2025 Western Washington Short School

Date 06/03/2025

Start Time 07:30 AM

End Time 08:30 AM

Track Track 1

Drinking Water and/or Wastewater Wastewater

Length of Session Full Hour (about 50 minutes with 10 minutes for questions and discussion)

Presentation Title: ***Intensificaton Processes 101***

Abstract

Utilities are increasingly challenged with meeting new or lower nutrient effluent limits while seeking to reduce costs, energy and carbon footprint. Process intensification, i.e., doing more with less, has emerged as a water sector trend whereby utilities seek to find financially responsible and effective nutrient treatment. This presentation will highlight multiple biological process intensification strategies, such as densified activated sludge (DAS), aerobic granular sludge (AGS), membrane biofilm reactors (MBRs), membrane aerated biofilm reactors (MABRs), and Partial Nitrification/Denitrification/Anammox (PdNA/PANDA), and the value they can provide to water resource recovery facilities.

Relevance

As WRRFs are large contributors to nutrient loading in US waterways, utilities are increasingly challenged with meeting more stringent nutrient effluent limits. A key challenge and opportunity for a growing number of utilities is to find financially responsible and effective nutrient treatment. Biological process intensification strategies like densified activated sludge (DAS), aerobic granular sludge (AGS), membrane biofilm reactors (MBRs), membrane aerated biofilm reactors (MABRs), and Partial Nitrification/Denitrification/Anammox (PdNA/PANDA) provide potential solutions.

Speaker Eric Polli

E-mail epolli@hazenandsawyer.com

Speaker's Job Title Principal Engineer

Phone 9196093017

Organization Hazen and Sawyer

Primary Job Duties Mr. Polli specializes in the design, process evaluation, master planning, and optimization of wastewater facilities. His experience includes general plant design, BioWin modeling, master planning, creating process control descriptions, process troubleshooting, and emerging intensification technologies.

Registrations or Certifications North Carolina Professional Engineer

2025 Western Washington Short School

Date 06/03/2025

Start Time 07:30 AM

End Time 08:30 AM

Track Track 2

Drinking Water and/or Wastewater Water

Length of Session Full Hour (about 50 minutes with 10 minutes for questions and discussion)

Presentation Title: ***On-site Hypochlorite Generation Basics and Lessons learned from a retrofit project with RO Pre-treatment***

Abstract

On-site Hypochlorite Generation (OSHG) continues to be a solution for facilities to improve safety by changing from gas systems, and to avoid bulk chemical delivery. Often plants are retrofitting an existing space that needs to be reconfigured to fit the new OSHG system, and is important to consider the water quality for potential impacts on treatment performance. This presentation will cover the basics of OSHG and the tradeoffs of converting to an OSHG system, followed by lessons learned from a recent OSHG retrofit project with the City of Vancouver. The City of Vancouver embarked on a system-wide chlorine gas conversion program starting in 2015, to convert to a safer disinfection alternative with On-site Hypochlorite Generation (OSHG). This presentation will provide a post-construction perspective of the City's latest OSHG conversion project at the Ellsworth WTP and how the team worked through unexpected design and construction elements along the way, as well as how this project fits into the City's overall chlorine conversion program to reach a 100% chlorine gas reduction by 2025. The presentation will also cover lessons learned from start-up and commissioning, and how that informs future design.

Relevance

The focus of this paper will be on lessons learned from the design of an On-site Hypochlorite generation system and considerations for operation and maintenance that went into the design process. This presentation will provide the audience with an understanding of the OSHG process, and pre-treatment with reverse osmosis to remove silica.

Speaker Joanie Stultz

E-mail jstultz@brwncald.com

Speaker's Job Title Environmental Engineer

Phone 2064998282

Organization Brown and Caldwell

Primary Job Duties Joanie Stultz is an environmental engineer with Brown and Caldwell's Seattle Office. She has experience in water, and wastewater treatment design, water quality assessment, and hydrologic and hydraulic modeling. Joanie's focus is on drinking water treatment, with experience in providing project management support and design.

Registrations or Certifications Washington State Professional Engineer

2025 Western Washington Short School

Date 06/03/2025

Start Time 07:30 AM

End Time 08:30 AM

Track Track 3

Drinking Water and/or Wastewater

Length of Session Full Hour (about 50 minutes with 10 minutes for questions and discussion)

Presentation Title: ***Let's Talk Hydrants 2025***

Abstract

Emphasis on Discussion and Questions >Sharing of experiences>Alderwood Water Intro to System>Safety>Basics>Problem/Diagnosis>Clow IOWA

Relevance

Fire hydrants are integral to all water systems. They are of paramount importance to community safety in regards to fire suppression and water quality. Sharing experience and knowledge throughout our industry can benefit individuals and organizations.

Speaker Pete Miller

E-mail pmiller@awwd.com

Speaker's Job Title Senior Water Service Worker II

Phone 425 231 5194

Organization Alderwood Water and Waste Water District

Primary Job Duties Hydrant Maintenance Inspection and repair

Registrations or Certifications Washington State Water Operator, Washington State Wastewater Operator

2025 Western Washington Short School

Date 06/03/2025

Start Time 07:30 AM

End Time 08:30 AM

Track Track 4

Drinking Water and/or Wastewater

Length of Session Full Hour (about 50 minutes with 10 minutes for questions and discussion)

Presentation Title: ***Instrumentation, PLC, HMI, what? How does it all fit together to become a SCADA System?***

Abstract

Let's go over a generic SCADA system and walk through the measurement to HMI. How it works with all the parts and pieces. We will spend a few moments talking about the following:•Instrument and Sensors •Analog and Digital connectivity to Programable Logic Controllers (PLC)•PLC and Operator interface terminals (OIT)•Local and Wide Area communications methods•Gateway Devices•SCADA software•SCADA Historian•SCADA HMIAs we go along the discussion journey, we will focus on simplifying the parts & pieces and how they connect all together for a system.

Relevance

Water and Wastewater utilities continue to modernize with Industrial Control System and using SCADA software package to address their operation needs. Each utilities infrastructure is unique the same concept follows with the chosen hardware and software installed within the operations SCADA system. We will focus on simplifying what you may find from a older to modern system and how they tie together.

Speaker Kevin Sykes

E-mail ksykes@awwd.com

Speaker's Job Title SCADA/Electrical Manager

Phone 425-248-0029

Organization Alderwood Water District

Primary Job Duties Responsible for managing the District SCADA System including ongoing maintenance, modernization and security. Also responsible for managing the Electrical systems maintenance.

Registrations or Certifications Washington and Oregon Electrical License, ISA Member, WWCPA

2025 Western Washington Short School

Date 06/03/2025

Start Time 07:30 AM

End Time 08:30 AM

Track Track 5

Drinking Water and/or Wastewater Water, Wastewater

Length of Session Full Hour (about 50 minutes with 10 minutes for questions and discussion)

Presentation Title: ***Water and Wastewater Construction inspection Basics***

Abstract

This class covers the basic scope of what goes into water and wastewater installation from initial contact for development to project close. A high level approach covering each step in the process to promote consistency and safety to public water and wastewater systems.

Relevance

Water and wastewater infrastructure is starting to age and with the housing crisis/development in the area, I believe there is a need for Inspection to be more of a focal point of water and wastewater utilities. A basic introduction with some particular points to keep in mind while inspecting would be beneficial to a conference where many city or utility employees would gathered in one place. Due to the large number of smaller districts and cities in the area, many of them may not have a full time inspector on staff. Infrequent exposure to contractors and developers installing district or city facilities could result in an inconsistent, poor, or unsanitary product. Inspectors are usually the first line of the defense to help protect the public systems. Ensuring those that do not typically inspect or those that only inspect occasionally have resources or training available to help with the protection of public systems.

Speaker David Lewis

E-mail dlewis@awwd.com

Speaker's Job Title Construction Inspector

Phone 4258792550

Organization Alderwood water and wastewater

Primary Job Duties Inspects water and sewer installation, documents and records installation of pipe and appurtenances, works with developers and contractors to ensure standards are met.

Registrations or Certifications Washington State Water Operator, Washington State Wastewater Operator

2025 Western Washington Short School

Date 06/03/2025

Start Time 08:40 AM

End Time 09:40 AM

Track Track 1

Drinking Water and/or Wastewater Wastewater

Length of Session Full Hour (about 50 minutes with 10 minutes for questions and discussion)

Presentation Title: ***Pretreatment 101 - Washington State***

Abstract

This presentation will provide an overview on the history and regulations of the pretreatment program. The majority of the content is focused on development and implementation of the pretreatment program elements, such as legal authority, industrial user identification, and many more. An overlay of additional Washington state specific pretreatment initiatives will also be provided. The focus of this presentation is for non-delegated POTWs.

Relevance

Pretreatment is a fundamental source control program for the protection of municipal wastewater treatment plants and conveyance systems.

Speaker Maia Hoffman

E-mail mhof461@ecy.wa.gov

Speaker's Job Title Statewide Pretreatment Lead

Phone 4255075681

Organization Washington State Department of Ecology

Primary Job Duties As the statewide pretreatment lead, I organize policy and implementation of the state's approved pretreatment program. Additionally, I write and manage industrial user permits and oversee the delegated local pretreatment programs for Ecology's northwest region.

Registrations or Certifications Washington State Professional Engineer

2025 Western Washington Short School

Date 06/03/2025

Start Time 08:40 AM

End Time 09:40 AM

Track Track 2

Drinking Water and/or Wastewater Water

Length of Session Full Hour (about 50 minutes with 10 minutes for questions and discussion)

Presentation Title: ***Drinking Water PFAS Residuals Management***

Abstract

Increasing number of Washington water systems are finding out at they might need to implement PFAS treatment. A typical water treatment evaluation includes considerations for treatment performance, footprint, construction cost, and labor requirements. However, a frequently overlooked consideration is residuals management and disposal. As a water system removes PFAS from the water, it is actually concentrating the PFAS onto the activated carbon, ion exchange, or novel sorbent media or in brine generated by high-pressure membranes. Typical disposal methods include landfilling spent media or discharging brine to environmental waters. However, many landfills are leery of accepting PFAS-laden media due to their own PFAS compliance issues with their leachate. In addition, discharging brines containing PFAS to the environment is becoming more strictly controlled, and more likely banned, by state regulators. As a result, PFAS materials are looking to be incinerated or processed through more exotic destruction methods. The purpose of this presentation is to help inform attendees on this frequently overlooked, but increasingly critical, consideration in selecting and implementing PFAS treatment.

Relevance

PFAS treatment is becoming increasingly common in Washington and the management of treatment residuals is a critical part of a successful treatment program for all water systems.

Speaker Pierre Kwan

E-mail pierre.kwan@hdrinc.com

Speaker's Job Title Water Treatment Technical Director

Phone 2068264735

Organization HDR

Primary Job Duties Lead the technical execution of water treatment and compliance projects throughout HDR's global drinking water program.

Registrations or Certifications Washington State Professional Engineer

2025 Western Washington Short School

Date 06/03/2025

Start Time 08:40 AM

End Time 09:40 AM

Track Track 3

Drinking Water and/or Wastewater Water

Length of Session Full Hour (about 50 minutes with 10 minutes for questions and discussion)

Presentation Title: ***Asbestos Pipe Asset or Liability***

Abstract

Brief history of AC pipe and past replacement philosophy. Optimal replacement strategy based on Capital Cost, Risk, and Life Cycle Cost. Condition Assessment Inferential Assessment Indicators discussing Technologies and Techniques. Replacement strategy model.Q&A

Relevance

Asbestos pipe is still in service. How can the replacement strategy be determined using various techniques and technologies.

