

Morning	Wednesday, May 1 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		Tessoro 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, Annikki Chamberlain (60) DW		18 - Math for Operators, Jeff Lundt (3 hours) DW/WW	87-Well Electric Well Station Assessment – Evaluating Options for Increasing its Reliable Production Capacity, Kenny Janssen (30) DW		63-Tour of Spokane’s Riverside Park Water Reclamation Facility, Tessoro Young (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, Matt Kohlbecker (30) DW				
9:30 - 9:45 Break								
9:45	99b-Meters, submeters and deduct meters, oh my!, Annikki Chamberlain (60) DW			92-Pilot Testing Supports ASR Decision Making, Lee Odell (30) DW				
10:15				148-Permitting Considerations for ASR Source Water, Andrew Austreng (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!, Graham Mattison (60) DW			52-Municipal Water Supply Source Development and Regulatory Considerations, Patrick Cabbage (30) DW				
11:30	99c-Leak Detection on Commercial Properties, Annikki Chamberlain (30) DW			178-Water Quality Challenges and Solutions for ASR Systems, DeEtta Fosbury (30) DW				
		Drinking Water CEUs only	Wastewater CEUs only					

Afternoon	Wednesday, May 1 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 Contresas		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, Annikki Chamberlain (60) DW/WW		19 - Reading Process & Instrumentation Diagrams, Jeff Lundt (3 hours) DW/WW			83-City of Spokane Well Electric Well Station and Water System Field Trip, Seth McIntosh (3 hour tour) DW	124-City of Vancouver Bench- and Pilot-Scale Evaluations for PFAS Mitigation, Gwen Woods-Chabane (30) DW	8 - Long Term Seismic Resilience Master Planning, Negar Niakan (30) DW
1:30							46-PFAS in Potable Reuse, Kyle Thompson (30) DW	152 - Seismic Piping 101, Daniel Shafar (30) DW
2:00 - 2:15 Break								
2:15	99e-Commercial Heating and Cooling System Efficiency, Annikki Chamberlain (60) DW/WW						104-Centralized Treatment to Removes PFAS and Nitrate in Tustin, CA, Esther Chang (30) DW	128 - Challenges of Routing and Designing a 66" Seismically Resilient Pipeline: Liquefaction Risks, Alignment Alternatives, and Deep Soil Mixing on the WWSP Pipeline, Kelli Barton (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, Amy Gao (30) DW
3:15 - 3:30 Break								
3:30	99f-Field Evaluation of a Commercial Property, Annikki Chamberlain (60) DW/WW						130-Navigating PFAS Treatment Technology Decisions, Cynthia Yeager (30) DW	68 - Oregon City Henrici Reservoir Rehabilitation – Extending the Service Life of Welded Steel Potable Water Storage Tanks, Justin Ford (30) DW
4:00								175-GAC and IX for PFAS Removal: A review of recent case studies, Eli Townsend (30) DW
		Drinking Water CEUs only	Wastewater CEUs only					

