

15th	Water Treatment Proctor: AWWA Room:Cascade West	Water Distribution Proctor: Josh Manson Room:Cascade West	Wastewater Collection Proctor: Andy Blondell Room:Umpqua Hall	Wastewater Treatment Proctor: Caleb Trammell Room:Umpqua Hall
7:00 REGISTRATION BEGINS & BREAKFAST				
8:00 - 9:00 KEYNOTE SPEAKER - Lara Kammereck, President PNCWA, W,WW, FUTURE OF WATER - 1A				
9:05 - 10:05	Vendor Display	1 AMI Options and Water Distribution Management Systems Bridget Garlinghouse Consolidated Supply Company	2 Utilizing Acoustic Inspection to Prioritize Sewer Cleaning Gene Hallum InfoSense, Inc.	3_1 Solutions for Pump Plugging Rich Owens Owens Pump & Equipment
	W, WW	W	WW	W, WW
10:05 - 10:15 BREAK				
10:15- 11:15	4 Mixing and TTHM Removal in Potable Water Tanks Harvy Hibl Ixom Medora / Ixom Watercare	5_PGL Practical Guide to locating Water (including non-metallic pipes) & Sewer Brian Moss RJM Equipment Sales, Inc	Vendor Display	3_2 Revolutionizing Sludge Dewatering Rich Owens Owens Pump & Equipment
	W	W, WW	W, WW	WW
11:15 - 11:20 BREAK				
11:20 - 12:20	6 Summation of the importance of water conservation Chris Bennett Correct Equipment	5_PGW Practical Guide to Water Leak Detector & Non-metallic water pipe locating Brian Moss RJM Equipment Sales, Inc	7 CCTV Operation Basics (Pipeline Assessment) Andrew Blondell Roseburg Urban Sanitary Authority	3_3 Simple Industrial Waste Water Treatment / Pre- Treatment Rich Owens Owens Pump & Equipment
	W	W, WW	WW	WW
12:20 - 1:10 LUNCH				
1:10 - 2:10	8_2 THM Mitigation in Water Distribution Systems through Tank Mixing UGSI Ethan Brooke	9 Operators Math Workshop 4 Hour Session Lance Mason Brown and Caldwell	CCTV Operation Basics (Pipeline Assessment) Continued Andrew Blondell	3_4 Wastewater Screening Options Rich Owens Owens Pump & Equipment
	W	W, WW	WW	WW
2:10 - 2:15 BREAK				
2:15 - 3:15	10 Technology selection drivers or he Portland Water Bureau Filtration Facility Tyler Kane Carollo	Operators Math Workshop 4 Hour Session Continued Lance Mason	11 Submersible Pump and Preventive Maintenance Dave Olson Xylem inc.	4 Benefits of Energy Efficient Mixing / Circulation in Partial Mix and Facultative Wastewater Ponds Harvy Hibl Ixom Medora / Ixom Watercare
	W	W, WW	W, WW	WW
3:15 - 3:20 BREAK				
3:20 - 4:25	12 Using Data to Make Informed Water infrastructure Decisions Mike Uthe Mueller Water Products	Operators Math Workshop 4 Hour Session Continued Lance Mason	Submersible Pump and Preventive Maintenance 2 Hour Session	14 Chemical Root Control Dan Lawrence Rootx WW
	W		W, WW	
4:25 - 4:30 BREAK				
4:30 - 5:30	Continued 2 Hour Session	Operators Math Workshop 4 Hour Session Continued Lance Mason	15 Rehabilitation of Sewers - Is geopolymer an option Rob Lee Leeway Engineering	16 Assessing Wastewater Microbials Ecology Caleb Trammell Jacobs
	W	W, WW	WW	WW

