August 28, 2023

OESAC CEU Committee P.O. Box 577 Canby, OR 97013

Enclosed is the complete course descriptions and class agenda for the 2023 Southern Oregon Water and Wastewater Short School for review and approval. Date of the short school is September 19-21, 2023 in Grants Pass, Oregon. Course is sponsored by the AWWA Southern Oregon Subsection. The short school will provide 2.0 CEUs for Drinking Water, and 2.0 CEUs for Wastewater.

Attendance will be tracked by moderators and stamp cards. All courses are in 1 hour or more.

Sincerely,

Cyndi Weeks Secretary/Treasurer SOS Subsection

Cyndi Weeks

2023 AWWA Southern Oregon Subsection Short School Course Descriptions

- (W) Water Certification 2.0 CEUs
- (WW) Wastewater Certification 1.3 CEUs
- (B) Both Water and Wastewater Certification 1.4 CEUs

WATER

- **(W):** Ductile Iron Pipe Joints, Lining/Coating and Applications: John Kitchen, American Ductile Iron Pipe. This 60-minute presentation will teach the history and development of DIP joints, linings/coatings and the appropriate use of each as well as teach how DIP is manufactured. 0.1 CEU
- (W): A Virtual 3-D Tour of the New North City Pump Station: Denny Clouse, BHC Consultants. This is a discussion on the functional objectives that went into the design and construction of the North City Pump Station in Shoreline Washington. 0.1 CEU
- **(W):** New Water Main Pipeline Project From Start to Finish: Denny Clouse, BHC Consultants. Talking about the process of a new water line from design, to installation, to activation. 0.1 CEU
- (W): Natural and Unnatural Events in a Water System: Denny Clouse, BHC Consultants. This course will be an insight on disasters that happen in a water system, complete with what has happened in the Pacific Northwest. 0.1 CEU
- **(W): Water Leak Detection:** *Brian Moss, RJM.* How to reduce lost water and lost revenue from water system leaks by finding the leaks faster. 0.1 CEU
- **(W):** Reagentless Free Chlorine: Frank Spevak, Rosemount. This course will cover the fundamentals of measurement, technology comparison, troubleshooting techniques, calibration procedures and various installation solutions in Oregon. 0.1 CEU
- **(W): Mixed Media Filter Operations:** Jason Canady, City of Grants Pass. This course teaches operators the various components that make up a modern mixed-media filter, discusses proper operation, and instructs operators how to look for problems and head them off early. 0.1 CEU
- (W): Filtering the Options Technology Selection for Grants Pass Water Treatment Plant: Jason Canady, City of Grants Pass. This is a discussion of the process Grants Pass City Council and Design Build Team went through to choose the right technology for the replacement water treatment plant project and the economic and non-economic criteria and how different decisions will change long term operation costs. 0.1 CEU
- (W): City of Ashland's New Water Treatment Plant: Pierre Kwan, HDR Engineering. This course will go over the design of the new water treatment plant in Ashland that will be addressing changing water qualities due to global climate change, wildfires, and new drinking water regulations. 0.1 CEU
- **(W): Water Emergency Response Trailer Setup and Operation**: *Jacob Godfrey, City of Grants Pass.* This course is instruction on how to setup and operate a mobile corrugated membrane water filtration system including adding coagulant and disinfectant, and operation of the power generation and diesel pumps. 0.1 CEU
- **(W): THM Mitigation in Water Distribution Systems Through Water Storage Tank Mixing and Aeration:** *Haley Goddard, Cleanwater 1.* This 60-minute seminar will provide water system managers, operators, and engineers a practical understanding of the conditions, chemistry and science behind THMs generation in water distribution systems. 0.1 CEU
- **(W): Water Quality Improvement Through Water Storage Tank Mixing:** *Haley Goddard, Cleanwater 1.* This seminar will provide water system managers, operators and engineers a practical understanding of the science behind applying mixing energy to water in reservoirs or tanks as a means to improve water quality in distribution networks. 0.1 CEU

