CEU Details - Wednesday, May 1 - Pre-Conference Seminars

Location	Water Information Technology - Using Excel to Perform Functions and Calculations in the Drinking Water Industry		CEUs	
	Time	Presentation	Water	*Wastewater*
Spruce - Wednesday Morning	8:30	Overview of Best Practices; Interpreting Operator Records to Determine System Supply Patterns	ID 0.1, OR 0.1, WA 0.1	*ID 0.1*
	9:30 - 9:45 Break			
	9:45	Water Industry Spreadsheet Calculators	ID 0.1, OR 0.1, WA 0.1	*ID 0.1*
	10:45 - 11:00 Break			
	11:00	Writing Water Industry Procedures, Tutorials and Training Documents	ID 0.1, OR 0.1, WA 0.1	*ID 0.1*
Must attend entire day for credit				

Location	Water Information Technology - Using Excel to Perform Functions and Calculations in the Drinking Water Industry		CEUs	
	Time	Presentation	Water	*Wastewater*
Spruce - Wednesday Afternoon	1:00	Analysis & Calculator Lab	ID 0.1, OR 0.1, WA 0.1	*ID 0.1*
	2:00 - 2:15 Break			
	2:15	Analysis & Calculator Lab (continued)	ID 0.1, OR 0.1, WA 0.1	*ID 0.1*
	3:15 - 3:30 Break			
	3:30	Analysis & Calculator Lab (continued)	ID 0.1, OR 0.1	*ID 0.1*
Must attend entire day for credit			ID 0.6, OR 0.6, WA 0.6	*ID 0.6*

Location	Water Treatment		CEUs	
	Time	Presentation	Water	*Wastewater*
Pine - Wednesday Morning	8:30	Groundwater Treatment - Overview of Constituents and Technologies	ID 0.1, OR 0.1, WA 0.1	
	9:30 - 9:45 Break			
	9:45	Treatment for Iron and Manganese and Related Constituents	ID 0.05, OR 0.05, WA 0.05	
	10:15	Formation, Degradation, and Treatment: Addressing Water Quality Challenges in Salem's ASR Wells	ID 0.05, OR 0.05, WA 0.05	
	10:45 - 11:00 Break			
	11:00	Vancouver Water Station No. 1	ID 0.05, OR 0.05, WA 0.05	
	11:30	Carol Curtis Water Treatment Plant	ID 0.05, OR 0.05, WA 0.05	
Must attend entire day for credit				

Location	Water Treatment		CEUs	
	Time	Presentation	Water	*Wastewater*
Bus Loading Zone - Wednesday Afternoon	1:00 - 1:30 Travel			
	1:30	Tour of Carol Curtis Water Treatment Plant	ID 0.1, OR 0.1, WA 0.1	
	2:30 - 3:00 Travel			
	3:00	Tour of Vancouver Water Station No. 1	ID 0.1, OR 0.1, WA 0.1	
	4:00 - 4:30 Travel			
Must attend entire day for credit			ID 0.5, OR 0.5, WA 0.5	

Location	Engineering - Utilizing Advanced Engineering Tools		CEUs	
	Time	Presentation	Water	*Wastewater*
Oak - Wednesday Morning	8:30	Covington Water District's Hydro-Turbine and Grant Success in Western Washington	ID 0.1, OR 0.1, WA 0.1	
	9:30 - 9:45 Break			
	9:45	A Rock in the River: Navigating Obstacles in the Quest for Energy Efficiency at Hannah Mason Pump Station, Portland Water Bureau	ID 0.05, OR 0.05, WA 0.05	
	10:15	Knowledge Development and Transfer - Sustainable Documentation	ID 0.05, OR 0.05, WA 0.05	*ID 0.05, WDOE 0.05*
	10:45 - 11:00 Break			
	11:00	How to Simulate Operation of a 320-MGD Conventional Water Treatment Plant	ID 0.05, OR 0.05, WA 0.05	
	11:30	The EchoWater Project: Leveraging Technology to Enhance Project Delivery - Leveraging BIM and 4D/5D Tools to Manage Multiple Construction Projects at an Operating Treatment Plant	ID 0.05, OR 0.05, WA 0.05	*ID 0.05, WDOE 0.05*
Must attend entire session for credit			ID 0.3, OR 0.3, WA 0.3	*ID 0.1, WDOE 0.1*

