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**Pacific Northwest** Section

SPRING 2023

# **WATER** *matters*

The Official Magazine of the  
Pacific Northwest Section – AWWA

## Welcome to the PNWS-AWWA's **Annual Conference**

May 3-5, 2023 | Kennewick, WA

- ▶ **2023 Women in Leadership Symposium**
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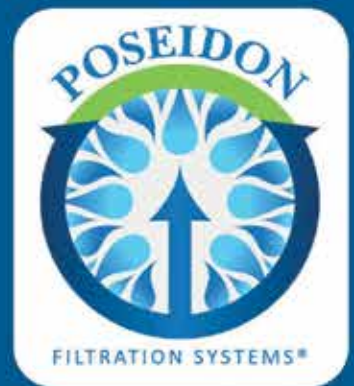
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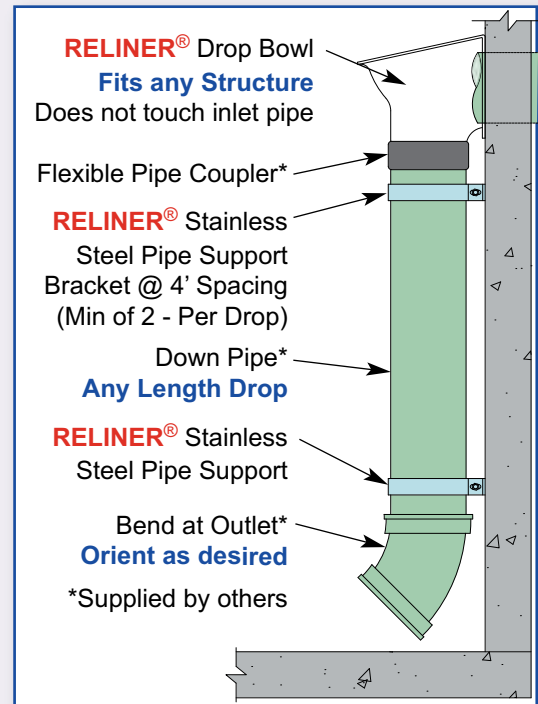
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## Reflecting on My Year as Chair

Ahh, spring is in the air! Spring means the days are getting longer, flowers are starting to bloom, my mountain bike is begging me to take her for a spin, and it also means writing my last Chair's message (yay – admittedly, it's not my favorite thing about being Chair). I'll use this Chair's message as an opportunity to briefly reflect on my year as Chair and express my gratitude to our Section. I didn't accomplish or make progress on as many things as I wanted to, but some new ideas popped up along the way.

### Financial Stability

We're in a better place financially than we were a couple of years ago, thanks to conservative budget choices, proactive budget management, and a strong conference showing in Tacoma last year. Many of you probably noticed the increase in conference registration

I'll use this Chair's message as an opportunity to briefly reflect on my year as Chair and express my gratitude to our Section.

fees this year. This was the first time in many years that we've raised conference registration fees. This was not an easy decision, but it will further ensure our financial stability going forward and our ability to reinvest in our membership which will help ensure our standing as leaders in AWWA.

### Ad Hoc Committee

Speaking of conference registration fees, during Board discussions on this topic, we realized that we don't have any policy or guidance around evaluating conference fees. The Section

Conference is the largest source of income and the largest expense for the Section; as such, the registration fees have a big impact on Section finances. I recently created an Ad Hoc Committee to develop guidance that can be used by future Boards to evaluate and recommend conference registration fees. Dan Sleeth (Chair-Elect) will lead this committee of volunteers (or volun-tolds) from across the Section.

### Networking Diversity

I committed to creating at least one networking event that didn't revolve

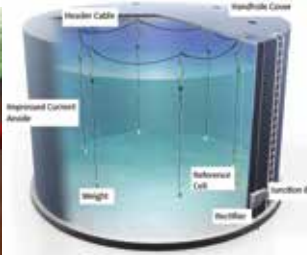


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around golf, wine, or beer. While I personally had an epic fail on this one, I encourage Subsections and Committees to consider some new ideas for future events. The networking/fundraising survey showed a strong interest in other types of events – bingo, bowling, or a poker competition, to name a few – and all of these are great winter alternatives to golf. I hope to see some new events taking place in the next year.

### Membership Growth

What I'm most proud of over the past year had absolutely nothing to do with me and everything to do with you. As part of a broader AWWA challenge, the Membership Engagement and Development Committee (MEDC) launched the PNWS Membership Challenge to encourage Subsections to recruit new members between September and December 2022. Our Section surpassed our recruitment goal thanks to all the hard work of our Subsections. Welcome to all our new or reinstated members! You can find all the details of the membership challenge on the MEDC's Committee

and the MEDC article in this issue of *Water Matters*.

### Gratitude and Appreciation

This is the Oscars part of my message where I'd get teary-eyed if I were speaking. In no particular order, I'd like to express my sincerest thanks to the following:

- PNWS Board for their support and leadership over the past year and for being fun. I actually like all of you.
- John Roth (Past Chair) for being a great mentor over the past year – just about the time you figure this Chair thing out, it's time to move on.
- Dan Sleeth (Chair-Elect) for his collaboration and support with the Ad Hoc Committee and for helping me through Board meetings. I struggle with remembering how to get through a Board motion. I'll have to make a cheat sheet for the spring meeting so I can go out like a rock star.
- Kyle Kihs (Executive Director) for answering all my dumb questions and helping me stay in my lane.
- Incoming Board, for your willingness to take on this important leadership role.

It's a lot of work, but I promise you're going to love it, and Dan is going to be a much better leader than me.

- Portland Water Bureau (my employer) for their support and for allowing me to take on the three-year commitment required for the Chair position. Two years down, one to go!

I am so proud to be a part of this Section and incredibly honored that y'all chose me to lead the Section over the past year. The reality is, though, our membership, especially those of you that volunteer at the Committee and Subsection levels, are the ones that do all the hard work and provide the real value and leadership to the Pacific Northwest water industry. This year has flown by, and I can't believe I'll be passing the gavel to Dan Sleeth in May. I didn't accomplish all I wanted to, but hey, I'll give myself a little grace. It's a reminder that we are all volunteers and have very important day jobs.

A big thanks to all y'all! See you in Kennewick! 🙌

Michelle Cheek  
PNWS Section Chair

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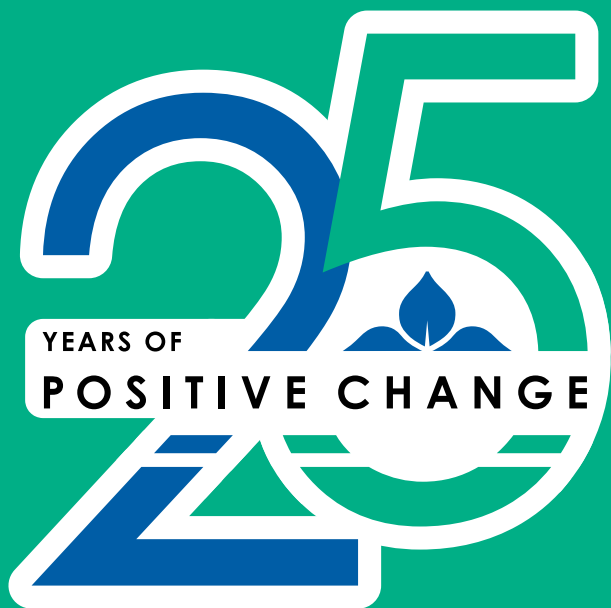
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## Leading the Water/Wastewater Industry into the Future

**A**WWA recently concluded the winter Association Directors meeting in Santa Fe, New Mexico. The meeting was focused on Board elections, Diversity and Member Inclusion, and furthering the Water 2050 initiative.

Cheryl Porter was elected as AWWA's next President-Elect by the Board. Cheryl is the COO of Water and Field Services for the Great Lakes Water Authority in Detroit, Michigan. Cheryl has previously served on the Finance Committee and as a Vice-President for AWWA.

The Board also elected four new Vice-Presidents: Marcus Firman, Mary Gugliuzza, Christine Spitzley, and Brent Tippey. Director-at-Large Amy Stoffer and Service Provider Director-at-Large Jeff Zdrojewski were also elected. The new officers will begin their terms in office at the conclusion of the ACE 2023 Conference in June.

As previously mentioned, the association remains committed to

Diversity and Member Inclusion and the Water 2050 initiatives. The driving force will come at the Section level, where the two initiatives are closely intertwined.


The Pacific Northwest Section has been a leader in promoting and furthering the diversity of Section members and ensuring that our Section is inclusive and empowering the next generation that will actually be leading the water/wastewater industry into the future.

Sections are partners with the Association and will have a significant impact on driving the Water 2050 initiative. As this initiative continues to develop, there will be many opportunities to get involved. I encourage all of you to get involved by completing the survey that was in the most recent Section e-newsletter, participating in 'Think Tanks,' and attending presentations and meetings when possible. There will be some exciting opportunities coming as

AWWA and the Utility Council look to take the Water 2050 campaign beyond just the United States.

