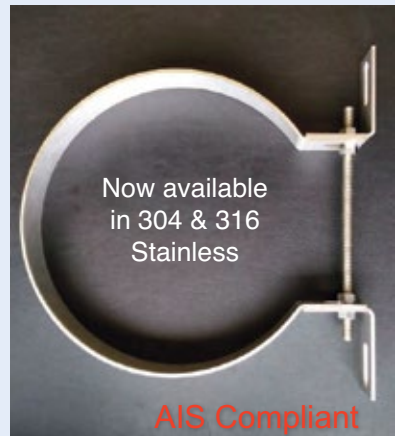
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Water Quality and Research Committee Partner Up for Lead and Copper Rule Workshop

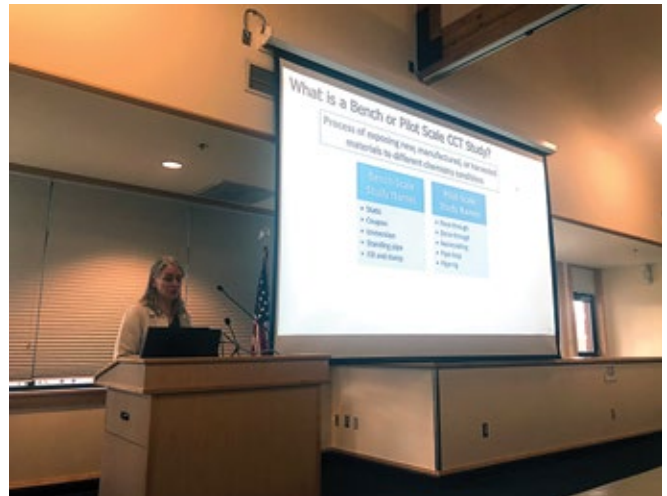
On January 23, 2024, the Water Quality and Research Committees hosted the workshop “The Lead and Copper Rule: What’s New and Improving” for 90 attendees across the section. It was the goal of our Planning Committee to make the workshop accessible to our Section’s members, and to do so, we offered options to attend the workshop at one of two in-person locations in Vancouver, WA, and Meridian, ID, and also offered a virtual attendance option on Zoom. In addition, we provided free registration to five small system-certified operators.

In recent years, the EPA initiated the process to strengthen and overhaul the *Lead and Copper Rule* (LCR), now 32 years old, to identify and remove sources of lead in public water systems and significantly reduce exposure to

lead in drinking water. Our workshop provided guidance and case studies related to the *Revised LCR* (LCRR) and the recently proposed *LCR Improvements* (LCRI) in a program that was tailored to Pacific Northwest drinking water systems. The workshop featured presentations on current and proposed regulatory requirements, a Q&A panel with the region’s drinking water regulators, a corrosion control study bench and pilot testing guidance, and case studies from Pacific Northwest water systems.

We would like to thank our volunteers, speakers, sponsors, and attendees for a successful workshop!

For more information, please contact the Workshop Planning Committee Chair, Anna Vosa, at anna.vosa@portlandoregon.gov. 



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Young Professionals Committee

The Young Professionals Committee hosts events that foster valuable leadership skills, provide opportunities to grow technical knowledge to enhance careers in the water industry, and encourage networking between seasoned professionals and YPs. Young Professionals are those who have been in the water industry for less than ten years.

What the YP Committee is Up To YP Summit – Scholarship Winners

1. Cody Scoggins
2. Nikita Kowal
3. Ana Haines
4. Eric Delbo
5. Zac Hardwick

The YP Committee was pleased to award five scholarships to support PNWS Young Professionals who attended the 2024 YP Summit. The Annual YP Summit was held in the Pacific Northwest in Portland, OR, from February 11-13, 2024. YPs from across the country gathered to share successes and challenges faced in their respective sections, collaborate on future projects, and build sound leadership skills to tackle water-industry issues.

YP Committee members Claire Litsky, Cole Benak, and Annabel Irwin gave a presentation on PNWS YP event successes and challenges. YPs from other Sections also shared their experiences with Summit participants, highlighting strategies for YP engagement and retention in AWWA.

Socials – In Jeopardy!

In December, the YP Committee hosted a winter virtual happy hour to allow YPs to connect and celebrate the Committee's growth this year. YPs tested their mettle with holiday/AWWA-themed Jeopardy and got to know one another while sipping hot cocoa (and, for some, hot toddies). Winners of Jeopardy were awarded gift cards, although everyone got the prize of some good networking and holiday trivia!

PNWS Conference – YP Track

The YP Committee will host a half-day 'YP Track' at the PNWS 2024 Conference in Spokane. Both YPs and seasoned water industry professionals will share their experiences and wisdom on topics such as leadership development, career planning for workforce retention, the employee lifecycle, and the 'YP mindset.' If you plan to

The YP Committee will host a half-day 'YP Track' at the PNWS 2024 Conference in Spokane.



attend the conference, please join us for one (or all) of these innovative presentations! Interested in presenting at future conferences, or do you want to learn more about the YP Track? Please contact Annabel Irwin at annabeli@sagegeotechnical.com.

Upcoming Events

YP Wednesdays

Join us on the first Wednesday of each month for stimulating conversation and technical sessions! Future topics include career development, data analysis and visualization, women in the water industry, engineering/source water protection projects, and more! Interested but want to know more? Contact Emma Martin, the Northwest Oregon YP Liaison, at emma.martin@hillsboro-oregon.gov.

Participate and Stay Connected!

The YP Committee meets virtually monthly, so it couldn't be easier to stop in and see what we're up to! Please email Claire Litsky at clitsky@cityoftacoma.org or Annabel Irwin at annabeli@sagegeotechnical.com for questions or to be added to our contact list.

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www.pnws-awwa.org/member-groups/committees/young-professionals-committee