Location	Engineering - Case Studies and Lessons Learned		CEUs	
	Time	Presentation	Water	*Wastewater*
Oak - Wednesday Afternoon	1:00	City of Vancouver Water Station 1 Upgrade Project - Site Electrical, Pump Station, Treatment, and Control System Replacement	ID 0.05, OR 0.05, WA 0.05	
	1:30	Water System Disinfectant Conversion - Chlorine Gas to On-site Sodium Hypochlorite Generation	ID 0.05, OR 0.05, WA 0.05	*WDOE 0.05*
	2:00 - 2:15 Break			
	2:15	How to Decide, the $500M Question	ID 0.05, OR 0.05, WA 0.05	*WDOE 0.05*
	2:45	A Tale of Two Tanks: Construction and Assessment of a New and an Existing Steel Reservoirs	ID 0.05, OR 0.05, WA 0.05.	
	3:15 - 3:30 Break			
	3:30	Keep It Down Out There! Pump Station Facility Noise Issues and Mitigation Design	ID 0.05, OR 0.05, WA 0.05	*ID 0.05, WDOE 0.05*
	4:00	Balancing Safety, Process Performance, and Costs in Design, Construction, and Operations	ID 0.05, OR 0.05, WA 0.05	*ID 0.05, WDOE 0.05*
Must attend entire session for credit			ID 0.3, OR 0.3, WA 0.3	*ID 0.1, WDOE 0.2*

Location	Distribution - Efficiency and Water Loss		CEUs	
	Time	Presentation	Water	*Wastewater*
Hemlock - Wednesday Morning	8:30	Cherry-Picking Pump Stations: Consolidating System Assets for Operational Flexibility	ID 0.05, OR 0.05, WA 0.05	
	9:00	Developments on Water Demand Projects from WRF	ID 0.05, OR 0.05, WA 0.05	*ID 0.05*
	9:30 - 9:45 Break			
	9:45	Washington State Water Audit Pilot Results and the Future of Water Loss Tracking	ID 0.05, OR 0.05, WA 0.05	
	10:15	Pioneering Water Loss Control – Groundbreaking Statewide Technical Assistance Programs	ID 0.05, OR 0.05, WA 0.05	
	10:45 - 11:00 Break			
	11:00	The Non Revenue Water Journey to Capturing More Revenue and Saving Costs	ID 0.1, OR 0.1, WA 0.1	*WDOE 0.1*
Must attend entire session for credit			ID 0.3, OR 0.3, WA 0.3	*ID 0.05, WDOE 0.1*

Location	Distribution - Planning and Modeling		CEUs	
	Time	Presentation	Water	*Wastewater*
Hemlock - Wednesday Afternoon	1:00	The Office Side of Water Main Flushing: How to Ensure Data is Collected and Distributed Efficiently During Annual Maintenance	ID 0.05, OR 0.05, WA 0.05	*ID 0.05*
	1:30	Lessons From the Field - Design Improvements for Increased Sanitary Protection	ID 0.05, OR 0.05, WA 0.05	
	2:00 - 2:15 Break			
	2:15	Drones Need Water Too: Meeting Industrial Water System Demands in Pendleton's Airport Area	ID 0.05, OR 0.05, WA 0.05	
	2:45	Adding Transmission Capacity Without Bigger Pipes - Camas Downtown Supply Operational Improvements	ID 0.05, OR 0.05, WA 0.05	
	3:15 - 3:30 Break			
	3:30	Using GIS and Hydraulic Modeling to Save Time and Add Value	ID 0.05, OR 0.05, WA 0.05	
	4:00	Combining Two Water Systems Into One	ID 0.05, OR 0.05, WA 0.05	
Must attend entire session for credit			ID 0.3, OR 0.3, WA 0.3	*ID 0.05*

Location	Train the Trainer - Math for Operators		CEUs	
	Time	Presentation	Water	*Wastewater*
Cedar - Wednesday Morning	8:30	Math for Operators	ID 0.1, OR 0.1, WA 0.1	*ID 0.1, WDOE 0.1*
	9:30 - 9:45 Break			
	9:45	Math for Operators (continued)	ID 0.1, OR 0.1, WA 0.1	*ID 0.1, WDOE 0.1*
	10:45 - 11:00 Break			
	11:00	Math for Operators (continued)	ID 0.1, OR 0.1, WA 0.1	*ID 0.1, WDOE 0.1*
Must attend entire session for credit			ID 0.3, OR 0.3, WA 0.3	*ID 0.3, WDOE 0.3*