- **(W):** Disinfectant Residual Control in Water Distribution Systems: Haley Goddard, Cleanwater 1. This course will explore the conditions, chemistry and science behind affecting positive control of both chloramine and free-chlorine levels in water distribution systems. 0.1 CEU
- **(W):** The Role of Smart Tanks in Distribution Water Quality Management: Haley Goddard, Cleanwater 1. This course will discuss the science and implementation of distribution system based water treatment to address low residual levels and disinfection byproducts. 0.1 CEU
- **(W): OHA 2023 Regulatory Update:** Rebecca Templin, OHA Drinking Water Services. This course will give attendees general updates of new regulations including the lead and copper service line inventory update, emerging contaminants, and Bipartisan Infrastructure Law (BIL) funding opportunities. 0.1 CEU
- **(W): Drinking Water Operator Certification Update**: *Anthony Fields, OHA Drinking Water Services*. This course will consist of information relating to Level 1-4 treatment & distribution operator certification, backflow tester & specialist certifications, and small water system operator certifications. 0.2 CEU
- (W): What If Your Water Meters Could Hear the Leaks You Can't See? Chris Bennett, Correct Equipment., Understanding a meter based acoustic leak detection approach to combat non-revenue water. 0.1 CEU
- **(W): Tour of Grants Pass Water Filtration Plant**: *Jason Canady, City of Grants Pass.* This will be a tour of the treatment facility with discussion of different processes, applications and ways in which different plants accomplish water treatment goals. 0.2 CEU

WASTEWATER

(WW): Modern Small and Medium Lift Station Design: Simon Cartwright, Xylem. This two hour presentation will explore the challenges faced when deciding what is needed to meet operating requirements, what technology is available to optimize a station and what questions should be addressed when beginning the RFP process. 0.2 CEU

(WW): Collections Plugging Solutions: *Rich Owens, Owens Pump & Equipment.* This course will talk about what types of items are being found in wastewater collections, and what types of pumps are available to prevent collection plugs. 0.1 CEU

(WW): Your DEQ Online: *Kim Grzyb, DEQ.* This tutorial will provide a demonstration of how to register and set up an account with the new cloud-based system for Wastewater Operator Certification. 0.1 CEU

(WW): DEQ Operator Certification Basics: *Kim Grzyb, DEQ.* This course goes over the basics that is required to obtain an operator certification. 0.1 CEU

(WW): Compliance Pitfalls: *Johnny Leavy, City of Medford.* This presentation identifies NPDES Permit compliance requirements commonly overlooked by wastewater treatment operators and staff. 0.1 CUE

(WW): Current OPSC (Code Change)- FOG Requirements/Building Sewers: Shane Macuk, Rogue Valley Sewer Services. This course will review and discuss OPSC, Oregon Statues and sewer use ordinances as they relate to fats, oils, and grease enforcement. 0.4 CEU

(WW): Anaerobic Digester Startup Best Practices, with a Case Study: *Nate Janega, Carollo Engineers*. This presentation will cover best engineering practices for taking a digester out of service and restarting the process safely and efficiently. 0.1 CEU

(WW): Grants Pass Water Reclamation Plant Tour: Gary Brelinski, City of Grants Pass. This tour will cover the history of the facility with discussion of processes, and applications. 0.2 CEU

BOTH: WATER/WASTEWATER

(B): Practical Guide to Locating Water and Sewer Pipes: *Brian Moss, RJM.* How to improve the accuracy and effectiveness of locating buried utilities metal and plastic water lines, sewer lines and other utilities. 0.1 CEU

