2026 AWWA/PNCWA Cascade to Coast Short School Class Descriptions

Note: All classes are designated as follows:

(W) – Water Certification
(WW) – Wastewater Certification
(B) – Both Water and Wastewater Certification

KEYNOTE SPEAKER

(B) Legislative Update: *Mark Landauer, Special Districts Association of Oregon.* General update on Oregon legislature, budget, including updates on legislative impacting water, wastewater, and stormwater utilities. 0.1 CEU

COLLECTIONS

(B) Centrifugal Pumps for Wastewater and Water: *Rich Owens, Owens Pump & Equipment.* Explaining the many available types of centrifugal pumps, their benefits for different applications. 0.1 CEU

(WW) Inflow and Infiltration-Manhole Inspections: *Jim Brown, True North Equipment.* This class discusses some of the differences between Inflow and Infiltration, where to look, and methods of inspection manholes in sewer systems. reasons for inspection and assessment, and methods and terminology used in manhole inspection as well as a brief discussion into NASSCO and MACP assessment. 0.1 CEU

(WW) Get the F.R.O.G. Out: *Dan Lawrence, RootX*. Chemical root and grease control for sanitary sewer systems. How & why roots grow in sewers, chemicals used for root control, Microbial vs Enzymes for FOG control and Emulsifier. 0.1 CEU

(WW) Pretreatment Programs & FOG: *Nicole Morris, Oregon DEQ.* Oregon DEQ's Pretreatment Programs & FOG will help you and your staff understand what interest the State and EPA have in control of FOG sources and keep up to date on recent FOG happenings at the State and Local level. 0.1 CEU

(B) Vendor Tour: *Moderator: Lisa Erkert, EWEB.* Interactive time for attendees to learn about new technologies, equipment, and useful tools for the water and wastewater sectors by taking a tour of this year's vendors. Attendees will report to classroom and get instructions. They will select five vendors to hear 10-minute presentations from each vendor. Vendor tours are offered at various times and tracks throughout the short school. **Attendees only get CEUs for one vendor tour**. 0.1 CEU

(WW) Pretreatment & Hazardous Waste: *Nicole Morris, Oregon DEQ.* Oregon DEQ's Pretreatment and Hazardous Waste will help you and your staff understand when POTW is considered a hazardous waste treatment facility and understand the basics of hazardous waste regulations. 0.1 CEU

(WW) Your DEQ Online for DMR Entry: *Mark Bentz, Oregon DEQ.* This one-hour presentation provides an overview of Your DEQ Online and why it is being used, the importance of account set up and how an account is used to access the Discharge Monitoring Report function of YDO, orientation of how a DMR looks and works in YDO, how to fill out the DMR, special things to pay attention to and how to submit additional information. Q & A presentation on YDO. 0.1 CEU

(WW) Your DEQ Online Account Troubleshooting: *Mark Bentz, Oregon DEQ.* Your DEQ Online account setup and associated complications. Troubleshooting and effective navigation in Your DEQ Online. 0.1 CEU

(WW) The City of Eugene's Regulatory Services Program Overview: Scope of Work & Areas of Growth: *Contrail Smith & Jon Wilson, City of Eugene.* Eugene merged their industrial pretreatment and industrial/commercial stormwater programs to embrace the one-water concept. This presentation will discuss the scope of work the program is now responsible for, highlighting the program areas that required additional resources to efficiently and effectively implement both programs. 0.1 CEU

(WW) Safe Hydro-Excavation Operation Practices: *Chris Young, SWS Equipment.* This course will prepare attendees to perform hydro-excavations properly and safely. Operators will learn how to dig properly around sanitary and storm utilities

with proper digging wand techniques and pressure control. Additional discussions will revolve around vacuum safety, PPE, overhead safety and fall protection. 0.1 CEU

(WW) Nozzles 101: *Chris Young, SWS Equipment.* We will cover sanitary sewer and storm water pipe cleaning basics and safety. Students will learn the basic nozzle construction and jets and how to select the proper nozzle for application. 0.1 CEU (WW)

(WW) Sewer Inspection: How Did It Start & Where Is It Going: *Chris Young, SWS Equipment.* A look at the history of sewer inspection systems and how technology has advanced. This class will cover the different technologies used for pipe inspection in a sanitary sewer and stormwater conveyance system to look at pipe integrity/condition, pipe wear and defects, pipe obstructions. How it has evolved into current times and where it is going in the future. 0.1 CEU