In other news, the annual AWWA Fly-in is scheduled for March 22-23 this year, and I will be reporting on this in the summer edition of *Water Matters*. As a reminder, our Section will be hosting a meet and greet with the CA/NV Section at the ACE 2023 Conference on June 11, 2023, at the Hockey Hall of Fame in Toronto, Ontario, Canada. You must register to attend this event. Registration can be found on the Networking page on our website.

I look forward to seeing you all in May at our Section Conference in Kennewick.

Thank you for allowing me to represent you as your Association Director! 

James Dean  
PNWS-AWWA Association Director

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### Diversity & Inclusion (D&I) Subcommittee

The D&I Subcommittee aims to foster a welcoming and inclusive AWWA culture that champions meaningful institutional and individual change regarding diversity and equity in the water industry.

#### Join Us for Our Monthly D&I Call

The D&I Subcommittee meets virtually on the first Wednesday of every month from 11-12 pm. These calls are for us to get to know each other, plan out the Subcommittee's activities, and set priorities. We always start the meeting with an opportunity to share and meet other Committee members, so don't feel you need to come with any specific background. Currently, the Committee is in the process of reviewing and confirming goals and priorities for the upcoming year. The focus is on establishing a set of macro-goals to guide the direction of the Committee that are supported by a set of micro-goals for specific initiatives/activities.


Join the conversation at our next D&I call. All are welcome to join. Contact Chair Gina Hortillosa for the meeting information at [ghortillosa@pnws-awwa.org](mailto:ghortillosa@pnws-awwa.org).

#### D&I Virtual Event – March 23, 2023

The D&I Subcommittee hosted a virtual event in late March, sharing the experience of a local Utility, King County, on developing a Diversity, Equity, and Inclusion Program, followed by breakout rooms for attendees to connect on DEI topics, including 'Courageous Conversations,' and 'DEI for Employees vs. DEI For the Community.' A full debrief of the event will be shared on the D&I website.

#### D&I Conference Track 2023 – Planning Underway

The D&I Subcommittee is excited to be planning a special panel for the PNWS 2023 Conference on Retention and Recruitment. The panel will include two sessions with speakers from the PNWS. The first panel will focus on recruitment

and discuss how to create a more diverse workforce to promote a growing industry with representation from various sectors. Speakers will discuss topics such as the benefits of internships/apprenticeships, volunteering, and community outreach, using resources like local programs, partnerships, and social media, etc. On the flip side of recruitment is retention. The second panel on retention will discuss the challenges of retaining diverse talent in the water industry and discuss paths to sustain an inclusive workforce. Panelists from various sectors will discuss topics such as DEI workplace training, employee affinity groups, workplace culture, mentorship programs, etc. If you have an interest in attending or participating as a panelist, please reach out to Benedicte Diakubama at [benedicte.diakubama@jacobs.com](mailto:benedicte.diakubama@jacobs.com) for the Retention Panel and Asa Reyes-Chavez at [areyeschavez@parametrix.com](mailto:areyeschavez@parametrix.com) for the Recruitment Panel. 

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### Engineering Committee

#### Excellence in Engineering

We received multiple entries for this year's Excellence in Engineering Awards in both the Large and Small Project categories (unfortunately, no Engineering Planning entries this year). Thank you to all who submitted entries showcasing your outstanding projects. Winners will be announced at the upcoming Annual Conference in Kennewick on Friday, May 5, 2023, at 1:30 pm in Room G.

#### Annual Conference Engineering Technical Sessions

The Engineering Track for the upcoming Annual Conference will feature a solid schedule of excellent presentations highlighting successful projects, lessons learned, and innovations in practice. We look forward to seeing you there.

#### Engineering Committee Meeting in Kennewick

We are changing things up a little this year. For all Engineering Committee members, and those interested in joining the Committee, we will get together on Wednesday evening, May 3, 2023, following the conference competitions. Details on the venue and time will be forthcoming. If you'd like to join (or audit in a non-committal way) the Engineering Committee, please email Nick Augustus at [nick.augustus@tvwd.org](mailto:nick.augustus@tvwd.org), and we'll add you to the list.

The Utility Division (which includes the Engineering Committee) will also be meeting during the conference on Thursday, May 4, 2023, at 5:00 pm.


#### Good Reads

From an engineering and construction perspective, *The Path Between the Seas*:



*The Creation of the Panama Canal, 1870-1914*, by David McCullough, is outstanding. If you are familiar with the author, you know all you need to know.

#### Committee Meetings Schedule

Engineering Committee meetings are held from Noon to 1 pm (PT) on the first Wednesday of each month. We are always looking for fresh faces. If you would like to join the Committee, please reach out to Greg Loscher at [gloscher@bowencollins.com](mailto:gloscher@bowencollins.com). 



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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.

### Membership Challenge Update – September 1 - December 31

On behalf of the Membership Engagement and Development Committee (MEDC), we want to say a special thank you for everything the Subsections did to recruit and retain members in 2022! We saw an overall increase in membership throughout the Section thanks to each and every one of your efforts.

As a Section, we grew by **4.9% over the year**, surpassing our goal of 2% and exceeding our recruitment goal of 292 members, with **344 new or reinstated members** in 2022. PNWS received a monetary reward from AWWA for meeting our recruitment goal that will be reinvested in the Section for

membership engagement efforts, thanks to all your individual efforts.

The MEDC launched the 2022 Membership Challenge in September to encourage Subsections to recruit new members, running from September 1 - December 31. The results are in! The MEDC extends a special congrats to the two Subsection winners of the challenge, who will receive a \$500 award to use towards membership engagement:

- Most new members: **Northwest Oregon (25 new members)**
- Most percent growth increase: **Blue Mountain (11.1% increase)**

The results were close between several Subsections, and we want to thank everyone for your efforts! We hope you all feel proud of the work

you did this year as a Subsection and take some time to celebrate.


Share the AWWA membership link far and wide – [www.awwa.org/membership-volunteering/join](http://www.awwa.org/membership-volunteering/join).

### Mentorship Program Update

The 2022-2023 PNWS Mentorship Program has officially launched with 17 new mentor/protege pairs. Mentor pairs meet about once a month over the next six months, with sessions on various career development topics, including technical and interpersonal skills, resume writing, and personal and professional goal setting. If you missed the application deadline and are interested in learning more, feel free to contact our Mentorship Program Coordinator, Kyle Wong, at [kyle.wong@spwater.org](mailto:kyle.wong@spwater.org) with any questions.

**Are you interested in learning more about the MEDC?** Attend our next monthly call. We meet on the first Friday of the month from Noon to 1 pm. Contact [jstultz@brwnncald.com](mailto:jstultz@brwnncald.com) for the meeting invite.

**Need help with reaching your Subsection members?** Let us know! We can pull member lists specific to your Subsection and renewal date to outreach specific members. Please reach out to the MEDC Chair, Joanie Stultz, at [jstultz@brwnncald.com](mailto:jstultz@brwnncald.com), or visit us at [www.pnws-awwa.org/member-groups/committees/membership-committee](http://www.pnws-awwa.org/member-groups/committees/membership-committee).

Special thanks to our current MEDC Committee members: Chris Young (Past Chair), Joanie Stultz, Kyle Wong, Natalie Reilly, Doug Schlepp, Randy Black, and DeEtta Fosbury, supported by Trustee Tyler Clary. 

We saw an overall increase in membership throughout the Section thanks to each and every one of your efforts.



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## Utility Management Committee Previews Kennewick Technical Program


The Utility Management Committee is excited to preview our Technical Program for Kennewick! Topics include *Asset Management, Mentoring, Capital Funding, Small Systems, Environmental Justice, Public Private Partnerships, Lessons Learned from our Next Generation Water Leaders, Dealing with Uncertainty and Inflationary issues,*

*Leadership, Emergency Planning, Project Management, and Project Outreach.* The diversity of these topics reflects the complexity of being a water manager today; it also reflects the need for communication, collaboration, and partnerships across various disciplines, skill sets, and generations.

What exciting and challenging times we are in for the water industry! See you in Kennewick!

The Utility Management Committee meets on the third Thursday every month from 9 am to 10 am. Please contact Ann Hajnosz at [ann.hajnosz@weareharris.com](mailto:ann.hajnosz@weareharris.com) if you would like to join our calls. 

What exciting and challenging times we are in for the water industry! See you in Kennewick!