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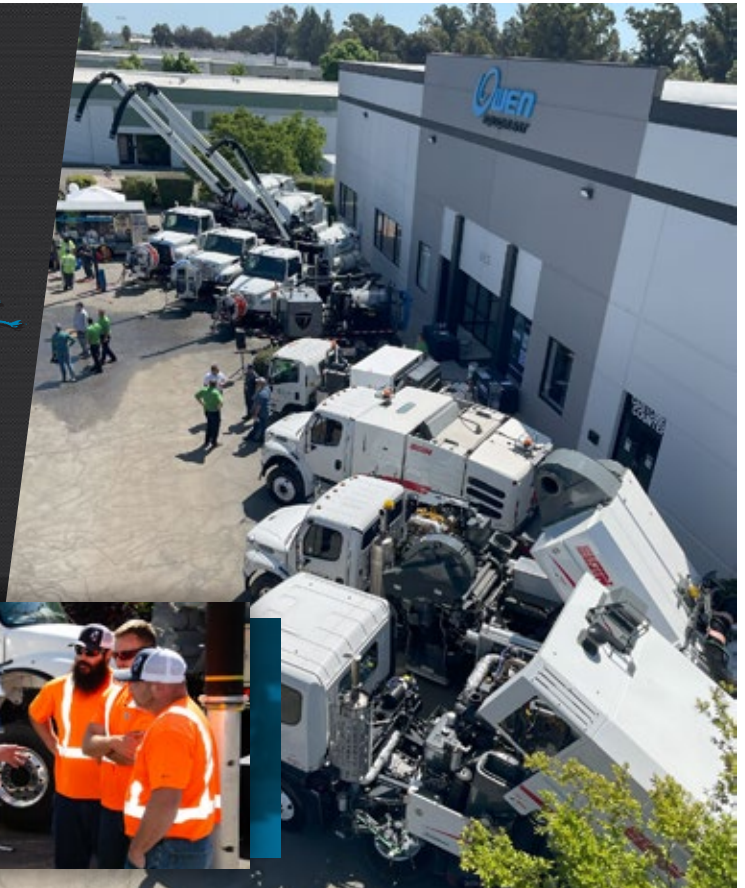
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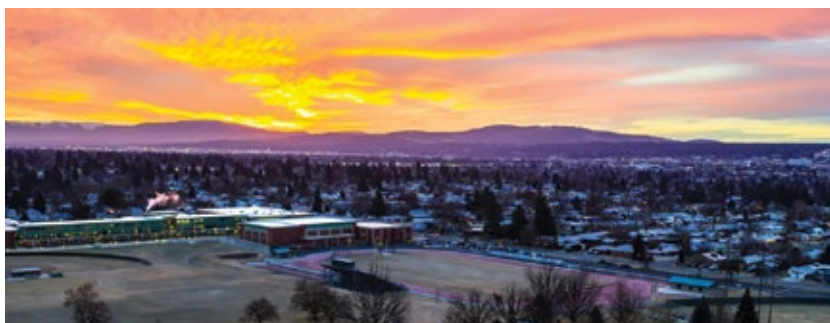


American Water Works Association
Pacific Northwest Section



Welcome to the PNWS-AWWA's Annual Conference

May 1-3, 2024 | Spokane, WA



Spokane 2024

The City of Spokane is excited to be your host for the 2024 Pacific Northwest Section of the American Water Works Association Conference, May 1-3, 2024. Spokane and the surrounding areas are fortunate to have access to the Spokane Valley – Rathdrum Prairie Aquifer. The protection and safety of our aquifer is a top priority in our community, allowing us to continuously provide safe, clean, and reliable water to all our consumers.

The event will take place in the heart of downtown at the Spokane Convention Center. Located on the south bank of the Spokane River, you will have easy access to the 100-acre Riverfront Park that hosts a wide array of attractions, such as the Sky Ride across the falls and the historical Looft Carrousel. Along with the park, the downtown area has a wide variety of restaurants and shops, all within walking distance. Connected by a sky bridge is the luxurious Davenport Grand Hotel, which will be this year's conference hotel. The Davenport Grand Hotel offers all the amenities expected from a four-star hotel, including The Grand Espresso Lounge and the new Table 13 Tacos and Tequila restaurant. [FA](#)

Master Meter's Octave® Ultrasonic Meter and Sonata® Residential Ultrasonic Meter

Greg Land, National Strategic Account Manager – Master Meter, Inc.



Simply Smart Sustainability

Solid-state ultrasonic meters offer reliable low-flow measurement to reduce wasted water.

The water we have today is all we will ever have. That's why conserving and protecting this limited resource is a primary objective for community water systems across the country – from arid regions to the lush Pacific Northwest.

The network of underground pipes in the typical water distribution system is aging. National studies indicate an average loss of 14% of treated water due to leaks and breaks – with some systems losing 50% or more.¹ Even where rainfall is abundant, addressing non-revenue water loss (NRW) is a priority for ensuring efficient and sustainable water utility operations to meet growing demand.

Reliable, accurate measurement is critical for managing water loss. The challenge is further compounded by the state of aging water meters and outdated measurement technologies found at many water utilities. With highly advanced, smart water measurement technology from Master Meter, water utilities have the tools they need to detect even very low flows and accurately measure the full range of flows, helping them account for every drop in their systems.

Commercial & Industrial Applications

The Octave® Ultrasonic Meter represents the latest in ultrasonic metering technology for the commercial/ industrial (C&I) sector. Able to accurately measure low



flows down to 0.25 gallons per minute (GPM), these water meters master NRW and enable large usage accountability by putting precise measurement where the real flows exist.

In addition to providing highly accurate measurement, the solid-state Octave Ultrasonic Meter has no moving parts, ensuring optimum revenue without waning performance over time. These meters are available in sizes ranging from 2-inch to 12-inch and offer an excellent alternative to mechanical compound, single-jet, floating ball, fire-service type, and turbine meters.

With a modular encoder interface and industry-standard communication protocol, the Octave Ultrasonic Meter easily connects to and integrates with Master Meter's Allegro AMI as well as most third-party AMR/AMI systems or telemetry and SCADA systems.

Residential Applications

Able to measure low flows down to 0.03 GPM, Master Meter's Sonata® Residential Ultrasonic Meter is a powerful ally in the fight against NRW. Available in sizes from 5/8-inch to 1-inch, the Sonata has no moving parts for durable and accurate performance for the lifetime of the meter. Furthermore, the patented design of the Sonata's flow tube eliminates obstructions from the center of the

pipe, which in turn reduces pressure loss and potential damage to vital measurement components. The side-mounted transducers, a unique feature in residential ultrasonic metering, reduce the effects of entrained air in the meter.




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“With highly advanced, smart water measurement technology from Master Meter, water utilities have the tools they need to detect even very low flows and accurately measure the full range of flows, helping them account for every drop in their systems.”

Master Meter’s commitment to smart water management is evident in the Sonata’s IoT-ready design with internal RF options or wired UI-1203 open protocol output for AMI or AMR connectivity.

“Master Meter’s family of smart ultrasonic water meters are a game-changer for water utilities struggling with water loss,” said Tim Owens, President of Correct Equipment, Master Meter’s distributor in the Pacific Northwest. “The solid-state construction and IoT-compatible design of both the Octave and Sonata, coupled with extreme accuracy at very low flows, bring smart, reliable measurement capability to water utilities looking to enhance sustainability and efficiency in their networks.”

Correct Equipment will be exhibiting at the Pacific Northwest AWWA 2024 Section Conference, May 1-3, 2024, in Spokane, WA. Stop by booths 511, 513, 515, 517, 519, 618, 616, or 614 to learn more about how Master Meter’s portfolio of smart water measurement technologies can help your utility account for every last drop of our most precious resource: water. 

References

¹ “Water Efficiency for Water Suppliers,” US EPA, www.epa.gov/sustainable-water-infrastructure/water-efficiency-water-suppliers, accessed Jan. 31, 2024.

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Conference Highlights

Technical Program

Attend Wednesday's full day of pre-conference programs offered by the Conservation, Distribution, Water Resources, Engineering, Treatment, and Wastewater committees. Two of these programs consist of an off-site tour. Wednesday morning's tour is of the Spokane Riverside State Park Water Reclamation Facility. The second tour on Wednesday afternoon will be of the City of Spokane's Well Electric, Well Station, and a Water System field trip. Make sure to register early for these sessions.

