Event Agenda

PNCWA2024

Sun, Sep 08, 2024	
4:00 PM - 5:00 PM	New Member and First Time Attendee Meet and Greet
5:00 PM - 7:00 PM	All Attendee Meet and Greet

Mon, Sep 09, 2024

7:00 AM - 8:30 AM	Breakfast
8:30 AM - 10:00 AM	Opening General Session Speaker: Joe Bohringer
9:00 AM - 11:00 AM	Boise Recycled Water Tour: City of Boise Advanced Water Treatment Pilot
10:00 AM - 10:15 AM	Break
10:15 AM - 11:15 AM	Wastewater 102: Biosolids Speaker: Hannah Thomascall
10:15 AM - 10:45 AM	Maximizing Return on Investment for your Sanitary Sewer Evaluation Survey (SSES) Program Speaker: Jeff Duplantis
10:15 AM - 10:45 AM	Boise's Journey in Understanding Reliability and Redundancy Speakers: Haley Falconer, Allison Hornak
10:15 AM - 10:45 AM	How WRRFs Can Benefit From Organic Landfill Waste Diversion Speakers: Natalie Gustafson, P.E., Ruth Roxburgh, Ph.D.
10:15 AM - 10:45 AM	Nitrous Oxide Emissions Estimation for Better Nutrient Planning Speaker: Shannon Cavanaugh
10:15 AM - 10:45 AM	Turning Equity Goals into Community Outcomes Speaker: Nicki Pozos, PhD, PE
10:45 AM - 11:15 AM	Georgetown Wet Weather Treatment Station – Leveraging Green Stormwater Infrastructure to Showcase Sustainability Speaker: Jesse Williams
10:45 AM - 11:15 AM	Resiliency Through Applied Research into Emerging Constituents Speaker: Josh Baker
10:45 AM - 11:15 AM	"Food waste – Worth the Trouble?" Speaker: Mario Benisch
10:45 AM - 11:15 AM	Flexible Design for Resilient Biological Nutrient Removal Speakers: Austin Carnes, John Gonzales, Dan Hingley
10:45 AM - 11:15 AM	Collaboration Improves Hybrid Work: The Case for Treating Policy Like Design Speaker: Jane Vail, P.E.

11:15 AM - 11:45 AM	Choosing a Biosolids Treatment Option and Implementation Speaker: Ken Windram
11:15 AM - 11:45 AM	Mitigating Risks in Urban Storm and Sewer System Upgrades: A Case Study in Hydraulic Resilience Speakers: Patrick Vandenberg, Ruby Mohammadi
11:15 AM - 11:45 AM	Strategic Energy Master Planning in a Complex and Dynamic Landscape Speakers: Alison Nojima, Preeti Thimmaraju
11:15 AM - 11:45 AM	When the Mood Sours: A Digester Upset and Recovery Case Study Speaker: Bryce Figdore
11:15 AM - 11:45 AM	Energy and Resource Efficient Biological Nutrient Removal via Internal Stored Carbon (ISC) and Partial Nitrification Denitratation Anammox (PdNA/PANDA) for Achieving Stringent Effluent TN Limit Speakers: Yewei Sun, Bryce Danker
11:15 AM - 11:45 AM	Wastewater to Waterways: Nurturing Diversity, Equity, and Inclusion in Pacific Northwest Communities Speaker: J'Reyesha Brannon
11:45 AM - 12:15 PM	PFAS in Biosolids Update Speakers: Scott Buecker, Scott Schaefer
11:45 AM - 12:15 PM	Odor Control Breakthrough Using A Low-Hazard Form Of Ferrous Chloride Speakers: Tam Truong, Ian Watson
11:45 AM - 12:15 PM	Energy Resiliency Master Planning - Planning For Long Term Resiliency Speaker: Bryan Lisk PE, CEM
11:45 AM - 12:15 PM	Intensification of Anaerobic Digestion Through Vacuum Evaporation Speaker: Christopher Muller
11:45 AM - 12:15 PM	Evaluating Tertiary Treatment Technologies at the Rock Creek WRRF Under Regulatory Uncertainty Speakers: Nick Guho, Peter Schauer
11:45 AM - 12:15 PM	Forging a Resilient Team: Intentional Stakeholder Engagement Speakers: Josh Baker, Tyler Resnick, Jeff Hodson, Mike Zeltner
12:30 PM - 1:45 PM	PNCWA Business Lunch
1:45 PM - 2:15 PM	Proactive PFAS Management: National Solutions for Regional Utilities Speakers: Dave Clark, Austin Walkins, Tyson Schlect, Zach Conde
1:45 PM - 2:15 PM	Small Community Planning: What To Do When Your Assumptions Change Speakers: Pamela Villarreal, P.E., Eric Roundy
1:45 PM - 2:15 PM	Laramie WWTP Upgrades Project: Energy Efficiency Improvements Design And Regulatory Strategies Speaker: Ben Miller
1:45 PM - 2:15 PM	Implementation of Machine Learning for Detection of VFA Depletion Speakers: Brandon M. Boyd, Erik R. Coats
1:45 PM - 2:15 PM	Biological Fundamentals of Denitrification Intensification Speaker: Frederick Tack, PE, BC.WRE, ENV SP
1:45 PM - 2:45 PM	Engaging Governing Bodies to Achieve a Clean Water Mission Speakers: Yarrow Murphy, Loralyn Spiro, Craig Borrenpohl, Jennifer Coker, PE