Morning	Thursday, May 2 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	Doug Lane	Mike Grimm	Chris Young	Tyler Kurtz	Taylor Stockton
7:00	177-Will AI Replace or Enhance Public Communication?, Kristen Zimmer (60) DW/WW	176-Washington Regulatory Update, Mike Means (30) DW	165-Flow and Function: Facets of Large Vertical Pumps, Motors, and VFDs, Jennifer Murphy (60) DW/WW	43-Water Treatment Media Design and Evaluation - Screening Method Limitations and Proper Pilot Trial Design, Neal Megonnell (30) DW/WW	101-Holistically Evaluating Staffing Needs, Emily Palmer (30) WW	132 - Implementing DEI Initiatives in your Water Utility, Kyle Bayer (60) DW/WW	113-To Pilot or not to Pilot? PFAS Pilot Testing Approaches and Case Studies, Amy Gao (60) DW	6-Essentials for the Design & Specification of Earthquake Resistant Ductile Iron Pipe, John Kitchen (30) DW/WW
7:30		126-Oregon Regulation Update, Michelle Byrd (30) DW		107-Side-by-side Comparison of Online Monochloramine Analyzers, Mojtaba Azadiaghdam (30) DW/WW	82-Broadening our SCOPE – Growing Industry Involvement in the STEM Educational Experience, Maricris Eleno-Orama (30) WW			11-Seismic Design Alternative for Ductile Iron Boltless Segment Pipe Joints to Address Schedule Issues and Improve Installation Flexibility, Mike Britch (30) DW/WW
Morning	Thursday, May 2 Morning 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	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 Jurotich	Chris Young	Brian Smith	Greg Loscher
8:30	170-Fixing Leaks, Saving Wallets: Tacoma’s Water Service Line Grant and Loan Program, Tyler Cummings (30) DW	27-Lead and Copper Rule Revision: Idaho Primacy and Beyond the Inventory, Cassandra Lemmons (60) DW	140a-Hands-On w/ Hydraulic Control Valves: Function, Steve Causseaux (60) DW	162-Enhancing Protection of the Willamette River, Oregon’s Largest Watershed, Jacob Krall (60) DW	164-Aligning Your Top Projects with Federal Funding Priorities, Kim Pugel (30) DW/WW	9-What Makes an Award-Winning Diversity Equity & Inclusion (DEI) Program?, Ann Hajnosz (30) DW/WW	60-Four Tenets of Pressure Vessel Design - What to Consider on Your Next GAC or IX Treatment System,Richard (Bo) Botteicher (30) DW	157-Alternative Delivery: Another Tool in the Toolbox to Get Projects Done, Patrick Weber (30) DW/WW
9:00	54-Water Providers Uniting to Conserve Water on Oregon’s Mid-Coast, Suzanne de Szoeki (30) DW				145-External Funding Opportunities to Reduce Project Financing Costs, Seema Chavan (30) DW/WW	20-From Raindrops to Rivers: Nurturing Diversity, Equity, and Inclusion in the Pacific Northwest's Water Journey, Courtney Thomas (30) DW/WW	85-The Evolution of Membrane Filtration for Water Treatment, Bryan Black (30) DW	2-Lightning Fast! How alternative delivery speeds up projects, and stories of when it doesn't, Nicholas Augustus (30) DW/WW
9:30 - 9:45 Break								
9:45	16-Uniting for a Common Goal: Regional Partnerships in Water Conservation, Cody Scoggins (30) DW	32-PFAS - Proposed rule, UCMR5 and Idaho Sampling Project, Cassandra Lemmons (30) DW	140b-Hands-On w/ Hydraulic Control Valves: Maintenance, Steve Causseaux (60) DW	10-Current and Future Trends in Source Water Protection Planning, Rob Annear (30) DW	173-Forging the Future: Aligning Mission, Vision, and Values to Set Organizational Direction, Paul Matthews (60) DW/WW	30-From 2 to 200: how we grew an internal network to support digital accessibility at the City of Portland, Penny Milton (30) DW/WW	98-Operational Conditions to Reduce Colloidal & Biological RO Fouling Downstream of Flat-Plate MBR Membranes for Potable Reuse Applications, Katrina Messologitis (30) DW	151-Using Progressive Design-Build to Improve Operations and Maintenance at Everett’s Water Filter Plant, Christopher Baersten (30) DW
10:15	144-Flow-ward Bound: Making Waves with Residential Water Audits in Spokane, Will Rettig (30) DW	142-Tracing Copper in Schools: Implications for Lead Sampling under the LCRR, Damon Roth (30) DW		58-Using Place-based Planning to Develop and Implement Regional Water Supply Strategies, Suzanne de Szoeki (30) DW		59-Beyond Relationships: Creating Positive Impact in Underserved Communities, Nicki Pozos (30) DW/WW	106-Low pressure membrane verification studies, Jolyn Leslie (30) DW	88-Succeeding With Progressive Design Build Delivery of Your Water Treatment Project, Bryan Black (30) DW
		Drinking Water CEUs only	Wastewater CEUs only					

10:45 - 11:00 Break											
11:00	133-Water Wise Spokane and Spokane Public Schools use technology to improve water management, Annikki Chamberlain (60) DW/WW	37-LCRR, Corrosion Control Study, and Implementation Plan in Anacortes, Sanyukta Gokhale (30) DW				28-Levels of Service: Establishing and Supporting Realistic Goals for the Utility, Erin McLachlan Sanchez (60) DW/WW	80-Operationalizing DE&I in the Water Industry through your Organization, Walt Walker (30) DW/WW	123-Bench-Scale Testing as an alternative to Pilot Testing, Brian Rowbotham (30) DW	24-CMGC Delivery Strategies in an Uncertain Cost Environment, Michael Neher (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, Hisyam Mohsin (30) DW						136-Prove It! Demonstrating pathogen removal in a 10 gpm/sf gravity filtration pilot study, Enoch Nicholson (30) DW			
	140c-Hands-On w/ Hydraulic Control Valves: Troubleshooting, Steve Causseaux (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, John Porcello (60) DW									
12:00 - 1:30		Vendor Lunch									
		Drinking Water CEUs only	Wastewater CEUs only								