Location	Train the Trainer - Reading P&IDs		CEUs	
	Time	Presentation	Water	*Wastewater*
Cedar - Wednesday Afternoon	1:00	Reading Process and Instrumentation Diagrams	ID 0.1, OR 0.1, WA 0.1	*ID 0.1, WDOE 0.1*
	2:00 - 2:15 Break			
	2:15	Reading Process and Instrumentation Diagrams (continued)	ID 0.1, OR 0.1, WA 0.1	*ID 0.1, WDOE 0.1*
	3:15 - 3:30 Break			
	3:30	Reading Process and Instrumentation Diagrams (continued)	ID 0.1, OR 0.1, WA 0.1	*ID 0.1, WDOE 0.1*
Must attend entire session for credit			ID 0.3, OR 0.3, WA 0.3	*ID 0.3, WDOE 0.3*

CEU Details - Thursday, May 2 - Early Bird Sessions

7:00 - 8:00 am			CEUs	
Location	Time	Presentation	Water	*Wastewater*
Spruce - History	7:00	History of Northwest Utilities	ID 0.1, OR 0.1, WA 0.1	
Must attend entire hour for credit				
Pine - Public Officials	7:00	Public Engagement Provides Valuable Community Input in Milestone Bull Run Water Treatment Decisions	ID 0.05, OR 0.05	*WDOE 0.05*
	7:30	Cross Connections We All Should Be Making Within Our Communities	ID 0.05, OR 0.05	*ID 0.05, WDOE 0.05*
Must attend entire hour for credit				
Oak - Engineering	7:00	A Tale of Two Tanks: Water Facility Planning and Design in Idaho Falls	ID 0.05, OR 0.05, WA 0.05	
	7:30	Fire and Water Unite: Providing Water System Improvements and Firefighter Training With a 103-foot-tall Reservoir	ID 0.05, OR 0.05, WA 0.05	
Must attend entire hour for credit				

7:00 - 8:00 am			CEUs	
Location	Time	Presentation	Water	*Wastewater*
Hemlock - Distribution	7:00	Water Well Rehabilitation & Asset Management: Maintaining Well Performance and Water Quality	ID 0.05, OR 0.05, WA 0.05	
	7:30	Well Rehabilitation in Alaska Bush Country: Techniques to Improve Wellfield Productivity	ID 0.05, OR 0.05, WA 0.05	
Must attend entire hour for credit				
Cedar - Research / Water Quality	7:00	Lessons Learned from Salem's 2018 Algal Toxin Event	ID 0.1, OR 0.1, WA 0.1	
Must attend entire hour for credit				

CEU Details - Thursday, May 2 - Technical Sessions

Location	Young Professionals		CEUs	
	Time	Presentation	Water	*Wastewater*
Spruce - Thursday Morning	9:45	Cover Letter and Resumes: How To Stand Out in a Crowded Job Market	ID 0.1, OR 0.1	*ID 0.1*
		Must attend entire hour for credit		
		10:45 - 11:00 Break		
	11:00	Tapping into a Network: How to Make the Right Connections	ID 0.05, OR 0.05	*ID 0.05*
	11:30	Capitalizing on Generational Strengths: A MurraySmith Case Study	ID 0.05, OR 0.05	*ID 0.05, WDOE 0.05*
		Must attend entire hour for credit		

Location	Young Professionals		CEUs	
	Time	Presentation	Water	*Wastewater*
Spruce - Thursday Afternoon	2:30	Women in Leadership – Learning to Lead	ID 0.05, OR 0.05	*ID 0.05*
	3:00	Self-Guided Leadership - Blaze Your Own Trail	ID 0.05, OR 0.05	*ID 0.05*
		Must attend entire hour for credit		
		3:30 - 3:45 Break		
	3:45	Keep Flowing, Don't Be Stagnant - Motivation Tools for Lifelong Success	ID 0.05, OR 0.05	*ID 0.05*
	4:15	How Saying Yes Can Derail Success	ID 0.05, OR 0.05	*ID 0.05*
		Must attend entire hour for credit		

Location	Water Resources		CEUs	
	Time	Presentation	Water	*Wastewater*
Pine - Thursday Morning	9:45	Source Water Protection Basics 101	ID 0.05, OR 0.05, WA 0.05	
	10:15	Developing a Source Water Protection Program in the Rogue River Basin	ID 0.05, OR 0.05, WA 0.05	
		Must attend entire hour for credit		
		10:45 - 11:00 Break		
	11:00	The Path to Healthy Headwaters	ID 0.05, OR 0.05, WA 0.05	
	11:30	How to Communicate to Ratepayers and Build Capacity for Source Water Protection	ID 0.05, OR 0.05, WA 0.05	
		Must attend entire hour for credit		