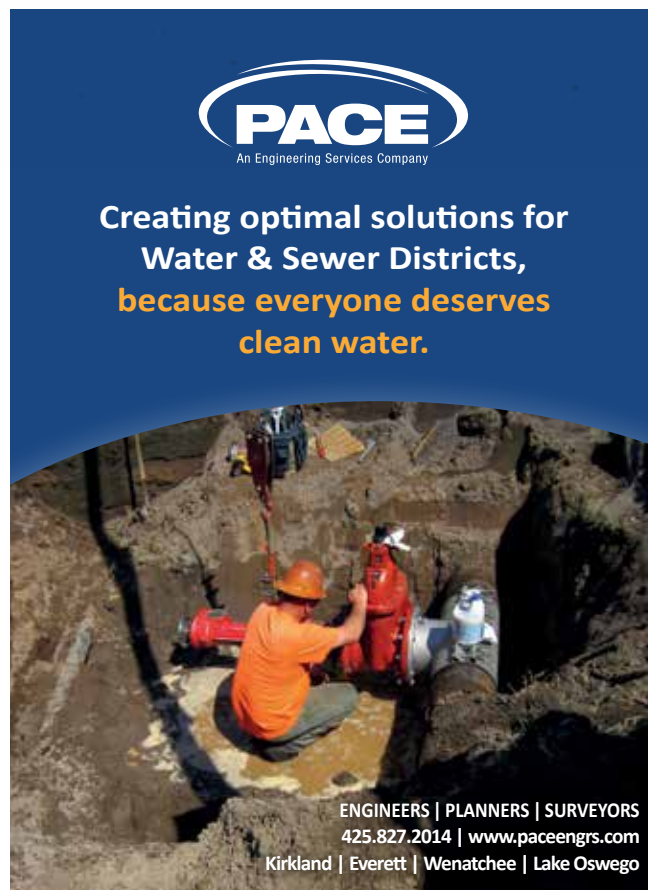


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# Welcome to the PNWS-AWWA's Annual Conference

May 3-5, 2023 | Kennewick, WA



## Tri-Cities 2023

The Tri-Cities welcomes you to the Pacific Northwest Section of the American Water Works Association Conference, taking place May 3-5, 2023. Water is essential to our communities, agriculture, and recreation in the Tri-Cities. We invite you to an enjoyable week of technical education, networking, discovery, and fun.

Located in Kennewick, Washington, the Three Rivers Convention Center is a short distance from the conference hotels and restaurants. Spend your time walking, hiking, or biking along Columbia Park on the Sacagawea Heritage Trail.







## Conference Highlights

### Technical Program

Training starts Wednesday morning with pre-conference programs offered by the Water Treatment, Research, Distribution, and Engineering Committees. Register early for these sessions.

Are you planning to join the conference later? With eight concurrent tracks on Thursday and Friday, there will be plenty of CEU-approved topics from which to choose. If you are an early riser, consider attending the early bird sessions Thursday and Friday mornings. Total CEUs available this year for the entire conference is 2.0.



### Activities and Competitions

#### **Tapping, Top Ops, Hydrant Hysteria, Meter Madness, Best Tasting Water, and Gimmicks and Gadgets**

What is a conference without some fun activities to enjoy with colleagues and friends? You are invited to check out all the competitions between the best of our 12 Subsections have to offer. The Tapping Contest, Meter Madness, and Hydrant Hysteria all take place on Wednesday. Also, find out who has the best water in the region during the Best Tasting Water competition Wednesday night. Interested in new gadgets? Friday afternoon, you will be able to watch the Gimmicks and Gadgets demonstration for new ideas. Think you know everything about the water industry? Test your knowledge against the Sections top competitors during the ever-popular Top Ops.



### Silent Auction in Support of our Section's Philanthropic Efforts

Do your Mother's Day shopping at our silent auction benefitting Water For People, The Water Equation, and our Section's Scholarship Fund: E&T. Be sure to stay close to the items you want because you could be out-bid during the last frenzied minutes before the close of the auction on Friday prior to the awards lunch.



### Awards Luncheon

The conference closes with the Awards Luncheon on Friday, May 5, just after the Philanthropic Silent Auction. The Section will award its highest honors for volunteerism and support of the water industry. The gavel will also be passed from Section Chair Michelle Cheek to Chair-Elect Dan Sleeth. Don't miss it!





## Golf Tournament

Canyon Lakes Golf Course is the location for this year's golf tournament. Located in South Kennewick, the course is rated 4.5 by *Golf Digest*, making it the highest-rated golf course in the Tri-Cities, and it shares the highest ranking in Washington State. Come out and network on May 3; check-in opens at 6:30 am, with a shotgun start happening at 8:00 am. The tournament entry fee is \$110 per person, and it includes the following: driving range, cart, breakfast, and a prime rib and salmon lunch.



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## 2023 Conference Schedule

SESSION NAME	DATE	START TIME	END TIME	LOCATION
Golf Tournament	May 3, 2023	8:00 am	3:00 pm	Canyon Lakes Golf Course
Room Assistant Training for Wednesday, Thursday, Friday Sessions	May 3, 2023	3:15 pm	3:30 pm	Convention Center Lobby
Room Assistant Training for Thursday, Friday Sessions	May 3, 2023	4:00 pm	4:15 pm	Convention Center Lobby
Best Tasting Water Contest	May 3, 2023	5:00 pm	7:00 pm	Cyber Café
Tapping Contest, Hydrant Hysteria, Meter Madness	May 3, 2023	5:00 pm	7:00 pm	Back Dock
Philanthropic Silent Auction Opening	May 3, 2023	5:00 pm		Convention Center Lobby
First-Time Attendees Breakfast	May 4, 2023	7:00 am	8:00 am	Cyber Café
Fresh Ideas Poster Contest	May 4, 2023	3:00 pm	4:00 pm	Board Room
Room Assistant Training for Friday Sessions	May 4, 2023	4:00 pm	4:15 pm	Convention Center Lobby
Water Science Division Meeting	May 4, 2023	5:00 pm	6:00 pm	Room C
Membership Engagement Division Meeting	May 4, 2023	5:00 pm	6:00 pm	Board Room
Philanthropy Division Meeting	May 4, 2023	5:00 pm	6:00 pm	Room E
Utility Operations Division Meeting	May 4, 2023	5:00 pm	6:00 pm	Room H
Public Communication Division Meeting	May 4, 2023	5:00 pm	6:00 pm	Room F
Government Relations Division Meeting	May 4, 2023	5:00 pm	6:00 pm	Room A & B
Excellence in Communication Awards	May 4, 2023	6:00 pm	7:00 pm	Cyber Café
Young Professionals Scavenger Hunt	May 4, 2023	6:00 pm	9:00 pm	Convention Center Lobby
Board of Trustees Meeting	May 5, 2023	9:30 am	11:30 am	Great Hall, Room B
Philanthropic Silent Auction Closing	May 5, 2023	12:00 pm		Convention Center Lobby
PNWS Awards Lunch Banquet	May 5, 2023	12:00 pm	1:30 pm	Great Hall, Rooms A & C
Excellence in Engineering Awards	May 5, 2023	1:30 pm	2:30 pm	Room G
Incoming Chair's Reception	May 5, 2023	5:00 pm	6:00 pm	Convention Center Lobby



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**Clean safe drinking water  
unites us all, together it is our  
job to keep it safe.**

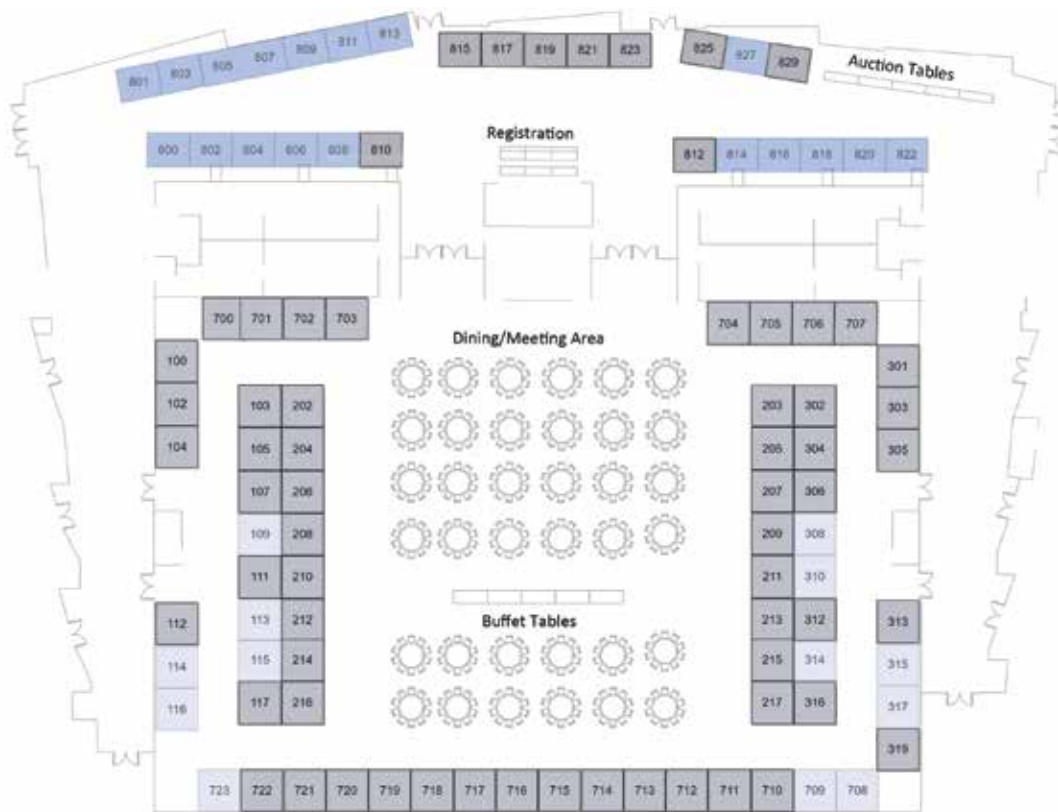
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## Exhibitor Floor Plan