2:00 PM - 5:00 PM	Meridian Wastewater Resource Recovery Facility
2:15 PM - 2:45 PM	From Northeast to Pacific Northwest - How PFAS regulations may impact Biosolids Beneficial Reuse Programs Speaker: Kenneth C Hui
2:15 PM - 2:45 PM	Tacoma's Solid Future Speaker: Greg Mockos
2:15 PM - 2:45 PM	Waste to Energy on Steroids: A Simple Solution to Multiple Utility Challenges in Alaska Speaker: Mark Spafford
2:15 PM - 2:45 PM	Decarbonization and Recycling of Sewage Sludge to Renewable Natural Gas (RNG) using an Innovative and Cost-effective technology Speaker: Birgitte Ahring
2:15 PM - 2:45 PM	"DAS a good idea!": Leveraging Intensification during Facility Planning for Cost Savings Speakers: Kelley Florence, Riley Murnane
2:45 PM - 3:00 PM	Break
3:00 PM - 3:30 PM	How and Why We Built a Successful In-House Trace Organics Lab for PFAS at a Wastewater Utility Speakers: Summer L. Sherman-Bertinetti, Daniel Marrin
3:00 PM - 3:30 PM	Using a Watershed Restoration Lens to Rethink Urban Water Management Speaker: Brian Busiek
3:00 PM - 4:00 PM	Wastewater Symbiosis Speakers: Rhys Roth, Frank Dick, P.E., Christina Davenport
3:00 PM - 3:30 PM	Sludge Densification: An Innovative Approach to Enhance Secondary Treatment Capacity Speakers: Chris Machado, Skylar Watnick
3:00 PM - 3:30 PM	Achieving Cold Weather Biological Nutrient Removal with Aerobic Granular Sludge Speaker: Paula Dorn
3:00 PM - 3:30 PM	Growing our SCOPE and Industry Engagement in STEM Education Speaker: Maricris Orama, EdD, PE, PMP
3:30 PM - 4:00 PM	The Guide To PFAS: How Water Reclamation Utilities Can Control The PFAS Narrative Speaker: Teigan Gulliver
3:30 PM - 4:00 PM	Increasing Water Renewal System Resilience in the City of Boise with WIFIA Financing Speakers: Mary Fasano, Heather Buchanan
3:30 PM - 4:00 PM	Investigation of kenaf as a physical carbon substrate in a lab-scale mobile organic biofilm reactor Speaker: Brian Roman
3:30 PM - 4:00 PM	Gift of Flow: Continuous Aerobic Granular Sludge Process Boosts Sustainable and Resilient Upgrades at WRRFs Speaker: Amit Kaldate
3:30 PM - 4:00 PM	Digital Polymerase Chain Reaction (dPCR) and Genomic Sequencing in Wastewater Surveillance Speakers: David Mickle, Oumaima Hachimi, Anirudh Bhatia
4:00 PM - 4:30 PM	Developing a PFAS Response Plan to Maintain Public Trust: Salem's Case Study Speakers: Tyler Kane, Libby Barg Bakke