Location	Water Resources		CEUs	
	Time	Presentation	Water	*Wastewater*
Pine - Thursday Afternoon	2:30	Reclaimed Water - New Water Solutions for Washington	ID 0.05, OR 0.05, WA 0.05	*ID 0.05, WDOE 0.05*
	3:00	Siting, Characterization, and Preliminary Design for Groundwater Recharge and Watershed Augmentation, Kitsap County and Suquamish Tribe, Kingston Facility	ID 0.05, OR 0.05, WA 0.05	*ID 0.05, WDOE 0.05*
		Must attend entire hour for credit		
		3:30 - 3:45 Break		
	3:45	Domestic and Instream Flow Mitigation Strategies in Mission Creek	ID 0.05, OR 0.05, WA 0.05	
	4:15	Evaluation of Municipal Residential Stormwater Reuse With Aquifer Storage and Recovery	ID 0.05, OR 0.05, WA 0.05	*ID 0.05*
		Must attend entire hour for credit		

Location	Engineering		CEUs	
	Time	Presentation	Water	*Wastewater*
Oak - Thursday Morning	9:45	How Taking a Holistic Approach to Master Planning Can Provide Added Value	ID 0.05, OR 0.05, WA 0.05	*ID 0.05, WDOE 0.05*
	10:15	Leveraging Industry Experience to Anticipate the Trade-offs of Alternative Water Supplies	ID 0.05, OR 0.05, WA 0.05	*ID 0.05, WDOE 0.05*
		Must attend entire hour for credit		
		10:45 - 11:00 Break		
	11:00	Feeding the Machine: Water Facilities to Keep Up With Development	ID 0.05, OR 0.05, WA 0.05	
	11:30	Waterline Alignment Modification for Land Use and Seismic Constraints	ID 0.05, OR 0.05, WA 0.05	
		Must attend entire hour for credit		

Location	Water Information Technology		CEUs	
	Time	Presentation	Water	*Wastewater*
Oak - Thursday Afternoon	2:30	Replacement of Legacy SCADA, Telemetry, & Control Systems: Planning, Budgeting, and Implementation	ID 0.05, OR 0.05, WA 0.05	*ID 0.05, WDOE 0.05*
	3:00	Assessing Maturity of GIS Programs with the SLIM GIM Model	ID 0.05, OR 0.05, WA 0.05	*ID 0.05*
		Must attend entire hour for credit		
		3:30 - 3:45 Break		
	3:45	Effective SCADA Graphics - Enable Situational Awareness	ID 0.1, OR 0.1, WA 0.1	*ID 0.1, WDOE 0.1*
		Must attend entire hour for credit		

Location	Cross Connection Control		CEUs	
	Time	Presentation	Water	*Wastewater*
Hemlock - Thursday Morning	9:45	Nightmare on Worthen Street and Other Backflow Incidents	ID 0.05, OR 0.05, WA 0.05	
	10:15	Small Public Water System Cross Connection Control Program Development	ID 0.05, OR 0.05, WA 0.05	*ID 0.05*
		Must attend entire hour for credit		
		10:45 - 11:00 Break		
	11:00	Test Fraud: How to Find Bad Testers and What Should/Can Be Done About Them	ID 0.1, OR 0.1, WA 0.1	*ID 0.1*
		Must attend entire hour for credit		

Location	Distribution		CEUs	
	Time	Presentation	Water	*Wastewater*
Hemlock - Thursday Afternoon	2:30	Seismic Facility Updates and Operational Planning	ID 0.05, OR 0.05, WA 0.05	*ID 0.05, WDOE 0.05*
	3:00	Water Industry Seismic Guidelines and Practice Updates	ID 0.05, OR 0.05, WA 0.05	*ID 0.05, WDOE 0.05*
		Must attend entire hour for credit		
		3:30 - 3:45 Break		
	3:45	Seismic Resilience of Two Water Lines: Case Studies in Everett, WA	ID 0.05, OR 0.05, WA 0.05	*WDOE 0.05*
	4:15	Existing Steel Reservoirs – Retrofit or Build New?	ID 0.05, OR 0.05, WA 0.05	
		Must attend entire hour for credit		