Speaker Jaclyn Knoth; Douglas Schlepp

E-mail Dschlepp@rh2.com

Speaker's Job Title Principal

Phone 2067946608

Organization RH2 Engineering

Primary Job Duties Project manager for water, sewer, road and storm for local special purpose districts and municipalities.

Registrations or Certifications Washington State Professional Engineer

2025 Western Washington Short School

Date 06/03/2025

Start Time 08:40 AM

End Time 09:40 AM

Track Track 4

Drinking Water and/or Wastewater Water, Wastewater

Length of Session Full Hour (about 50 minutes with 10 minutes for questions and discussion)

Presentation Title: ***Lessons Learned from the trenches of managing & maintaining SCADA Systems***

Abstract

What has the experience of 17 years in maintaining and managing a public utility SCADA system taught us? Capital projects, development extensions, migration, software vulnerabilities, total system obsolescence…where do we start?Discuss a few of our operational Issues and lessons that we learned along the way. Capital projects timelines always seem to squeeze the I&C implementation and testing. Developer Standards, do they cover what you need in your system or are you left holding the bag? Changing out equipment, what's the migration plan? Windows 10 is obsolete, what you may need to consider…. Let's spend a few moments on these topics and talk about the lessons learned.

Relevance

Most water and Wastewater utilities use SCADA and have both capital improvements and development projects that improve or bring new assets into the system. Who manages the parts of the system from implementation and what questions should you ask from them or have in your contracts?

Speaker Kevin Sykes

E-mail ksykes@awwd.com

Speaker's Job Title SCADA/Electrical Manager

Phone 425-248-0029

Organization Alderwood Water District

Primary Job Duties Responsible for managing the District SCADA System including ongoing maintenance, modernization and security. Also responsible for managing the Electrical systems maintenance.

Registrations or Certifications Washington and Oregon Electrical License, ISA Member, WWCPA

2025 Western Washington Short School

Date 06/03/2025

Start Time 08:40 AM

End Time 09:40 AM

Track Track 5

Drinking Water and/or Wastewater Water, Wastewater

Length of Session Full Hour (about 50 minutes with 10 minutes for questions and discussion)

Presentation Title: ***Start-up, Testing, Training, Commissioning; a King County Wastewater Construction Management Perspective***

Abstract

The purpose of this presentation will be to share the King County Wastewater Treatment Division's (WTD) standard approach for testing, starting up, training, and commissioning of newly constructed facilities. The intent is to share WTD's experiences over the years and its usual challenges. We will likely present some different approaches we have tried and then ask the audience for their experiences at their agencies. Draft Agenda - Start-up, Testing, Training, Commissioning (STTC):Background –What is STTC?Typical team at WTD – CM Inspector, PR, PE, O&M Rep, ContractorSpec overviewTesting and Commissioning SpecTesting by phasesPre-installationComponentSystemOperationalCommissioningTraining SpecTypical experienceLarge vs. small project examplesTest engineer and KC InspectorsLessons Learned/ChallengesTraining - Overall system training vs. component trainingO&M Resources – Lack ofContractors hire the same 1-2 local test engineersPilot experiencesDrafted the test plan for the contractorConsultant test engineer/CxAIn-house test engineerWhat do you do?

Relevance

Due to ever aging infrastructure and changing regulations, construction projects within operating facilities and greenfield projects are inevitable for utilities. The smooth transition between construction and operations is critical for utilities to ensure the safety of their staff and that their facilities continue to meet regulatory requirements.

Speaker William Sroufe

E-mail william.sroufe@kingcounty.gov

Speaker's Job Title Construction Management Supervisor

Phone 2064775403

Organization King County Wastewater Treatment Division

Primary Job Duties Supervise construction management staff in the delivery of capital and asset management projects.

Registrations or Certifications Washington State Wastewater Operator

2025 Western Washington Short School

Date 06/03/2025

Start Time 09:50 AM

End Time 10:50 AM

Track Track 1

Drinking Water and/or Wastewater Wastewater

Length of Session Half Hour (about 25 minutes with 5 minutes for questions and discussion)

Presentation Title: ***Screen Time: Headworks Screening 101***

Abstract

As one of the first processes at any wastewater treatment plant, screening can be critical to the function and performance of many downstream processes. This presentation will focus on important considerations for the design and implementation of screening processes that successfully meet the needs of the application, including:Screenings volume and characteristicsPhysical constraintsHydraulics – Flows, velocity, and upstream/downstream water levelsScreening element – Capture, capacity, carryover, cleaning and blindingStaged screening, redundancy, and overflows/bypassesMaintenance access – Isolation, drains, space/locationControls and integrationRocks and gritEnvironment – Area classification, odors, and weather exposureWasher/compactorsScreenings conveyance and storage/disposalSupport systems – Water and powerExamples of actual installations and designs will be referenced throughout the presentation to demonstrate how these considerations are translated into real world applications.

Relevance

Provides an overview of important considerations regarding screening in wastewater applications.

Speaker Tom Giese

E-mail tom.giese@bhcconsultants.com

Speaker's Job Title Sr. Project Manager

Phone 2533445084

Organization BHC Consultants

Primary Job Duties Sr. project manager for wastewater treatment projects

Registrations or Certifications Washington State Professional Engineer

2025 Western Washington Short School

Date 06/03/2025

Start Time 09:50 AM

End Time 10:50 AM

Track Track 2

Drinking Water and/or Wastewater Water

Length of Session Full Hour (about 50 minutes with 10 minutes for questions and discussion)

Presentation Title: ***You've Got PFAS – Now What? Navigating PFAS Treatment Implementation from Sampling to Startup***

Abstract

In April 2024, the US Environmental Protection Agency (USEPA) implemented legally enforceable maximum contaminant levels (MCLs) for six per- and polyfluoroalkyl substances (PFAS). Implementing PFAS treatment can be complicated and navigating the best solution can be overwhelming. Kennedy Jenks has experience with over 25 full-scale design, alternatives evaluation, and bench/pilot testing projects on PFAS. Using this experience, we hope to demystify PFAS treatment for Short School Attendees and provide guidance on lessons learned and best practices for implementing treatment. This presentation will provide attendees with a crash course on the critical aspects of implementing PFAS treatment from sampling to startup.

Relevance

Now that the USEPA has set legally enforceable regulatory limits for PFAS, utilities with PFAS contamination will need to take action. The good news is that full-scale PFAS treatment has been implemented in facilities across the US, and utilities may rely on existing expertise and data to guide decision making. We look forward to sharing lessons learned from other utility experiences to support successful PFAS implementation.

Speaker Charlie Liu

E-mail charlieliu@kennedyjenks.com

Speaker's Job Title National PFAS Lead

Phone 720-744-2212

Organization Kennedy Jenks Consultants

Primary Job Duties Support and manage research, alternatives evaluations, and design projects for PFAS, drinking water quality and treatment, water reuse quality and treatment, and evaluations for contaminants of emerging concern.

Registrations or Certifications

2025 Western Washington Short School

Date 06/03/2025

Start Time 09:50 AM

End Time 10:50 AM

Track Track 3

Drinking Water and/or Wastewater Water

Length of Session Full Hour (about 50 minutes with 10 minutes for questions and discussion)

Presentation Title: ***Developing A Leak Detection Program***

Abstract

Aging infrastructure creates greater challenges in managing valuable water resources wisely. Real losses, namely leakage, usually accounts for the majority of water loss in a system. Utilities that only respond to reported leaks are operating a reactive leakage management program. Developing a leak detection program is a proactive approach to identifying unreported leaks in the system.

Relevance

To help in the reduction of Non Revenue Water Loss and to be proactive in asset management.

Speaker Sam Maahs

E-mail smaahs@awwd.com

Speaker's Job Title Senior Utility Worker

Phone 425 787 0250

Organization Alderwood Water and Wastewater

Primary Job Duties Response / Leak Detection

Registrations or Certifications Washington State Water Operator

2025 Western Washington Short School

Date 06/03/2025

Start Time 09:50 AM

End Time 10:50 AM

Track Track 4

Drinking Water and/or Wastewater Water, Wastewater

Length of Session Full Hour (about 50 minutes with 10 minutes for questions and discussion)

Presentation Title: ***Pump Station Hydraulic Basics***

Abstract

This presentation will cover friction losses, NPSH, and some of the standard elements of wet well design.

Relevance

Information presented will give operators the basics for design and decision making for new or rehabbed pump stations, both water and wastewater.

Speaker Andrew Perez

E-mail andrew.perez@jacobs.com

Speaker's Job Title Project Engineer

Phone 425/233-3069

Organization Jacobs

Primary Job Duties Design of wastewater facilities

Registrations or Certifications PE

2025 Western Washington Short School

Date 06/03/2025

Start Time 09:50 AM

End Time 10:50 AM

Track Track 5

Drinking Water and/or Wastewater Wastewater

Length of Session Full Hour (about 50 minutes with 10 minutes for questions and discussion)

Presentation Title: ***Construction is nearing completion – what about O&M training implementation?***

Abstract

In the world of project delivery of capital projects, the focus is typically on planning, design, and construction. As the project is nearing construction, what is being done to ensure the successful transition to the operations and maintenance (O&M) personnel? The Ship Canal Water Quality Project (SCWQP) is a $710M combined sewer project being delivered by Seattle Public Utilities and King County. It will consist of a 29 Mgal tunnel, two microtunnels, and one 12 MGD pump station. During construction, significant planning was completed to determine training requirements for operating and maintaining the new system.· - What are the assets that will be handed over by the project? - Who needs to participate in training?· - What information needs to be covered?· - How do the requirements inform the courses and structure of the training program?· - What training deliverables will be required?· - What training logistics need to be addressed?· - What are the constraints that need to be accommodated?This course will focus on planning and implementation of SCWQP O&M training that answered these questions for SPU and King County.

Relevance

This training is relevant to the water/wastewater industry because it identifies a strategy to provide relevant operation and maintenance training with clear deliverables. This training is intended to enhance the training experience for O&M staff.

Speaker Joelle Torre

E-mail joelle.torre@seattle.gov

Speaker's Job Title Senior Civil Engineer

Phone 2067339507

Organization Seattle Public Utilities

Primary Job Duties I am a Seattle Public Utilities senior civil engineer working on the Ship Canal Water Quality Project (SCWQP) as the SCWQP Design Lead. I ensure ongoing communication of SCWQP design related items, am responsible for SCWQP commissioning, and am the SCWQP point of contact for operation & maintenance coordination.