4:00 PM - 4:30 PM	Decoding the Federal Funding Alphabet Soup for Resilient Infrastructure Speaker: Kim Colson
4:00 PM - 4:30 PM	Using Algae to Recover Nutrients at the Pasco Resource Recovery Center Speaker: Max Gangestad
4:00 PM - 4:30 PM	Biosolids Biochar: Net Zero Drying and Pyrolysis with Bioforcetech Speaker: Valentino Villa
4:00 PM - 4:30 PM	Implementing AGS For The Wolcott Wastewater Treatment Plant Upgrade, Brandon Coleman Speaker: Brandon Coleman
4:00 PM - 4:30 PM	Washington Wastewater-Based Epidemiology Program: The scoop on your poop Speaker: Matthew Feck
4:00 PM - 5:30 PM	Women of Water Reception
4:30 PM - 5:00 PM	Mitigating PFAS in Biosolids through New Stabilization Technologies Speaker: Todd Williams
4:30 PM - 5:00 PM	Ride the Funding Wave: How to Get Paid for Your WRRF Renewable Energy Projects Speakers: Matt Noesen, P.E., Natalie Gustafson, P.E., Brittany Park, P.E.
4:30 PM - 5:00 PM	A Solid(s) Planning Process to Build Support for A Generational Investment in Climate Action Speakers: Tim Mills, PE, Frank Dick, P.E.
4:30 PM - 5:00 PM	Elevating Sludge Process Design: The Significance of Plant-Specific Rheology Data Speakers: Luke Thompson, Elaine Leonard
4:30 PM - 5:00 PM	The State of Direct Potable Resue Speaker: Jason Flowers
4:30 PM - 5:00 PM	Engagement between Wastewater Utilities, Oregon State University, and Public Health Agencies in Oregon's Wastewater Surveillance Program Speakers: Wendy Woothtakewahbitty, Leslie Dietz
5:00 PM - 7:00 PM	Exhibit Hall Opening Reception

Tue, Sep 10, 2024

7:00 AM - 8:00 AM	Breakfast
7:00 AM - 8:00 AM	Operators Breakfast (Ticket Required)
8:00 AM - 8:30 AM	Not Your Great, Great, Grandfathers Clarifier - Secondary Adjustable Inlet (abstract number 163) Speaker: Todd Latchaw
8:00 AM - 8:30 AM	Wastewater Treatment Aeration Applications and Blower Technologies Speaker: Trey Poer
8:00 AM - 8:30 AM	Turning Nuisance Scaling into Resource Recovery – A Tale of Struvite, Brushite and Vivianite Speaker: Shubhashini Oza
8:00 AM - 9:00 AM	Tracking Puget Sound Nutrient Loading Trends and Water Quality Response Speakers: David L. Clark, Joel E. Baker
8:00 AM - 8:30 AM	One Water: The Hidden Benefits of Collaborative Water Management Speaker: John Rehring

8:00 AM - 8:30 AM	WateReuse Association- National and Regional Update Speakers: Natalie Monro, Pat Sinicropi
8:00 AM - 8:30 AM	Commissioning the Largest Water Quality Improvement Project in Idaho: Creating Operator and Maintenance Friendly Facilities Speakers: Alex Yoffie, PE, Barry Garcia, Logan Branscum, William Leaf
8:00 AM - 11:30 AM	City of Nampa Water Renewal Facililty Tour
8:30 AM - 9:00 AM	Microscreening for Advanced Primary Filtration – Pilot Testing in the U.S. and Europe Speaker: Bryce Kerney
8:30 AM - 9:00 AM	Tackling the Struvite Headache, What is the Best Approach? Speakers: Heather McKenna, Jeff Semigran, Corey Klibert
8:30 AM - 9:00 AM	What got us here won't get us there: building alignment around a (one) water resiliency strategy to prioritize, fund and communicate CIP needs Speakers: Frank Dick, P.E., Holly Tichenor
8:30 AM - 9:00 AM	A Summary of the Active Research and Innovations Around Reuse Happening in the Pacific Northwest Speaker: Scott Mansell
8:30 AM - 9:00 AM	Design Strategies to Support Reliable Operations and Effective Maintenance at the Flamingo Water Resources Center Speakers: Chris Machado, Skylar Watnick
8:30 AM - 9:00 AM	Sludge Settleability Control Strategy Using Migrating Carriers and Hydrocyclones Speaker: Jason Calhoun
9:00 AM - 9:45 AM	Break - Exhibit Hall
9:45 AM - 10:15 AM	Embracing Failure - How to Learn from our Mistakes Speaker: Jeff Schmidt, PE, PMP
9:45 AM - 10:15 AM	Exhibit Hall Guided Tours
9:45 AM - 10:15 AM	Case Study: Meridian Reduces Phosphorus Recycle (struvite) Speakers: Nick Webber, Stuart Hurley, David Briggs, Clint Dolsby
9:45 AM - 10:15 AM	Improving MBR Performance Through Continuous Flow Densification Speaker: Matt Reeve
9:45 AM - 10:15 AM	What's Old is New Again – Lessons Learned from the Nampa Wastewater Program Speakers: Matthew Gregg, Shannon Johnson, Andy Zimmerman
9:45 AM - 10:45 AM	On Site Non-potable Water Resuse Speakers: Jocelyn Jones, Paula Kehoe
9:45 AM - 10:15 AM	Shrinking the MBR Footprint Even More Speaker: Rick Kelly
9:45 AM - 10:15 AM	Rebranding for Resilience – Nampa's One Water Journey toward a Sustainable Water Future Speakers: Erin Cox, Jeff Barnes
10:15 AM - 10:45 AM	From Data to Action: Alderwood's Journey Towards Informed Decision-Making Speakers: Kevin Cook, PE, Don Ranger, PE
10:15 AM - 10:45 AM	Solids Handling Pump Guidelines for Municipal Collections Systems Speaker: Richard Barile