Location	Water Quality / Water Treatment		CEUs	
	Time	Presentation	Water	*Wastewater*
Cedar - Thursday Morning	9:45	Regulatory Perspective of Cyanotoxins in Oregon	ID 0.05, OR 0.05, WA 0.05	
	10:15	Blue-Green Algae Control from Source to Tap	ID 0.05, OR 0.05, WA 0.05	
	Must attend entire hour for credit			
	3:30 - 3:45 Break			
	11:00	Combating Algae - Startup of the Bellingham Dissolved Air Flotation Facility	ID 0.05, OR 0.05, WA 0.05	
	11:30	A Bacteria That Acts Like a Plant? Demystifying Cyanobacteria and Their Toxins	ID 0.05, OR 0.05, WA 0.05	
	Must attend entire hour for credit			

Location	Water Treatment		CEUs	
	Time	Presentation	Water	*Wastewater*
Cedar - Thursday Afternoon	2:30	Comparison of GAC vs PAC for DBP Reduction at Two WTPs with the Same Source Water	ID 0.05, OR 0.05, WA 0.05	
	3:00	Treatment Considerations for Surface Water T&O Issues	ID 0.05, OR 0.05, WA 0.05	
	Must attend entire hour for credit			
	3:30 - 3:45 Break			
	3:45	Preliminary Results of Portland's Treatment Pilot Study	ID 0.05, OR 0.05, WA 0.05	
	4:15	Portland Water Bureau's Improved Corrosion Control Treatment Project	ID 0.05, OR 0.05, WA 0.05	
	Must attend entire hour for credit			

Location	
Discovery D - Thursday Morning	General Session

Location	Cross Connection Control		CEUs	
	Time	Presentation	Water	*Wastewater*
Discovery D - Thursday Afternoon	2:30	State Regulations: Updates, Incidents, Differences	ID 0.1, OR 0.1, WA 0.1	*ID 0.1*
	Must attend entire hour for credit			
	3:30 - 3:45 Break			
	3:45	How to Do a Site Survey and Obscure Things to Look For	ID 0.05, OR 0.05, WA 0.05	
	4:15	A Fully Web-Based Cross Connection Control Program: How TVWD Made the Leap	ID 0.05, OR 0.05, WA 0.05	
	Must attend entire hour for credit			

Location	
Discovery E - Thursday Morning	General Session

Location	Public Information		CEUs	
	Time	Presentation	Water	*Wastewater*
Discovery E - Thursday Afternoon	2:30	What Do Your People Really Know? Summarizing Public Knowledge and Understanding of Drinking Water Issues in Today's Information-Rich World	ID 0.05, OR 0.05, WA 0.05	
	3:00	Communicating About Risk	ID 0.05, OR 0.05, WA 0.05	*WDOE 0.05*
	Must attend entire hour for credit			
	3:30 - 3:45 Break			
	3:45	The Power of "We"	ID 0.1, OR 0.1, WA 0.1	*WDOE 0.1*
	Must attend entire hour for credit			

CEU Details - Friday, May 3 - Technical Sessions

Location	Water Resources		CEUs	
	Time	Presentation	Water	*Wastewater*
Spruce - Friday Morning	8:30	Managing Alluvial and Confined Aquifers Across the Washington-Oregon State Boundary in the Walla Walla Subbasin	ID 0.05, OR 0.05, WA 0.05	
	9:00	Know No Boundaries: Creative Use of Storage for Trans-boundary Water Management in the Klamath Basin	ID 0.05, OR 0.05, WA 0.05	*ID 0.05*
	Must attend entire hour for credit			
	9:30 - 9:45 Break			
	9:45	IWAC: Collaborative Management of a Shared Resource	ID 0.05, OR 0.05, WA 0.05	*ID 0.05*
	10:15	A Look Beneath the Surface: Developing a Transboundary Groundwater Governance Framework and Agreement for the Memphis Sand Aquifer	ID 0.05, OR 0.05, WA 0.05	
	Must attend entire hour for credit			
	10:45 - 11:00 Break			
	11:00	Portland's Multi-Faceted Approach to Groundwater Protection	ID 0.05, OR 0.05, WA 0.05	
	11:30	Taming the Wild – Understanding Risks and Responses to Water Supplies from Wildfires	ID 0.05, OR 0.05, WA 0.05	
	Must attend entire hour for credit			