- **(B): Online pH101:** Frank Spevak, Emerson. This course explains the relationship between glass and reference electrodes, effects of temperature, calibration procedures, troubleshooting practices and maintenance. 0.1 CEU
- **(B): Tahoe Reno Industrial Park Process Water System:** *Brent Farr, PE, DOWL.* This presentation will focus on the development of an innovative process water system in Reno, NV. The system includes reclaimed wastewater, water from the Truckee River, and groundwater wells. We will discuss design and operation challenges. 0.1 CEU
- **(B): Navigate Safe Practices in Chemical Logistics**: *Kathy Green, Cargo Check*. This course empowers water treatment staff with proactive chemical handling methods, emphasizing best practices to prevent incidents, enhance safety, and improve security for the protection of personnel, the environment, and critical infrastructiore. 0.1 CEU
- **(B):** The Fundamentals of Electrochemistry: *Mark McElroy, Thermofisher.* This is a practical look at tasks that are performed every day in the lab and in the plant. These functional tasks are often misunderstood and not performed properly. There will also be a detailed conversation about how things work and how to best troubleshoot. We will also discuss proper care and maintenance. 0.1 CEU
- **(B):** Leadership- Who Me? Jason Canady, City of Grants Pass. The course is designed to instruct entry level operations staff in their role in being leaders and discusses the importance of listening, learning and providing honest feedback. 0.1 CEU
- **(B):** High Rate Filtration Fundamentals and Medford Water Pilot Study: *Tessora Young, Jacobs.* Review high rate filtration fundamentals, highlight the importance of filter pilot studies and share case dtudy pilot filter results from Medford Water. 0.1 CEU
- (B): On-Site Sodium Hypochlorite Generation as a Safe & Efficient Alternative to Chlorine Gas or Commercial Strength Bulk Hypochlorite for Water Disinfection: Haley Goddard, Cleanwater 1. This course will discuss the science and implementation behind on-site sodium hypochlorite generation as a source of chlorine disinfection capacity for water and wastewater plants as well as distributed well systems. 0.1 CEU
- **(B):** Peristaltic or Diaphragm Metering Pumps; How to Choose? *Bill Ormsby, Blue-White.* The focus will be on the specific operational functions of both peristaltic and diaphragm pumps, also performance, application and maintenance of each. 0.1 CEU
- **(B): Chemicals in Water and Wastewater Application**: Jeff Zachman, Cascade Columbia Distribution Co. This will be an overview of chemicals and their applications in potable water and wastewater. 0.1 CEU
- **(B): Long Term Cost Realities of PFAS Treatment:** *Andrew Nishihara, Stantec.* This presentation will inform attendees about per and polyflourinated alkyl substance rules, regulations, treatment and drinking water treatment costs. 0.1 CEU
- **(B): Cellular Telemetry for Water and Wastewater:** *Chris Bennett, Correct Equipment,* This course will get into what is available in cellular based telemetry. 0.1 CEU
- **(B): Cyber Resilience for Critical Infrastructure**: *Tara Mertz, West Yost.* This course will discuss the vulnerabilities associated with Industrial Control Systems, and understand key protective measures to protect against cyber threats. 0.1 CEU
- **(B): Medford Water SCADA Modernization:** *Jeff Kanyuch, Jacobs.* This will be a discussion of work associated with Master Planning for a modernized SCADA system, and necessary components and phases for implementation. 0.1 CEU

Water & Wastewater Short School September 19-21, 2023

| Tuesday 9/19 | | | | |
|---------------------|---|--|--|--|
| | Water | Wastewater/ Combo | | |
| 7:00 AM - 8:00 AM | REGISTRATION AND BREAKFAST | | | |
| 8:00 AM - 9:00 AM | Anthony Fields Drinking Water Certification Update Pt 1 Water | Simon Cartwright Modern Small & Medium Lift Station Design pt 1 Wastewater | | |
| 9:05 AM - 10:05 AM | Anthony Fields Drinking Water Certification Update Pt 2 Water | Simon Cartwright Modern Small & Medium Lift Station Design pt 2 Wastwater | | |
| 10:05 AM - 10:20 AM | BREAK | | | |
| 10:20 AM - 11:20 AM | Frank Spevak Reagentless Free Chlorine Water | Shane Macuk Current OPSC-FOG Requirements Pt 1 Wastewater | | |
| 11:25 AM - 12:25 PM | Brian Moss, RJM Water Leak Detection Water | Shane Macuk Current OPSC-FOG Requirements Pt 2 Wastewater | | |
| 12:25 PM - 1:30 PM | LUNCH | | | |
| 1:30 PM - 2:30 PM | Rebecca Templin OHA 2023 Regulatory Update Water | Shane Macuk Current OPSC-FOG Requirements Pt 3 Wastewater | | |
| 2:35 PM - 3:35 PM | Haley Goddard THM Mitigation in Water Distribution Systems with Storage Tank Mixing & Aeration Water | Shane Macuk Current OPSC-FOG Requirements Pt 4 Wastewater | | |
| 3:0 PM - 4:40 PM | Haley Goddard Water Quality Improvement with Storage Tank Mixing Water | Frank Spevak Online pH101 W/WW Combo | | |
| 4:40 PM-5:00 PM | VENDOR TIME | | | |
| 5:00 PM - 7:00 PM | Dinner/Vendor Social Hour/Vendor Raffle | | | |