THREE RIVERS  
CONVENTION CENTER



## 2023 Exhibitor/Booth list

Exhibitors	Booth #	Exhibitors	Booth #	Exhibitors	Booth #
A.Y. McDonald Mfg. Co.	104	Environmental Site Solutions	825	Northwest Pipe Co.	703
Alumichem Canada	203	ESRI	306	PACE Engineers	202
American Ductile Iron Pipe	212	Farwest Corrosion Control Company	117	Parametrix	812
American Flow Control	112	Ferguson Waterworks	722, 721	Polydyne	316
Aqueduct Software	105	The Ford Meter Box Co.	305	PPI America	711
Bainbridge Associates	214	Frank J. Martin	111	PumpTech	707, 301
Baker Silo	304	General Pacific	313	RH2 Engineering	810
Beaver Equipment	817	HD Fowler	215	Romac Industries	208
Big Dog Sales NW	829	Hollabaugh Bros.	210	Rosemount	704
Calgon Carbon Corp.	206	Iconix Waterworks	107	Sensus – Xylem	302
Consolidated Supply Co.	103	Kimley-Horn	213	Sigma Corporation	216
Conсор	706	Layfield	710	Stantec	209
Core & Main	207	M&H Kennedy Valve	217	SYBIS Cyberlock	815
Correct Equipment	719, 718, 717, 716, 715, 714, 713, 712	Master Meter	702	TMG Services	700
DN Tanks	720	McWane Ductile	303	TNW, Themec	102
Ductile Iron Pipe	204	Mueller Water Products	819, 821, 823	Trenton Corp.	100
Electrosteel USA	319	Neptune Technology	205	Victaulic	211
Emerson Automation	705	Nicor	312	Zenner US	701

# PNWS-AWWA's Annual Conference

May 3-5, 2023 | Kennewick, WA

## Wednesday, May 3

Assigned CEUS: Oregon, 2.0 Drinking Water; Washington, 2.0 Drinking Water

Attendees from Idaho will receive a certificate with an Oregon accreditation number per the Idaho Administrative Code Bureau of Occupational Licenses IDAPA 24.05.01.500 i. 0.4 Approved Courses.

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### Morning Pre-Conference Seminar

Room	A & B (cap 100)	C (cap 120)	D (cap 120)	E & F (cap 120)	G (cap 130)	H (cap 130)
Hosting Committee		Treatment		Distribution		Engineering
Preconference Seminar		PFAS Solutions Part 1		A Comprehensive Look at Municipal Installation of High Density Polyethylene (HDPE) Pipe Part 1		Hydraulic Modeling & Pumping
Moderator		Sean Thomson		Brian Murphy		Nick Augustus
8:30		145-Treatment Selection and Design for PFAS Management in a Changing Regulatory Environment (30 min) <i>Joanie Stultz</i>		36a-An Overview of Construction Installation Methods (60 min) <i>Peter Dyke</i>		16-Maximizing Booster Station Efficiency (30 min) <i>Jason King</i>
9:00		53-Developing a PFAS Treatment Approach (30 min) <i>Mehrin Selimger</i>				
9:30 - 9:45	Break					
9:45		66-PFAS Mitigation Strategy and Lessons Learned by a Regional Water Provider (30 min) <i>Marshall Meyer</i>		36b-Open Cut Installation (60 min) <i>Drew Mueller</i>		34-Dual Challenges of Portland's Bull Run Filtration Pipelines Project: Minimizing Head loss and Optimizing Flow Control (30 min) <i>Spencer Adams</i>
10:15		69-Removal of PFAS in Groundwater: Practical Lessons and Forward-Looking Planning (30 min) <i>Chris McMeen</i>				73-Leveraging Hydraulic Modeling Tools for Pump Selection in Closed Water Systems (30 min) <i>Chadwick Johnson</i>
10:45 - 11:00	Break					
11:00		60-In Search of PFAS (30 min) <i>Alex Mofidi</i>		36c-Horizontal Directional Drill (60 min) <i>Dan Landy</i>		86-Distribution System Flushing: Conventional, Unidirectional, and No Discharge Methods (30 min) <i>Dylan Bright</i>
11:30		12-Planning and Design of 18 MGD IX PFAS Treatment in Colorado (30 min) <i>Laurie Sullivan</i>				97-How Can I Make Sense of Demand Data, for Hydraulic Models and Everyone Else (30 min) <i>Matt Huang</i>

Reserved for Meet & Greet



Wednesday, May 3

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## Afternoon Pre-Conference Seminar

Room	A & B (cap 100)	C (cap 120)	D (cap 120)	E & F (cap 120)		G (cap 130)	H (cap 130)
Hosting Committee		Research		Distribution		Engineering	
Preconference Seminar		PFAS Solutions Part 2		A Comprehensive Look at Municipal Installation of High Density Polyethylene (HDPE) Pipe Part 2		Reservoirs	
Moderator		Andrew Nishihara		Brian Murphy		Douglas Lane	
1:00		70-Communicating about PFAS While Maintaining Public Trust (30 min) <i>Libby Barg-Bakke</i>		36d-Pipe Bursting and Sliplining (60 min) <i>Richard Kolasa</i>		40-City of Kennewick Reservoir Evaluation & Replacement (60 min) <i>Erik Peterson</i>	Reserved for Meet & Greet
1:30		5-A PFAS Journey – Vancouver Approach to Widespread Source Detections (30 min) <i>Tyler Clary</i>					
2:00 - 2:15	Break						
2:15		136-Not-So-Forever Chemicals: Field Demonstration of PFAS Destruction by a Pilot-Scale Nanofiltration and UV-Sulfite Treatment Train (30 min) <i>Charlie Liu</i>		36e-Above Ground Installations (60 min) <i>Drew Mueller</i>		98-Keeping the Eggs in More than One Basket – One of the City of Beaverton's Plans for Post- Earthquake Water Supply (30 min) <i>Tom Boland</i>	
2:45		131-When PFAS is Only Half the Battle: Treating Multiple Contaminants With a Series of Media (30 min) <i>Stephen Timko</i>				120-Rehabilitation Options for Aging Concrete Water Storage Reservoirs (30 min) <i>Jamin Ankeny</i>	
3:15 - 3:30	Break						
3:30		27-Thermal Destruction of PFAS during Full-Scale Reactivation of Granular Activated Carbon from Water Treatment (30 min) <i>Adam Redding</i>		36f-Repair Methods for HDPE (60 min) <i>Peter Dyke</i>		128-Baffled by CT? How Anacortes Used Baffle Design and Clearwell Redundancy to Streamline Compliance (30 min) <i>Tara Randall</i>	
4:00		24-Yorba Linda Water District Installs Largest Ion Exchange PFAS Water Treatment Plant in US (30 min) <i>Kelsey Hakes</i>				146-The Balance of Conservation and Storage (30 min) <i>Michelle Johnson</i>	

# PNWS-AWWA's Annual Conference

May 3-5, 2023 | Kennewick, WA

## Thursday, May 4

Assigned CEUS: Oregon, 2.0 Drinking Water; Washington, 2.0 Drinking Water

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### Early Bird Session

Room	A & B (cap 100)	C (cap 120)	D (cap 120)	E (cap 60)	F (cap 60)	G (cap 130)	H (cap 130)
Hosting Committee	Utility Management	Research		Water Resources		Engineering	Distribution
Moderator	Ann Hajnosz	Andrew Nishihara		Jacob Krall		Greg Loscher	
7:00	2-Improvise, Adapt and Overcome: Using Failure as an Asset (30 min) <i>Dick Talley</i>	149-PFAS Addressing State and Federal Regulatory Changes – What's Next (60 min) <i>Mike Meens</i>		35-Water Supply Well Condition Assessments: Real-World Applications and Results (60 min) <i>Panel Presentation Facilitated by Kevin Lindsey</i>		94-Delivering Capital Projects: A Young Professional's Guide to Specification Writing (60 min) <i>Spencer Adams</i>	49-How to Manage an Aging Control Valve System (60 min) <i>Steve Causseaux</i>
7:30	91-Asset Management Culture and Workplan (30 min) <i>Andy Tuchscher</i>						