10:15 AM - 10:45 AM	Sucking the Air out of the Party:A Novel Approach to Phosphorous Sequestration Speaker: Merima Beganovic
10:15 AM - 10:45 AM	Assessment of RO Fouling in MBR-RO Trains using Flat-Plate MBR Membranes Speakers: Katerina Messologitis, Michael Adelman
10:15 AM - 10:45 AM	Water Recycling Through Managed Aquifer Recharge – What Do We Need To Know About Geochemistry? Speakers: Dan Stanaway, Katherine Y. Bell
10:15 AM - 10:45 AM	Benefits of Incorporating Primary Effluent Equalization at a Large Membrane Bioreactor Facility Speakers: Anthony Benavidez, Hannah Thomascall, William Leaf
10:45 AM - 11:15 AM	Embracing the Uncomfortable: Navigating Complex Decisions Speaker: Topher Jones
10:45 AM - 11:15 AM	The Better Cake - Enhancing Digestion with THP to Achieve a Desirable End Product Speaker: Andrew Christy
10:45 AM - 11:15 AM	Innovative AD Recycle Yields More Gas, Less H2S, Struvite, Nutrients Speaker: Matthew Williams
10:45 AM - 11:15 AM	Building Resiliency Into Tertiary Phosphorus Removal At The West Boise WRF: Enhancing Micro And Ultra-Filtration Membrane Efficiency And Reliability Through Tertiary Clarification Speaker: Taylor Romenesko, PE
10:45 AM - 11:15 AM	Exploring Environmental DNA: Piloting A Novel Method For Monitoring Biological Characteristics Of Surface Waters In The Tualatin River Watershed Speaker: Hannah Ferguson
10:45 AM - 11:15 AM	Recycled Water Use in the Beet Sugar Industry Speaker: Kyle Bair
10:45 AM - 11:15 AM	Equipment Preselection – How, Why and Lessons Learned Speaker: Chris Baersten
11:15 AM - 11:45 AM	Pump or Treat? Decision-making based on utility values Speakers: Dana Devin-Clarke, P.E., Samantha Salvia, P.E.
11:15 AM - 11:45 AM	Unveiling the Science of Polymer Activation: Best Practices for Performance Speaker: Haley Goddard
11:15 AM - 11:45 AM	The Great Bug Migration: Keeping Them Happy and Healthy from Washington DC to a new Digester Home in Dallas - Thermal Hydrolysis Anaerobic Digester Seeding Speaker: Esther Nadarajan, PE
11:15 AM - 11:45 AM	Internally Stored Carbon for resilient Enhanced Biological Phosphorus Removal with efficient Biological Nutrient Removal Speaker: Edward Black
11:15 AM - 11:45 AM	Tetrad Discovery by Microscopic Analysis at the RPWRF, City of Spokane, Washington Speaker: Joni Meyer
11:15 AM - 11:45 AM	Restored Wetland Irrigation as a New Beneficial Use for Reuse in Oregon: Thomas Dairy as a Case Study Speakers: Jared Kinnear, Blythe Layton, Scott Mansell
11:15 AM - 11:45 AM	Frankenstein Chaos Creations – Commissioning & Operational Lessons Learned from Modifying "Standard" Vendor Equipment Package Systems Speaker: Kiersten Lee, P.E., PMP