Not going to make it for Wednesday's tracks? Don't worry – Thursday and Friday currently hold 12 different tracks, offering a great variety of topics to choose from. For all of you early risers, don't forget about the early bird sessions offered on Thursday and Friday. This year's technical program offers the possibility of 2.0 CEUs.

Silent Auction

The Silent Auction is a great way to give back, as all the proceeds benefit the PNWS-AWWA's philanthropic efforts: Water For People, The Water Equation, and the Education & Training Fund. Make sure you get your bids in and stand guard, as the auction will end at 11:00 am on Friday.



Activities and Competitions

Get ready for another fun and exciting Wednesday afternoon with The Tapping Competition, Hydrant Hysteria, and Meter Madness. While these events are going on, we will determine who will get the bragging rights for this year's Best Tasting Water. If that's not enough, check out Friday afternoon's Gimmicks and Gadgets for new ideas and test your knowledge against some of the Section's top competitors at the Top Ops event.



Awards Luncheon

Join us Friday afternoon, following the closing of the silent auction, for the awards luncheon. The Section will award the highest honors to individuals who have dedicated countless volunteer hours to support the water industry. The luncheon will end with the passing of the gavel from Section Chair Dan Sleeth to Incoming Chair Nick Belmont.





Golf Tournament

Prairie Falls Golf Club, located in Post Falls, ID, will host this year's conference golf tournament. This newly renovated golf club offers terrific views and challenging play for golfers at every skill level. Check-in will start at 7:00 am with a shotgun start at 8:00 am. The tournament entry fee is \$100 per person, and that includes golf simulators, cart, and lunch. [📍](#)



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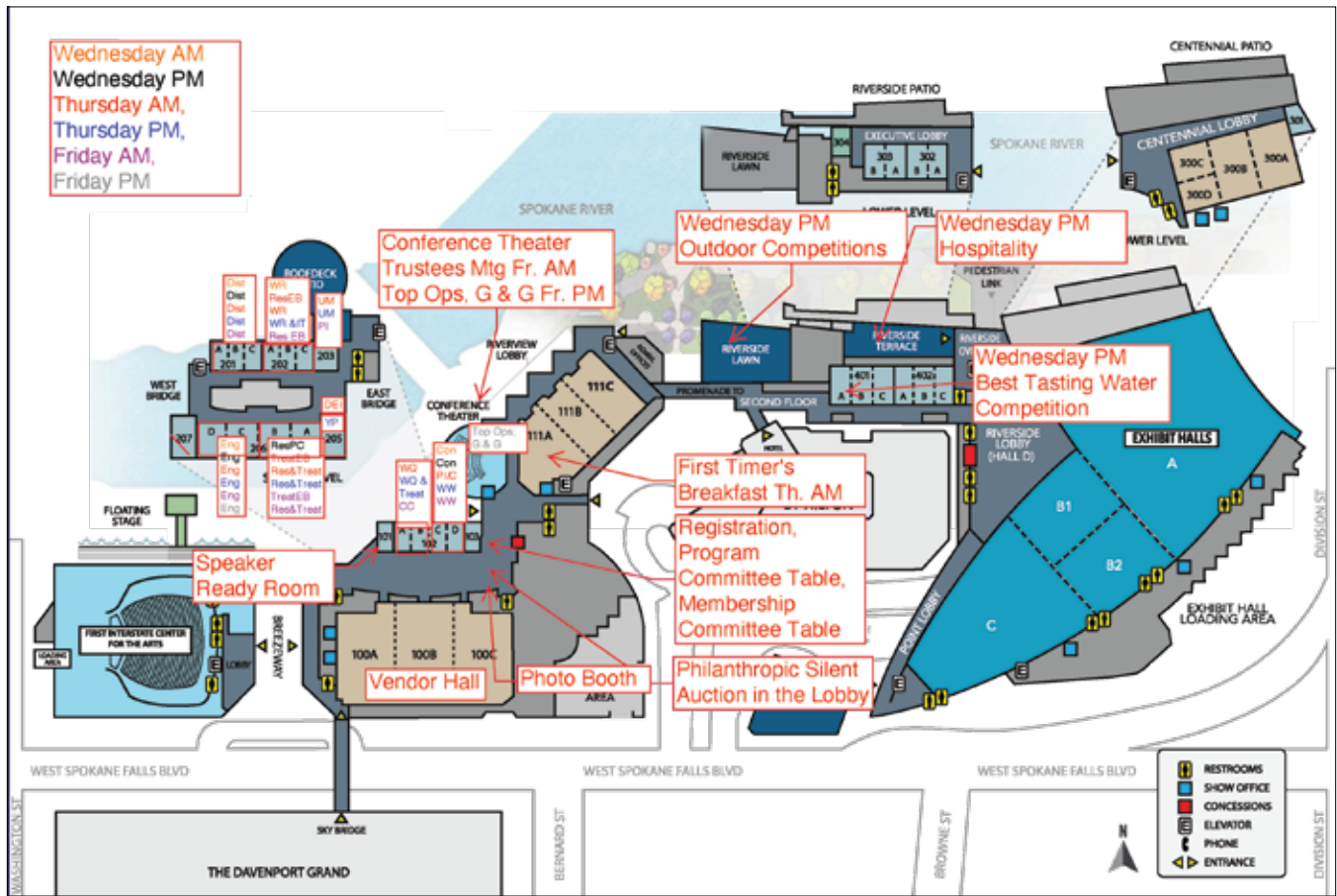
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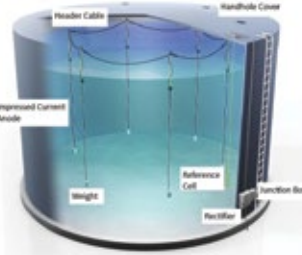
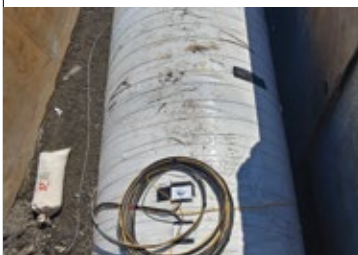


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2024 Conference Agenda

Tuesday, April 30

- 3:00 pm - 6:00 pm: Conference Registration Self Check-In – Convention Center
- 4:00 pm: Room Assistant Training for Wednesday – Convention Center by Room 103

Wednesday, May 1

- Pre-Conference Sessions – *(Additional cost – not included in full registration fee)*
- 8:00 am: Golf Tournament – Prairie Falls Golf Club – Shotgun Start
- 4:00 pm: Room Assistant Training for Thursday to Friday Sessions – Convention Center by Room 103
- 5:00 pm: Conference Kick-Off and Competition Night *(Everyone invited)* – Spokane Convention Center
 - Tapping, Meter Madness, and Hydrant Hysteria Finals – Riverside Lawn
 - Best Tasting Water Contest – 401 A
 - Philanthropic Silent Auction Opens

Thursday, May 2

- Vendor Hall Open All Day – Breakfast and Lunch served in Vendor Hall
- Free Head Shots for YP's and First-Time Attendees *(Space limited)* – Convention Center Lobby
- 7:00 am: First-Time Attendees Breakfast – Room 111 A
- 4:00 pm: Room Assistant Training for Friday Sessions – Convention Center by Room 103
- 5:00 pm: Division/Committee Meetings
- 6:00 pm: Young Professional Scavenger Hunt – Convention Center Lobby