### Morning Technical Session

Room	A & B (cap 100)	C (cap 120)	D (cap 120)	E (cap 60)	F (cap 60)	G (cap 130)	H (cap 130)
Hosting Committee	Utility Management	Research	Treatment	Water Resources	Diversity & Inclusion	Engineering	Distribution
Moderator	Ann Hajnosz	Andrew Nishihara	Jolyn Leslie	Jacob Krall	Randy Black	Dan Schafar	
8:30	14-Building A Small Systems Support Network (30 min) <i>Jamie Porter</i>	152-Reframing the Conversation around Emerging Contaminants (30 min) <i>Holly Tichenor</i>	33-Gas Chlorine is Still Used for Disinfection – Designing for Safety (30 min) <i>Stephen Nuss</i>	39-Data Dashboards: Who, What, When, Where, Why, and How (30 min) <i>Emma Martin</i>	100-Retaining Talent a Panel Discussion (60 min) <i>Facilitated by Benedicte Diakubama</i>	7-Permitting 101: Expectations And Strategies For Your Project (30 min) <i>Sean Thomson</i>	50-If Check Valves Were Cars: Style, Selection, Performance (60 min) <i>Steve Causseaux</i>
9:00	23-Mentoring: Still the Critical Path (30 min) <i>Kimberly Kelsey</i>	89-Impact of PFAS on Tacoma Water's Groundwater Supply and Corrosion Control Strategy (30 min) <i>Beth Mende</i>	82-Converting from Chlorine Gas to Sodium Hypochlorite at the Meadowlark Water Reclamation Facility (30 min) <i>Heather Burns</i>	143-Seeing the Future: Using GIS for Enhanced Planning and Forecasting of Well Maintenance and Life Cycle Costs (30 min) <i>Kelsey Mach</i>		8-Planning for Success – Adding Resiliency to Water Supply via Horizontal Directional Drill (30 min) <i>Kenneth Packard</i>	
9:30 - 9:45	<b>Break</b>						
9:45	118-Infrastructure Capital Funding Programs Panel Discussion: Program Updates, Strategies, and future Development (60 min) <i>Chris McCord</i>	113-Toxic Additives in Microplastics Desorb into Drinking Water Matrices (30 min) <i>Husein Almuhtara</i>	88-Improving Chemical Supply Resiliency – Transition from Gas to On-Site Hypochlorite Generation for a Large 1500 PPD System (30 min) <i>Joshua Kennedy</i>	83-Integrated Modeling to Optimize Ecological and Agricultural Water Supply Enhancement (30 min) <i>Jason Keller</i>	59-Filling your Bucket: Diverse Discussion Panel on Recruitment (60 min) <i>Facilitated by Asa Reyes- Chavez</i>	65-Successfully Tackling High Risk Design: Lessons Learned from the WWSP's Construction of the Raw Water Facility Project (30 min) <i>Jennifer Minton</i>	54-What's the Big Deal with Big Pumps? (30 min) <i>Daphne Marcyn</i>
10:15		107-Microplastics Removal in a Dynamic Coagulation-Flocculation- Sedimentation System (30 min) <i>Robert Andrews</i>	84-Round Tank in a Square Door: How to Fit an OSHG System into an Existing WTP (30 min) <i>Joanie Stultz</i>	85-Pollutant Load Modeling Webtool for Source Water Protection (30 min) <i>Jamie Feldman</i>		93-Developing an Effective Permitting Strategy for your Water Supply Project (30 min) <i>Jennifer Miller</i>	1-Water Loss Reduction Techniques (60 min) <i>Mike Uthe</i>
10:45 - 11:00	<b>Break</b>						
11:00	30-Machine Learning/ Artificial Intelligence (ML/AI) Applications for Small Systems (60 min) <i>Mike Grimm</i>	101-Machine Learning in Water Coagulation Optimization (30 min) <i>Benedicte Diakubama</i>	44-Successful Installation and Operation of a Full-Scale Hypolimnetic Oxygenation System for T&O Control (30 min) <i>Daniel Mosiman</i>	135-Using ESRI's GIS Technology to Further Tacoma Water's AMI (Automated Metering Infrastructure) Program (60 min) <i>Andy Simpson</i>	117-An Equity Journey Begins at Tacoma Water (30 min) <i>Rochelle Gandour-Rood</i>	115-Dog River Pipeline: Replacing a 100-year-old Wooden Pipeline to Secure a Resilient Water Future (60 min) <i>Dave Anderson</i>	80-Condition Assessment of Large Diameter Pipe (60 min) <i>Glenn Edgemon</i>
11:30		124-Making Conventional Treatment Cutting Edge Technology – Process Optimization Using Advanced Data Analytics (30 min) <i>Damon Roth</i>	102-Leveraging a Digital Twin to Implement Complex Control Logic at the 3Kings Water Treatment Plant (30 min) <i>Stephanie McGregor</i>		19-Everyone on Board: Advancing Equity Within Different Organizational Cultures (30 min) <i>Nicki Pozos</i>		
12:00 - 1:30	<b>Vendor Lunch</b>						



Thursday, May 4

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## Afternoon Technical Session

Room	A & B (cap 100)	C (cap 120)	D (cap 120)	E (cap 60)	F (cap 60)	G (cap 130)	H (cap 130)
Hosting Committee	Utility Management	Water Quality	Treatment	Water Resources	Public Information	Engineering	Distribution
Moderator	Kim Reid	Emilia Blake	Spencer Adams	Kenny Janssen	Andrea Watson	Erika Murphy	
1:30	132-Environmental Justice and Water Equity Private Sector Alliance – Partnering with Utilities (30 min) <i>Andrew Nishihara</i>	71-The Changing Regulatory Picture of Manganese (30 min) <i>Helene Baribeau</i>	129-The Revitalization of Water Infrastructure: Modernizing and Expanding a 100-year-old Water Treatment Plant (30 min) <i>Emily Palmer</i>	37-Groundwater Level Declines: Not Just an Odessa Groundwater Management Area Challenge (30 min) <i>Kevin Lindsey</i>	58-What Could Go Wrong? The Challenges of Communicating During Construction (60 min) <i>Marlys Mock</i>	56-Incorporating Additional Resilience Measures through Operational and System Control Strategies now that the Design is Complete for the Willamette Water Supply System (30 min) <i>Mike Britch</i>	3-Fire Hydrant Maintenance, Operation and iHydrant (30 min) <i>Vaughn Barber</i>
2:00	21-Public Private Partnership is Micro Hydro Installations (30 min) <i>Sam Shipp</i>	62-How Widespread is Manganese in Drinking Water? (30 min) <i>Andy Eaton</i>	126-Evaluation of Membrane Technologies and Options for Meeting the Ultimate Capacity Demand at Kennewick WTP (30 min) <i>Pierre Kwan</i>	68-A Study in Proactive Water Supply Planning (30 min) <i>Kelsey Mach</i>		67-Trailer to Tap: Maintaining a City's Water Supply While Replacing it's 100-year-old WTP (30 min) <i>Danielle Kalmbach</i>	13-Meter Health Analytics: The Importance of Large Meter to Water Districts Bottom Lines and Communities At Large Performance (30 min) <i>Kali Kocdemir</i>
2:30 - 2:45	<b>Break</b>						
2:45	32-City of Vancouver's Water Resiliency Strategy – Using Different Financial Levers to Raise Revenues (30 min) <i>Chris Malone</i>	63-Comparing Manganese Treatment Technologies (30 min) <i>Philip Brandhuber</i>	144-Finding the Best Option for Upgrading JWC's Chlorine Gas Disinfection System (30 min) <i>Connor Mancosky</i>	51-All's Well that Ends Well – Implementing Eugene Water and Electric Board's Emergency Well Program (60 min) <i>Nathan Endicott</i>	15-That was Then, This is Now: Communications in an Everchanging COVID-19 Environment (30 min) <i>Tacy Steele</i>	87-Seismically Resilient Transformation of the Medford Water Duff WTP (30 min) <i>Joshua Kennedy</i>	31-Setting Up for Success: The City of Hillsboro's Comprehensive Approach to Pipeline Replacement Project Prioritization (30 min) <i>Preston Love</i>
3:15	26-Financing the Cascade Groundwater Development Program with a WIFIA Loan and Revenue Bonds (30 min) <i>Kari Duncan</i>	55-Legacy Manganese Issues in Distribution Systems (30 min) <i>Andrew Hill</i>	76-High Rate Filtration Pilot Study and the impacts of the Chlorine Shortage (30 min) <i>Tessora Young</i>		122-Customer Information System Conversions: Lessons Learned (60 min) <i>Andrea Watson</i>	142-Installing Earthquake Resilient Water Mains in Constrained Corridors (30 min) <i>Sarah Merrill</i>	127-Elevated Water Storage Tank Assessment and Rehabilitation – Extending the Service Life of our Most Visible Infrastructure (30 min) <i>Justin Ford</i>
3:45 - 4:00	<b>Break</b>						
4:00	162-Asset Management Plan: Lessons Learned (30 min) <i>Chris Guest</i>	57-Main Cleaning and Control Strategies for Legacy Manganese (30 min) <i>Andrew Hill</i>	156-Enhancing Drinking Water Treatment Resilience to Wildfire Events (60 min) <i>Lynn Stephens</i>	155-Groundwater Depletion and Municipal Supply Resiliency in the Columbia Basin, Washington (30 min) <i>Walter Burt</i>	141-Engaging the Community in the Affordability Challenge (60 min) <i>Libby Barg-Bakke</i>	116-The Cascade Groundwater Alliance: Groundwater Development Project Program Overview Update and Package 1 Construction (60 min) <i>Justin Ford</i>	47-77,000 Service Lines Identified in 1,000 days – GIS to the Rescue (30 min) <i>Patrick Craney</i>
4:30	160-Lessons Learned from School to Design (30 min) <i>Michelle Horio</i>	151-Manganese Landscape in Washington: Occurrence, Challenges, and Regulatory Perspective (30 min) <i>Jolyn Leslie</i>		158-Managing for the Future: Building Drought Resiliency and Reliability into Municipal Water Supply (30 min) <i>Tyson Carlson</i>			90-Challenges Extending Earthquakes Resilience to Hydrants and Water Services (30 min) <i>Daniel Shafar</i>

