General Session

Tactics for Dealing with Difficult People (Janina Rager, City of Eugene Police Department)
Verbal De-escalation is what we use during potentially dangerous or threatening situations. Our goal is to prevent a person from causing harm to us, themselves, or others. In this seminar you will learn various techniques to deal with a person in crisis. Additionally, the importance of understanding what is happening in the brain and how it will affect your response and the person in crisis.

Collection Systems Sessions

(All Sessions are in Alphabetical Order)

A Practical Guide to Locating Water and Sewer (Brian Moss, RJM Equipment Sales, Inc)
Understanding utility locating to improve accuracy, depth and distance. Selecting the best frequency for each type of pipe. Locating non-metallic water and sewer pipes. Verify and improving accuracy.

Adj. Municipal Casting & Precast Concrete (Matt Stiller, RimRiser)
Evaluate the challenges related to the traditional methods of sanitary sewer or stormwater castings and precast concrete tops. Review Department of Transport or municipal standards for installation and grade adjustment. Discuss the advantages of new technology when choosing infrastructure replacements and maintenance applications.

Advances in Artificial Intelligence in Wastewater Coding (Jim Brown, True North Equipment)
This session covers the development of AI in wastewater inspections and coding, compliance with NASSCO, and future direction. This session encourages class participation and experiences with new technology. The students will leave with a better understanding of Wastewater AI inspection tools now and moving into the future.

Bigger, Faster, and SMARTer PIGs: Three Force Mains Condition Assessment Stories
(Molly Nause-McCord, Bureau of Environmental Services, City of Portland)
Pressure pipe condition assessment has become a critical topic among public municipalities over the past decade. Many sewer system owners are at the early stages of determining the condition of their force mains and planning their integration into Capital Improvement Plans (CIP) and maintenance cycles, but what does it look like after a program has performed substantial field work? This presentation will delve into the end results, showcasing the findings from three (3) select locations that have undergone the full three-phase condition assessment process. The presentation will describe the work performed, with a particular emphasis on the in-line inspection "smart pigging" tools used during the 3rd phase and compare the output to the initial phase data from the 1st and 2nd phases. Additionally, the presentation will discuss preliminary remedial measures (rehabilitation, repairs, or preventive maintenance).

Collections Plugging Solutions (Rich Owens, Owens Pump & Equipment)
What types of items or debris are found in wastewater collections and plants, and what types of pumps and other equipment are available to prevent collection plugs? Minimize your downtime and personnel requirements in the field.

Combination Sewer & Storm Water Trucks
(Dan Nelson, Owen Equipment; Shawn Patrick, Owen Equipment Co)
This class is a general discussion of combination trucks and their equipment regarding sewer and storm water applications. We will cover the types of trucks, different styles, the uses and history of them, as well as how they squirt, suck, contain and transport.

Confined Space Entrant, Attendant, Entry Supervisor (Grerg McDonald Ritz Safety, LLC)
This four-hour course will cover: The Oregon Confined Space Rule OAR 437-002-0146, Characteristics of Confined Spaces, Hazards and Managing of Hazards in Wastewater Systems including Access Points, Vaults and Lift Stations, Duties and Responsibilities of Entrants, Attendants, and Entry Supervisors, The Use of Equipment, Care, and Maintenance Requirements, Rescue, and Personal Protective Equipment.

Everything, Everywhere, All at Once™ The state of PFAS in Clackamas County
(Terrance Romainei, Clackamas Water Environment Services)
Per- and polyfluoroalkyl substances (PFAS) are a family of more than 9,000 synthetic chemicals widely used since the 1940s in products that resist heat, oils, stains, and water. Perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) are two of the most widely used chemicals in the PFAS group. Even though U.S. manufacturers voluntarily phased out the manufacture of PFOS in 2002 and PFOA in 2015, they are still manufactured overseas and can be imported in consumer goods. Also, many other PFAS compounds are being manufactured today and remain prevalent in many household products. PFAS are considered “forever chemicals” because they are extremely resistant to breaking down in the environment. The chemicals exist at low levels in the environment, in wastewater and biosolids, and in most animals — including humans. Studies have suggested that these chemicals are associated with adverse health effects. What is WES doing, and what does Clackamas County's developing strategy entail to keep them out of our conveyance systems?