Registrations or Certifications Washington State Professional Engineer

2025 Western Washington Short School

Date	06/03/2025	**Track**	Track 1
Start Time	11:00 AM	**Drinking Water and/or Wastewater**	Water, Wastewater
End Time	12:00 PM	**Length of Session**	Full Hour (about 50 minutes with 10 minutes for questions and discussion)

Presentation Title: ***Bringing Business Intelligence to Seattle's Drainage and Wastewater Production Management***

Abstract

At Seattle Public Utilities (SPU), we have been leveraging business intelligence tools to revolutionize how we track and analyze our drainage and wastewater conveyance performance metrics. Tableau is a business intelligence tool which enables us to visualize key data points, such as the volume of work received, its sources, and our backlog, providing a clear and concise overview of our operations. With connections to other data systems such as Maximo, our enterprise work and asset management system, we developed a real time dashboard that automatically refresh reports nightly. Tableau's dynamic filtering capabilities allow us to drill down into specific metrics, create dynamic visualizations and uncover actionable insights tailored to various needs. By customizing reports for our customers, we enhance transparency and communication, while the ability to perform quality assurance and control (QA/QC) on a large scale ensures accuracy and consistency across our workflows. Using business intelligence that provides intuitive and interactive visual representations and dashboards empower our teams to conduct quick reviews, make data-driven decisions, and adapt to evolving demands, ultimately driving efficiency and accountability across SPU operations.

Relevance Asset Management, Production Management, Performance Metrics, Data-driven Decisions

Speaker	Caroline Barlow	**E-mail**	caroline.barlow@seattle.gov
Speaker's Job Title	CMOM Section Manager	**Phone**	206-386-9872
Organization	Seattle Public Utilities		
Primary Job Duties	Conveyance Program Management		
Registrations or Certifications	Washington State Professional Engineer		

2025 Western Washington Short School

Date 06/03/2025

Start Time 11:00 AM

End Time 12:00 PM

Track Track 2

Drinking Water and/or Wastewater

Length of Session Full Hour (about 50 minutes with 10 minutes for questions and discussion)

Presentation Title: ***On-Site Sodium Hypochlorite Generation: A Safe and Cost-Effective Solution for Disinfection***

Abstract

The adoption of on-site hypochlorite generation (OSHG) systems for disinfection has experienced significant growth in recent years, driven by safety concerns associated with chlorine gas usage in water and wastewater utilities. However, with soaring commodity prices post-covid, converting to OSHG presents utilities a rare opportunity to make a significant improvement investing in the safety of operations staff and surrounding community while simultaneously providing a positive return on that investment. This presentation highlights the economic advantages of OSHG, including excellent return on investment, better cost control, and enhanced operational planning for utilities. By utilizing safe and readily available raw materials such as electricity and salt, OSHG systems offer consistent operating costs over time, in contrast to the unpredictable cost of bleach deliveries.Real-world case studies, including those from major water utilities, will be showcased to highlight the success of selecting OSHG over bleach 12.5% for disinfection. Estimated annual savings based on actual usage and historical chemical and electricity prices will be reviewed, along with the positive environmental impact of reducing chemical deliveries and greenhouse gas emissions.Lessons learned from over 30 years of OSHG installations will also be shared. Key aspects such as salt handling, salt purity, water softener reliability, ongoing maintenance, and system layout will be addressed, offering practical insights to ensure successful implementation and operation.

Relevance

Many water and wastewater facilities require sodium hypochlorite for disinfection and on-site generation can be one of the safest and most cost-effective methods of producing hypochlorite.

Speaker Haley Goddard

E-mail grock@cleanwater1.com

Speaker's Job Title Regional Manager

Phone 9709464005

Organization Cleanwater1

Primary Job Duties Responsible for providing sales and engineering support for the application of disinfection, chemical feed, and drinking water quality solutions in the Northwest U.S.

Registrations or Certifications

2025 Western Washington Short School

Date 06/03/2025

Start Time 11:00 AM

End Time 12:00 PM

Track Track 3

Drinking Water and/or Wastewater Wastewater

Length of Session Full Hour (about 50 minutes with 10 minutes for questions and discussion)

Presentation Title: ***Collection System Rehab***

Abstract

Collection system rehab will talk about CIPP of pipes and the rehab of maintenance holes.

Relevance

Pipes and structures in collection systems deteriorate over time and require repair to prevent infiltration and exfiltration. Decisions for how to cost-effectively make repairs and maintain service need to be made by operations staff. This presentation will help inform operators as they make those decisions.

Speaker Andrew Perez

E-mail andrew.perez@jacobs.com

Speaker's Job Title Project Engineer

Phone 425/233-3069

Organization Jacobs

Primary Job Duties Design of wastewater facilities

Registrations or Certifications PE

2025 Western Washington Short School

Date 06/03/2025

Start Time 11:00 AM

End Time 12:00 PM

Track Track 4

Drinking Water and/or Wastewater Water, Wastewater

Length of Session Full Hour (about 50 minutes with 10 minutes for questions and discussion)

Presentation Title: ***Ultrasonic***

Abstract

Overview of ultrasonic level detection technology and it's uses in water and wastewater. Will review challenging applications and provide tips and best practices for accurate level measurements.

Relevance

Accurate level detection is critical for the operation of many water and wastewater facilities.

Speaker Mark Hoffman

E-mail mark@ceipnw.com

Speaker's Job Title Regional Sales Manager

Phone (425) 869-1233

Organization Correct Equipment

Primary Job Duties Sales Manager for process equipment, pump systems, controls, and instrumentation to the municipal water and wastewater industry in the Pacific Northwest.

Registrations or Certifications

2025 Western Washington Short School

Date 06/03/2025

Start Time 11:00 AM

End Time 12:00 PM

Track Track 5

Drinking Water and/or Wastewater Wastewater

Length of Session Half Hour (about 25 minutes with 5 minutes for questions and discussion)

Presentation Title: ***Unique Experiences from Startup of a 220mgd Influent Pump Station in New York City.***

Abstract

HDR is currently working for the New York City Department of Environmental Protection as engineer and construction manager on an emergency project to replace the influent pumps at the Coney Island Wastewater Resource Recovery Facility. The facility has a dry weather capacity of 110mgd, and wet weather capacity of 220mgd. Due to equipment age and harsh conditions, the pumps, force main, valves, and instrumentation have to be replaced... all while keeping pumping capacity in place at all times. This presentation will discuss the unique issues involved including project phasing, electrical constraints, testing procedures, and more.

Relevance

The audience will learn about startup and commissioning processes at treatment facilities and how to handle unforeseen circumstances that inevitably arise on construction projects.

Speaker Chris Malinowski

E-mail chris.malinowski@hdrinc.com

Speaker's Job Title Operations Practice Lead

Phone 2812537750

Organization HDR

Primary Job Duties Chris leads HDR's operations business practice, involving a network of experienced operations and maintenance experts across the country.

Registrations or Certifications Texas Water Operator, Texas Wastewater Operator, Texas Professional Engineer, Oklahoma Professional Engineer

2025 Western Washington Short School

Date 06/03/2025

Start Time 12:40 PM

End Time 01:10 PM

Track Track 1

Drinking Water and/or Wastewater

Length of Session Half Hour (about 25 minutes with 5 minutes for questions and discussion)

Presentation Title: ***Dry Media Wastewater Odor Scrubber Fundamentals***

Abstract

This presentation will describe the various types of dry media odor control scrubber configurations and and how to select an appropriate dry media to efficiently control odors from wastewater sources. Advantages and disadvantages of each scrubber configuration will be discussed along with basic design considerations that can influence operation and maintenance activities. Examples will be provided to show the mathmatical methods necessary to estimate dry media useful life and how it influences the annual cost of odor control.

Relevance

Controlling odors from wastewater conveyance and treatment facilities is required by local and State law and regulations. Wastewater operators should have the fundamental knowledge of science of odor generation and control systems to prevent the violation of the law.

Speaker Diederik Apgar

E-mail dirk.apgar@apgarengineering.com

Speaker's Job Title Director of Engineering

Phone 4254178138

Organization Air Quality Engineering

Primary Job Duties Engineering design, troubleshooting and testing of wastewater odor control systems.

Registrations or Certifications Washington State Professional Engineer

2025 Western Washington Short School

Date 06/03/2025

Start Time 01:10 PM

End Time 01:40 PM

Track Track 1

Drinking Water and/or Wastewater Wastewater

Length of Session Half Hour (about 25 minutes with 5 minutes for questions and discussion)

Presentation Title: ***The Hidden World of Odor Control***

Abstract

This presentation will focus on how odor control treatment systems can be integrated within facilities to provide a visual look and impact that suits the surrounding community. A variety of case studies will be reviewed that demonstrate methods to meet the treatment goals as well as blend the process into a situation that requires a unique visual look. Multiple treatment systems and components will be reviewed, including biofilters, scrubbers, fan systems and ductwork. The case studies will demonstrate the full range of integrated design potential, including completely hidden/buried approaches, integrated designs that blend the functional components with architectural components and noise reduction, and open designs that take full advantage of the unique aspects of odor control equipment to create a unique look for a facility. Each case study is a distinct approach that was necessary to meet the needs of both the utility and the surrounding public.

Relevance

Odor Control has become a critical part of both treatment plants as well as many remote facilities (CSO, pump stations, etc.). They are a key part of how designs integrate into communities and often the visual aesthetics and noise reduction are more difficult to establish and design than the actual treatment capacity itself. This presentation will try to consider the broader range of design considerations.

Speaker Jeff Zahller

E-mail jeffrey.zahller@hdrinc.com

Speaker's Job Title Senior Professional Associate

Phone 425.586.5207

Organization HDR

Primary Job Duties Lead Process Mechanical Engineer

Registrations or Certifications Washington State Professional Engineer

2025 Western Washington Short School

Date 06/03/2025

Start Time 12:40 PM

End Time 01:40 PM

Track Track 2

Drinking Water and/or Wastewater

Length of Session Full Hour (about 50 minutes with 10 minutes for questions and discussion)

Presentation Title: ***Optimizing Water Quality in Drinking Water Distribution Systems: The Role of Active Mixing***

Abstract

Maintaining water quality within drinking water distribution systems presents an ongoing challenge for utility operators. As water leaves the treatment plant meeting or exceeding quality standards, its quality inevitably begins to deteriorate over time within the distribution system. Chlorine residual, critical for disinfection, is not persistent and naturally degrades over time. As it diminishes, harmful disinfection byproducts (DBPs) such as trihalomethanes (THMs) can form.Additionally, water conservation measures, while essential for sustainability, have unintentionally exacerbated these issues by reducing water demand. Lower demand increases water retention times within the system, leading to higher water age and further deterioration of disinfectant residuals.Active mixing facilitates automated control of disinfectant levels by providing consistent water samples to water quality stations and ensuring rapid and even distribution of added chemicals, such as chlorine and ammonia. It makes it possible to control and boost disinfectant residuals directly in the distribution system, effectively resetting the water age downstream of the storage tank.This presentation will explore real-world applications of active mixing technology and its role in addressing key water quality challenges within drinking water storage tanks. Through case studies and performance data, it will demonstrate how active mixing can optimize disinfectant residual levels, reduce disinfection byproducts, and enhance overall water quality in distribution systems.

Relevance

Ever expanding capacity in water distribution systems can make it difficult to maintain water quality within the system. This presentation will address ways to maintain water quality in distribution systems.

Speaker Haley Goddard

E-mail grock@cleanwater1.com

Speaker's Job Title Regional Manager

Phone 9709464005

Organization Cleanwater1

Primary Job Duties Responsible for providing sales and engineering support for the application of disinfection, chemical feed, and drinking water quality solutions in the Northwest U.S.

Registrations or Certifications

2025 Western Washington Short School

Date 06/03/2025

Start Time 12:40 PM

End Time 01:40 PM

Track Track 3

Drinking Water and/or Wastewater Water, Wastewater

Length of Session Full Hour (about 50 minutes with 10 minutes for questions and discussion)

Presentation Title: ***Backflow Prevention Retrofits: Adapting to Changing Regulations***

Abstract

Case studies of existing facilities and modifications to back flow prevention for WWTPs and Pump Stations in response to new requirements by local potable water suppliers/jurisdictions. Presentation will cover state and local requirements and regulations, and a handful of case studies using a variety of methods to keep each facility in compliance.