11:30 AM - 1:30 PM	Awards Lunch
1:30 PM - 2:30 PM	Leveraging Collaborative Delivery Today for a Resilient Tomorrow Speakers: Shelby Smith, Guy Voss, Nick Martin, Michelle Green, Michael Neher
1:30 PM - 2:00 PM	On-Site Sodium Hypochlorite Generation: A Safe and Cost-Effective Solution for Disinfection Speaker: Haley Goddard
1:30 PM - 2:00 PM	Threat Mapping To Aide In Cyber Risk Prioritization Speaker: David Brearley
1:30 PM - 2:30 PM	A Comparison of Interventions, Order of Magnitude Costs and Co-benefits for Reducing Nitrogen Pollution to the Puget Sound Speakers: Tony Orlando, Dustin Atchison, Jacque Klug, David Primozich
1:30 PM - 2:00 PM	Connection Through Demonstration: City of Boise's Advanced Water Treatment Pilot Speakers: DeAnn Brown, Abby Haydin
1:30 PM - 2:30 PM	Idaho Recycled Water Panel Speakers: Royce Davis, Joe Payne, Tom Points
1:30 PM - 2:00 PM	My Digester is Full and Mixing Pump Suction Valve is Stuck – Here is What We Did Speakers: Nick Martin, John Koch
1:30 PM - 2:00 PM	Coatings, Concrete, & Sludge. A Digester Renewal Story Speaker: Frederick Tack, PE, BC.WRE, ENV SP
1:30 PM - 2:00 PM	Innovation Below the Surface: The Success of Retrievable Aeration Grids in Municipal Wastewater Treatment Speakers: McKenna Pearson, Ben Miller
1:30 PM - 3:30 PM	Boise Water Walking Tour
2:00 PM - 2:30 PM	Peracetic Acid and Biological Oxygen Demand in Wastewater Speaker: Jacquelyn Wilson
2:00 PM - 2:30 PM	Making Sense of the Scatter: A Comparison of Traditional and Machine Learning Models for Predicting Primary Clarifier Speaker: Nick Guho
2:00 PM - 2:30 PM	Assured Water Supply Implementation for a Resilient Tomorrow: A Case Study of Boise Speakers: Eric Dodds, Robin Lee-Beusan
2:00 PM - 2:30 PM	Benefits of Hydrocyclones for WRRF Performance: Better Settling, Improved Nitrification and Reduced E. coli?! Speakers: Jenny Strehler, Samir Mathur
2:30 PM - 3:00 PM	Break - Exhibit Hall
3:00 PM - 3:30 PM	Short on Time and Budget: Expedited Alternative Delivery of a Greenfield Treatment Plant Speakers: Allison Lukens, PE, Shawn Spargo, PE
3:00 PM - 3:30 PM	Exhibit Hall Guided Tours
3:00 PM - 3:30 PM	Creating the Foundations of Digital Maturity Through a Data Management Master Plan Speakers: Adrienne Menniti, Ben Stanford
3:00 PM - 3:30 PM	Process Intensification opportunities via Partial denitrification Anammox (PdNA) process: Applications and impact on CAPEX and OPEX of nitrogen removal Speaker: Ahmed Al-Omari