Friday, May 3

- Breakfast
- 9:30 am - 11:30 am: Board of Trustees Meeting – Convention Center Theatre
- 11:00 am: Philanthropic Silent Auction Closes – Convention Center Lobby
- 12:00 pm: PNWS Awards Luncheon *(Everyone invited)*

- 1:30 pm: Excellence in Engineering Awards – 206 C, D
- 1:30 pm - 2:30 pm: Top Ops Competition – Convention Center Theatre

- 2:45 pm - 3:45 pm: Gimmicks and Gadgets – Convention Center Theatre
- 5:00 pm - 6:00 pm: Incoming Chair Reception for Nick Belmont – Convention Center Lobby

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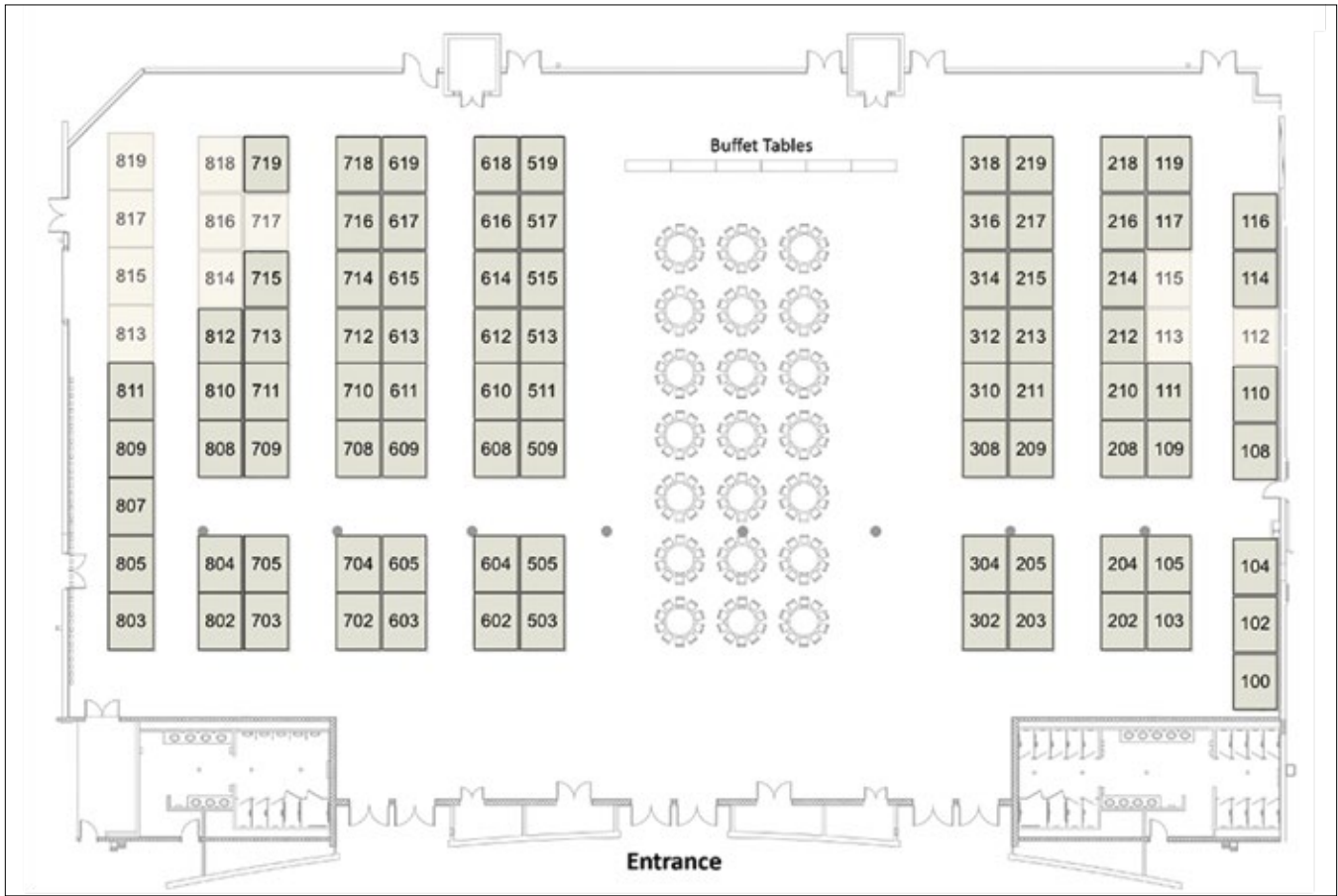
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2024 Exhibitor/Booth list

Exhibitors	Booth #
A.Y. McDonald	208
Aclara LLC	718
Alumichem Canada Inc.	209
American Ductile Iron Pipe	314
AMERICAN Flow Control	215
APSCO, LLC	708
Aqueous Vets	716
Bainbridge Associates	114
Baker Silo LLC	105
Beaver Equipment	204
Burgess	705
Calgon Carbon Corporation	312
Cimco-GC Systems	709
Cleanwater1	608
Clow-McWane Co.	102, 104
Consolidated Supply Company	304
Conсор - 2	710
Core & Main	617
Correct Equipment Inc.	511, 513, 515, 517 519, 614, 616, 618
DFW Plastics Inc.	302
DN Tanks	509
Ductile Iron Pipe Research Association	110
EJ	605
Esri (Environmental Systems Research Institute Inc) - 2	217
Ferguson Waterworks	711, 713
Ford Meter Box Company	116
Frank J. Martin	214
Furrow Pump	609
General Pacific - 3	218
General Pacific - 4	216
HD Fowler Company	117, 119
Hubbell Utility Solutions - Waterworks	719
Hydra-Stop	205
HydroCorp - Cross-Connection Programs - Backflow Tracking	603
Iconix Waterworks	108
Independent Rep Service	712
Inland Environmental Resources	714
Jacobs	715
JCM Industries Inc.	109
Landmark Structures	802
Morrison-Maierle	811
Mueller	611, 613, 615
National Safety Incorporated	219
Neptune Technology Group	612
Northwest Pipe Company	503
Norton Corrosion Limited LLC	203
Operational Technical Services	211

Exhibitors	Booth #
Owen Equipment	604
PACE Engineers Inc.	505
PPI America Inc.	610
Pumptech LLC	103
Reiner Pump Systems	808, 810
RH2 Engineering Inc.	704
Romac Industries	213
Rosemount	602
SAF-T-FLO	809
Sensus, a Xylem Brand	310
Stantec Consulting Services Inc.	210
Sundt Construction	100
SYBIS - CyberLock	308

Exhibitors	Booth #
Tap Master Inc.	703
TMG Services Inc.	805, 807
Traffic Safety Supply	803
TRIPAC	619
TT Technologies Inc.	316
Underground Solutions, Inc.	111
US Saws	812
USALCO	212
Varela Engineering	702
VTScada	202
Wilson Engineering LLC	804
WSP	318