# PNWS-AWWA's Annual Conference

May 3-5, 2023 | Kennewick, WA

## Friday, May 5

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## Early Bird Session

Room	A & B (cap 100)	C (cap 120)	D (cap 120)	E (cap 60)	F (cap 60)	G (cap 130)	H (cap 130)
Hosting Committee	Utility Management	Cross Connection			Diversity & Inclusion	Engineering	Distribution
Moderator	Kimberly Kelsey	Jessica Shaw			Randy Black	Greg Loscher	
7:00	75-Navigating Supply Chain Disruptions and Inflation with Estimating and Scheduling (30 min) <i>Bob Griesinger</i>	109-Game on! Come Roll the Dice on Water Complaints (60 min) <i>Darci Mattioda</i>			18-Responsive Support for Disadvantaged Businesses (30 min) <i>Jessie Maran</i>	138-No Exceptions Taken – Construction Submittal Review 101 (30 min) <i>Josh Yung</i>	29-Use of Fusible PVC in Adverse Conditions: Corrosive Soils, Expansive Soils, Slope Stability and for Seismic Resiliency (60 min) <i>Jeffrey Rosenlund</i>
7:30	28-The Future Ain't What it Used to Be: Dealing with uncertainty in climate projections (30 min) <i>John Phillips</i>				108-Improving Disability and Language Access (30 min) <i>Penny Milton</i>	20-Engineering Departments – Going Digital: Moving Beyond Spreadsheets, Blueprints and Paper Maps (30 min) <i>Stephen Dennehy</i>	

## Morning Technical Session

Hosting Committee	Utility Management	Cross Connection	Treatment	Water Resources	Conservation	Engineering	Water Quality & Distribution
Moderator	Kimberly Kelsey	Jessica Shaw	Scott Allis	Andrew Austreng	Dan Denning	Mohammad Ahmad	Emilia Blake
8:15	17-Understand The Tools in Being a Good Leader (60 min) <i>Randy Black</i>	163-Fire Sprinkler System Standards (60 min) <i>Gary Honald</i>	64-Coagulation 101 (30 min) <i>David Pernitsky</i>	48-Developing a Strategic Source Water Protection Plan for Oregon's Largest Watershed (30 min) <i>Christina Walter</i>	11- Evolving Approaches to Public Outreach on a Regional Scale (30 min) <i>Bonny Cushman</i>	77-Upgrading Pendleton's Infrastructure to Support Development at the Top of Its Water System (30 min) <i>Taylor Spencer</i>	99-Navigating the New Lead and Copper Rule Requirements & Leveraging Available Funding (30 min) <i>Lauren Wasserstrom</i>
8:45			9-How Long is Too Long? Evaluating Extended Biofilter Shutdown at Hayden Bridge (WRF #4984) (30 min) <i>Michael McKie</i>	81-Development of a Watershed Protection, Monitoring, and Outreach Plan for the Willamette Intake Facilities Commission (30 min) <i>Jacob Krall</i>	10-Curtail Your Enthusiasm: How We Exercised Our Conservation Management Plans and Other Regional Projects (30 min) <i>Bonny Cushman</i>	140-Evaluation and Improvements Design of the Cloud Cap Inn Water System, Mt. Hood, Oregon (30 min) <i>Alex Bargmeyer</i>	130-Preparing for LCRR Compliance Part I: Service Line Material Inventory (30 min) <i>Helene Baribeau</i>
9:15- 9:30	<b>Break</b>						
9:30	4-Emergency! Who's In Charge? (60 min) <i>Brian Murphy</i>	105-Building a Robust Cross Connection Control Program (60 min) <i>Brian McDaniel</i>	137-Deep-Bed Filters: State of the Art and Lessons Learned (30 min) <i>Katerina Meesologitis</i>	166-Forecasting Daily Streamflow to Maintain a Critical Minimum Streamflow Target (30 min) <i>Kevin Boggs</i>	92-Seeing Purple: Design and Construction of the City of Beaverton's Non-Potable Water System for Municipal Irrigation (60 min) <i>Jason Melady</i>	121-ShakeAlert and Water Systems: What Would You Do With 10 Seconds of Earthquake Early Warning? (30 min) <i>Kelly Missett</i>	125-Preparing for LCRR Compliance Part II: Beyond the Service Line Material Inventory (30 min) <i>Damon Roth</i>
10:00			95-Modified Tracer Testing Methodology for Long Detention Times (30 min) <i>Andrew Nishihara</i>	61-Source Water Protection Planning in an Agricultural Watershed (30 min) <i>Joanna Lewis</i>		159-A Scenario Approach to Supply System Planning Positions Portland Water Bureau for a Sustainable Future (30 min) <i>Mark Anderson</i>	72-Lead and Copper Rule Revisions: Find-and-Fix Assessments, Even Without Lead Pipes (30 min) <i>Virpi Salo-Zieman</i>
10:30 - 11:00	<b>Break</b>						
11:00	150-Building Effective and Efficient Project Management Teams (30 min) <i>Rachel McGinn</i>	103-Reviewing Building Plans for Cross Connection Control (30 min) <i>Jessica Shaw</i>	96-Ozone Disinfection in Drinking Water: Back to the Basics (30 min) <i>Spencer Adams</i>	52-Tualatin River Drinking Water Source Area Impoundment Identification and Prioritization (30 min) <i>Austin Orr</i>	164-Developing an Equity Data Toolkit: Building Organizational Capacity to Identify, Assess and Mitigate Water Conservation Service Inequities (30 min) <i>Maoloud Dabab</i>	25-Funding Your Next Risk Mitigation Project (30 min) <i>Sarah Lingley – suggested</i>	134-Guidance for Using Pipe Rigs to Inform Lead and Copper Corrosion Control Treatment Decisions – Program Drivers (30 min) <i>Melinda Friedman</i>
11:30	153-Aligning Strategic Priorities and Level of Service to Improve Project Outreach Effectiveness (30 min) <i>Holly Tichenor</i>		114-Major Ozone Equipment Replacement: How to Increase Resiliency of Your Ozone System Amidst Supply Chain Issues (30 min) <i>Kim Ervin</i>	78-Upper Tualatin Wildfire Protection Plan (30 min) <i>Jacob Krall</i>	165-Integrated Conservation Planning and Targeted Implementation (30 min) <i>Dan Denning</i>	139-Diving into Water Rates and Project Financing – End of PAYGO? (30 min) <i>Lusan Burke</i>	133-Guidance for Using Pipe Rigs to Inform Lead and Copper Corrosion Control Treatment Decisions – Design (30 min) <i>Pierre Kwan</i>



Friday, May 5

Assigned CEUS: Oregon, 2.0 Drinking Water; Washington, 2.0 Drinking Water

Attendees from Idaho will receive a certificate with an Oregon accreditation number per the Idaho Administrative Code Bureau of Occupational Licenses IDAPA 24.05.01.500 i. 0.4 Approved Courses.

Those continuing education courses which are relevant and approved by the states of Nevada, Oregon, Montana, Utah, Wyoming, and Washington are deemed approved by the Board. (2-26-08).


## Afternoon Technical Session

12:00 - 1:30	Awards Lunch						
Room	A & B (cap 100)	C (cap 120)	D (cap 120)	E (cap 60)	F (cap 60)	G (cap 130)	H (cap 130)
Hosting Committee	Competitions		Treatment				Water Quality & Distribution
Moderator			Scott Allis				Emilia Blake
1:30	Top Ops		154-Bull Run Water: Investigating Coagulation, Flocculation and Sedimentation (60 min) <i>Mojtaba Azadiaghdam</i>				42-Oversight and Communication for Implementing Improved Corrosion Control Treatment (30 min) <i>Yone Akagi</i>
2:00							41-Regulatory, In Home, and Installation Monitoring for Implementing Improved Corrosion Control Treatment (30 min) <i>Mac Gifford</i>
2:30 - 2:45	Break						
2:45	Gimmicks & Gadgets		112-Advances and Challenges in Microplastic Sampling and Analysis of Drinking Waters (30 min) <i>Robert Andrews</i>				46-Rockwood Pipe Loop Study: Pilot Testing Challenges for Corrosion Control Optimization (30 min) <i>Aaron Gress</i>
3:15			111-Interaction of Microplastics with Per- and Polyfluoroalkyl Substances (PFAS) and Microcystins in Drinking Water (30 min) <i>Husein Almuhtaram</i>				104-Setting the Standard: City of Lacey pH Treatment Projects (30 min) <i>Nathan Rostad</i>
3:45 - 4:00	Break						
4:00			161-Approaches for Accelerating the Design and Construction of a PFAS Treatment Facility (30 min) <i>Amy Gao – suggested</i>				79-Water Quality: Seriously Consider the System (30 min) <i>Chris McMeen</i>
4:30			123-Nitrate Treatment for Groundwater Wells (30 min) <i>Jeganathan</i>				119-Using Bench-Scale Testing and Field Activities to Identify Distribution System Destabilization Risks from Water Supply and Treatment Changes (30 min) <i>Alex Mofidi</i>



## Our Section Conference Smart Phone App is available for download!

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# 2023 WOMEN IN LEADERSHIP SYMPOSIUM

*Looking Back to Launch Forward*



2023 Women in Leadership Planning Committee

On February 7, 2023, 225 women gathered at Seattle University's Campion Ballroom for the 10th Anniversary Women in Leadership Symposium, a unique tradition that has been inspiring professional women in the water industry. This year's theme focused on 'Looking Back to Launch Forward,' encouraging women to consider the past while being excited and using experiences to prepare for their future. This year the Symposium was hosted at Seattle University, which provided students with the opportunity to participate in our morning sessions and, additionally, hear from aspiring student engineering leaders.