3:00 PM - 3:30 PM	Combining Metabolic, Kinetic, and Physical Selection to Achieve Full-Scale Continuous Flow Densified Activated Sludge and Nutrient Removal at Robert W. Hite Treatment Facility Speakers: Anna Scopp, Rudy Maltos
3:00 PM - 3:30 PM	Tucson Water's Reclaimed Water Program: Serving Tucson for 40 years Speaker: John Kmiec
3:00 PM - 3:30 PM	Forging Operational Resilience: Measuring O&M Success and Adaptation In The Climate Change Era Speaker: Ray Brown
3:30 PM - 4:00 PM	Size Doesn't Matter - Successful Alternative Delivery for Small Utilities Speaker: Ben Miller
3:30 PM - 4:00 PM	Emerging Solids Technology Speaker: Chris McCalib
3:30 PM - 4:00 PM	Enabling Integrated Urban Wastewater Management by Connecting Digital Twins Speaker: Venu Kandiah
3:30 PM - 4:00 PM	How Low Can We Go? A Full-Scale Case Study of Low DO Operations for Suboxic Biological Nitrogen Removal Speakers: Michelle Young, Natalie Beach, PhD, Sam Reifsnyder, Anne Conklin
3:30 PM - 4:00 PM	From Data to Insights: A Guide to Hydraulic Modeling Evaluations for Non-Hydraulic Modelers Speaker: Nandita Ahuja
3:30 PM - 4:00 PM	Keeping The Recycled Water Flowing in Mountain Home Speakers: Eric Roundy, Julia Reese, Chris Curtis
3:30 PM - 4:00 PM	Pump Station Phasing to Accommodate Variability of Industrial Flows Speakers: Jeff Hart, Eddie Kreipe
4:00 PM - 4:30 PM	Leveraging the CM/GC Model to Overcome obstacles at Sandy WWTP Speakers: Jennifer Coker, PE, Andrew Pharis, DBIA, Shannon Johnson
4:00 PM - 4:30 PM	Revolutionizing H2S Management: The Hach GS2440 Probe for Enhanced Water Treatment and Infrastructure Protection Speaker: Jedd Powell
4:00 PM - 4:30 PM	Digital Technologies Help Build a Sustainable Future - The Milano Nosedo WWTP Speaker: Mark Drake
4:00 PM - 4:30 PM	Nitrogen Removal Performance and Lessons Learned from Mobile Organic Biofilm Demonstration Speaker: Bryce Figdore
4:00 PM - 4:30 PM	Approaches for Evaluation of Phosphorus Dynamics in the Fernhill Natural Treatment System Speakers: Leila Barker, Colin Wilson Root
4:00 PM - 5:00 PM	Reuse Regulator Session and Q&A
4:00 PM - 4:30 PM	Don't Get Caught With Your Pumps DownUsing Analytics To Improve Pump Reliability and Performance Speaker: Ryan Hougham
4:30 PM - 5:00 PM	Enhancing Collaboration and Innovation in the Design of a \$250M Wastewater Pipeline Speakers: Ryan Nordvik, Kim Hackett, Michael Jaeger

4:30 PM - 5:00 PM	Jetting Techniques and Proper Nozzle Selection Speaker: Phil Davison
4:30 PM - 5:00 PM	Does Al Make a Difference? Case Studies of Al's Impact on Multi-Year Collection Systems Management Speaker: Daniel Buonadonna
4:30 PM - 5:00 PM	Innovative Multi-barrier Approach using Ozone-two stage Biofiltration to manage Organics, Nutrients and Emerging Contaminants Speaker: Gayathri Ram Mohan
4:30 PM - 5:00 PM	Water Reuse Feasibility the City of Klamath Falls Story Speaker: Wayne Gresh
4:30 PM - 5:00 PM	Wastewater Pump Station 45: System Optimization Through Data Analysis Speakers: Karen Iwasaki, P.E., Arevik Sargsyan, P.E.
5:00 PM - 6:30 PM	Exhibit Hall Closing Reception
6:30 PM - 7:00 PM	Break
7:00 PM - 10:00 PM	PNCWA Block Party & Ops Awards

Wed, Sep 11, 2024

7:00 AM - 8:00 AM	Breakfast
8:00 AM - 8:00 AM	Improving Power Quality at King County's West Point Treatment Plant Under Executive Order
	Speakers: Kevin Stively, Moderator, Samantha Brittain, Tammy Lupenski, Mark Slepski
8:00 AM - 8:30 AM	PFAS in Wastewater – From Research to Reality
	Speakers: Kenneth C Hui, Samir Mathur
8:00 AM - 8:30 AM	Cleaning up Biogas for "Free" at Lander Street WRF
	Speakers: Jeff Hodson, Kylle Walkoski, William Leaf, Adrian Romero
8:00 AM - 8:30 AM	Construction and Startup of the Big Sky WRRF: Resiliency Through Covid, Supply Chain Disruptions and General Churn
	Speakers: Scott Buecker, Trent Dyksterhouse, Ron Edwards
8:30 AM - 9:00 AM	Advances in PFAS Water Treatment: Membrane Filtration with Concentration and Destruction of Reject
	Speaker: Tamzen Macbeth
8:30 AM - 9:00 AM	Keeping the Fire Going – A Continuation of Lessons Learned During the Startup of Three 16
	Million BTU Firetube Steam Boilers on Digester Biogas. Speaker: Emmett Minner
8:30 AM - 9:00 AM	Prioritizing Resiliency and Sustainability in Combined Sewage Storage Tank Design While
	Helping to Protect the Duwamish River Speaker: Carrie Murillo-Oaks
9:00 AM - 9:30 AM	How Can Switching from Distributed Generation to Centralized Generation Make Sense?
	Speakers: Lauren Stanford, John Barrutia
9:00 AM - 9:30 AM	Assessing the Impacts of Industrially-derived Reverse Osmosis Concentrate on BNR –
	Macro and Molecular-level Investigations Speakers: Erik R. Coats, Royce Davis