Relevance

The presentation will cover how potable water supply interacts with a wastewater agency, and the specific issues that arise.

Speaker Robert Standley

E-mail rostandley@kingcounty.gov

Speaker's Job Title Mechanical Engineer

Phone 2064723473

Organization King County Wastewater Treatment Division

Primary Job Duties Capital project design engineer with a focus in mechanical engineering

Registrations or Certifications

2025 Western Washington Short School

Date 06/03/2025

Start Time 12:40 PM

End Time 01:40 PM

Track Track 4

Drinking Water and/or Wastewater Wastewater

Length of Session Full Hour (about 50 minutes with 10 minutes for questions and discussion)

Presentation Title: ***Replacing Chemical Feed Pumps at CSO Facility***

Abstract

King County's (County) Wastewater Treatment Division owns and operates the Elliott West Combined Sewer Overflow facility (EWCSO), located in the City of Seattle. Placed in operation in 2005, the EWCSO receives and treats combined sewage from Denny and Lake Union CSO basins encompassing the Seattle neighborhoods of South Lake Union, Eastlake, Belltown, and Uptown, and portions of Capitol Hill, Downtown, and Queen Anne.The EWCSO operates and discharges treated combined sewage under the County's National Pollutant Discharge Elimination System (NPDES) permit for the West Point Treatment Plant (WPTP), a County-owned regional wastewater treatment facility. Since operation began, EWCSO has substantially reduced pollution entering Elliott Bay, but not all NPDES permit effluent limits have been met consistently.The chlorination system at EWCSO currently consists of 3 chemical feed diaphragm pumps that inject sodium hypochlorite into the effluent before discharge (and dichlorination) further downstream. The feed pumps are designed to deliver a dose of 15 to 25 milligrams per liter (mg/l) at maximum flow to achieve bacterial reductions. Because the volume of combined sewage and the corresponding flow rates into EWCSO during storm events are variable, maintaining proper disinfection levels in the effluent has been a challenge (particularly at reduced flow rates).We will discuss the replacement of the chemical feed pumps with a different type (peristaltic) of pump(s) that better responds to these flow variations and will be able to achieve better disinfection performance.

Relevance

Relates to disinfection of wastewater effluent.

Speaker Douglas Jones

E-mail doujones@kingcounty.gov

Speaker's Job Title Wastewater Engineer

Phone 2062635528

Organization King County Wastewater Treatment Division

Primary Job Duties Engineer

Registrations or Certifications Washington State Professional Engineer

2025 Western Washington Short School

Date 06/03/2025

Start Time 12:40 PM

End Time 01:40 PM

Track Track 5

Drinking Water and/or Wastewater Water

Length of Session Full Hour (about 50 minutes with 10 minutes for questions and discussion)

Presentation Title: ***Using Asset Management to Create Operational Efficiencies***

Abstract

Many organizations implemeent asset management programs but aren't leveraging them to create operational efficiencies. This presenation walks through Covington Water Districts approach to asset management and shows how asset management is more than a program. Rather it is a business methodology to create operational efficeiences in creative and useful ways.

Relevance

This is directly related to the water/wastewater industry by showing Covington Water Districts use-cases for Asset Management and explains the EPA 10-step to asset management.

Speaker Chris Guest

E-mail Chris.guest@covingtonwater.com

Speaker's Job Title Customer Service Supervisor

Phone 2532619988

Organization Covington Water District

Primary Job Duties Customer Service Supervisor

Registrations or Certifications Washington State Water Operator

2025 Western Washington Short School

Date 06/03/2025

Start Time 01:50 PM

End Time 02:50 PM

Track Track 1

Drinking Water and/or Wastewater Wastewater

Length of Session Half Hour (about 25 minutes with 5 minutes for questions and discussion)

Presentation Title: ***Liquid Phase Odor Control 101***

Abstract

Presents an review of technologies available to prevent the production of hydrogen sulfide or alternatively destroy or prevent its release from the liquid stream in waswtewater collection systems.

Relevance

Monitoring to odor complaints helps a wastewater utility better troubleshoot and manage odors within the system, seeing patterns of time of day seasonality, flow, weather and other conditions that could cause odors. Responding helps the utility make sure odors are correctly attributed and helps maintain a good neighbor policy. Also odors lead to corrosion and monitoring and controlling odors can reduce corrosion, increasing reliability and decreasing costs.

Speaker Richard Finger

E-mail dick.finger@att.net

Speaker's Job Title consultant

Phone 2536313343

Organization Retired

Primary Job Duties Independent Consultant

Registrations or Certifications Washington State Wastewater Operator

2025 Western Washington Short School

Date 06/03/2025

Start Time 01:50 PM

End Time 02:20 PM

Track Track 2

Drinking Water and/or Wastewater Water, Wastewater

Length of Session Half Hour (about 25 minutes with 5 minutes for questions and discussion)

Presentation Title: ***Water in History***

Abstract

This presentation goes through a short history of water and its use in Cities from from the Romans' communal bath houses, medieval times, and through present day.

Relevance

The water challenges faced in Rome are not terribly different from the water challenges of today. Operators, however they found their way into their jobs, are a part of history.

Speaker Caitlin Dwyer

E-mail cdwyer@arlingtonwa.gov

Speaker's Job Title Utilities Manager

Phone 424-309-9021

Organization City of Arlington

Primary Job Duties Manage Drinking Water, Wastewater & Stormwater utilities

Registrations or Certifications Washington State Wastewater Operator

2025 Western Washington Short School

Date 06/03/2025

Start Time 02:20 PM

End Time 02:50 PM

Track Track 2

Drinking Water and/or Wastewater Waster, Wastewate

Length of Session Half Hour (about 25 minutes with 5 minutes for questions and discussion)

Presentation Title: ***Hydropneumatic Tanks***

Abstract

Hydropneumatic tank are used in small water systems and at treatment facilities to provide pressurized water storage without elevation. Planning and design of these systems is straight forward and this presentation covers the various types of hydropneumatic tanks, requirements for setup and how to size.

Relevance

Understanding how to size and maintain a hydropneumatic tank system is relevant to small water systems and to water and wastewater treatment and pumping facilities that need air-breaks on their public water supply but still need a pressurized system for domestic and process uses.

Speaker Jeff Lundt

E-mail jalundt53@gmail.com

Speaker's Job Title Operator Training Coordinator

Phone 2065526131

Organization Retired

Primary Job Duties Previously engineer responsible for planning, permitting, design and construction of water and wastewater public works projects

Registrations or Certifications WA PE Civil

2025 Western Washington Short School

Date 06/03/2025

Start Time 01:50 PM

End Time 04:00 PM

Track Track 3

Drinking Water and/or Wastewater Wastewater

Length of Session Two hours

Presentation Title: ***Everett WWTO Tour***

Abstract

The Everett Water Pollution Control Facility (WPCF) is located on Smith Island in north Everett and has a capacity of 40.3 MGD. Initially constructed in 1959, the plant was originally oxidation and polishing ponds providing primary treatment. Through the years multiple additions to the plant and process have been made including; an aeration pond, screening and grit facilities, biological trickling filters, aeration tanks and secondary clarifiers, odor control, primary settling tanks and skimmers and upgraded disinfection. The tour will visit all elements of the facility with seasoned operators as tour guides.

Relevance

An opportunity to see in-person the operation of one of the larger regional WWTF and ask questions of the operations staff. This tour will be useful to many WWTP operators due to the wide range of equipment and processes employed.

Speaker Jeff Marrs

E-mail jmarrs@everettwa.gov

Speaker's Job Title Operations superintendant

Phone

Organization City of Everett

Primary Job Duties Supervise the water and wastewater departments

Registrations or Certifications Certified WTPO & WWTPO

2025 Western Washington Short School

Date 06/03/2025

Start Time 01:50 PM

End Time 02:20 PM

Track Track 4

Drinking Water and/or Wastewater Wastewater

Length of Session Full Hour (about 50 minutes with 10 minutes for questions and discussion)

Presentation Title: ***Unveiling the Science of Polymer Activation: Exploring the Benefits through Applications***

Abstract

The optimization of polymer use in water and wastewater treatment processes remains a challenge, leading to high recurring expenses and sub-optimal process performance. This presentation emphasizes the critical role of polymer activation and its direct impact on process efficiency. By selecting suitable polymer and employing appropriate mixing technologies, polymer activation can reduce polymer usage and enhance the downstream separation process, resulting in improved overall performance and substantial annual cost savings.The presentation focuses on the science of polymer activation, offering insights into the fundamental principles of polymer mixing. It showcases the advantages of adopting a two-stage mixing approach, characterized by high initial mixing energy followed by low and uniform mixing energy. Theoretical considerations and practical test data provide tangible evidence of the benefits of this approach for both emulsion and dry polymers. Additionally, a comparative analysis of mechanical and hydraulic mixing technologies will be presented to aid in equipment selection for specific applications.Through a series of compelling case studies, the presentation not only highlights the impact of polymer savings but also demonstrates the effect on the process downstream. Comparisons between different mixing technologies will provide insights for decision-making processes when optimizing polymer activation. Additionally, the discussion will include design considerations and valuable lessons learned, offering practical guidance for implementing effective polymer activation solutions.

Relevance

Attendees will understand the basic structure and chemistry of water and wastewater treatment polymers Attendees will understand how to use the fundamental science of polymer chemistry to properly activate polymer which leads to better treatment efficiencies and costs

Speaker Haley Goddard

E-mail grock@cleanwater1.com

Speaker's Job Title Regional Manager

Phone 9709464005

Organization Cleanwater1

Primary Job Duties Responsible for providing sales and engineering support for the application of disinfection, chemical feed, and drinking water quality solutions in the Northwest U.S.

2025 Western Washington Short School

Registrations or Certifications

Date 06/03/2025

Start Time 01:50 PM

End Time 02:50 PM

Track Track 5

Drinking Water and/or Wastewater Water, Wastewater

Length of Session Full Hour (about 50 minutes with 10 minutes for questions and discussion)

Presentation Title: ***Cathodic Protection 102***

Abstract

Cathodic protection (CP) is a widely misunderstood topic for those not directly involved. I provide a 50 minute presentation on CP that looks at the natural process of corrosion, factors that influence it, and how CP takes advantage of these characteristics to minimize or eliminate corrosion of the protected structure.List of topicsThe fundamentals of corrosion and CPDifferent types of CP systemsDesign, materials, and installation considerationsCP testing and maintenanceLive corrosion cell demonstration

Relevance

Cathodic protection (CP) is a critical element in preserving water and wastewater infrastructure. Industrial coatings are the first line of defense, but over time these break down and it is not typically possible or cost effective to excavate piping or a lift station to recoat, repair, or replace. Instead, every 20 years or as determined by regular testing, anodes are added to maintain protection from corrosion on buried and submerged infrastructure.