FOG Data Management & Community Engagement
(Jude Brown, Pollution Prevention Resource Center)
In this session, I will cover best management practices for collecting, storing, and analyzing FOG data from wastewater collections systems and how to use data to better inform your efforts. I will also discuss the importance of community engagement and how to meaningfully collaborate with key stakeholders.

Get The F.R.O.G. Out (Dan Lawrence, RootX)
Get the F.R.O.G. (Fats, Roots, Oils & Grease) Out. This session covers effective strategies for controlling sewer blockages caused by fats, roots, oils, and grease. We’ll explore both mechanical and chemical methods for root control, and discuss how to manage FOG (fats, oils, and grease) and other organic materials that clog sewer lines and lift stations. Topics include the use of emulsifiers and microbial treatments for cleaning and maintaining system flow.

Inflow and Infiltration-Manhole Inspections (Jim Brown, True North Equipment)
This class instructs participants to understand and identify inflow and infiltration in sanitary sewer manholes and assessments of manholes as well as reporting methods.

Keep it out of the River (Bill Buterbaugh, Oregon T2 Center)
Overview of a City of Eugene Engineer project to build a large Storm Water Filter from an existing old structure to prevent polluting the Willamette River. The class will learn how we adapted a technique to clean this structure. This includes Vactor Truck support and a team approach using Confine Space Support. A safety and action plan will be presented to clean this unusual structure.

Nozzle 101 (Dan Nelson, Owen Equipment)
This class will cover a brief history of nozzles and the 3 different tiers of nozzles currently in use. Proper nozzle selection for different applications. We will discuss specialty nozzles and best practices, and basic safety while jetting a sanitary sewer or stormwater collections system. The differences between sewer nozzles and storm nozzles, how to properly use them for pipe cleaning.

Optimizing Sewer Maintenance Using Acoustics (Sam Taaffe, InfoSense)
How transmissive acoustic inspection enables municipal wastewater collection system operators to transition from a reactive or time-based sewer cleaning program to a condition-based maintenance strategy where the right maintenance is done programmatically on the right pipe at the right time. Changing to this more efficient model for directing sewer cleaning activities allows system operators to stop cleaning clean pipes and direct their cleaning resources to the pipe segments with the greatest need. Making this change in approach reduces system risk while saving field operator time, flushing water, wear and tear on expensive cleaning equipment and CO2 emissions. The presentation will discuss the enabling technology in detail. We will also cover the limitations of the Sewer Line Rapid Assessment Tool, or SL-RAT, technology. Several pertinent cases studies from existing customers will be shared.

Preventing Serious Injuries in the Wastewater Industry (Elena Estrada, Clackamas County WES)
This course will review hazardous work that occurs in the wastewater industry, including the potential for serious injuries or fatalities (SIFs), and how environmental or human factors increase risks in the workplace. It will provide tools on how to identify hazards that lead to SIFs, tools to prevent incidents, and strategies for employees and supervisors to strengthen their safety program through the lens of SIF prevention.

Sewer Inspection – How did it Start and Where is it Going? (Chris Young, SWS Equipment)
A look at the history of sewer inspection systems and how technology has advanced. This class will cover the different technologies used for pipe inspection in a sanitary sewer or stormwater conveyance system to look at pipe integrity and condition, pipe wear and defects, and pipe obstructions like roots, grease, and gravel. See how they have evolved into what we currently use and what is in store for the future.

Spills 101 Emergency Response (Kevin Chan, Oregon DEQ)
Let's dive into the world of emergency response. What happens when diesel or wastewater sewage enters the waterways after a truck crash? Are all releases of chemicals and hazardous substances an emergency? We will discuss DEQ's authority, jurisdiction and go into unique case studies which involve public works.

Stormwater and Wastewater Round Table
(Bob Skinner, Clackamas Water Environment Services; Preston Langeliers, City of Newberg)
Throughout the state, Public Works is responsible for maintaining many types of underground utilities within their jurisdiction. Wastewater and stormwater have historically been neglected. As a result, many assets are failing and need to be repaired or replaced. With the development of new technology, different types of assets, materials, and controls have been installed to improve the systems. This session will be a “round table” format, starting with some information and training regarding the maintenance and repairs of these systems. It will finish as a round table discussion on situations different agencies face and how they address each situation.