Afternoon		Thursday, May 2 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	Jamie Feldman	Sam Shipp	Annabel Irwin	Kim Reid	Cameron Lee
1:30	39-Nitrogen Removal Optimization at Post Point, Susanna Leung (60) WW	122-Tracer Testing 101, Brian Rowbotham (30) DW	154-Resiliency Prioritization within the Distribution System, Daniel Shafar (30) DW/WW	45-One Inventory to Rule them All: Hillsboro Water’s Quest for LCRR Lead Service Line Inventory Compliance, Symon Powlison (30) DW	139-How to Talk about Water Rate Adjustments with Decision-Makers and Stakeholders, Ann Hajnosz (60) DW/WW	72-Emerging Leaders Venturi-style: A Case Study for Professional Development, Erica Schyler (30) DW/WW	74-Innovate ways to add capacity and ozone to the Quail Creek WTP, Jeremy Williams (30) DW	50-Case Histories: Concrete Water Reservoir Foundation and Floor Slab Design Considerations, Scott Schlechter (30) DW
2:00		158-Catalyst or Breaking Point - Dechloramination Decision, Andrew Nishihara (30) DW	171-The Pressure is On: Replacing a Crumbling Regulator Vault, Joel Ayres (30) DW	22-Targeted Streamflow Gaging and Associated Data Systems for Water Supply Planning - City of Waldport, OR., Zach Pike-Urlacher (30) DW		135-Turning a Job into a Career: Career Planning for Workforce Retention, Claire Litsky (30) DW/WW	91-True Capacity: Understand the current state of The Dalles WTP, Enoch Nicholson (30) DW	117-Structural Assessments and Asset Preservation Strategies for Welded Steel Water Tanks, Leslie Scott (30) DW
2:30 - 2:45 Break								
2:45	168-Is smaller always simpler? Engineering and Operating considerations for remote WWTPs, Kenneth Packard (60) WW	153-Making the most of your space: Lessons learned from On-site Hypochlorite Generation retrofit project with RO Pre-treatment, Joanie Stultz (30) DW	73-Under Pressure! Emergency Repair of Sherwood’s Prestressed Concrete Tank. Matt Hickey (30) DW	108-Diverting Data Disasters, Kelsey Mach (30) DW	79- Equitable Climate Action Planning: From National Perspectives to Local Approaches, Walt Walker (30) WW	36-Who? Me? A Leader?, Jason Canady (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, Joshua Kennedy (30) DW	23-The Balance of Conservation and Storage, Jessica Nathan-Waller (30) DW
3:15		66-City of Spokane’s 70-Year Well Facility Onsite Generation Disinfection Upgrade Challenges, Heather Burns (30) DW	110-Commissioning a New WTP with a Ruptured Reservoir, Danielle Philbrick (30) DW	147-Modeling visualization using R Shiny, Benjamin Beal (30) DW	114-Growing Your Own - Tacoma Water's OIT Journey, Craig Downs (30) DW		41-Alternatives and Optimization Strategies for Sedimentation Basin Sludge Collection, Henry Ricca (30) DW	33-Unlocking the Flow: SCADA- Powered Knowledge Retention for Efficient Flow Management, Jeff Hesse (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, Pedro deArteaga (60) DW/WW	90-Preventing distribution system destabilization during source and treatment changes, Alex Mofidi (30) DW	7-Creating a New Pressure Zone in a Century-Old System: Seattle’s Queen Anne 580 Zone, Cheryl Capron (60) DW	42-Increasing Data Quality, Defensibility, and Confidence Through Utilization of a Field Sampling and Measurement Organization Quality System, Thomas Krause (60) DW/WW	119-DRIP Talks: Creating Opportunities in the Water Industry Workforce, Natalie Reilly (60) DW/WW	149-Generations@Work: Tailoring the Employee Life Cycle for a Multigenerational Workforce, Luise Winslow (30) DW/WW	78-Comparison of Oxygen Sources for Ozone Generation, Ali Leeds (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, Greg Postlewaite (30) DW
4:30		77-Inorganic Awakenings: Anacortes's Investigation from Source through Distribution, Chris McMeen (30) DW				161-The YP Mindset, Jacob Yoshino (30) DW/WW	141-Chemical Mixing: Nothing but a G Thing?, Conner Mancosky (30) DW	70-Small Tank Material Selection Results in a 0.4 MG Prestressed Concrete Tank – How Considering Multiple Criteria Led to an Unexpected Material Choice, Nathan Rostad (30) DW
		Drinking Water CEUs only	Wastewater CEUs only					