Location	Research / Water Treatment		CEUs	
	Time	Presentation	Water	*Wastewater*
Spruce - Friday Afternoon	1:30	A Comparison of Treatment Technologies to Treat Algae Through Pilot Testing of a New Surface Water Source	ID 0.05, OR 0.05, WA 0.05	
	2:00	Treating Cyanotoxins with Activated Carbon	ID 0.05, OR 0.05, WA 0.05	
	Must attend entire hour for credit			
	2:30 - 2:45 Break			
	2:45	Using GAC and Ion Exchange Resins to Remove PFAS and Similar Compounds from Drinking Water	ID 0.05, OR 0.05, WA 0.05	*ID 0.05*
	3:15	Development of Technologies for Effective PFAS Removal and Destruction	ID 0.05, OR 0.05, WA 0.05	*ID 0.05*
	Must attend entire hour for credit			
	3:45 - 4:00 Break			
	4:00	Pacific Northwest Case Studies in Biofiltration	ID 0.05, OR 0.05, WA 0.05	*WDOE 0.05*
	4:30	Biofiltration	ID 0.05, OR 0.05, WA 0.05	*WDOE 0.05*
	Must attend entire hour for credit			

Location	Public Information		CEUs	
	Time	Presentation	Water	*Wastewater*
Pine - Friday Morning	8:30	Get Your Kit Together	ID 0.05, OR 0.05, WA 0.05	
	9:00	Disaster Sanitation – What Can Water Utilities Do?	ID 0.05, OR 0.05, WA 0.05	
	Must attend entire hour for credit			
	9:30 - 9:45 Break			
	9:45	Using Planned Events to Normalize Utility ICS Activation	ID 0.1, OR 0.1, WA 0.1	*WDOE 0.1*
	Must attend entire hour for credit			
	10:45 - 11:00 Break			
	11:00	Excellence in Communications Awards	ID 0.1, OR 0.1	
	Must attend entire hour for credit			

Location	Water Conservation		CEUs	
	Time	Presentation	Water	*Wastewater*
Pine - Friday Afternoon	1:30	A Look At Portand's Residiental and Commercial - Portland Residential and Commercial Water Conservation Efforts	ID 0.1, OR 0.1, WA 0.1	
	Must attend entire hour for credit			
	2:30 - 2:45 Break			
	2:45	Love Your Graywater - Reuse and Communicating the Value of Water	ID 0.05, OR 0.05, WA 0.05	
	3:15	Making the Case for Non-Potable On-site Water Systems	ID 0.05, OR 0.05, WA 0.05	*ID 0.05, WDOE 0.05*
	Must attend entire hour for credit			
	3:45 - 4:00 Break			
	4:00	Making System Improvements Through Tracking and Validating Non-Revenue Water	ID 0.05, OR 0.05	
	4:30	Hassalo on 8th - Wastewater Reuse	OR 0.05	*ID 0.05, WDOE 0.05*
	Must attend entire hour for credit			

Location	Engineering		CEUs	
	Time	Presentation	Water	*Wastewater*
Oak - Friday Morning	8:30	Is Alternate Project Delivery Appropriate for My Project?	ID 0.05, OR 0.05, WA 0.05	*ID 0.05, WDOE 0.05*
	9:00	Part 1 of 2 - Progressive Design Build for a 5 MG Water Tank? TVWD's Unique Approach for Replacing a 5 MG Water Tank	ID 0.05, OR 0.05, WA 0.05	*ID 0.05*
	Must attend entire hour for credit			
	9:30 - 9:45 Break			
	9:45	Part 2 of 2 - Progressive Design Build for a 5 MG Water Tank? TVWD's Unique Approach for Replacing a 5 MG Water Tank	ID 0.05, OR 0.05, WA 0.05	*ID 0.05*
	10:15	How to Use Design/Build For Your Next Project	ID 0.05, OR 0.05, WA 0.05	*ID 0.05, WDOE 0.05*
	Must attend entire hour for credit			
	10:45 - 11:00 Break			
	11:00	CM/GC - Using Qualitifications, Experience and Price to Select the Best Contractor	ID 0.05, OR 0.05, WA 0.05	*ID 0.05, WDOE 0.05*
	11:30	Alternate Project Delivery: Panel Discussion With Local Contractors - Advantages and Disadvantages of CM/GC, Progressive Design Build, and Design-Bid-Build	ID 0.05, OR 0.05, WA 0.05	*ID 0.05, WDOE 0.05*
	Must attend entire hour for credit			