Street Sweeping: General Knowledge and Discussion (Shawn Patrick, Owen Equipment Co.)
This session will be a general discussion of street sweeping, history and the evolution of the sweeper. Regulatory standards require cities/towns with either an NPES or a Stormwater permit to capture runoff entering the stormwater system. These runoffs include heavy metals from vehicles, human and pet waste, trash and vegetation debris. Sweepers are used to sweep and pick up these debris along the curb line. We will also discuss the different sweeper brands available, sweeper types and what they are used for. We will cover the best practices for making your sweeper last, basic maintenance and operation questions.

The Lateral Accuracy Project: Leveraging GIS and GNSS Equipment to Map Private Sanitary Laterals in the Public Right-of-Way (Andres Mendoza, City of Hillsboro)
This presentation outlines the City of Hillsboro Public Works Department's efforts to more accurately map the locations of private sanitary sewer laterals in the public right-of-way. This is being accomplished by employing a contractor to carry out lateral inspections, using a sonde to mark where the lateral is within the right-of-way, GPSing the markings, and reincorporating the GPS information into the City's GIS data. Doing so will bring the City into compliance with legislation mandating that it possess this information, help avoid cross drilling and bore-throughs, and allow residents to be notified of deteriorating lateral conditions as they are found.

Street Maintenance Sessions

(All Sessions are in Alphabetical Order)

Roadside Vegetation Management (Will Lackey, ODOT)
This course will provide a brief overview of why roadside vegetation is managed; safety, drainage, aesthetics and to control noxious weeds. In addition, it will cover management techniques including mechanical, cultural, biological and chemical control methods. The final portion will focus on herbicide use best management practices; licensing, herbicide selection, and timing and application techniques.

RS-7 Effective Communication Skills (Dustin Ross, ODOT)
This is a required core class for those in the Roads Scholar Level 1 program. The class presents the principles of listening, speaking and writing skills for more effective communication with the public, co-workers, supervisors and others. Group exercises will be used to practice the principles presented. Must attend all hours for credit.

RS-8 Environmental BMPs 2 (Will Lackey, ODOT; Patti Caswell, ODOT)
This is a required class for those in the Roads Scholar Level 1 program. The class presents an overview of environmentally friendly vegetation management and erosion control methods. Vegetation control activities such as mowing, brush cutting and spraying will be covered as well as related issues including chemical spills and use of personal protective equipment. The discussion on erosion and sediment control for highway maintenance activities will define what it is, cover the reasons why it's needed, identify the causes of erosion and address various best management practices. Must attend all hours for credit.

RS-9 Maintenance Mathematics (Bill Buterbaugh, Oregon T2 Center)
This is a required class for those in the Roads Scholar Level 1 program. The class is a refresher for public works employees that use basic mathematics to provide solutions for common maintenance problems encountered in the field. Must attend all hours for credit.

RS-10 Introduction to Survey & Grade Checking (Kurt Andersen, ODOT)
This is a required class for those in the Roads Scholar Level 1 program. The class provides an introduction to basic surveying techniques including measuring, calculating elevations, and slope staking. Must attend all hours for credit.

RS-11 Workplace Safety Training 1 (Mike Eastman, Oregon T2 Center)
This is a required core class for those in the Roads Scholar Level 2 program. The class material covers workplace safety topics that include OR-OSHA inspections, hazard communication, PPE, hearing conservation, blood borne pathogens, and sleep deprivation. Must attend all hours for credit.

Traffic Incident Management (TIM) (Dustin Ross, ODOT; Various Presenters)
Oregon's Traffic Incident Management Program is dedicated to improving the on-scene safety of our first responders, reliability of our highways, and livability of our communities by increasing outreach and awareness of TIM practices. Traffic Incident Management consists of a planned and coordinated multi-disciplinary process to detect, respond to, and clear traffic incidents so that traffic flow may be restored as safely and quickly as possible. TIM Responder Training brings together personnel across the responder spectrum to build a stronger, more coordinated corps at the local and national level.

Winter OPS (Joe Pekkola, Clackamas County; Ricardo Sandoval, Clackamas County)
Winter operation and safety on county roads, both urban and rural. We will be partnering with David Minor. We will have a Q&A portion of the class where students can share their experiences.