(B) Working with Older Laterals & Services: Odd Pipe Materials & Where to Find Them: *Kenneth Cannady-Shultz, City of Oregon City & Matthew Del Moro, HBH Consulting Engineers, Inc.* Co-presenters Kenny and Matt leverage their experience with diverse water and sewer systems to provide practical guidance on how to work with several common (and uncommon) historic pipe materials, as well as methods to predict what's in the ground before digging (desk work). 0.1 CEU

(B) Excavation Safety Awareness & Refresher: *Jim Johnson, D2000 Safety, Inc.* In this session we will review the basic safety requirements and best practices when excavating. This includes soil classification, selecting protective systems, and emergency preparedness. The program is designed for anyone working around excavations or serving as competent persons. 0.2 CEUs

(B) Confined Spaces Identification & Alternate Entry Procedures: *Jim Johnson, D2000 Safety, Inc.* Identifying and evaluating confined spaces in water treatment facilities can pose challenges given the variety of spaces and possible hazards. In this session we will examine the process for identifying confined spaces, permit-required confined spaces, and using alternate entry procedures to ensure worker safety. 0.2 CEUs.

(B) Water and Wastewater Jeopardy: *James Green, City of Corvallis.* Trivia style oriented learning opportunity for a variety of topics such as water/wastewater terminology, math equations, troubleshooting, common operational mistakes, reporting requirements, history of water and wastewater treatment techniques, fun facts about legislation, bodies of water and equipment type questions. 0.2 CEUs

WASTEWATER

(WW) Clean Water Act & NPDES Permits: *Rajeev Kapur, Kapur Environmental LLC.* Regulatory framework and content of the NPDES permit program. 0.1 CEU

(B) Vendor Tour: *Moderator: Lisa Erkert, EWEB.* Interactive time for attendees to learn about new technologies, equipment, and useful tools for the water and wastewater sectors by taking a tour of this year's vendors. Attendees will report to classroom and get instructions. They will select five vendors to hear 10-minute presentations from each vendor. Vendor tours are offered at various times and tracks throughout the short school. **Attendees only get CEUs for one vendor tour**. 0.1 CEU

(WW) Adaptive Mixing for Efficiency & Process Resiliency: *Alden Meade, Xylem*. Adaptive mixing continuously adjusts the mixer speed, so the output thrust precisely matches dynamic process conditions, such as fluctuating flow rates or aeration demands. This technology delivers continuous thrust variation for energy-efficient, demand-based operation. 0.1 CEU

(WW) Positive Displacement Pumps for Wastewater Applications: *Rich Owens, Owens Pump and Equipment.* Benefits and applications for Positive Displacement Pumps for wastewater. 0.1 CEU

(WW) Oregon DEQ Water Reuse Program Overview: *Grace Silver, Oregon DEQ.* The presentation will provide an overview of DEQ's water reuse program, including history, current work, future direction, and interagency collaboration. 0.1 CEU

(WW) City of Bend Beneficial Reuse: *Roy Bradley, City of Bend.* The presentation provides an overview of the City of Bend's recycled water program. It includes how the program started, construction and development, operational challenges, logistical challenges with A,B,C water and how the program operates currently. 0.1 CEU

(WW) City of Molalla Upgrade: *Seth Kelly, City of Molalla.* City of Molalla 2025 DEQ NPDES Permit renewal process and lessons learned. 0.1 CEU

(WW) The Original Process Control Toolkit: Applying the EPA's 1974 & 1977 Manuals Today: *Mark Walter, Waterdude Solutions.* This workshop draws on the classic EPA activated sludge process control manuals from 1974-1977 to reinforce a practical "see-test-trend-adjust" approach. Operators work through common symptoms using a portable set of checks and a shared troubleshooting language. The session is interactive with demos and breakouts. 0.2 CEUs

(WW) Inflow & Infiltration a DEQ Perspective: *Bradley Eagleson, Oregon DEQ.* The lesson will include a discussion of how to use EPA's method to determine excessive inflow and infiltration, its potential downstream compliance concerns from a cost, operational and regulatory standpoint, DEQ's regulatory approach, and financial resources available to aid cities. 0.1 CEU

(WW) Common DMR Reporting Errors: *Bradley Eagleson, Oregon DEQ.* The lesson will touch on some of the more common errors DEQ sees and how to ensure that operators are reporting accurately. Topics will include bacterial resampling, mass load suspension, and weekly average calculation. Session will provide resources on reporting. 0.1 CEU