| | V | Vednesday 9/20 | |
|---------------------|--|---|--|
| | Water | Wastewater/ Combo | Water/Wastewater Combo |
| 7:00 AM - 8:00 AM | | REGISTRATION AND BREAKFAST | |
| 8:00 AM - 9:00 AM | Jason Canady Mixed Media Filter Operations Water | Rich Owens Collections Plugging Solutions Wastewater | Andrew Nishihara Long Term Cost Realities of PFAS Treatment W/WW Combo |
| 9:05 AM - 10:05 AM | Jason Canady Filtering the Options - Technology Selection for Grants Pass Water Plant Water | Mark McElroy Fundamentals of Electrochemistry W/WW Combo | Chris Bennett Cellular Telemetry for Water and Wastewater W/WW Combo |
| 10:05 AM - 10:20 AM | | BREAK | |
| 10:20 AM - 11:20 AM | Chris Bennett What If Your Water Meters Could Hear the Leaks You Can't See? Water | Kimi Grzyb * Your DEQ Online Wastewater | Jason Canady Leadership - Who Me? W/WW Combo |
| 11:25 AM - 12:25 PM | Jacob Godfrey Water Emergency Response Trailer Setup and Operation Water | Kimi Grzyb * DEQ Operator Certification Basics Wastewater | Haley Goddard - Onsite Sodium Hypochlorite Generation as a Saf Alternative to Chlorine Gas W/WW Combo |
| 12:25 PM - 1:30 PM | | LUNCH | |
| 1:30 PM - 2:30 PM | Haley Goddard Disinfectant Residual Control in Water Distribution Systems Water | Johnny Leavy Compliance Pitfalls Wastewater | Tessora Young High Rate Filtration Fundamentals and Medford Water Pilot Study W/WW Combo |
| 2:35 PM - 3:35 PM | Haley Goddard Role of Smart Tanks in Distribution Water Quality Management Water | Brian Moss Practical Guide to Locating Water & Sewer Pipes W/WW Combo | Tara Mertz Cyber Resilience for Critical Infrastructur W/WW Combo |
| 3:40 PM - 4:40 PM | John Kitchen Ductile Iron Pipe Joints, Lining/Coating Water | Jeff Zachman * Chemicals in Water & Wastewater Application W/WW Combo | Jeff Kanyuch/Andy Huffman Medford Water SCADA Modernization W/WW Combo |
| 4:40 PM - 5:00 PM | | VENDOR TIME/ PASSPORT RAFFLE | |
| 5:00 pm - 7:00 pm | | YP EVENT | |
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| Thursday 9/21 | | | |
|---------------------|--|--|--|
| | Water | Wastewater/ Combo | |
| 7:00 AM - 8:00 AM | REGISTRATION AND BREAKFAST | | |
| 8:00 AM - 9:00 AM | Pierre Kwan City of Ashland's New Water Treatment Plant Water | Brent Farr Tahoe/Reno Industrial Park Process Water System W/WW combo | |
| 9:05 AM - 10:05 AM | Denny Clouse New Water Main Project Start to Finish Water | Bill Ormsby Peristaltic or Diaphragm Metering Pumps; How to Choose? W/WW Combo | |
| 10:05 AM - 10:20 AM | BREAK | | |
| 10:20 AM - 11:20 AM | Denny Clouse Natural & Unnatural Events in Water Systems Water | Gary Brelinski Grants Pass | |
| 11:25 AM - 12:25 PM | Denny Clouse Virtual 3-D Tour of North City Pump Station Water | Water Reclamation Plant Tour Wastewater | |
| 12:25 PM - 1:30 PM | LUNCH | | |
| 1:30 PM - 2:30 PM | Adam Smith Grants Pass | Nate Janega Anaerobic Digester Startup Best Practices Wastewater | |
| 2:35 PM - 3:35 PM | Water Filtration Plant Tour Water | Kathy Green Navigate Safe Practices in Chemical Logistics W/WW Combo | |
| 3:35 PM - 4:00 PM | CLOSING REMARKS AND RAFFLE | | |