Speaker Miles Hickey

E-mail mhickey@nortoncorrosion.com

Speaker's Job Title Technical Sales

Phone 2063756835

Organization Norton Corrosion Limited LLC

Primary Job Duties Cathodic Protection Inspections, Installations, Educational Presentations, Technical Sales

Registrations or Certifications

2025 Western Washington Short School

Date 06/03/2025

Start Time 03:00 PM

End Time 04:00 PM

Track Track 1

Drinking Water and/or Wastewater Wastewater

Length of Session Full Hour (about 50 minutes with 10 minutes for questions and discussion)

Presentation Title: ***Wastewater Odor Production, Regulations & Odor Control Technologies***

Abstract

This presentation will introduce odors associated with wastewater conveyance systems. Odor generation, associated corrosion to infrastructure, and the control of odorous compounds in wastewater and in the gas phase will be discussed.

Relevance

Odor generation takes place in many parts of the wastewater collection, conveyance and treatment system. Understanding the nature and origins of these odors will help engineers and operators better manage them, reducing corrosion and making our facilities better neighbors,

Speaker Diederik Apgar

E-mail dirk.apgar@apgarengineering.com

Speaker's Job Title Director of Engineering

Phone 4254178138

Organization Air Quality Engineering

Primary Job Duties Engineering design, troubleshooting and testing of wastewater odor control systems.

Registrations or Certifications Washington State Professional Engineer

2025 Western Washington Short School

Date 06/03/2025

Start Time 03:00 PM

End Time 04:00 PM

Track Track 2

Drinking Water and/or Wastewater

Length of Session Full Hour (about 50 minutes with 10 minutes for questions and discussion)

Presentation Title: ***Smart Tanks: Distribution System Based Water Treatment***

Abstract

Water utilities commonly face two major distribution network challenges: disinfection byproducts (DBPs) and compliance with the Revised Total Coliform Rule. The introduction of the EPA's Stage 1 and Stage 2 Disinfection Byproduct Rules led utilities to prioritize compliance with THM (trihalomethane) limits. Many operators adjusted their treatment plants by closely monitoring chlorine dosing or switched to chloramine, which is less likely to form THMs. However, maintaining stable chloramine levels in the distribution network has proven difficult due to its complex chemistry and degradation patterns.

Relevance

Presentation will discuss ways to address issues related to DBPs and address new Total Coliform rules in distribution systems.

Speaker Haley Goddard

E-mail grock@cleanwater1.com

Speaker's Job Title Regional Manager

Phone 9709464005

Organization Cleanwater1

Primary Job Duties Responsible for providing sales and engineering support for the application of disinfection, chemical feed, and drinking water quality solutions in the Northwest U.S.

Registrations or Certifications

2025 Western Washington Short School

Date 06/03/2025

Start Time 03:00 PM

End Time 04:00 PM

Track Track 4

Drinking Water and/or Wastewater Wastewater

Length of Session Full Hour (about 50 minutes with 10 minutes for questions and discussion)

Presentation Title: ***Optimizing Antiquated Oxygen Generation Technology at West Point Treatment Plant***

Abstract

In systems using free chlorine, residual chlorine can continue to react within the distribution network, forming DBPs through interactions with organic matter and biofilms in pipes and tanks. The rate of DBP formation is influenced by several factors, including the disinfectant type, dose, water age, temperature, and organic content. Even with careful treatment at the plant, DBPs may still form in the distribution system.

Relevance

Lessons learned from operating obsolete equipment (i.e. troubleshooting, maintenance, contracting, and retrofit design work) - especially for Oxygen generation systems. This presentation will primarily focus on the design challenges and O&M experience of supporting the start-up and commissioning.

Speaker Wade Phillips

E-mail wadephi@gmail.com

Speaker's Job Title Plant Engineer III

Phone 206-465-0512

Organization King County Wastewater Treatment Division

Primary Job Duties O&M Plant Engineer - West Point Treatment Plant; Mechanical troubleshooting, design, and capital project delivery

Registrations or Certifications

2025 Western Washington Short School

Date 06/03/2025

Start Time 03:00 PM

End Time 04:00 PM

Track Track 5

Drinking Water and/or Wastewater Water, Wastewater

Length of Session Full Hour (about 50 minutes with 10 minutes for questions and discussion)

Presentation Title: ***eOM Manuals - What's new and improved***

Abstract

Chloramine disinfection reduces THM formation but introduces a new challenge: the degradation of chloramines, which releases ammonia. This ammonia serves as a nutrient for bacteria that can trigger nitrification, a problematic issue in the network. Developing an effective chloramine dosing strategy is challenging due to the dynamic nature of the breakpoint curve.

Relevance

To improve efficiency of O&M staff having a go to source of information of their individual plants is a requirement. The eOM manual put plant data into the hands of O&M staff within a few clicks of entering the manual. This information can be downloaded into hard copies or stored as pdfs for offline references or reached though WIFI access.

Speaker Ed Griffenberg

E-mail egriffen@hdrinc.com

Speaker's Job Title Senior Operations Specialist

Phone 4255918436

Organization HDR

Primary Job Duties Water Wastewater Consulting - startup and commissioning, and electronic O&M manual development

Registrations or Certifications Washington State Wastewater Operator

2025 Western Washington Short School

Date 06/04/2025

Start Time 07:30 AM

End Time 08:30 AM

Track Track 1

Drinking Water and/or Wastewater Wastewater

Length of Session Full Hour (about 50 minutes with 10 minutes for questions and discussion)

Presentation Title: ***Advancements in Primary Treatment – Moving Beyond Clarification***

Abstract

To address these challenges, the concept of “Smart Tank” design offers a promising solution. By rethinking water storage tanks as intervention points, utilities can improve water quality in the distribution network. Smart Tank technology optimizes water storage management to mitigate THM spikes and maintain stable disinfectant residuals, whether chlorine or chloramine. This approach also holds the potential to reduce overall treatment plant costs related to disinfectant levels and THM control.

Relevance

As engineers and plants look at upgrades to their facilities, often they are faced with limited space on site. Primary filtration is becoming an attractive option to either gain back the space consumed by traditional primary clarifiers or save space on new facility builds. The construction cost is dramatically less than traditional Primary Clarifiers and occupies roughly 1/10th of the space. Also Primary filtration lends itself to Carbon diversion and the removed material can be utilized in plant by converting to Volatile Fatty Acids for BNR carbon supplementation, fed to digestors for Biogas production, and has been evaluated as a construction material or carbon source for bioplastic generation.

Speaker Robert Wiley

E-mail r.wiley@nuoveenergie.com

Speaker's Job Title Vice President

Phone 7242722514

Organization Nuove Energie USA, Inc.

Primary Job Duties Oversight of USA/Canada Operations, Engineering, Sales, and Service for Nuove Energie USA, Inc.

Registrations or Certifications

2025 Western Washington Short School

Date 06/04/2025

Start Time 07:30 AM

End Time 08:30 AM

Track Track 2

Drinking Water and/or Wastewater Water

Length of Session Full Hour (about 50 minutes with 10 minutes for questions and discussion)

Presentation Title: ***PFAS is here...now how do I deal with it without breaking the bank?***

Abstract

This presentation will explore how water storage tanks can be leveraged to enhance distribution water quality. Case studies will demonstrate how Smart Tank technology can improve chlorine residuals, reduce THMs, and maintain chloramine residuals, highlighting its benefits for utilities looking to optimize their distribution network operations.

Relevance

PFAS is a contaminant that is likely to be found in the groundwater aquifers underlying any areas of urban land use based on a recent analysis by the USGS. These aquifers are a common source water for many water utilities in Western Washington. Developing a better understanding of how to undertake a project to determine and then implement the most cost-effective treatment solution for PFAS will be important for any water utility stakeholder attending the conference.

Speaker Steve Green

E-mail sgreen@atecwater.com

Speaker's Job Title Chief Commercial Officer

Phone 5033189290

Organization ATEC Water Systems

Primary Job Duties Lead all commercial activities of the business (sales, marketing, business development)

Registrations or Certifications EIT

2025 Western Washington Short School

Date 06/04/2025

Start Time 07:30 AM

End Time 08:30 AM

Track Track 3

Drinking Water and/or Wastewater Wastewater

Length of Session Full Hour (about 50 minutes with 10 minutes for questions and discussion)

Presentation Title: ***Clogs Be Gone***

Abstract

Agenda, •How Pumps Work•How Clogs Happen•What can we do about clogs•New tools to fight clogsThis class cover pumping 101 how to read pump curves and how modern wastewater is getting harder to pump, what we can do about, and all the new tools we can use to make operating pumps easer and less troublesome

Relevance

Wastewater operators will learn why clogs are happening and what they can do about them, they will be armed with great tools to fight this problem and keep the wastewater in the pipes and not on the ground

Speaker Andrew Klempel

E-mail Andrew@weci.com

Speaker's Job Title Outside Sale Manager

Phone 4254920255

Organization Whitney Equipment

Primary Job Duties Outside Sales Manager, Help a team of 8 outside sales people meet there customers needs

Registrations or Certifications Washington State Water Operator

2025 Western Washington Short School

Date 06/04/2025

Start Time 07:30 AM

End Time 08:30 AM

Track Track 4

Drinking Water and/or Wastewater Wastewater

Length of Session Full Hour (about 50 minutes with 10 minutes for questions and discussion)

Presentation Title: ***Wastewater Chemistry 101***

Abstract

Chemistry changes and interactions drive wastewater treatment. This class will introduce the wastewater operator to basic chemistry concepts, such as electron orbitals and how they relate to chemical bonds. Then, time will be taken to use this knowledge and apply it to different applications in the wastewater world, from pretreatment to final treatment. For example looking at pH adjustment in pre-treatment, odor control, or polymer reactions with sludge in the dewatering process.

Relevance

Chemistry is the building block of every basic concept of the wastewater treatment process.

Speaker John Van Wingerden

E-mail jvanwingerden@inlande.com

Speaker's Job Title Regional Manager

Phone 5094399626

Organization Inland Environmental Resources (IER)

Primary Job Duties I oversee IER's sales for the I-5 corridor for Washington and Oregon, interacting with current customers and new customers to overcome pH and Alkalinity needs, using knowledge gained from my BS in Chemistry and 11+ years' experience of being an operator in an industrial wastewater facility.

Registrations or Certifications

2025 Western Washington Short School

Date 06/04/2025

Start Time 07:30 AM

End Time 08:30 AM

Track Track 5

Drinking Water and/or Wastewater Water, Wastewater

Length of Session Full Hour (about 50 minutes with 10 minutes for questions and discussion)

Presentation Title: ***Confined Space Entry Awareness***

Abstract

This class gives an overview of the Federal standard, why it was necessary, what drove the wording and requirements, and how it applies to water/wastewater workers. This is a one hour version of an all day class I have presented for decades for CEU's all over the western U.S. condensed down to a one hour time format.

Relevance

Many wastewater workers spend significant amounts of time going into and working in confined spaces. This works as a refresher course for those who already know the requirements, and as an awareness level for those who may not be aware of the requirements of confined space entry.

Speaker Brent Kleven

E-mail brent.kleven@teledyne.com

Speaker's Job Title Product/Application Specialist - Fixed & Portable Detection

Phone 5038603898

Organization Teledyne Gas and Flame Detection

Primary Job Duties Technical/Application support, training, sales

Registrations or Certifications

2025 Western Washington Short School

Date 06/04/2025

Start Time 08:40 AM

End Time 09:40 AM

Track Track 1

Drinking Water and/or Wastewater Wastewater

Length of Session Full Hour (about 50 minutes with 10 minutes for questions and discussion)

Presentation Title: ***Operation and Maintenance Considerations for Fine Bubble and Coarse Bubble Diffused Aeration***

Abstract

Discuss typical O&M concerns for Fine Bubble and Coarse Bubble Diffused Aeration Systems, including diffuser monitoring and cleaning options for Fine Bubble Systems. We will also discuss general design and layout considerations for a sucessful diffused aeration project.