(WW) Operator Math Review: *Caleb Trammell, Jacobs.* This presentation will feature a variety of math review questions based on material from the ABC wastewater operator certification exams. It is designed to help operators develop math skills that will help them pass their tests. 0.1 CEU

(WW) Flammable Gas Systems Purging Practices Incorporating Federal Standards: *Spencer Goodro, City of Eugene.* Purging flammable gas systems in and out of service using federal standards found in NFPA 56 and AGA Purging Principles and Practice. 0.1 CEU

(WW) Activated Sludge Treatment Basics: *Jonathan Gasik, Retired Oregon DEQ*. An overview of the history of activated sludge treatment development, activated sludge treatment theory, and activated sludge treatment facility configurations. 0.1 CEU

(WW) Activated Sludge Process Control: *Jonathan Gasik, Retired Oregon DEQ*. This class is based on Michigan DEQ's training manual for wastewater treatment plant operators "Activated Sludge Process Control". The class covers calculations of organic loading, food-to-microorganism ratio, cell residence time, and wasting; and using of settlometer, OUR, and microscopic examination. 0.1 CEU

(WW) Activated Sludge Process Control Practical Workshop: *Jonathan Gasik, Retired Oregon DEQ*. This workshop is a practical continuation of "Activated Sludge Process Control". It will include three 40 minute sessions at the wastewater treatment plant: A) plant walkthrough with use of sludge judge and DO measurements, B) microscopic examination, and C) Settlometer, OUR, and calculations. ***At the Albany/Millersburg WRF at 405 NE Davidson St. Provide your own transportation.*** 0.2 CEUs

DISTRIBUTION

(W) History of Valves, New Valves and Water Mains: *Carl Schaumburg & Ron Bell, City of Corvallis.* This presentation will deal with the importance of location and operation of valves in your distribution system, new valves, and water mains. 0.1 CEU

(W) Revolutionize Water Quality with Active Tank Mixing: *Kevin Chapa, Big Wave Water Technologies.* This lesson will discuss the challenges that water operators face when it comes to water quality inside water storage tanks. This presentation will review how tank mixing can help improve water quality by eliminating stratification, biofilm, and TTHM's. This will also cover the installation and review how to get a mixer installed in a water storage tank. 0.1 CEU

(W) Astoria Water Main Replacement in Century Old Hand-dug Tunnel: *Dan Johnston, HDR.* The 16th St. Waterline project in Astoria Oregon is a unique and challenging project. The story begins with a corroded 18-inch diameter cast iron water main running through a century old hand-dug tunnel with depths up to 110-feet deep. Knowing the waterline's days were numbered, with little ability to access and repair, the City needed to come up with a long-term and resilient solution. HDR evaluated different options such as HDD in an adjacent alignment, and various options for replacement inside the tunnel. In collaboration with the City, a path was set to design for replacement inside the tunnel and to use the CM/GC

process so that constructability and costs could be closely managed. **Key Takeaways** – Sometimes solutions are not apparent until an experienced contractor can fully investigate – The design process can be strengthened when quality Contractor input is received – The CM/GC process is a give and take arrangement – Hydraulic analysis was important to determine how to keep the system fully operational while the water main was offline – Investigations by the Operators was needed to learn if old valves could still be closed. 0.1 CEU

(W) Solutions for Control: Distribution Maintenance & Repair Techniques to Avoid System Shutdown: *Dan Huffaker, Hydra-Stop.* Insertion valve technology helps prevent major shutdowns and disruptions in critical infrastructure. Learn how utilizing these techniques will eliminate cost associated with planned and emergency system shutdown. The information that will be discussed covers benefits of technology, performance testing, and real-world applications of this solution for hydrant replacements, water main rehabs, lift station renovations and more. 0.1 CEU

(B) Enhancing Water Sector Security: *Leslie Ann Kainoa, CISA.* Interactive lesson on the tools, methods, and steps to identify strengths, risks, and weaknesses in an operation. We will look at ow to turn this information into clear, actionable goals to keep water and wastewater systems secure and running smoothly. 0.2 CEUs