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Wednesday, May 1

Drinking Water CEUs only	Wastewater CEUs only	WA Drinking Water CEUs only
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CEUs Awarded: Oregon – 1.9 DW, 1.9 WW
 CEUs Awarded: Washington – 2.0 DW, listed as variable, WW not yet awarded
 Idaho accepts CEUs awarded by Oregon and Washington

Morning Pre-Conference Seminars

Room	102 C/D - 100		201 A/B/C - 100	202 A/B/C - 100		Meet in Lobby
Hosting Committee	Conservation		Distribution	Water Resources		Treatment & Wastewater
Moderator	Dan Denning		Doug Kubik	Andrew Austreng		Tessora Young
Theme	Water Efficiency Solutions for Commercial Properties – Part 1		Operator Skills Part 1 – Math for Operators	Water Supply and ASR Permitting		Off-Site Tour
8:30	99A - Intro to Water Efficiency Solutions for Commercial Properties <i>Annikki Chamberlain</i> (60) DW		18 - Math for Operators <i>Jeff Lundt</i> (3 hours) DW/WW	87 - Well Electric Well Station Assessment – Evaluating Options for Increasing its Reliable Production Capacity <i>Kenny Janssen</i> (30) DW		63 - Tour of Spokane's Riverside Park Water Reclamation Facility <i>Tessora Young</i> (3 hours, off-site) DW/WW
9:00				48 - PFAS Regulation and Implications for Aquifer Storage and Recovery (ASR) and Artificial Recharge (AR) Projects: Data Review, Management Strategies, and Case Studies <i>Matt Kohlbecker</i> (30) DW		
9:30 - 9:45	Break					
9:45	99B - Meters, Submeters, and Deduct Meters, Oh My! <i>Annikki Chamberlain</i> (60) DW			92 - Pilot Testing Supports ASR Decision Making <i>Lee Odell</i> (30) DW		
10:15				148 - Permitting Considerations for ASR Source Water <i>Andrew Austreng</i> (30) DW		
10:45 - 11:00	Break					
11:00	86 - Water Meters Can't Find Water Main Line Leaks, Can They? You Bet They Can! <i>Graham Mattison</i> (60) DW			52 - Municipal Water Supply Source Development and Regulatory Considerations <i>Patrick Cabbage</i> (30) DW		
11:30	99C - Leak Detection on Commercial Properties <i>Annikki Chamberlain</i> (30) DW			178 - Water Quality Challenges and Solutions for ASR Systems <i>DeEtta Fosbury</i> (30) DW		



Wednesday, May 1

Drinking Water CEUs only Wastewater CEUs only WA Drinking Water CEUs only

CEUs Awarded: Oregon – 1.9 DW, 1.9 WW
 CEUs Awarded: Washington – 2.0 DW, listed as variable, WW not yet awarded
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Afternoon Pre-Conference Seminars

Room	102 C/D - 100		201 A/B/C - 100			Meet in Lobby	206 A/B - 100	206 C/D - 100
Hosting Committee	Conservation		Distribution			Water Resources	Treatment	Engineering
Moderator	Brittany Contreas		Tonya Reiss			Kenny Janssen	Milt Larson	Nicholas Augustus
Theme	Water Efficiency Solutions for Commercial Properties – Part 2		Operator Skills Part 2 – Understanding Process Control & Diagrams			Off-Site Tour WR	PFAS Treatment	Seismic/Resilience Planning and Projects
1:00	99D - Commercial Irrigation Efficiency <i>Annikki Chamberlain</i> (60) DW/WW		19 - Reading Process & Instrumentation Diagrams <i>Jeff Lundt</i> (3 hours) DW/WW			83 - City of Spokane Well Electric Well Station and Water System Field Trip <i>Seth McIntosh</i> (3 hour tour) DW	124 - City of Vancouver Bench- and Pilot-Scale Evaluations for PFAS Mitigation <i>Gwen Woods-Chabane</i> (30) DW	8 - Long Term Seismic Resilience Master Planning <i>Negar Niakan</i> (30) DW
1:30							46 - PFAS in Potable Reuse <i>Kyle Thompson</i> (30) DW	152 - Seismic Piping 101 <i>Daniel Shafar</i> (30) DW
2:00 - 2:15	Break							
2:15	99E - Commercial Heating and Cooling System Efficiency <i>Annikki Chamberlain</i> (60) DW/WW						104 - Centralized Treatment to Removes PFAS and Nitrate in Tustin, CA <i>Esther Chang</i> (30) DW	128 - Challenges of Routing and Designing a 66-inch Seismically Resilient Pipeline: Liquefaction Risks, Alignment Alternatives, and Deep Soil Mixing on the WWSP Pipeline <i>Kelli Barton</i> (30) DW
2:45							118 - A Utility's Journey to Treat Rising PFAS Concentrations: Emergency Treatment Implementation While Design of Permanent Treatment Facility is Underway <i>Amy Gao</i> (30) DW	12 - Lessons Learned about Seismic Certification to Help Your Equipment Operate Post-Earthquake Event <i>Mike Britch</i> (30) DW
3:15 - 3:30	Break							
3:30	99F - Field Evaluation of a Commercial Property <i>Annikki Chamberlain</i> (60) DW/WW						130 - Navigating PFAS Treatment Technology Decisions <i>Cynthia Yeager</i> (30) DW	68 - Oregon City Henrici Reservoir Rehabilitation – Extending the Service Life of Welded Steel Potable Water Storage Tanks <i>Justin Ford</i> (30) DW
4:00							175 - GAC and IX for PFAS Removal: A Review of Recent Case Studies <i>Eli Townsend</i> (30) DW	160 - Getting Ready for the Big One: Seismic Upgrades at a 255 MGD WTP <i>Tyler Bird</i> (30) DW



Thursday, May 2

Drinking Water CEUs only	Wastewater CEUs only	WA Drinking Water CEUs only
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CEUs Awarded: Oregon – 1.9 DW, 1.9 WW

CEUs Awarded: Washington – 2.0 DW, listed as variable, WW not yet awarded

Idaho accepts CEUs awarded by Oregon and Washington

Early Bird Sessions

Room	102 C/D - 100	102 A/B - 100	201 A/B/C- 100	202 A/B/C - 100	203 - 50	205 - 50	206 A/B - 100	206 C/D - 100
Hosting Committee	Public Information	Water Quality	Distribution	Research	Utility Management	Diversity, Equity, Inclusion and Belonging	Treatment	Engineering
Moderator	Tacy Steele	Mia Vijanderan	Dave Stanley		Mike Grimm	Chris Young	Tyler Kurtz	Taylor Stockton
7:00	177 - Will AI Replace or Enhance Public Communication? <i>Kristen Zimmer</i> (60) DW/WW	176 - Washington Regulatory Update <i>Mike Means</i> (30) DW	165 - Flow and Function: Facets of Large Vertical Pumps, Motors, and VFDs <i>Jennifer Murphy</i> (60) DW/WW	43 - Water Treatment Media Design and Evaluation - Screening Method Limitations and Proper Pilot Trial Design <i>Neal Megonnell</i> (30) DW/WW	101 - Holistically Evaluating Staffing Needs <i>Emily Palmer</i> (30) WW	132 - Implementing DEI Initiatives in your Water Utility <i>Kyle Bayer</i> (60) DW/WW	113 - To Pilot or not to Pilot? PFAS Pilot Testing Approaches and Case Studies <i>Amy Gao</i> (60) DW	6 - Essentials for the Design & Specification of Earthquake Resistant Ductile Iron Pipe <i>John Kitchen</i> (30) DW/WW
7:30		126 - Oregon Regulation Update <i>Michelle Byrd</i> (30) DW		107 - Side-by-side Comparison of Online Monochloramine Analyzers <i>Mojtaba Azadiaghdam</i> (30) DW/WW				82 - Broadening our SCOPE – Growing Industry Involvement in the STEM Educational Experience <i>Maricris Eleno-Orama</i> (30) WW