Relevance

Many wastewater treatment facilities have diffused aeration systems. Operators of these facilities need to know how to properly maintain their systems and what to ask for when the system is ready for an upgrade.

Speaker Jeremy Jensen

E-mail jeremy.jensen@xylem.com

Speaker's Job Title Territory Manager - West Region

Phone 9794367407

Organization Xylem

Primary Job Duties I am involved in design and sales of wastewater treatment equipment

Registrations or Certifications Utah and Idaho State Professional Engineer

2025 Western Washington Short School

Date 06/04/2025

Start Time 08:40 AM

End Time 09:40 AM

Track Track 2

Drinking Water and/or Wastewater Water

Length of Session Full Hour (about 50 minutes with 10 minutes for questions and discussion)

Presentation Title: ***Holistic Approach to Water Loss***

Abstract

When we think of loss in a water network we typically look to leakage in the pipes as the primary culprit. While this leage does play a role, we must also take a look at apparent losses (the accuracy of the data we have available), other authorized uses of the water, as well as our methods for uncovering leaks. In this presentation we will look at various methods for determining the issues in a distribution system and alleviating them by leveraging new technologies. We will begin with the metering journey and how building a reliable baseline allows for better decision making across the network. We will then look at the relationship between demand and pressures in the water system. The steps taken to move from reactive maintenance to proactive pressure management will be described. Finally we will look at leak detection methods available today, and steps that can be taken to get ahead of the problems.

Relevance

This presentation will be relevant to anyone making decisions about or operating a water network. In the Pacific Northwest water is plentiful, but it still costs money to treat, pressurize, and deliver drinking water to our customers. Attendees should leave with a better understanding of how changes to operation can affect overall system longevity as well as options for becoming a more proactive water purveyor. The industry is changing rapidly, being aware of methods that other water utilities are implementing should be useful information for most attendees.

Speaker Mike Uthe

E-mail muthe@muellerwp.com

Speaker's Job Title Western Technology Manager

Phone 4062232192

Organization Mueller Water Products

Primary Job Duties I currently manage the Western United States for Mueller's smart water technologies team. Our goal is to help municipalities and engineers provide clean water to their customers with minimal losses. I handle Echologics, Hydro-Guard, and i2O product lines.

Registrations or Certifications

2025 Western Washington Short School

Date 06/04/2025

Start Time 08:40 AM

End Time 09:40 AM

Track Track 3

Drinking Water and/or Wastewater Wastewater

Length of Session Full Hour (about 50 minutes with 10 minutes for questions and discussion)

Presentation Title: ***Utilizing Remote Monitoring Technology to More Effectively Run your Wastewater Collection System***

Abstract

This presentation focuses on how several local Washington utilities can adopt and utilize unique monitoring technology, which gives them data in the field that they did not have before. Remote monitoring is now a mainstream tool for utilities to monitor level, flows, hydrogen sulfide and more, as they battle several different challenges in their wastewater collection system.Utilizing the latest in communication technology (satellite), these specific monitoring tools that can mount directly on the manhole covers – thereby eliminating the need for a confined space entry - provide remote, reliabile insight. These monitoring tools can be used in several applications. Many agencies are looking for ways to prevent and eventually eliminate Sanitary Sewer Overflows (SSOs). By collecting level data and sending specifically set alarms, one site can yield return on investment (ROI) by alerting field staff, who can then visit the site and prevent a spill. Other solutions can include I&I studies. Utilizing the devices to estimate flow and overlay local radar data to track and find the sources of I&I.By utilizing this same general deployment, agencies can now monitor H2S levels in their sewer systems as well. This new feature can assist in odor studies, dosing, and overall health of the pipe/manhole.

Relevance

This presentation is specifically relevant to the wastewater industry. Mainly this comes from the ability for wastewater utilities to utilize newer technology to more effectively run their collection systems. Wastewater collection specifically will see the biggest value in this presentation

Speaker Brogan Quist

E-mail bquist@smartcoversystems.com

Speaker's Job Title VP of Sales

Phone 7602911980

Organization SmartCover Systems

Primary Job Duties Assisting customers solve their wastewater monitoring goals in the Western Region of the United States, including Canada. More recently working within SmartCover to assist our team across North America to achieve this same goal within Wasteawater Utilities.

Registrations or Certifications

2025 Western Washington Short School

Date 06/04/2025

Start Time 08:40 AM

End Time 09:40 AM

Track Track 4

Drinking Water and/or Wastewater Water

Length of Session Full Hour (about 50 minutes with 10 minutes for questions and discussion)

Presentation Title: ***Why do you utilities implement automated reading systems?***

Abstract

New water meters, paired with Automated Meter Reading (AMR/Drive by) or Advanced Metering Infrastructure (AMI), can we a game changer for a lot of utilities. But what drives utilities to install new meters and implement an automated reading system? We will discuss the driving reasons why utilities install these technologies, and some results from recent projects.

Relevance

Almost every water utility must meter their customer's water usage. But obtaining an accurate water meter read can be time consuming and costly. Additionally, getting an accurate read is important, to ensure the utility is capturing all possible usage, and therefore receiving the most possible revenue.

Speaker Matt Zellers

E-mail mzellers@muellerwp.com

Speaker's Job Title Territory Manager

Phone 4125275346

Organization Mueller Systems

Primary Job Duties I work with utilities and distributors to help find the correct water meter and meter reading systems to help reduce the labor and costs of obtaining an accurate water meter read.

Registrations or Certifications

2025 Western Washington Short School

Date 06/04/2025

Start Time 08:40 AM

End Time 09:40 AM

Track Track 5

Drinking Water and/or Wastewater Water, Wastewater

Length of Session Full Hour (about 50 minutes with 10 minutes for questions and discussion)

Presentation Title: ***Hazardous Energy Control Procedures: Lockout and Tagout***

Abstract

A summary of the presentation includes primary reference to KC DNRP WTD's Program for compliance with WAC 296-803. WAC 296-803 outlines the Safety Standards for Lockout/Tagout (Control of Hazardous Energy) in Washington. This regulation is designed to protect employees from the dangers of unexpected energization or startup of machinery and equipment during maintenance or servicing. Here are the key details covered;Written Energy Control Program: Employers must establish and document a comprehensive program to control hazardous energy. This program should include specific procedures for shutting down, isolating, blocking, and securing machines or equipment to control hazardous energy:Lockout/Tagout Devices; Energy Control Procedures; Employee Training; Protecting Employees.

Relevance

Lockout/Tagout (LOTO) procedures are crucial in the water and wastewater treatment industry due to the presence of hazardous energy sources, such as electrical, hydraulic, and mechanical systems. Here's how LOTO is relevant:Safety: LOTO procedures ensure that machinery and equipment are properly shut down and isolated before maintenance or servicing, preventing accidental startup and protecting workers from injuries.

Speaker Jim Faccone

E-mail jim.faccone@kingcounty.gov

Speaker's Job Title Manager - Safety, Hazardous Materials & Emergency Programs

Phone 2064775379

Organization King County - Department of Natural Resources - Wastewater Treatment Division (Seattle, WA)

Primary Job Duties Responsibilities include managing a comprehensive wastewater system safety and emergency program. Duties include developing and managing health and safety, emergency, and risk programs for wastewater operations; supervising staff and managing labor policies; reviewing and evaluating safety systems; directing emergency management programs and preparedness drills; gathering and coordinating Capital Construction Safety.

Registrations or Certifications Certified Safety Manager, Confined Space Entry Specialist, Hazardous Energy Control Specialist, Process Safety Management Specialist, Construction Safety Specialist, National Emergency Management System Specialist

2025 Western Washington Short School

Date 06/04/2025

Start Time 10:10 AM

End Time 11:10 AM

Track Track 1

Drinking Water and/or Wastewater Wastewater

Length of Session Full Hour (about 50 minutes with 10 minutes for questions and discussion)

Presentation Title: ***Optimize WWTP Mixing for Efficiency & Process Resiliency***

Abstract

Wastewater treatment is more challenging than ever, requiring more flexibility, more accuracy, and total reliability. In the past Mixers were designed for worst case scenarios, whether flow or loading, and did not provide flexibility to meet changing mixing demands. With an increased focus on energy management and treatment optimization, mixers present an opportunity for both. Many engineers and operators have come to recognize that mixing can be improved to optimize conditions.With the increased need for Improved treatment efficiency Variable speed mixing ensures that bacteria and nutrients are consistently in motion, increasing their interaction with changing conditions. The introduction of adaptive mixers has made this control not only possible but also programmable. This presentation will review the processes involved with biological wastewater treatment, and how adaptive mixing provides enhanced interaction in treatment zones. The purpose and need for mixers will be reviewed with regard to each process. The concept of adaptive mixing will then be introduced along with suggestions on what parameters to monitor within the treatment processes to make mixer speed automation possible. Parameters include monitoring and adjusting mixer speed based on tank levels, flows, DO levels, TSS concentrations and phosphorus release.

Relevance

Attendees of this presentation will walk away with a better understanding wastewater treatment mixing and the technology available to enhance its effectiveness. In addition, they will learn different ways to monitor treatment processes and will have suggestion on control options that they can attempt at their own facilities to improve resiliency throughout the plant.

Speaker Alden Meade

E-mail alden.meade@xylem.com

Speaker's Job Title Flygt Mixers - Territory Manager

Phone 5038674717

Organization Xylem

Primary Job Duties Business Development and Technical Expert for Flygt Wastewater Treatment Mixing

Registrations or Certifications

2025 Western Washington Short School

Date 06/04/2025

Start Time 10:10 AM

End Time 11:10 AM

Track Track 2

Drinking Water and/or Wastewater Water

Length of Session Full Hour (about 50 minutes with 10 minutes for questions and discussion)

Presentation Title: ***Robert A. Duff Water Treatment Plant: A 20-Year-Old Sidestream Injection System Ready for the Next Decades***

Abstract

The Robert A. Duff Water Treatment Plant (WTP), situated along the Rogue River in Medford, Oregon, has been a vital part of the Medford Water District's strategy to meet the growing demand for clean water in the region. With the plant's ozone generation system approaching the end of its original 20-year lifespan, upgrades have positioned the facility to meet the community's future water needs, including a capacity increase to 65 million gallons per day (MGD). A standout feature of these upgrades is the continued reliability and efficiency of the plant's Mazzei venturi injectors and Mass Transfer Multiplier™ (MTM) nozzles, which have been in use for two decades with minimal maintenance. Despite significant changes to the plant, the original sidestream injection system remains an integral part of ozone treatment for removing taste and odor (T&O) compounds such as geosmin and MIB from the river water. The plant's ongoing improvements and focus on energy efficiency ensure it will continue to serve the region for the next several decades, providing clean, treated water to the growing Rogue Valley community.

Relevance

Ozone (O_3) plays a significant role in the municipal drinking water industry due to its powerful disinfection and purification properties. Unlike traditional chlorine-based treatments, ozone does not leave harmful residuals, making it an attractive option for ensuring water quality without introducing potentially harmful byproducts, such as chloramines or trihalomethanes, into the water.