(B) Protect Your Pipes: *Patrick Miller & Ray Velasquez, CIMCO-GC Systems.* Students will learn the science behind locating wire technology, installation techniques, data interpretation, troubleshooting methods, and strategies for ensuring pipeline safety and damage prevention. This presentation is highly relevant to the operation and maintenance of both water and wastewater utility systems, focusing on the ongoing challenges of accurately locating underground pipelines. Certified operators will gain practical knowledge about how pipeline materials, installation practices, and tracer wire systems affect the success of locating efforts. This session explains how tracer wire works, why it can fail, and how to design and maintain a reliable system that lasts the life of the pipeline. Applying this information helps utilities reduce service disruptions, protect water quality, and ensure public access to essential utilities. 0.1 CEU

(B) Vendor Tour: *Moderator: Lisa Erkert, EWEB.* Interactive time for attendees to learn about new technologies, equipment, and useful tools for the water and wastewater sectors by taking a tour of this year's vendors. Attendees will report to classroom and get instructions. They will select five vendors to hear 10-minute presentations from each vendor. Vendor tours are offered at various times and tracks throughout the short school. **Attendees only get CEUs for one vendor tour**. 0.1 CEU

(W) Corrosion Survey of EWEB's Finished Water Transmission Main: *Nathan Endicott, EWEB.* An overview of the corrosion survey methodology, findings, and lessons learned. Background information of the corrosion evaluation for EWEB's 45-inch and 60-inch water transmission main pipelines. Background information of the corrosion engineering and External Corrosion Direct Assessment (EDCA) methodology. 0.1 CEU

(B) Underground Utilities: What You Don't See Can Hurt You: *Joshua Thomas, Oregon Utility Notification Center.* Attendees will gain understanding and appreciation for the importance of safe excavation when digging above the critical infrastructure beneath our feet in communities across our state and beyond. Knowing what's below can help prevent costly damages, temporary loss of critical utility services, injuries or worse. 0.1 CEU

(B) Introduction to Specialty Valves: *Patrick Miller & Ray Velasquez, CIMCO-GC Systems.* This course focuses on three critical valve categories essential for water operators: check valve for preventing backflow and protecting system components, various air valves necessary for managing pipeline air to ensure efficient flow and prevent damage, and quarter-turn valves prized for their quick on/off functionality and sealing characteristics. Water operators will gain practical knowledge in the application, design, and sizing of these valves to maintain system integrity and reliability. Understanding the operation of these specific valves is vital for ensuring optimal performance in modern water, wastewater, and distribution systems. 0.1 CEU

(B) Practical Guide to Locating Water & Sewer Pipes: *Brian Moss, RJM Equipment Sales, Inc.* Improving locator accuracy by understanding locator signals and methods. Choosing the best frequencies for each condition, checking locate accuracy, choosing the best location for grounding rods. Locating plastic pipes. Locating cameras and sondes. Calibration check of locators. 0.1 CEU

(B) Practical Guide to Locating Water Leaks: *Brian Moss, RJM Equipment Sales, Inc.* Practical leak detection methods and equipment for locating leaks in water mains. Field examples of leaks including water leak sounds. Tips for improving leak detection accuracy and success. Locating non-metallic pipes. 0.1 CEU

(B) State Preparedness and Incident Response Equipment (SPIRE) Grant Program: *Matt Neuvenheim Oregon Emergency Management.* The State Preparedness and Incident Response Equipment (SPIRE) grant program provides equipment to local government and other recipients for emergency preparedness. This equipment is made available in an emergency response to decrease the risk of loss of life and property damage. 0.1 CEU

(B) Active Shooter Response Planning: *Ray Johnson, BMI.* Today you are 18 times more likely to experience workplace violence than a fire. OSHA requires all employers to have Emergency Action Plans including a written plan and training for an Active Shooter event. Learn how to construct a plan, what to expect when police arrive, conduct a head count and train employees how to respond to an Active Shooter using the "Run, Hide, Fight" protocol. 0.2 CEUs

(B) Cross Connection Control Awareness: *Ray Johnson, BMI.* An EPA funded study found that almost 96% of all cross connections in the US were health hazards. All Water Distribution, Water Treatment Plant, Wastewater Collection and Wastewater Plant Operators should have a basic understanding of how to identify a cross connection and what causes backflow. This presentation will cover the basics of Cross Connection Control and Backflow including; Terminology and Definitions; Hydraulics of Backflow; Common Cross Connections; Documented Backflow Incidents; Regulatory Jurisdictions; Methods of Protection; Backflow Devices; Backflow Prevention Assemblies; Overview of Water System's Cross Connection Control Programs; Duties of Backflow Testers and Cross Connection Specialists. 0.1 CEU