Morning Technical Sessions

Hosting Committee	Conservation	Water Quality	Distribution	Water Resources	Utility Management	Diversity, Equity, Inclusion and Belonging	Research & Treatment	Engineering
Moderator	Danlyn Brennan	Mia Vijanderan	Dave Stanley	DeEtta Fosbury	Theresa Jurotch	Chris Young	Brian Smith	Greg Loscher
8:30	170 - Fixing Leaks, Saving Wallets: Tacoma's Water Service Line Grant and Loan Program <i>Tyler Cummings</i> (30) DW	27 - Lead and Copper Rule Revision: Idaho Primacy and Beyond the Inventory <i>Cassandra Lemmons</i> (60) DW	140A - Hands-On w/ Hydraulic Control Valves: Function <i>Steve Causseaux</i> (60) DW	162 - Enhancing Protection of the Willamette River, Oregon's Largest Watershed <i>Jacob Krall</i> (60) DW	164 - Aligning Your Top Projects with Federal Funding Priorities <i>Kim Pugel</i> (30) DW/WW	9 - What Makes an Award-Winning Diversity Equity & Inclusion (DEI) Program? <i>Ann Hajnosz</i> (30) DW/WW	60 - Four Tenets of Pressure Vessel Design – What to Consider on Your Next GAC or IX Treatment System <i>Richard (Bo) Botteicher</i> (30) DW	157 - Alternative Delivery: Another Tool in the Toolbox to Get Projects Done <i>Patrick Weber</i> (30) DW/WW
9:00	54 - Water Providers Uniting to Conserve Water on Oregon's Mid-Coast <i>Suzanne de Szoeko</i> (30) DW				145 - External Funding Opportunities to Reduce Project Financing Costs <i>Seema Chavan</i> (30) DW/WW			
9:30 - 9:45	Break							
9:45	16 - Uniting for a Common Goal: Regional Partnerships in Water Conservation <i>Cody Scoggins</i> (30) DW	32 - PFAS Proposed Rule, UCMR5 and Idaho Sampling Project <i>Cassandra Lemmons</i> (30) DW	140B - Hands-On w/ Hydraulic Control Valves: Maintenance <i>Steve Causseaux</i> (60) DW	10 - Current and Future Trends in Source Water Protection Planning <i>Rob Annear</i> (30) DW	173 - Forging the Future: Aligning Mission, Vision, and Values to Set Organizational Direction <i>Paul Matthews</i> (60) DW/WW	30 - From 2 to 200: How We Grew an Internal Network to Support Digital Accessibility at the City of Portland <i>Penny Milton</i> (30) DW/WW	98 - Operational Conditions to Reduce Colloidal & Biological RO Fouling Downstream of Flat-Plate MBR Membranes for Potable Reuse Applications <i>Katrina Messoligitis</i> (30) DW	151 - Using Progressive Design-Build to Improve Operations and Maintenance at Everett's Water Filter Plant <i>Christopher Baersten</i> (30) DW
10:15	144 - Flow-ward Bound: Making Waves with Residential Water Audits in Spokane <i>Will Rettig</i> (30) DW	142 - Tracing Copper in Schools: Implications for Lead Sampling under the LCRR <i>Damon Roth</i> (30) DW		58 - Using Place-based Planning to Develop and Implement Regional Water Supply Strategies <i>Suzanne de Szoeko</i> (30) DW				
10:45 - 11:00	Break							
11:00	133 - Water Wise Spokane and Spokane Public Schools Use Technology to Improve Water Management <i>Annikki Chamberlain</i> (60) DW/WW	37 - LCRR, Corrosion Control Study, and Implementation Plan in Anacortes <i>Sanyukta Gokhale</i> (30) DW	140C - Hands-On w/ Hydraulic Control Valves: Troubleshooting <i>Steve Causseaux</i> (60) DW	34 - Getting to Informed Water Supply Planning Using a Feedback Loop of Systems Analysis, Data Collection, and Intentional Learning: A Spokane Case Study <i>John Porcello</i> (60) DW	28 - Levels of Service: Establishing and Supporting Realistic Goals for the Utility <i>Erin McLachlan Sanchez</i> (60) DW/WW	80 - Operationalizing DE&I in the Water Industry through your Organization <i>Walt Walker</i> (30) DW/WW	123 - Bench-Scale Testing as an Alternative to Pilot Testing <i>Brian Rowbotham</i> (30) DW	24 - CMGC Delivery Strategies in an Uncertain Cost Environment <i>Michael Neher</i> (60) DW/WW
11:30		131 - A Bench-Scale Study to Evaluate the Impact of Different Corrosion Inhibitors on Lead and Copper Leaching from Plumbing Materials in High and Low Hardness Waters <i>Hisyam Mohsin</i> (30) DW				81 - Engineering Justice in Design – Water Equity Approaches in Practice <i>Walt Walker</i> (30) DW/WW		
12:00 - 1:30	Vendor Lunch							



Thursday, May 2

Drinking Water CEUs only	Wastewater CEUs only	WA Drinking Water CEUs only
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CEUs Awarded: Oregon – 1.9 DW, 1.9 WW
CEUs Awarded: Washington – 2.0 DW, listed as variable, WW not yet awarded
Idaho accepts CEUs awarded by Oregon and Washington