Speaker Jim White

E-mail jwhite@mazzei.net

Speaker's Job Title Regional Sales Manager

Phone 6613755439

Organization Mazzei Injector Corporation

Primary Job Duties Educate, size and sell sidestream ozone injection systems to municipal drinking water plants

Registrations or Certifications

2025 Western Washington Short School

Date 06/04/2025

Start Time 10:10 AM

End Time 11:10 AM

Track Track 3

Drinking Water and/or Wastewater Wastewater

Length of Session Full Hour (about 50 minutes with 10 minutes for questions and discussion)

Presentation Title: ***Wastewater Intensification in the Collection System with Superoxygenation***

Abstract

Wastewater intensification is a new trend that involves the use of new technologies or modifications to existing processes or combining processes to improve the effectiveness and efficiency of wastewater treatment. Superoxygenation is a means for wastewater intensification by dissolving pure oxygen through a Speece Cone. Pure oxygen has historically been used in wastewater treatment however, traditional technologies have low oxygen transfer efficiency's (OTE <50%) and are not able to achieve intensification. New technological advances like Superoxygenation and the Speece Cone which have high oxygen transfer efficiency's (OTE >95%) provide several key benefits of wastewater intensification. Superoxygenation is a proven technique to achieve wastewater intensification and have between used extensively in the collection system and at wastewater treatment plants. A case study will be presented highlighting a project with the City of Aiken, SC which was awarded the prestigious 2024 Public Works Municipal Achievement Award from the Municipal Association of South Carolina (MASC).

Relevance

Superoxygenation is a means for wastewater intensification by dissolving pure oxygen through a Speece Cone to improve the effectiveness and efficiency of wastewater treatment. This technology would enable the utilities to further utilize the collection as not just a means to convey wastewater but to provide pretreatment and other added benefits so that the wastewater can be more efficiently treated at the WWTP.

Speaker David Clidence

E-mail atrollier@eco2tech.com

Speaker's Job Title Engineer

Phone 3179976428

Organization Eco Oxygen Technologies, LLC

Primary Job Duties All aspects of company operation including system design through fabrication and startup

Registrations or Certifications

2025 Western Washington Short School

Date 06/04/2025

Start Time 10:10 AM

End Time 11:10 AM

Track Track 4

Drinking Water and/or Wastewater Wastewater

Length of Session Full Hour (about 50 minutes with 10 minutes for questions and discussion)

Presentation Title: ***Proactive PFAS Management for Wastewater Utilities***

Abstract

This presentation will introduce proactive approaches to PFAS management for wastewater utilities to protect the quality of effluent, reclaimed water, and biosolids. Per- and polyfluoroalkyl substances (PFAS) are a family of thousands of manufactured chemicals that have been widely used in industry and consumer products since the 1940s. Wastewater utilities are receivers of these substances in influent sewage and consequently PFAS are present in effluent discharges to surface water, reclaimed water for reuse, and biosolids residuals. For drinking water, EPA has published a draft rule limiting six PFAS in drinking water and requiring communication with customers about the potential health impacts of PFAS, their prevalence in drinking water supplies, and more. Wastewater considerations differ from the urgency of drinking water PFAS management where the emphasis is focused on treatment to protect public health from contaminated water supplies. Those circumstance warrant the immediate application of prove treatment technologies for safe drinking water. Fortunately, drinking water treatment solutions are readily available with proven technologies (e.g. ion exchange, granular activated carbon (GAC), reverse osmosis (RO).

Relevance

PFAS is becoming a larger issue for both water and wastewater utilities. Proactively addressing the ever changing concernsand regulations surrounding PFAS is needed for wastewater utilities to effectively manage effluent, reuse water and biosolids.

Speaker Dave Clark

E-mail dave.clark@hdrinc.com

Speaker's Job Title Senior Vice President

Phone 2083877025

Organization HDR Engineers

Primary Job Duties Director of HDR's Integrated Watershed Management Practice

Registrations or Certifications P.E.

2025 Western Washington Short School

Date 06/04/2025

Start Time 10:10 AM

End Time 11:10 AM

Track Track 5

Drinking Water and/or Wastewater Wastewater

Length of Session Full Hour (about 50 minutes with 10 minutes for questions and discussion)

Presentation Title: ***Wastewater Operator Certification Update***

Abstract

This training will cover updates and changes recently made to the wastewater operator certification program. I will discuss fees, exams, technical assistance, and the process to apply for an exam. This is an opportunity for wastewater operators to ask their questions about certification and training.

Relevance

Wastewater operators must be certified and understanding the certification requirements is very important for an operator.

Speaker Poppy Carre

E-mail poca461@ecy.wa.gov

Speaker's Job Title Wastewater Operator Certification State Coordinator

Phone 3604858906

Organization WA Dept of Ecology

Primary Job Duties Administer Washington state's wastewater operator certification program.

Registrations or Certifications

2025 Western Washington Short School

Date 06/04/2025

Start Time 12:10 PM

End Time 01:10 PM

Track Track 1

Drinking Water and/or Wastewater Wastewater

Length of Session Full Hour (about 50 minutes with 10 minutes for questions and discussion)

Presentation Title: ***Electric Diaphragm Pump Technology***

Abstract

Discuss the unique electric diaphragm pump technology that best of pneumatic diaphragm pump features with the efficiency of an electric motor.

Relevance

Highlight new pumping technology that can be used in sampling, chemical transfer, and/or general transfer pump applications.

Speaker Daniel Scott

E-mail dscott@graco.com

Speaker's Job Title Key Account Manager

Phone 5592401700

Organization Graco Inc

Primary Job Duties Key Account Management

Registrations or Certifications

2025 Western Washington Short School

Date 06/04/2025

Start Time 12:10 PM

End Time 01:10 PM

Track Track 2

Drinking Water and/or Wastewater Water

Length of Session Full Hour (about 50 minutes with 10 minutes for questions and discussion)

Presentation Title: ***Washing Reservoir Exteriors to Remove Biological Growth and Dirt***

Abstract

Sparkle Wash has developed a standard operating procedure for washing the exteriors of water reservoirs to remove black mold, algae, moss and dirt. We wash several reservoirs a year for water districts in Washington and expect to soon provide this service in Oregon. Our washing approach utilizes high water volume and low water pressure, and proprietary soaps to effectively and efficiently clean. This method lends itself well to maintaining the integrity of the coatings. Waste water is diverted from storm collection systems and soaps degrade in surrounding soils. Care is taken around attached communication euqipment and vents. We will present our processes, show results, describe common pitfalls, and talk about preventative maintenance plans.

Relevance

Washing reservoir exteriors to remove mold, algae, moss and dirt.

Speaker James Pace

E-mail james@sparklewash.com

Speaker's Job Title Owner

Phone 425-616-6694

Organization Sparkle Wash

Primary Job Duties Owner manager

Registrations or Certifications Member of the Sparkle International Network of professional exterior washers

2025 Western Washington Short School

Date 06/04/2025

Start Time 12:10 PM

End Time 01:10 PM

Track Track 3

Drinking Water and/or Wastewater Water, Wastewater

Length of Session Full Hour (about 50 minutes with 10 minutes for questions and discussion)

Presentation Title: ***Screening General Survey***

Abstract

Screening water and wastewater appears simple but in practice can be much more complicated given the size and complexity of processes involved. The scope of this presentation covers a broad range of screening designs fit and function divided into stationary grid screening and moving grid screening equipment for wastewater and water. Some aspects of steel fabrication and materials shall be presented with some basic guidence in sizing and hydraulic calculations. This presentation is generic to many screening types with no emphasis on company or location.

Relevance

This presentation is developed for the engineering and operations community that wants to learn about the history and state of the art with respect to screening equipment.

Speaker Tim Matheis

E-mail timothy.matheis@hydro-dyne.com

Speaker's Job Title Business Developer

Phone 5126505587

Organization Hydro-Dyne Engineering

Primary Job Duties Promote, size, engineer, design, and optimize preliminary treatment equipment including screening, grit removal, and screening handling for the global wastewater and water municipal industry

Registrations or Certifications

2025 Western Washington Short School

Date 06/04/2025

Start Time 12:10 PM

End Time 01:10 PM

Track Track 4

Drinking Water and/or Wastewater Water

Length of Session Full Hour (about 50 minutes with 10 minutes for questions and discussion)

Presentation Title: ***Eyes and Ears on Your Water Systems***

Abstract

This Class will explain solutions for leak detection programs and pressure and flow monitoring that allow water operators to reduce their non-revenue water and prevent costly main breaks. We will cover the principles and advantages of differential metering on control valves as well using acoustic correlators to develop a robust leak detection and pressure control program. Getting remote data from the field will allow water operators to know where they should be spending precious work hours to get the best results.

Relevance

Water loss and over pressurization are major issues and can be catastrophic to water systems. Water operators can benefit from understanding how new solutions can improve their leak detection strategies and allow them to make data informed decisions on the pressures and flows in their systems. With technology progressing every year, it is important to stay in the loop on new strategies.

Speaker Patrick Miller

E-mail patrick@cimco-gcsystems.com

Speaker's Job Title Technical Sales and Engineering Support

Phone 2532633099

Organization Cimco-GC Systems

Primary Job Duties Patrick Miller has spent the last year in intensive training in valve dynamics and hydraulics. He works with the Cimco-GC Systems's Cla-Val Service Team rebuilding, inspecting, and troubleshooting control valves. He meets regularly with engineers to aid with valve design and selection. Patrick continues to support water and wastewater utilities with their specialty valves, pipe locating, and freeze protection.

Registrations or Certifications

2025 Western Washington Short School

Date 06/04/2025

Start Time 12:10 PM

End Time 01:10 PM

Track Track 5

Drinking Water and/or Wastewater Wastewater

Length of Session Full Hour (about 50 minutes with 10 minutes for questions and discussion)

Presentation Title: ***Emerging Solids Technology Update***

Abstract

The presentation highlights emerging solids technology that are developed and implemented in the United States from across the globe. Ranging from thickening technologies, dewatering, polymer reduction capabilities, drying, digestion alternatives, digestion enhancement, and beyond Class A solids minimization. These systems supply viable solutions at cost savings options that can be retrofitted into existing WWTP facilities to meet current and future needs. This presentation will touch on current alternatives to address Emerging compounds of concern (PFAS/PFOA/endocrine disrupters/microplastics/pharmaceuticals).

Relevance

Understanding emerging solids technology is vital to operations staff as they look to improve efficiency and comply with more stringent regulations.

Speaker Chris McCalib

E-mail chris@tec-nw.com

Speaker's Job Title President

Phone 14256414306

Organization Treatment Equipment Company (TEC)

Primary Job Duties Manufacturers Rep WW Group IV

Registrations or Certifications WW Group IV

2025 Western Washington Short School

Date 06/04/2025

Start Time 01:50 PM

End Time 02:50 PM

Track Track 1

Drinking Water and/or Wastewater Wastewater

Length of Session Full Hour (about 50 minutes with 10 minutes for questions and discussion)

Presentation Title: ***Wastewater Treatment Blower Technologies***

Abstract

Wastewater treatment aeration takes on many forms and the technology available continues to develop across the industry. As demands for aeration increase across the industry, Operators and Engineers are faced with many options to improve their processes and efficiency. Attendees should expect to take away a general high level knowledge of the different types of blowers available to the industry, what design considerations factor into selecting the right equipment, and maintenance requirements of each type of blower.