SOURCE/TREATMENT

(W) Streaming Current & Particle Counters: How Two Unique Instruments Contribute to Effective Water Treatment: *Krag Petterson & Tim Owens (Chemtrac).* Presentation covers how streaming current measurement works and how it can contribute to effective coagulant dose control. Also covered are particle counters and how they can be used in conjunction with turbidity measurements to efficiently operate filters and monitor filter breakthrough. 0.1 CEU

(B) Cascadia -Preparing to Be Ground Zero: *Jenny Demaris, EWEB.* 1) Review of characteristics to the Cascadia Subduction Zone earthquake fault: magnitude, frequency, impact zone, liquefaction, local tsunami, landslides, coastal subsidence, impacts to infrastructure. 2) Anticipated local, state, federal response, 3) Preparedness efforts needed at the personal and local level for water/wastewater utilities. 0.2 CEUs

(B) Game - ICS 201 Initial Incident Briefing: *Jenny Demaris, EWEB.* Learn how to adapt ICS 201 Game to home agency, how to host/facilitate the game and practice full game session. ICS 201 Game provides random, simulated hazards and impacts related to personnel, facilities, policy/finance/ information, technology/comm's, equipment/supply resources. 0.1 CEU

(B) Applying the New Effective Utility Management Framework to Your Utility: *Michael Grimm, West Slope Water District.* Effective Utility Management (EUM) is a management approach developed by water sector leaders for water sector leaders. This presentation provides an overview of the modernized EUM Framework for 2024 including 5 Keys to Management Success and the 10 Attributes of an effectively managed utility. 0.1 CEU

(W) Quartz Creek Floodplain Restoration: *David Richey, EWEB.* This presentation will describe the Quartz Creek floodplain restoration project. The project aims to promote historic connections between the river and its floodplain, increase habitat diversity, and provide slow water areas to support fish and allow sediment to drop out of the flowing water for enhanced water quality. Quartz Creek is a major tributary that runs into the McKenzie River which is the sole source for Eugene Water & Electric Board as well as a projected second source for Springfield Utility Board. 0.1 CEU

(W) Reservoir Cleaning: An Operator's Perspective: *Jared Giacomelli, EWEB.* Review of how Hayden Bridge Treatment Plant cleaned and inspected their 15MG reservoir while keeping tank in service. Overview of the planning and contingencies put in place. Background of why the tank needed to remain in service. Overview of how the cleaning went. 0.1 CEU

(W) Water Rights Explained: *Natalie Jennings, OWRSP.* This will explain how water rights work, what the terms mean, and how to know what actions your system needs to take to keep their water rights current. 0.1 CEU

(B) Vendor Tour: *Moderator: Lisa Erkert, EWEB.* Interactive time for attendees to learn about new technologies, equipment, and useful tools for the water and wastewater sectors by taking a tour of this year's vendors. Attendees will report to classroom and get instructions. They will select five vendors to hear 10-minute presentations from each vendor. Vendor tours are offered at various times and tracks throughout the short school. **Attendees only get CEUs for one vendor tour**. 0.1 CEU

(W) Preparing for a Water System Survey: *Nicholas Alviani, OHA.* Presentation consists of topics related to and preparation for a water system survey. This includes survey requirements, preparing for a survey, tips for success, survey follow up, and outstanding performance. 0.1 CEU

(W) PFAS Drinking Water Rule Overview: *Gregg Baird, OHA.* This presentation will provide an overview of the new PFAS drinking water regulations that were finalized April 2024. Topics covered include the new MCLs, monitoring requirements, compliance determinations, treatment options, implementation timelines, and funding available to address PFAS and other emerging contaminants. 0.1 CEU

(B) Chemicals in Water & Wastewater Applications: *Jeff Zachman, Cascade Columbia Distribution.* Practical applications of various chemicals in water and wastewater treatment, such as chlorine options, pH control, de-chlorination, fluoridation, coagulants and flocculants, algae control, taste and odor, chlorine dioxide generation, odor control, filtration media, iron and manganese and corrosion control, membrane cleaning chemicals, and miscellaneous chemicals for aerobic digestion, degreasers, and defoamers. 0.1 CEU

(W) Hydraulic Impacts of PFAS Treatment: *Joshua Justice, HDR.* Overview of pump curves and how to read them, brief summary of different PFAS treatment options, impacts of PFAS treatment to pump hydraulics, and modifications/options available to address additional head loss generated by PFAS treatment. 0.1 CEU