While the water industry has a reputation for being heavily male-dominated, the incredible women who attended the event proved that the female professionals in our industry are both accomplished leaders to learn from, and emerging leaders to carry the next generation. The morning speakers shared their knowledge and wisdom through personal anecdotes and

pragmatic approaches to leadership. Dr. Se-Yeun Lee, a Professor of Civil and Environmental Engineering at Seattle University, kicked off the morning by sharing her passion for being a strong and dynamic role model, and reminding us to "take it at face value." Ana White, a Seattle University Alum and Chief People Officer at F5 Networks, encouraged our



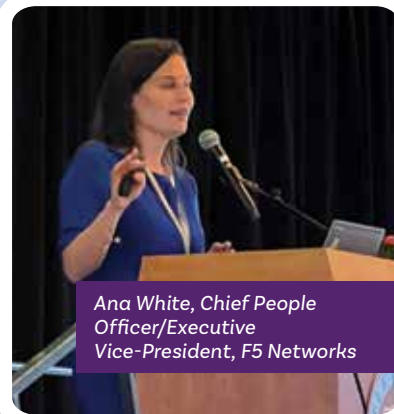
Robin McPherson, Adjudication Manager, Washington State Department of Ecology

*"The incredible women who attended the event proved that the female professionals in our industry are both accomplished leaders to learn from, and emerging leaders to carry the next generation."*





Seattle University Alum Panel reflecting on their careers in the industry



Ana White, Chief People Officer/Executive Vice-President, F5 Networks

attendees to create their own Personal Board of Directors. Our morning also included a panel of Seattle University Alum reflecting on their careers in the industry as well as student presentations on three senior design projects. The afternoon continued with Robin McPherson (Department of Ecology) returning to our event and reflecting on her career, hearing from Joelle Torre (SPU), Randi Perry (City of Langley, WA), and Shannon Brattebo (Tetra Tech), all top professionals in the industry highlighting projects and roles within the local water sector. Finally, our symposium wrapped up with instant polling led by Jenna Franklin (Conсор) and final thoughts by Planning Committee Member Grizelda Sarria (Tetra Tech) and her Seattle University engineering student daughter, Ashley, with a call to action to launch the next generation forward.

As with our past Symposiums, this event focused on networking, mentoring, leadership, and learning – essential buzzwords for any aspiring professional. What makes this day an event to look forward to each year is its unique ability to create an open and authentic atmosphere, key ingredients to foster professional growth and development. At the end of the day, it is this atmosphere that helps us walk back to our everyday lives more inspired and empowered.

Thank you to all who made the 10th Annual Women in Leadership Symposium a success! 🙌

PNWS-AWWA – Women in Leadership Planning Committee  
Contact: Erika Schuyler  
[erika.schuyler@consoreng.com](mailto:erika.schuyler@consoreng.com)

*"What makes this day an event to look forward to each year is its unique ability to create an open and authentic atmosphere, key ingredients to foster professional growth and development. At the end of the day, it is this atmosphere that helps us walk back to our everyday lives more inspired and empowered."*

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## DEFENDING AGAINST PHYSICAL AND CYBER THREATS

PATRICK MASSEY, CISA REGION 10 REGIONAL DIRECTOR

**T**he Cybersecurity and Infrastructure Security Agency (CISA) recognizes that safe drinking water and properly treated wastewater is essential to public health, environmental protection, and commerce.

At CISA, we are committed to working with water and wastewater system operators to help ensure your information technology (IT) and operational technology (OT) systems operate safely and efficiently and that each operational site is secure from unwanted access and tampering.

Water and wastewater systems are so vital to our nation; the Department of Homeland Security has defined them as a 'Lifeline Sector.' Additionally, both the ability to 'supply water' and 'manage wastewater' are considered 'National Critical Functions.'

In the recent past, there have been several cyber incidents targeting water and wastewater entities ranging from control manipulation and data exfiltration to ransomware attacks. CISA assesses that nation-state adversaries, cyber-criminals, and other malicious actors will continue to target water and wastewater utilities of all sizes.

But there are ways you can minimize the impact of cyber incidents through

basic cybersecurity best practices. For instance, some utilities use older equipment, so CISA recommends updating your software and operating systems with the latest patches. Outdated applications and operating systems are the targets of most attacks. It's also a good idea to back up your data on a regular basis and follow safe practices when using devices that connect to the internet. Also, pay attention to the insider threat. Recurring background security checks of staff and physical access controls are a few ways to reduce this risk.

I would encourage you to check out three CISA documents that may help your utility improve its cyber resiliency:

1. **Cybersecurity Performance Goals (CPGs)** – CPGs are a *prioritized* subset of IT and OT cybersecurity practices aimed at *meaningfully* reducing risk. If you have limited people and funds, the CPGs will show you where to start to invest in making the greatest impact. For more information, please visit [www.cisa.gov/cross-sector-cybersecurity-performance-goals](http://www.cisa.gov/cross-sector-cybersecurity-performance-goals).
2. **Multi-Factor Authentication (MFA)** – Implementing MFA, especially phishing-resistant MFA, is the single greatest action you can take to reduce both IT and OT

cyber vulnerabilities. For more information, please visit [www.cisa.gov/news-events/alerts/2022/10/31/cisa-releases-guidance-phishing-resistant-and-numbers-matching](http://www.cisa.gov/news-events/alerts/2022/10/31/cisa-releases-guidance-phishing-resistant-and-numbers-matching).

3. **Known Exploited Vulnerabilities (KEVs)** – This is the authoritative source of cyber vulnerabilities that have been exploited by adversaries. IT/OT staff should review this list to see if any of your vendor's hardware or software is on it and then take action. For more information, please visit [www.cisa.gov/known-exploited-vulnerabilities](http://www.cisa.gov/known-exploited-vulnerabilities).

In addition to the above, the "15 Cybersecurity Fundamentals for Water and Wastewater Utilities" provides best practices to reduce cyber vulnerabilities. It can be found at [www.waterisac.org/fundamentals](http://www.waterisac.org/fundamentals).

CISA stands ready to support you with various services like cybersecurity and physical security vulnerability assessments. If you'd like to learn more about these and other services, please reach out to us at [cisaregion10@cisa.dhs.gov](mailto:cisaregion10@cisa.dhs.gov).

The water/wastewater sector will be a high priority for CISA in 2023. We'll be sharing more about our work in this area soon.

Thank you for all you do. 🇺🇸



Mr. Massey has served as the Regional Director of the DHS Cybersecurity and Infrastructure Security Agency (CISA) Region 10 office in Seattle since 2016. Prior to joining CISA, Mr. Massey served for twenty years with the Federal Emergency Management Agency (FEMA) Region 10 office, including eight years as the Director of the National Preparedness Division. He also served as the Regional Integration Branch Chief, Technological Hazards Branch Chief, and as a Hazard Mitigation Specialist. Prior to joining FEMA, Mr. Massey served as the Assistant State Hazard Mitigation Officer with the Illinois Emergency Management Agency and served as a Planner for a Regional Planning Commission in Illinois. He also trained as a Nuclear, Biological, and Chemical Officer in the US Army, serving in a tank battalion in Germany and the First Gulf War.





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### Subsection Advisory Council

Competitions, competitions, competitions! The Annual Conference is fast approaching, and we are excited to get the competitions back and, most of all, the great competitors from each Subsection. On Wednesday night of the Section Conference, the competitors will be putting it all on the line for a chance to move onto the national stage, ACE 2023. We hope to see everyone there.

#### Competitions – What is it, and how is it done?

**Pipe Tapping** – The teams will be required to tap a water-pressurized ductile iron pipe, install a corporation stop, cut and flare 3/4" copper tubing for installation of a water service line with a curb stop, and connect this line to a meter yoke. Contact Loren Searl at [lsearl@spokanecity.org](mailto:lsearl@spokanecity.org) for more information.

**Hydrant Hysteria** – This competition is a measure of the team's skill at assembling a hydrant quickly, completely, and accurately. All parts will be assembled properly, and the reassembled hydrant shall be tested by the judges for its ability to operate correctly. Contact Pat Everham at [teverham@ci.richland.wa.us](mailto:teverham@ci.richland.wa.us) for more information.

**Meter Challenge** – The Meter Challenge is a fast-paced race between you and the other competitors. 3,2,1 go!

You start with a disassembled meter in a bucket, then dump your bucket to spill all its contents onto a table. Then, grab the correct pieces to place the parts back into the meter body as fast as possible. Watch out, though; there will be extra pieces in there to add to the excitement! What's the point in putting together a meter if it can't hold water? After the meter is back together, it will go through testing to ensure it works and there are no leaks. If you have any loose parts or leaks, time penalties will be added to the raw time of putting the meter back together. The winner is the contestant that has the lowest overall time of putting the meter back together and testing. If you have a minute to spare, are you up for the Meter Challenge? Contact Chris Hicks at [chicks@cityoftacoma.org](mailto:chicks@cityoftacoma.org) for more information.