Location	Engineering		CEUs	
	Time	Presentation	Water	*Wastewater*
Oak - Friday Afternoon	1:30	Source Water Challenges and the Need for Cooperative Water Resource Policy on Guam	ID 0.05, OR 0.05, WA 0.05	
	2:00	Cocktail Napkin or Four-Inch Binder? Rightsizing Your Project Management Plan	ID 0.05, OR 0.05, WA 0.05	*ID 0.05, WDOE 0.05*
	Must attend entire hour for credit			
	2:30 - 2:45 Break			
	2:45	Smart Utility as a Technology Platform: From Design to Utility Management	ID 0.05, OR 0.05, WA 0.05	*ID 0.05, WDOE 0.05*
	3:15	Building a Framework to Optimize CIP Delivery for Honolulu Board of Water Supply	ID 0.05, OR 0.05, WA 0.05	*ID 0.05*
	Must attend entire hour for credit			
	3:45 - 4:00 Break			
	4:00	Construction: Expect the Unexpected - Matthew Perkins	ID 0.05, OR 0.05, WA 0.05	*ID 0.05, WDOE 0.05*
	4:30	Owner Implementation of New Technology	ID 0.05, OR 0.05, WA 0.05	*ID 0.05, WDOE 0.05*
	Must attend entire hour for credit			

Location	Distribution		CEUs	
	Time	Presentation	Water	*Wastewater*
Hemlock - Friday Morning	8:30	Storage Facility Inspection and Maintenance – Tools and Tips	ID 0.05, OR 0.05, WA 0.05	
	9:00	Concrete Tank Rehabilitation: Why Coat Concrete Structures in Water and Wastewater System	ID 0.05, OR 0.05, WA 0.05	*ID 0.05, WDOE 0.05*
	Must attend entire hour for credit			
	9:30 - 9:45 Break			
	9:45	Leveraging AMI Data for Distribution System Modeling	ID 0.05, OR 0.05, WA 0.05	
	10:15	Improving Utility Operations through AMI Data Analytics	ID 0.05, OR 0.05, WA 0.05	
	Must attend entire hour for credit			
	10:45 - 11:00 Break			
	11:00	Navigating AMI - Central Point's Path to Selection	ID 0.05, OR 0.05, WA 0.05	
	11:30	Advanced Metering Infrastructure in Tacoma	ID 0.05, OR 0.05, WA 0.05	
	Must attend entire hour for credit			

Location	Distribution		CEUs	
	Time	Presentation	Water	*Wastewater*
Hemlock - Friday Afternoon	1:30	Lessons Learned in Using CIPP for Water Main Rehabilitation	ID 0.05, OR 0.05, WA 0.05	
	2:00	Returning Water System Confidence with CIPP	ID 0.05, OR 0.05, WA 0.05	
	Must attend entire hour for credit			
	2:30 - 2:45 Break			
	2:45	30-inch Water Main Rehabilitation Design Case Study	ID 0.05, OR 0.05, WA 0.05	
	3:15	Ice Pigging: Advanced Pipe Cleaning Technology	ID 0.05, OR 0.05, WA 0.05	*ID 0.05*
	Must attend entire hour for credit			
	3:45 - 4:00 Break			
	4:00	Cutting In a 16-Inch Tee During a Water Advisory	ID 0.05, OR 0.05, WA 0.05	
	4:30	Practical Guide to Locating Water Pipes	ID 0.05, OR 0.05, WA 0.05	*ID 0.05*
	Must attend entire hour for credit			

Location	Water Quality		CEUs	
	Time	Presentation	Water	*Wastewater*
Cedar -Friday Morning	8:30	Proactive Treatment Solutions for PFAS Drinking Water Contamination – Coupeville/Navy Fort Casey WTP Improvements	ID 0.05, OR 0.05, WA 0.05	
	9:00	PFOS/PFOA Contamination of Groundwater at the City of Airway Heights	ID 0.05, OR 0.05, WA 0.05	
	Must attend entire hour for credit			
	9:30 - 9:45 Break			
	9:45	Corrosion Control Studies in the Pacific Northwest, Part 1 of 2: Use of Spreadsheet Tools to Understand Corrosion Control and Metals Release	ID 0.05, OR 0.05, WA 0.05	
	10:15	Corrosion Control Studies in the Pacific Northwest, Part 2 of 2 Corrosion Control Studies: Putting the Tools to Use	ID 0.05, OR 0.05, WA 0.05	
	Must attend entire hour for credit			
	10:45 - 11:00 Break			
	11:00	The Role of Contaminants of Emerging Concern in Aquifer Recharge Projects Using Reclaimed Water	ID 0.05, OR 0.05, WA 0.05	*ID 0.05, WDOE 0.05*
	11:30	Operating Data and Lessons Learned from Sunny Slope Water Company's Microvi Nitrate Removal System	ID 0.05, OR 0.05, WA 0.05	
	Must attend entire hour for credit			