Afternoon Technical Sessions

Room	102 C/D - 100	102 A/B - 100	201 A/B/C- 100	202 A/B/C - 100	203 - 50	205 - 50	206 A/B - 100	206 C/D - 100
Hosting Committee	Wastewater	Water Quality & Treatment	Distribution	Water Resources & Information Information Technology	Utility Management	Young Professionals	Research & Treatment	Engineering
Moderator	Jeff Lundt	Sean Thomson	Cheryl Capron	Jacob Krall	Sam Shipp	Annabel Irwin	Kim Reid	Cameron Lee
1:30	39 - Nitrogen Removal Optimization at Post Point <i>Susanna Leung</i> (60) WW	122 - Tracer Testing 101 <i>Brian Rowbotham</i> (30) DW	154 - Resiliency Prioritization within the Distribution System <i>Daniel Shafar</i> (30) DW/WW	45 - One Inventory to Rule them All: Hillsboro Water's Quest for LCRR Lead Service Line Inventory Compliance <i>Symon Powlison</i> (30) DW	139 - How to Talk about Water Rate Adjustments with Decision-Makers and Stakeholders <i>Ann Hajnosz</i> (60) DW/WW	72 - Emerging Leaders Venturi-style: A Case Study for Professional Development <i>Erica Schyler</i> (30) DW/WW	74 - Innovate Ways to Add Capacity and Ozone to the Quail Creek WTP <i>Jeremy Williams</i> (30) DW	50 - Case Histories: Concrete Water Reservoir Foundation and Floor Slab Design Considerations <i>Scott Schlechter</i> (30) DW
2:00		158 - Catalyst or Breaking Point – Dechloramination Decision <i>Andrew Nishihara</i> (30) DW	171 - The Pressure is On: Replacing a Crumbling Regulator Vault <i>Joel Ayres</i> (30) DW	22 - Targeted Streamflow Gaging and Associated Data Systems for Water Supply Planning – City of Waldport, OR <i>Zach Pike-Urlacher</i> (30) DW		135 - Turning a Job into a Career: Career Planning for Workforce Retention <i>Claire Litsky</i> (30) DW/WW	91 - True Capacity: Understand the current state of The Dalles WTP <i>Enoch Nicholson</i> (30) DW	117 - Structural Assessments and Asset Preservation Strategies for Welded Steel Water Tanks <i>Leslie Scott</i> (30) DW
2:30 - 2:45	Break							
2:45	168 - Is Smaller Always Simpler? Engineering and Operating Considerations for Remote WWTPs <i>Kenneth Packard</i> (60) WW	153 - Making the Most of Your Space: Lessons Learned from On-Site Hypochlorite Generation Retrofit Project with RO Pre-treatment <i>Joanie Stultz</i> (30) DW	73 - Under Pressure! Emergency Repair of Sherwood's Prestressed Concrete Tank <i>Matt Hickey</i> (30) DW	108 - Diverting Data Disasters <i>Kelsey Mach</i> (30) DW	79 - Equitable Climate Action Planning: From National Perspectives to Local Approaches <i>Walt Walker</i> (30) WW	36 - Who? Me? A Leader? <i>Jason Canady</i> (60) DW/WW	95 - Zero to Hero: Best Practices for WTP Startup and Commissioning and Lessons Learned from the Houston NEWPP 320 MGD Greenfield WTP <i>Joshua Kennedy</i> (30) DW	23 - The Balance of Conservation and Storage <i>Jessica Nathan-Waller</i> (30) DW
3:15		66 - City of Spokane's 70-Year Well Facility Onsite Generation Disinfection Upgrade Challenges <i>Heather Burns</i> (30) DW	110 - Commissioning a New WTP with a Ruptured Reservoir <i>Danielle Philbrick</i> (30) DW	147 - Modeling Visualization Using R Shiny <i>Benjamin Beal</i> (30) DW	114 - Growing Your Own – Tacoma Water's OIT Journey <i>Craig Downs</i> (30) DW		41 - Alternatives and Optimization Strategies for Sedimentation Basin Sludge Collection <i>Henry Ricca</i> (30) DW	33 - Unlocking the Flow: SCADA-Powered Knowledge Retention for Efficient Flow Management <i>Jeff Hesse</i> (30) DW
3:45 - 4:00	Break							
4:00	61 - Georgetown Wet Weather Treatment Station, King County, Washington: Commissioning and Startup Lessons Learned of a New 70 MGD Ballasted Sedimentation with UV Disinfection Wet Weather Treatment Facility <i>Pedro deArteaga</i> (60) DW/WW	90 - Preventing Distribution System Destabilization during Source and Treatment Changes <i>Alex Mofidi</i> (30) DW	7 - Creating a New Pressure Zone in a Century-Old System: Seattle's Queen Anne 580 Zone <i>Cheryl Capron</i> (60) DW	42 - Increasing Data Quality, Defensibility, and Confidence Through Utilization of a Field Sampling and Measurement Organization Quality System <i>Thomas Krause</i> (60) DW/WW	119 - DRIP Talks: Creating Opportunities in the Water Industry Workforce <i>Natalie Reilly</i> (60) DW/WW	149 - Generations@Work: Tailoring the Employee Life Cycle for a Multigenerational Workforce <i>Luise Winslow</i> (30) DW/WW	78 - Comparison of Oxygen Sources for Ozone Generation <i>Ali Leeds</i> (30) DW	69 - Scope Creep for the Greater Good: Adding Replacement of a 90-Year-Old Reservoir to a Pump Station Project on a Highly Constrained Site <i>Greg Postlewaite</i> (30) DW
4:30		77 - Inorganic Awakenings: Anacortes's Investigation from Source through Distribution <i>Chris McMeen</i> (30) DW				161 - The YP Mindset <i>Jacob Yoshino</i> (30) DW/WW	141 - Chemical Mixing: Nothing But a G Thing? <i>Conner Mancosky</i> (30) DW	70 - Small Tank Material Selection Results in a 0.4 MGD Prestressed Concrete Tank – How Considering Multiple Criteria Led to an Unexpected Material Choice <i>Nathan Rostad</i> (30) DW



Friday, May 3

Drinking Water CEUs only	Wastewater CEUs only	WA Drinking Water CEUs only
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CEUs Awarded: Oregon – 1.9 DW, 1.9 WW

CEUs Awarded: Washington – 2.0 DW, listed as variable, WW not yet awarded

Idaho accepts CEUs awarded by Oregon and Washington

Early Bird Sessions

Room	102 C/D - 100	102 A/B - 100	201 A/B/C - 100	202 A/B/C - 100	203 - 50		206 A/B - 100	206 C/D - 100
Hosting Committee	Wastewater	Cross Connection	Distribution	Research	Public Information		Treatment	Engineering
Moderator	Jeff Lundt	Darci Ronning	Aurelie Nabonnand		Tacy Steele			
7:00	75 - Are You Ready? Emergency Preparedness for Water Utilities <i>Sarah Lingley</i> (60) DW/WW	125 - Digital Transition to Backflow Prevention Compliance <i>Paul Molisani</i> (60) DW	166 - Abrasive Situation: Rehab and Protection of 21-foot Diameter Raw Water Supply Piping <i>Matt Hickey</i> (30) DW	96 - Water 2050: Forecasting Tomorrow's Water Industry through Recent Research <i>Tyler Kane</i> (30) DW	89 - Demonstrating and Communicating the Absence of Lead Service Lines <i>Joel Cary</i> (60) DW		84 - A Typical Customer Concerns with Hard Water <i>Doug Greenlund</i> (30) DW	
7:30			71 - Redundancy and Reliability of Water Supply Solved with Trenchless Approach for the City of Pocatello, Idaho <i>Dennis Galitano</i> (30) DW	93 - Knowledge Management at Tacoma Water <i>Heather Dewey</i> (30) DW			105 - Path to Clear Water – Managing Manganese <i>Qianru Deng</i> (30) DW	