Relevance

Aeration is an integral part of wastewater treatment. Many treatment plants across Western WA are growing and aeration demands are changing. Operators and engineers should be aware of the growing options on the market and their strengths and limitations.

Speaker Ryan Brusca

E-mail rbrusca@reinerpump.com

Speaker's Job Title Director of Business Development - PNW/Territory Manager - Western WA

Phone 2533550112

Organization Reiner Pump Systems, Inc., Sulzer

Primary Job Duties As Director of Business development for the Northwest, I am responsible for managing our manufacturer relationships, familiarizing our company with their product lines, and building strategies around deploying their products within the region. As Territory Manager of Western WA, I am involved in direct sales of equipment and management of existing installations for our municipal customers across the region.

Registrations or Certifications

2025 Western Washington Short School

Date 06/04/2025

Start Time 01:50 PM

End Time 02:50 PM

Track Track 2

Drinking Water and/or Wastewater Water

Length of Session Full Hour (about 50 minutes with 10 minutes for questions and discussion)

Presentation Title: ***GAC 101 - The basics of Activated Carbon, and How to Apply it***

Abstract

This presentation will cover the following:What is GAC?From what material(s) is it made, and how does it work?How is it manufactured?What are the important properties that determine performance?How is a GAC treatment system designed, and what are the KPIs?How is a GAC treatment system operated?Various applications, such as PFAS, DBPs, T&O, VOCsIf given an hour, I can also touch on Ion Exchange technology - how it works, KPIs, etc.

Relevance

More and more water sources are becoming contaminated - whether it be new chemicals such as PFAS, or legacy VOCs, disinfection byproducts, and taste and odor compounds, the need for GAC is becoming increasingly common. Participants will learn the basics of GAC and some of it's applications.

Speaker Ben Goecke

E-mail ben.goecke@kuraray.com

Speaker's Job Title Applications Engineer

Phone 4252860754

Organization Calgon Carbon Coroporation

Primary Job Duties Work with drinking water utilities to develop GAC and IX water treatment systems

Registrations or Certifications

2025 Western Washington Short School

Date 06/04/2025

Start Time 01:50 PM

End Time 02:50 PM

Track Track 3

Drinking Water and/or Wastewater Water, Wastewater

Length of Session Full Hour (about 50 minutes with 10 minutes for questions and discussion)

Presentation Title: ***New Developments in Vault and Manhole Access Adjustment***

Abstract

Review of the latest developments and best practices when it comes to making adjustments to manhole and vault lids for water and wastewater structures.

Relevance

Will review common mistakes made when setting manhole and vault lids which can cause issues down the road.

Speaker Dean Jarvis

E-mail deanj@fjmartin.com

Speaker's Job Title Director

Phone 206.523.7665

Organization F.J. Martin Company

Primary Job Duties Director of the utility team at F.J. Martain

Registrations or Certifications

2025 Western Washington Short School

Date 06/04/2025

Start Time 01:50 PM

End Time 02:50 PM

Track Track 4

Drinking Water and/or Wastewater Water, Wastewater

Length of Session Full Hour (about 50 minutes with 10 minutes for questions and discussion)

Presentation Title: ***Critical Role of Valves in Pump Station Design***

Abstract

Valves are as critical to pump station operation as pumps. Understanding the styles of valves, their characteristics and uses will lead to better operations and simpler maintenance for pump stations

Relevance

The correct choice of valves in design of new pump stations, or rehabs and upgrades will lead to better efficiency and easier maintenance of pump stations.

Speaker Patrick Miller

E-mail patrick@cimco-gcsystems.com

Speaker's Job Title Technical Sales and Engineering Support

Phone 2532633099

Organization Cimco-GC Systems

Primary Job Duties Patrick Miller has spent the last year in intensive training in valve dynamics and hydraulics. He works with the Cimco-GC Systems's Cla-Val Service Team rebuilding, inspecting, and troubleshooting control valves. He meets regularly with engineers to aid with valve design and selection. Patrick continues to support water and wastewater utilities with their specialty valves, pipe locating, and freeze protection.

Registrations or Certifications

2025 Western Washington Short School

Date 06/04/2025

Start Time 01:50 PM

End Time 02:50 PM

Track Track 5

Drinking Water and/or Wastewater Water

Length of Session Full Hour (about 50 minutes with 10 minutes for questions and discussion)

Presentation Title: ***Water Sampling & Flushing, Best Practices***

Abstract

Water samples and testing are critical to maintaining water quality and public health, as well as managing treatment processes. However, only a very small fraction of the water distributed ever goes through an instrument or meter. Taking a representative sample is critical to make sure the best data is collected for use in the treatment and distribution processes. This presentation will discuss how to get representative samples in the distribution system, so the measurements taken best serve the treatment and distribution systems in a water utility. The presentation will also discuss automatic flushing devices , how they operate and how these can improve water quality by monitoring a number of parameters and maintain disinfection residual.

Relevance

Water sampling must be done correctly and consistently to produce accurate reliable test results and thereby protect the public water supply. Keeping the distribution system fresh with water that is adequately disinfected is key to maintaining water quality.

Speaker Dean Jarvis

E-mail deanj@fjmartin.com

Speaker's Job Title Factory Engineer

Phone 314/231-8738

Organization Kupferle Water solutions

Primary Job Duties Factory engineering/representative for the various water sampling equipment produced

Registrations or Certifications

2025 Western Washington Short School

Date 06/04/2025

Start Time 03:00 PM

End Time 04:00 PM

Track Track 1

Drinking Water and/or Wastewater Wastewater

Length of Session Full Hour (about 50 minutes with 10 minutes for questions and discussion)

Presentation Title: ***Lagoon Rehabilitation Including Cold Weather Nitrification by MBBR***

Abstract

The presentation will profile real world case studies to evulate the performance of lagoon rehabilitation alternatives with the view of lowering maintenance, reducing energy inputs, and improving treatment.

Relevance

After this session the learner will be able 1) understand aeration form and function; 2) be able to evaluate lagoon efficiencies; 3) understand various lagoon diagnostic tools; 4) understand basic nitrification or the oxidation of ammonia to nitrate 5) understand ambient temperature limitations to nitrification 6) understand conceptually how to use sidestream treatment to nitrify a lagoon in cold weather.

Speaker Tom Daugherty

E-mail tom.daugherty@lagoons.com

Speaker's Job Title Western Region Manager

Phone 2086997090

Organization Triplepoint Environmental, LLC

Primary Job Duties Manage the Western America's for client engagement and installation supervision.

Registrations or Certifications Washington State Wastewater Operator

2025 Western Washington Short School

Date 06/04/2025

Start Time 03:00 PM

End Time 04:00 PM

Track Track 2

Drinking Water and/or Wastewater Water

Length of Session Full Hour (about 50 minutes with 10 minutes for questions and discussion)

Presentation Title: ***Clean Water Act Regulatory Requirements***

Abstract

This presentation will provide a summary of the Clean Water Act (CWA), beginning with some history of water quality conditions and human health prior to the CWA. Human health risks associate with dirty water plagued humanity for centuries. Pioneers in basic epidemiology led to a broader emphasis on public health and addressing water pollution. Historical developments in sewage treatment technology resulted in broad application of biological treatment and disinfection processes still in use today. Nevertheless, public tolerance of water pollution was exhausted by the dawn of the age of Aquarius in the 1960's and the environmental movement that culminated in the 1972 Clean Water Act (CWA). The Clean Water Act is the primary federal law governing water pollution that aims to restore and maintain the integrity of the nation's waters by regulating the discharge of pollutants into surface waters and setting water quality standards. The National Pollutant Discharge Elimination System (NPDES) is a key component of the CWA and was established to regulate the discharge of pollutants into U.S. waters. The NPDES program controls water pollution by requiring permits for facilities that discharge pollutants directly into surface waters, such as rivers, lakes, and coastal waters. The goal is to protect water quality by limiting pollutant levels and ensuring compliance with environmental standards.

Relevance

Understanding the requirements of the CWA is critical to maintaining a healthy public water supply.

Speaker Dave Clark

E-mail dave.clark@hdrinc.com

Speaker's Job Title Senior Vice President

Phone 2083877025

Organization HDR Engineers

Primary Job Duties Director of HDR's Integrated Watershed Management Practice

Registrations or Certifications P.E.

2025 Western Washington Short School

Date 06/04/2025

Start Time 03:00 PM

End Time 04:00 PM

Track Track 3

Drinking Water and/or Wastewater

Length of Session

Presentation Title: ***When Dumb Pigs Get Smart***

Abstract

This case study and innovative technology based presentation will showcase project details and results from multiple sewer force main pigging and inline condition assessment projects in the Pacific Northwest. We will discuss the planning and preparation, on-site activities, and reported/verified results. In recent years, operations and engineering staff with the City of Portland, Clackamas County WES, and King County have seen reduced pumping capacity and multiple breaks on their sewer force mains. Progressive pigging, Pipers inspections, and SmartFoam inline condition assessment services were deployed on various force mains. Progressive pigging removes settled debris and scale to regain pipeline capacity; Pipers provides an assessment on leaks, air/gas pockets, magnetics, and debris; and SmartFoam collects high-resolution data on corrosion, pitting, cracking, xyz mapping, pipeline geometry, and locates all fittings/anomalies.

Relevance

Discussion of methods to inspect and maintain sewer forcemains.

Speaker Mike Lemmen

E-mail Mike.Lemmen@sfeglobal.com

Speaker's Job Title Director

Phone (360) 220-7224

Organization SFE Global

Primary Job Duties Director for SFE Global which is specialty contractor/consultant in the water, wastewater, and storm water industries

Registrations or Certifications

2025 Western Washington Short School

Date 06/04/2025

Start Time 03:00 PM

End Time 04:00 PM

Track Track 4

Drinking Water and/or Wastewater Water, Wastewater

Length of Session Full Hour (about 50 minutes with 10 minutes for questions and discussion)

Presentation Title: ***Elements of Cross-Connection Control Programs***

Abstract

Panel discussion with utility staff from Seattle Public Utilities, Alderwood Water, City of Vancouver and Northshore Utiltiy District to discuss elements of a good cross-connection control program and review of lessons learned from setting up their own program.

Relevance

Will discuss direct experience with setting up cross-connection control programs.

Speaker Kristi Lucht; Bob Hubbert

E-mail bob.hubbert@seattle.gov

Speaker's Job Title Utility Service Inspections Manager

Phone (206) 418-8407

Organization Seattle Public Utilities

Primary Job Duties Water Inspection Services Manager

Registrations or Certifications

2025 Western Washington Short School

Date 06/04/2025

Start Time 03:00 PM

End Time 04:00 PM

Track Track 5

Drinking Water and/or Wastewater Wastewater

Length of Session Full Hour (about 50 minutes with 10 minutes for questions and discussion)

Presentation Title: ***Solutions for Pump Plugging***

Abstract

What types of items are debris is found in wastewater collections and plant, and what types of pumps and other equipment are available to prevent collections plugs. Minimize your downtime and personnel requirements in the field.

Relevance

Clogging of pumps in wastewater conveyance is a huge problem. Insights and options to reduce clogging will greatly increase reliability and resilience of the collection system.

Speaker Rich Owens

E-mail rich@owenspump.com

Speaker's Job Title President

Phone 503-420-8390

Organization Owens Pump & Equipment

Primary Job Duties Sales & Service

Registrations or Certifications