Location	SAC Competitions		CEUs	
	Time	Presentation	Water	*Wastewater*
Cedar - Friday Afternoon	1:30	Gimmicks and Gadgets	ID 0.1, OR 0.1, WA 0.1	
	Must attend entire hour for credit			
	2:30 - 2:45 Break			
	2:45	Top Ops	ID 0.1, OR 0.1, WA 0.1	
	Must attend entire hour for credit			
	SAC Committee Meeting			

Location	Utility Management		CEUs	
	Time	Presentation	Water	*Wastewater*
Discovery D - Morning	8:30	Transitional Leadership in the Electronic Age	ID 0.05, OR 0.05	*ID 0.05, WDOE 0.05*
	9:00	How to Attract and Keep a Younger Workforce	ID 0.05, OR 0.05	*ID 0.05, WDOE 0.05*
	Must attend entire hour for credit			
	9:30 - 9:45 Break			
	9:45	Retool Your Communications Program Utilizing Public Opinion Research	ID 0.1, OR 0.1, WA 0.1	*ID 0.1, WDOE 0.1*
	Must attend entire hour for credit			
	10:45 - 11:00 Break			
	11:00	Where Do Good Ideas Come From?	ID 0.05, OR 0.05	*ID 0.05, WDOE 0.05*
	11:30	Top Ten Public Works Leader Recipient - How, What, When, Where, & Why!	ID 0.05, OR 0.05	*ID 0.05, WDOE 0.05*
	Must attend entire hour for credit			

Location	Utility Management		CEUs	
	Time	Presentation	Water	*Wastewater*
Discovery D - Afternoon	1:30	The Next Generation of Seismic Vulnerability Analysis	ID 0.05, OR 0.05, WA 0.05	*WDOE 0.05*
	2:00	In-Place Pipe Rehabilitation Utilizing Advanced 100% Solid High MIL Epoxy Lining System	ID 0.05, OR 0.05, WA 0.05	
	Must attend entire hour for credit			
	2:00 - 2:15 Break			
	2:45	Larger Facility Needs, Constrained Site, Oh My!	ID 0.05, OR 0.05, WA 0.05	
	3:15	Navigating a Boom: How Lakewood Water District Provides Information to External Stakeholders	ID 0.05, OR 0.05, WA 0.05	*ID 0.05, WDOE 0.05*
	Must attend entire hour for credit			
	3:15 - 3:30 Break			
	4:00	Strategic Asset Planning at the City of Vancouver	ID 0.05, OR 0.05, WA 0.05	*ID 0.05, WDOE 0.05*
	4:30	Introduction, Development and Use of InfoMaster AM Prioritization Tool	ID 0.05, OR 0.05, WA 0.05	*ID 0.05*
	Must attend entire hour for credit			

Location	Wastewater Treatment		CEUs	
	Time	Presentation	Water	*Wastewater*
Discovery E - Morning	8:30	How to Optimize Polymer Efficiency for Better Sludge Dewatering - Two Case Studies	ID 0.05, OR 0.05	*ID 0.05, OR 0.05, WDOE 0.05*
	9:00	Low Cost, Rapid Nitrogen Removal in Wastewater	ID 0.05, OR 0.05, WA 0.05	*ID 0.05, OR 0.05, WDOE 0.05*
	Must attend entire hour for credit			
	9:30 - 9:45 Break			
	9:45	Coordinating Equipment Manufacturer Package Control Systems and Existing Plant Control Systems	ID 0.1, OR 0.1, WA 0.1	*ID 0.1, OR 0.1, WDOE 0.1*
	Must attend entire hour for credit			
	10:45 - 11:00 Break			
	11:00	Best Practices for Sodium Hypochlorite Storage and Metering Systems	ID 0.1, OR 0.1, WA 0.1	*ID 0.1, OR 0.1, WDOE 0.1*
	Must attend entire hour for credit			

Location	Wastewater Treatment		CEUs	
	Time	Presentation	Water	*Wastewater*
Discovery E- Afternoon	1:30	Headworks: Screening	ID 0.1, OR 0.1	*ID 0.1, OR 0.1, WDOE 0.1*
	Must attend entire hour for credit			
	2:30 - 2:45 Break			
	2:45	Headworks: Grit Removal	OR 0.1	*ID 0.1, OR 0.1, WDOE 0.1*
	Must attend entire hour for credit			
	3:45 - 4:00 Break			
	4:00	Considerations in Monitoring and Pre-Treating Brewery Waste	OR 0.1	*ID 0.1, OR 0.1, WDOE 0.1*
	Must attend entire hour for credit			