9:00 AM - 9:30 AM	Lessons Learned from Low Pressure Biogas Pipe Replacement Project at West Point Treatment Plant Speakers: Majid Neyestani, Jesse Collins
9:00 AM - 9:30 AM	WW Assessment to Justify Cost of Service Rates Speaker: Maria Brady
9:00 AM - 11:00 AM	Past President's Breakfast
9:30 AM - 10:00 AM	Full Scale Two Stage PN-Anammox: Conquering Sulfate-Enriched Wastewater Challenges Speaker: Amit Kaldate
9:30 AM - 10:00 AM	Purging Flammable Gas Systems and Equipment Into and Out of Service – Incorporating Federal Standards Speaker: Spencer Goodro
9:30 AM - 10:00 AM	An Exploding Star – How A Local Sewer District Has Kept Up With Rapid Growth Speakers: Michael Schulz, P.E., Eric Roundy
10:00 AM - 10:30 AM	Break
10:30 AM - 11:00 AM	Building Lasting Community Relationships Speakers: Kerri Franklin, Ryan Orth
10:30 AM - 11:00 AM	Expanding The Stormwater Park Design Toolkit: Addressing Baseflow Challenges and Maximizing Benefits by leveraging Wetland Technologies Typically used for Wastewater Treatment Speakers: Dustin Atchison, Amy Carlson
10:30 AM - 11:00 AM	Floating Mobile Eyes: Cost-effective Camera System for RDII Assessment Speakers: Jadene Stensland, Amin Mahdipour, Chase Nelson, EIT
10:30 AM - 11:00 AM	When Your Project Cost Increases By 50% Speakers: Holly Johnson, P.E., Tyson Carpenter, P.E.
11:00 AM - 11:30 AM	Building and Maintaining Effective Workplace Relationships Speakers: Hannah Thomascall, Mark Poling
11:00 AM - 11:30 AM	Feeling the Heat: Integrated Planning to Reduce Stream Temperatures Speaker: John Phillips
11:00 AM - 11:30 AM	Forging Resilient Inspection Technologies – Guided Wave and Automated Ultrasonic Testing Speakers: Sarah Burch, Douglas Keene
11:00 AM - 11:30 AM	Spiral-Wound Pipe Rehabilitation Of Structurally Deficient Sewers Speakers: Eric Dienst, P.E., Bob Jacobsen, P.E.
11:30 AM - 12:00 PM	Does the Adaptation Action of Managing Water Rights Improve the Resilience of Umatilla River Basin to Climate-change Induced Droughts? Speaker: Sudip Gautam, Ph.D.
11:30 AM - 12:00 PM	Tertiary Treatment Prepares Oregon Utility for New Permit Limits and Future Nutrient Removal Speakers: Mark Strahota, Brad Albert
11:30 AM - 12:00 PM	Mastering Modernization: The Journey of Portland's Wastewater Automation Upgrades Speakers: Leo Rodgers, Heather McKenna, Dinh Nguyen
11:30 AM - 12:00 PM	6PPD-quinone - When the Rubber Meets the Road Speaker: Ross W. Dunning, P.E.

12:00 PM - 12:30 PM	Water Quality Trading and 401 Water Quality Certifications Speaker: Rob Annear
12:00 PM - 12:30 PM	The Dollars and Sense for Adopting Optimized Smart Technology O&M Processes Speaker: Jay Boyd
12:00 PM - 12:30 PM	Making Magic: Solutions for Increasing Capital Program Accomplishment Rate Speaker: Jennifer Belknap