(W) Green Peter Drawdown Project: *Chris Germond, City of Albany.* The U.S. Army Corps of Engineers Green Peter Drawdown plan, environmental and water quality impacts, effects on downstream water utilities, and future. 0.1 CEU

(W) Modified Tracer Testing Methodology for Long Detention Times: *Andrew Nishihara, Stantec.* Tracer testing can be difficult to perform on large reservoirs or clearwells. Having a place to put water or being able to run a WTP at rates needed to prove out hydraulic efficiency may not be feasible. This presentation will provide background on why and how tracer studies are conducted and provide case studies where abbreviated tracer testing was performed that shortened testing by over half the time traditional testing would require. Method was discussed and vetted with approving regulatory authority. Background and overview of disinfection calculations and different ways clearwells or water storage tanks can be tested to verify hydraulic efficiencies. 0.1 CEU

(W) Operational Optimization as Part of Effective Utility Management: *Kim Reid, Veolia.* Water industry operators should always strive to improve. To aid with that goal, EPA and professional associations developed a primer "Effective Utility Management." One pillar of ten is Operational Optimization. Includes strategies for resource efficiencies, adopting new technologies, measuring success by engaging all staff. 0.1 CEU

(W) The Interconnection Between Permit Extensions of Time and WMCPs: *Kerri Cope & Tamera Smith, Oregon Water Resources Department.* Permit Extensions of Time and Water Management and Conservation Planning (WMCPs) are interconnected because an extension preserves the timeline to develop a water right, while a WMCP can establish conservation requirements and other conditions that govern how that right is exercised. WMCPs also ensure that development is paired with accountability and efficient water use. 0.1 CEU

WATER TOUR

(W): Albany Water Treatment Plants Tour: *Chris Germond, City of Albany.* Two-hour tour of the City of Albany's two water treatment plants. The Albany-Millersburg Treatment Plant uses membrane technology to filter water from the Santiam River. The Vine Street Water Treatment Plant uses mixed media filter technology and takes its water supply from the 18-mile Santiam-Albany Canal. ***Tour begins at AMWTP 33883 Berry Dr NE then goes to VSWTP at 300 Vine St. Provide your own transportation.** 0.2 CEUs

Backup presentations in case of cancellation:

(WW) Wastewater Collections Operator Exam Prep: *Brian Stevens, Oregon Environmental Solutions.* This class will briefly discuss the certification process as well as state rules regarding certification. We will then pivot into helpful tips and tricks in studying for and taking the certification exam. The class will then move to a practice exam format featuring multiple choice test questions similar to what would be found on the exam. 0.1 CEU

(WW) Wastewater Operator Roundtable: *Brian Stevens, Oregon Environmental Solutions.* This course will provide a collaborative space for wastewater operators to discuss current issues in the community it is experiencing. Topics will include regulatory changes, operational efficiencies, workforce issues, energy savings, and more. 0.1 CEU

(W) Control Valve Function: *Patrick Miller & Ray Velasquez, CIMCO-GC Systems.* This class will include basic hydraulics, valve function, pilot system function, valve components, pressure reducing valves, maintenance, as well as troubleshooting on hydraulic control valves. Automatic control valves and maintenance are a vital aspect of a functioning water system. Proper understanding and maintenance practices will aid in ensuring proper valve performance and prevent valve failure which affects system reliability, community safety, resource (water) protection, and resource conservation. This class is designed to build fundamental familiarity with valve function and piloting systems. 0.1 CEU

(W) Five-Years Later: Recovery and Restoration Following the Holiday Farm Fire: *Nancy Toth, EWEB.* A look back at recovery and restoration efforts in the McKenzie Watershed following the 2020 Holiday Farm Fire that burned over 20% of the watershed. EWEB worked together with the McKenzie Watershed Council Upper Willamette Soil & Water Conservation District, McKenzie River Trust and others to conduct port-fire property assessments and provide assistance to mitigate erosion, replant on steep banks, control invasive species, etc. in order to protect the McKenzie River, the sole source of drinking for the City of Eugene. 0.1 CEU

(W) Water Operators Roundtable: *Lisa Erkert, EWEB.* Interactive course to have water operators discuss technologies, equipment, and processes that contributed to plant improvements. Also discuss common issues at water treatment plants to see how others address the issues and make improvements. 0.1 CEU