Friday, May 3 Early Bird Sessions									
Morning	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	Doug Lane	Tacy Steele			
7:00	75-Are You Ready? Emergency Preparedness for Water Utilities, Sarah Lingley (60) DW/WW	125-Digital Transition to Backflow Prevention Compliance, Paul Molisani (60) DW	166-Abrasive Situation: Rehab and Protection of 21-foot Diameter Raw Water Supply Piping, Matt Hickey (30) DW	96-Water 2050: Forecasting Tomorrow's Water Industry through Recent Research, Tyler Kane (30) DW	89-Demonstrating and Communicating the Absence of Lead Service Lines, Joel Cary (60) DW		84-A Typical Customer Concerns with Hard Water, Doug Greenlund (30) DW		
7:30			71-Redundancy and Reliability of Water Supply Solved with Trenchless Approach for the City of Pocatello, Idaho, Dennis Galitano (30) DW	93-Knowledge Management at Tacoma Water, Heather Dewey (30) DW			105-Path to Clear Water - Managing Manganese, Qianru Deng (30) DW		
Morning	Friday, May 3 Morning Technical Sessions								
Room	102 C/D - 100	102 A/B - 100	201 A/B/C- 100		203 - 50			206 A/B - 100	206 C/D - 100
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, David Seymour (60) DW/WW	179-Backflow Prevention Assembly Repair, Jim Purzycki (60) DW	103-Evaluating Water Quality and Enhancing Operations Management: Leveraging an EPS Calibrated Model, Natalie Reilly (30) DW		51-Rioting over Rising Rates: Communication Challenges in a "Water is a Right" World, Tacy Steele (30) DW/WW		150-Wildfire impacts on water quality and treatment processes in the Pacific Northwest, Kyle Shimabuku (30) DW	100-Delivering Capital Projects: A Young Professional's Guide to Specification Writing, Spencer Adams (30) DW	
8:45			1-Saving Rate Payer Dollars by Completing Water Main Replacment Projects Using Your Crews, Dave Stanley (30) DW	174-Effective Strategies for Building Consensus with a Rate Advisory Committee, Paul Matthews (30) DW/WW		35-Evaluation of the Effectiveness of Low-pressure Membranes in Water Treatment after Wildfire, Xue Jin (30) DW	137-Navigating Common Construction Pitfalls, Greg Loscher (30) DW		
9:15 - 9:30 Break									
9:30	172-Equipment Preselection - How, Why, and Lessons Learned, David Seymour (60) DW/WW	49-Cross Connection Control Hazard Surveys, William Bernier (60) DW/WW	13-Water Distribution Management Systems: Quantifying An Innovative Approach to Improve Water Loss and Carbon Footprint, Mike Uthe (60) DW		109-Lead Communications Guide and Toolkit! Using the LCRR to Strengthen Your Community, Andrea Watson (60) DW		159-Building Treatment Resilience to Wildfires in Oxidation and Coagulation Responses, Mac Gifford (60) DW	3-Teamed-Up! Keeping people informed and at the virtual decision- making table. Tips for project management communications, Nicholas Augustus (30) DW/WW	
10:00								155-Behind the Curtain – Things Owners and Consultants Wished Each Other Knew, Andrew Nishihara (30) DW/WW	
10:30 - 11:00 Break									
11:00	163-Fall City Business District Large On-site Sewage System Project, Jeff Wilson (30) WW	121-Cross Connection Control - Idaho Rules and Best Practices for Program Development, Anna Moody (60) DW	44-Improving System Resiliency One Critical Valve at a Time, Bryan Robinson (30) DW		167-Water Service Lines of Communication: Achieving LCRR Goals Beyond the Meter, Alyssa MacDonald (30) DW		181-Unfiltered and On Fire: Lessons Learned from the Camp Creek Fire, Kimberly Gupta (60) DW	115-Informing Water Treatment Plant Design with Localized Hydraulic Models, Henry Ricca (30) DW	
11:30	169-Alki WWTS Standby Generator - A Threading the Needle Retrofit, Jeff Lundt (30) DW/WW		112-Medford Water’s digital twin use for design through operator training, Stephanie McGregor (30) DW		53-Water Service Line Survey Outreach, Jill Hoyenga (30) DW			116-Tracer Study Back to Basics and the Intricacies Considered by McMinnville, Humberto Jaramillo (30) DW	
12:00 - 1:30									
Awards Lunch									
			Drinking Water CEUs only	Wastewater CEUs only					

Afternoon		Friday, May 3 Afternoon Technical Sessions						
Room			Conference Theater					206 C/D - 100
Hosting Committee			Subsection Advisory Committee					Engineering
Moderator								Dan Shafar
1:30			Top Ops, DW					25-Leveraging Innovations - Utilizing Technology to Add Value for Project Stakeholders, Michael Nehar (30) DW
2:00								102-The New Era of Pressure Pipe Design in AutoCAD Civil 3D, Laura Oxsen (30) DW
2:30 - 2:45 Break								
2:45			Gimmick & Gadgets, DW					31-Cost Savings on an Accelerated Schedule Utilizing Artificial Intelligence, Josh Ford (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, Jeff Kanyuch (30) WW
3:45 - 4:00 Break								
4:00								67-California Dreaming – Leveraging Water Reuse Innovations Inspiring PNW's Sustainable Future, Evelyn Choudhary (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, Chad Johnson (30) WADW CEUs
		Drinking Water CEUs only	Wastewater CEUs only	WA Drinking Water CEUs only				