16th	Water Treatment Proctor: AWWA Room: Cascade West	Water Distribution Proctor: Josh Manson Room: Cascade West	Wastewater Collection Proctor: Andy Blondell Room: Umpqua Hall	Wastewater Treatment Proctor: Caleb Trammell Room: Umpqua Hall
7:15 - 8:00 BREAKFAST				
8:00-9:00	Vendor Display W, WW	17_1 Ductile 101: Learning Objectives John Johnson McWane Ductile W, WW	18 How to better Clean & Televis Sewer and Storm Pipes Sheldon Teeples Subsite Electronics WW	19_1 Activated Sludge Process Control - PowerPoint Presentation Jon Gasik Oregon DEQ WW
9:00 - 9:05 BREAK				
9:05 - 10:05	20 Solid Emerging Technologies Chris McCalib Treatment Equipment Company WW	17_2 Corrosion Protection Basics for Ductile Iron Pipelines & The effective Use of the Updated AWWA C-105 Standard Design Decision Model (DDM) John Johnson McWane Ductile W, WW	Vendor Display W, WW	21 Protecting the collections system Doug Troyer Underground Tech WW
10:05 - 10:15 BREAK				
10:15 - 11:15	The Dalles Dog River Pipeline Replacement R. Brady Fuller, PE 22 W	23 Ductile Iron Pipe Best Installtion Practices Devon Burton US Pipe W, WW	19_2 SSO Overflow Response Jon Gasik Oregon DEQ WW	Protecting the collections system Continued WW
11:15 - 11:20 BREAK				
11:20 - 12:20	24 SCADA in the Cloud Advanced Control System Jonathan Frank W, WW	25 Calming the Network with High-res Pressure Monitoring Nicole Kaiser Syrinx W	9_2 Wastewater Process Science and Control Workshop Lance Mason Brown and Caldwell WW	3_5 Wastewater Sludge Pumping Solutions Rich Owens Owens Pump & Equipment WW
12:20 - 1:10 LUNCH				
1:10 - 2:10	26 Chemicals in Water and Wastewater Applications Jeff Zachman Cascade Columbia Distribution W, WW	27 AMI - Beyond The Meter Read Pat Hart Ferguson W	Wastewater Process Science and Control Workshop Continued WW	3_6 Simplicites in Grit Removal Rich Owens Owens Pump & Equipment WW
2:10 - 2:15 BREAK				
2:15 - 3:15	Fundamentals of Electrochemistry 28 2 Hour Session Mark McElroy Thermos Fisher W, WW	Modern lift station design and RFP 29 Simon Cartwright Xylem - Flygt W, WW	Wastewater Process Science and Control Workshop Continued WW	3_7 Package Lift Stations for Fast Retrofits Rich Owens Owens Pump & Equipment WW
3:15 - 3:25 BREAK				
3:25 - 4:25	Fundamentals of Electrochemistry Continued Mike McElroy Thermos Fisher W, WW	Modern lift station design and RFP Continued Simon Cartwright Xylem - Flygt W, WW	Wastewater Process Science and Control Workshop Continued WW	30 Beneficial Reuse of Biosolids Rebecca Singer WW
Networking Social - 5:30 pm and Dinner - 6:00 pm				

17th	Water Proctor: AWWA Room: Cascade West	Wastewater Proctor: Josh Manson Room: Cascade East	Special Topic - Wastewater Proctor: Andy Blondell Room: Umpqua Hall	Special Topic - Cross Connect Proctor: Caleb Trammell Room: Pacific Hall
7:15-8:00 BREAKFAST				
8:00 - 9:00	8_3 Disinfection Residual Control in Water Distribution Systems UGSI Ethan Brooke W	26 Oregon DEQ WQ Panel - Permitting/ Permit Limits State of Oregon - DEQ Jeffrey Navarro WW	19_3 Activated Sludge Basics Oregon DEQ Jon Gasik	32 Cross Connection Specialist Certification Renewal Mike Biesemeiser
9:05 - 10:05	38 Lead and Copper Rule Revisions Service Line Inventory Oregon Health Authority Kari Salis W	33_1 Regulators Round Table Oregon DEQ Jeff, Kimi, Pat, Suzie WW		6 Hour Session
10:05 - 10:15 BREAK				
10:15 - 11:15	34 Tri City Water & Sanitary Authority Water Treatment Plant Tour Brian Kelly W	33_2 DEQ Operator Certification Basics Oregon DEQ Kimi Grzyb WW		
11:15 - 11:20 BREAK		11:15 - 11:20 BREAK		
11:20 - 12:20		35 Flushing Awesome: A Northwest Pipes Update City of Cancoover WA Frank Dick WW	WW	W, CCS
12:20-1:10 LUNCH				
1:10 - 2:10	36 Expectations from an OR-OSHA inspection Larry Fipps OR-OSHA W, WW	37 Field Trip: Roseburg Wastewater Treatment Plant Caleb Trammell Jacobs WW		
2:15 - 3:15	Confined Space Entry Larry Fipps OR-OSHA W, WW			W, CCS
OREGON OPERATOR CONFERENCE ENDS				