Morning Technical Sessions

Hosting Committee	Wastewater	Cross Connection	Distribution		Public Information		Research & Treatment	Engineering
Moderator	Jeff Lundt	Darci Ronning	Aurelie Nabonnand		Tacy Steele		Xue Jin	Carmen Brown
8:15	180 - MBR-LRV Testing <i>David Seymour</i> (60) DW/WW	179 - Backflow Prevention Assembly Repair <i>Jim Purzycki</i> (60) DW	103 - Evaluating Water Quality and Enhancing Operations Management: Leveraging an EPS <i>Calibrated Model</i> <i>Natalie Reilly</i> (30) DW		51 - Rioting over Rising Rates: Communication Challenges in a "Water is a Right" World <i>Kyle Shimabuku</i> (30) DW/WW		150 - Wildfire Impacts on Water Quality and Treatment Processes in the Pacific Northwest <i>Kyle Shimabuku</i> (30) DW	100 - Delivering Capital Projects: A Young Professional's Guide to Specification Writing <i>Spencer Adams</i> (30) DW
8:45			1 - Saving Rate Payer Dollars by Completing Water Main Replacement Projects Using Your Crews <i>Dave Stanley</i> (30) DW		174 - Effective Strategies for Building Consensus with a Rate Advisory Committee <i>Paul Matthews</i> (30) DW/WW		35 - Evaluation of the Effectiveness of Low-pressure Membranes in Water Treatment after Wildfire <i>Xue Jin</i> (30) DW	137 - Navigating Common Construction Pitfalls <i>Greg Loscher</i> (30) DW
9:15 - 9:30	Break							
9:30	172 - Equipment Preselection – How, Why, and Lessons Learned <i>David Seymour</i> (60) DW/WW	49 - Cross Connection Control Hazard Surveys <i>William Bernier</i> (60) DW/WW	13 - Water Distribution Management Systems: Quantifying An Innovative Approach to Improve Water Loss and Carbon Footprint <i>Mike Utte</i> (60) DW		109 - Lead Communications Guide and Toolkit! Using the LCRR to Strengthen Your Community <i>Andrea Watson</i> (60) DW		159 - Building Treatment Resilience to Wildfires in Oxidation and Coagulation Responses <i>Mac Gifford</i> (60) DW	3 - Teamed-up! Keeping People Informed and at the Virtual Decision-Making Table. Tips for Project Management Communications <i>Nicholas Augustus</i> (30) DW/WW
10:00								155 - Behind the Curtain – Things Owners and Consultants Wished Each Other Knew <i>Andrew Nishihara</i> (30) DW/WW
10:30 - 11:00	Break							
11:00	163 - Fall City Business District Large On-site Sewage System Project <i>Jeff Wilson</i> (30) WW	121 - Cross Connection Control – Idaho Rules and Best Practices for Program Development <i>Anna Moody</i> (60) DW	44 - Improving System Resiliency One Critical Valve at a Time <i>Bryan Robinson</i> (30) DW		167 - Water Service Lines of Communication: Achieving LCRR Goals Beyond the Meter <i>Alyssa MacDonald</i> (30) DW		181 - Unfiltered and On Fire: Lessons Learned from the Camp Creek Fire <i>Kimberly Gupta</i> (60) DW	115 - Informing Water Treatment Plant Design with Localized Hydraulic Models <i>Henry Ricca</i> (30) DW
11:30	169 - Alki WWTS Standby Generator – A Threading the Needle Retrofit <i>Jeff Lundt</i> (30) DW/WW		112 - Medford Water's Digital Twin Use for Design through Operator Training <i>Stephanie McGregor</i> (30) DW		53 - Water Service Line Survey Outreach <i>Jill Hoyenga</i> (30) DW			116 - Tracer Study Back to Basics and the Intricacies Considered by McMinnville <i>Humberto Jaramillo</i> (30) DW
12:00 - 1:30	Awards Lunch							

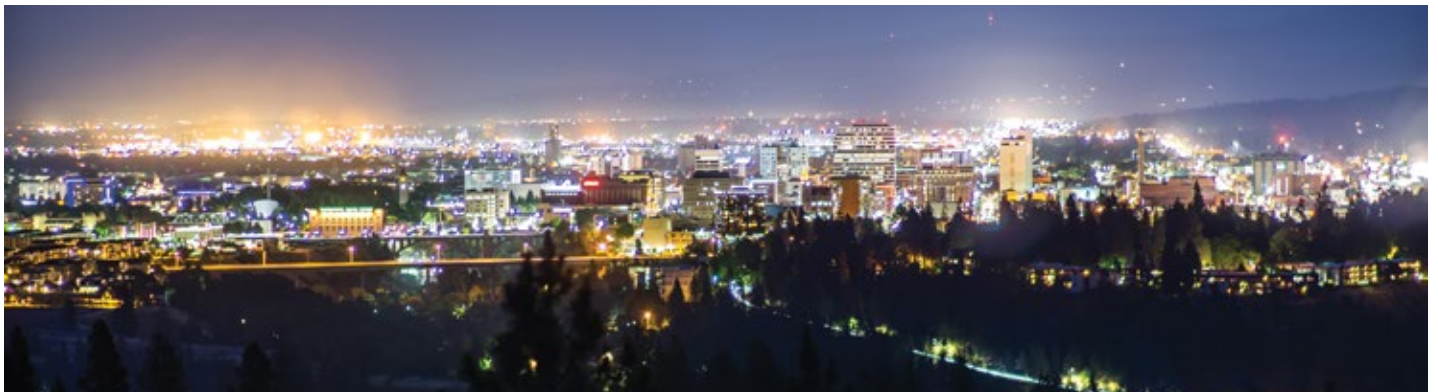


Drinking Water CEUs only	Wastewater CEUs only	WA Drinking Water CEUs only
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CEUs Awarded: Oregon – 1.9 DW, 1.9 WW
 CEUs Awarded: Washington – 2.0 DW, listed as variable, WW not yet awarded
 Idaho accepts CEUs awarded by Oregon and Washington

Afternoon Technical Sessions

Room	Hosting Committee	Moderator	Conference Theater	Subsection Advisory Committee	206 C/D - 100
					Engineering
					Dan Shafar
1:30			Top Ops, DW		25 - Leveraging Innovations – Utilizing Technology to Add Value for Project Stakeholders <i>Michael Nehar</i> (30) DW
2:00					102 - The New Era of Pressure Pipe Design in AutoCAD Civil 3D <i>Laura Oxsen</i> (30) DW
2:30 - 2:45	Break				
2:45			Gimmick & Gadgets, DW		31 - Cost Savings on an Accelerated Schedule Utilizing Artificial Intelligence <i>Josh Ford</i> (30) WW
3:15					129 - Taking Technology into the 21st Century: Creating a Resilient and Cybersecure SCADA System for Medford Water and Integrating it with the Duff WTP Expansion to 65 MGD <i>Jeff Kanyuch</i> (30) WW
3:45 - 4:00	Break				
4:00					67 - California Dreaming – Leveraging Water Reuse Innovations Inspiring PNW's Sustainable Future <i>Evelyn Choudhary</i> (30) No OR CEUs; WADW CEUs
4:30					62 - Starting from Scratch: When the Treatment Process is the Most Straightforward Part of Designing a New Water Treatment Plant <i>Chad Johnson</i> (30) WADW CEUs



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