**Top Ops** – The purpose of the Top Ops competition is to recognize and promote excellence and professionalism in all aspects of water operations by establishing a competition that gives operators the opportunity to showcase their talents. The Top Ops competition is a competitive, question-and-answer tournament where a moderator asks a broad range of technical questions to the participating teams, and they have limited time to answer. Strategy is involved since points are awarded

for correct answers and deducted for incorrect answers, while no change occurs to the score for not answering a question. Contact Bill Reynolds at [breyolds@cityoftacoma.org](mailto:breyolds@cityoftacoma.org) for more information.

#### Field Operations & Innovations –

Your entry should be a novel and relatively simple mechanical device or procedure designed to provide a more efficient, safer, and/or simplified way to perform routine tasks or functions in the maintenance, operation, or construction of a water utility system. Commercially available products are not eligible. Contact Kali Kocdemir at [kali.kocdemir@gmail.com](mailto:kali.kocdemir@gmail.com) for more information.


#### Subsection Engagement

The SAC has continued to have quarterly meetings with Subsections to promote communication and coordination. We have had four meetings that have produced a place to share upcoming networking events, trainings, and ideas. This has also been an opportunity for Subsections to discuss how to conduct business and engage with their members.

We will be developing the next agenda for the June meeting. We plan to have members from Committees attending to discuss their goals and how Subsections can work with them. There will also be training opportunities for new or existing Subsection members to learn about their roles and responsibilities. If you would like to join in, please feel free to reach out.

#### Opportunities to Join

If you are interested, please reach out to one of us! This is a fun and exciting Committee. We are looking for a Western Oregon Coordinator and an Eastern Washington/Idaho Coordinator.

For more information or for any inquiries, please contact Brian Wilson at [brian.e.wilson@cityofvancouver.us](mailto:brian.e.wilson@cityofvancouver.us). 



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## Northwest Oregon Subsection



Pictured Left to right: Officers Laura Oxsen (President) and Dawn Nolan (Secretary).

It was great to see so many of you at the 2022 Holiday Party! It was a fantastic venue, and over 220 attended this networking event. Thank you to everyone who provided door prizes to make this event fun and successful and to our sponsors: Stantec, 3J Consulting, Summit Water Resources, Branom Instrument Co., DN Tanks, GRI, General Pacific, Inc., and Consor!

Also, the members donated 250 pounds of food to the Oregon Food Bank, and more than ten toys were donated to the KGW Great Toy Drive!

### John Aho Memorial Golf Tournament

**John Aho Memorial Golf Tournament** will be held Friday, July 21, 2023, at Gresham Golf Course. It's time to find your four-person team and add this day to your calendar! Last year,




we had 120 golfers and 29 sponsors. If you're interested in helping with this event and/or want to sponsor in some capacity, please contact Justin Ford at [justin.ford@consoreng.com](mailto:justin.ford@consoreng.com). Registration opens in early summer.

### New Officer Announcement

Let's welcome our newest Subsection Secretary, Dawn Nolan, with GRI. Dawn was voted into this position at the December meeting.

Dawn currently works as the Information Services Lead & Technical Editor at GRI, an engineering consulting firm specializing in geotechnical, geologic, pavement, and environmental services in Tigard. She is responsible for leading GRI's specialty QA-QC programs, documenting firm compliance and all tasks associated with technical firm deliverables, and managing document standards. She is actively involved in GRI's water and environment group and is excited to be involved as the incoming NWOR Secretary and grow her involvement within the PNWS-AWWA.





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### Welcome to our new YP Committee Chair, Emma Martin

Emma Martin is the Water Resources Management Analyst for the City of Hillsboro's Water Department. She is responsible for tracking, analyzing, and reporting reservoir storage, production, consumption, and distribution data for the City and Joint Water Commission. She also provides support for source water protection projects and water rights reporting. Emma enjoys getting outside to hike, rock climb, snowboard, and camp. When she's not exploring, she enjoys going to new restaurants around PDX and playing with her two cats – Ani and Obi.



### Waterworks School in June!

June 20-22, 2023 –

#### Clackamas Community College 2.0 CEU (Pending OSEAC Approval)

Mark Knudson will be our keynote speaker! Mark will share observations and insights drawn from his 40-year career in the water industry in the Pacific Northwest. His thoughtful perspectives and inspiring stories are sure to help enhance the effectiveness of water professionals as they tackle many of the significant challenges facing the water industry.

Registration will open on April 1, 2023. For additional questions, please contact Christine Hollenbeck at [christine@clackamasproviders.org](mailto:christine@clackamasproviders.org).

2 Day – \$200.00

1 Day – \$155.00

### Looking for New Committee Leads

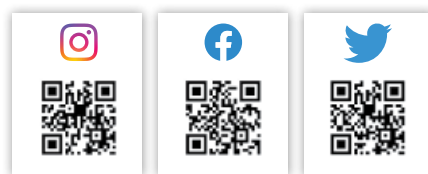
- **Membership Committee:** The duties include sending out monthly membership announcements and sending welcome letters to new members, maintaining a Subsection member list within Constant Contact, and working closely with the Board.

This position would start as soon as possible. *Congratulations to Chandra for becoming the Oregon/Idaho Trustee beginning in May.*

- **Education and Safety Committee:** Duties include putting together at least two trainings a year, applying for CEUs through the OSEAC process, providing awards after trainings are complete, and working closely with the Board.

If you are interested in one of these positions, please contact Kyle Arnhart at [kylea@tigard-or.gov](mailto:kylea@tigard-or.gov).

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### South Sound Subsection

#### Subsection Update

The South Sound Subsection is starting the year strong with valuable trainings and fun networking events lined up for 2023! Our officers and volunteers are gearing up for a great spring, starting with our Waterworks 101 workshop to kick off our training classes for the year, and the Water Taste Test and Meter Challenge to kick off our networking events.

#### Training Classes and Workshops

Our Waterworks 101 was held earlier this month. We were excited to offer this as a hybrid class with participants both at the Tacoma Public Utilities Auditorium and on Zoom.

We will have a Construction Management training on April 18, 2023. Speakers are being lined up, and registration is also available at [bit.ly/SouthSoundCM2023](https://bit.ly/SouthSoundCM2023).

The Subsection also plans on having classes covering the topics of Safety, Water Systems Planning, and possibly Chlorine Residual or Asset Management. Stay tuned as we finalize our planning for the second half of the year!

#### Water Taste Test and Meter Challenge

It's back! Our Subsection's Water Taste Test and Meter Challenge just took place. It was wonderful to see participants back in person. The winners took home the title of 'The Best in the Northwest' and will represent the South Sound at the Annual Section Conference competitions.



#### Golf Tournament

Are you ready for summer? We are! Our Subsection is having our 10th Annual Charity Golf Tournament on July 14, 2023, so mark the date on your calendar and join us for a fun day of golfing for a good cause!

Our 10th Annual Charity Golf Tournament proceeds will go toward Living Access Support Alliance (LASA) and through the direction of the Philanthropy Advisory


Committee. LASA supports local families struggling to afford their utilities and facing possible homelessness. Thank you to our sponsors and volunteers; we raised nearly \$4,000 last year! We hope you can join us this year in participating in this fun and charitable event and raise even more than we did last year!



The tournament will be held at the Oakbrook Golf Course, and dinner will be provided after you spend all day at the course. Truly a great experience you wouldn't want to miss!

#### Board Recruitment

Our Subsection is preparing for open positions, and we welcome you to participate in our Subsection. If you are in Kitsap, Pierce, Mason, Grays Harbor, Thurston, or Pacific County, we are your Subsection.

We hold our meetings every third Wednesday of the month, and everyone is welcome to join. Contact our Subsection President, Jolene Gibson, at [jgibson2@cityoftacoma.org](mailto:jgibson2@cityoftacoma.org) for more information and to get involved. 



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BioSafe Systems	8	888-441-1975	<a href="http://www.biosafesystems.com">www.biosafesystems.com</a>
Blue-White Industries, Ltd.	39	714-893-8529	<a href="http://www.blue-white.com">www.blue-white.com</a>
Brown and Caldwell	9	206-624-0100	<a href="http://www.browncaldwell.com">www.browncaldwell.com</a>
Carollo Engineers	12	800-523-5826	<a href="http://www.carollo.com">www.carollo.com</a>
Conсор	33	425-252-9003	<a href="http://www.consorteng.com">www.consorteng.com</a>
Core & Main	7	509-893-1055	<a href="http://www.coreandmain.com">www.coreandmain.com</a>
CUES, Inc.	2	503-622-3248	<a href="http://www.cuesinc.com">www.cuesinc.com</a>
DN Tanks	20	503-323-2000	<a href="http://www.dntanks.com">www.dntanks.com</a>
Force Flow/Halogen Valve Systems	29	925-686-6700	<a href="http://www.forceflowscales.com">www.forceflowscales.com</a>
Ford Meter Box Company	35	260-563-3171	<a href="http://www.fordmeterbox.com">www.fordmeterbox.com</a>
Garney Construction	15	303-791-3600	<a href="http://www.garney.com">www.garney.com</a>
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Owen Equipment Company	33	503-255-9055	<a href="http://www.owenequipment.com">www.owenequipment.com</a>
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