

TUESDAY | August 28

Technical Sessions

	Energy Efficiency/Sustainability	Operation & Maintenance	Utility Management	Potpourri
9:15am-9:45am	WW Biogas Upgrading - Renewable Natural Gas Options Eric Wilgenbusch, Unison Solutions	WW Nutrient Removal Optimization at OECC Alyssa Mayer, Hazen and Sawyer	B Planning for Affordable, Supportable Utility Rates Ken Duplay, NEORS; Carol Malesky, Stantec	W Detection and Monitoring of Microcystins in Theory & Practice Sheela Agrawal, NEORS
9:55am-10:25am	WW Cogeneration from biogas at Columbus Waste Water Treatment Plants Todd Krenelka, City of Columbus	B Next-Generation SCADA High Performance Human Machine Interfaces John Sidoti, Arcadis	W Water Technology Transfer: Building a Financially Sustainable Early-Warning System for Harmful Algae Bryan Stubbs, Cleveland Water Alliance; Ed Verhamme, Limnotech	WW Whole Effluent Toxicity Testing Kate Hansler, EnviroScience
10:35am-11:05am	B Blueprint for One Water: Tactical Guidance for Developing an Integrated One Water Framework Brett Farver, Wendy Broley, and Lynn Stephens, Brown & Caldwell	WW Optimization of Oxidation Ditch Aeration for Nutrient Removal and Energy Efficiency Robert Smith, YSI/Xylem; Josh Holton, SW Licking Community Water District; Jon vanDommelen, Ohio EPA	B Help! We Need to Invest in Our Infrastructure, But Can I Afford it? Christina LaPointe and Scott Ankrom, Hazen and Sawyer	W The Success vs. the Pain of Long Term Construction Sequencing Brian McGuire, Jacobs; Scott Lockhart and Mark Eppich, City of Columbus
11:15am-11:45am	WW Biologically Enhanced Primary Treatment: A Summary of Experience from Pilot, Demonstration, and Full Jared Alder, Evoqua Water Technologies	B Backbone Infrastructure Design for an Intermittent Use Site David McCallops and Julio Williams, Environmental Design Group	B A Beginner's Guide to Rates: The history, trends, and new horizons in water and sewer pricing Joe Crea, Raffelis	B Real Deal Energy KPIs Kevin Krejny, Montgomery County Environmental Services
11:55am-12:25pm	B Keeping up with the Solar Landscape in Ohio and Leveraging Onsite Power to Reduce Operating Cost Tom Armstrong, Arcadis; Jason Slattery, GEM Energy	W Copper-Silver Water Treatment for Legionella - is it the New Gold Standard for Healthcare? Cliff Shrive, Shrive Operations Solutions, LLC; Jeff Swertfeger, Greater Cincinnati Water Works	B Utility Meter-to-Cash Best Practices Improve Customer Service and Financial Performance Michael Rotunno and Morgan Mills, Arcadis	W A Dam Presentation About Hazard Creep and Ohio's Probable Maximum Precipitation Change Julie Lawson, Environmental Design Group
	Green Technologies	Operation & Maintenance	Utility Management	Potpourri
2:00pm-2:30pm	WW Why Do Some Urban Green Infrastructure Features Thrive Over Time and Others Not So Much? Nancy Ellwood, CDM Smith	WW NEORS Southerly WWTC Blower Serviceability Testing and Technology Selection for Energy Efficiency Jeff Ifft, Brown and Caldwell; Brian Flanagan, NEORS	B How to Pass a (Mostly) Painless Rate Increase Brianna Wooten and Pat Turnbull, Montgomery County Environmental Services	W Wilmington's Harmful Algal Bloom Journey Jennifer Delebreau, Strand Associates
2:40pm-3:10pm	WW Results for Stormwater Infiltration in Combined Sewer Systems Kim Colich, NEORS	W Lessons Learned from a 5 million dollar SCADA System Upgrade Philip Schmidt and John Gilmore, City of Columbus	B Building the Pipeline- Preparing the workforce of tomorrow Melinda White, Montgomery County Environmental Services	WW Advanced Real-Time Monitoring Improves Pre-Treatment Program Performance Dan Hanthorn, ZAPS Technologies
3:20pm-3:50pm	WW Blueprint Columbus Downspout Redirection and Lateral Lining Program Pilot: Lessons Learned Leslie Westerfelt and Fang Cheng, City of Columbus	W Bird Pest Mitigation and Other Challenges of Rehabilitating Toledo's Intake Structure in Lake Erie Jeremy Nakashima, Lockwood Andrews & Newman; Jacob Goetz, City of Toledo; Brad Lowery, Jones & Henry Engineering	B Starting a Young Professionals Group in your Workplace - Experiences, Challenges and Lessons Learned Justin Siegrist, Wade Trim	WW Respirometry - A Valuable Tool in Wastewater Treatment John Hoffman, Alloway
4:00pm-4:30pm	WW Green for Gray: CSO Control using Green Infrastructure Katherine Holmok, Environmental Design Group	WW Breaking the Sound Barrier in Sanitary System Assessments Jim Davis, Pinbrella Solutions	B Why Automation Can't Wait Mitchell Beckner, City of Troy	WW Please Do Not Feed Medicate the Fish: Pharmaceuticals in WRRF Effluent Madeleine Harris, Aaron Mann, Nicholas Merchant-Wells, William Worsham, Case Western Reserve University

W = Drinking Water

WW = Wastewater

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WEDNESDAY | August 29

Technical Sessions

	Distribution	Wastewater Treatment	Water Treatment
8:00am-8:30am	W Water Storage Tank Inspection Standards and Guidelines Penni Snodgrass, Tank Industry Consultants	WWW Design Challenges of a High Rate Treatment Facility Georgia Fuerst, CT Consultants	W Liquid Ionic Copper Offers 3-for-1 as Drinking Water Pre-Treatment David Hammond, Earth Science Labs
8:40am-9:10am	W Utilizing a Risk Mitigation Strategy to Design and Construct a Water System Interconnection Kristen VonderBrink, RA Consultants	WWW Southerly CEPT: Designing for Intermittent Use Vui Chung, Burgess & Niple; Seth Grimes, Arcadis	Ultrasonic Membranes for Biofouling Control Anton Rosi, Ohio State University
9:20am-9:50am	W EXTREME MAKEOVER: Water Edition - An Old Pressure District Receives New Infrastructure Phil Schmidt and Evan DiSanto, City of Columbus	WWW No Space No Problem: Membrane Bioreactors and Silo Digester Expand Capacity Jamie Mills and Scott Stearns, Strand Associates	W Softer Water for Yellow Springs Sam Swanson, Burgess & Niple; Brad Ault, Village of Yellow Springs; Gary Williams, Jones & Henry
10:00am-10:30am	W A New Source - Delco's O'Shaughnessy Raw Water Pump Station and Transmission Main Project Dan Barr, ms consultants	WWW Doubling the Secondary Treatment Capacity Using Step Feed Brian Gresser, City of Akron; David Frank and Ed Becker, Arcadis	Algal Organic Matter Shapes the Physical and Community Structure of Biofilm in Drinking Water Distribution Systems Lei Li, University of Toledo
10:40am-11:10am	W Water System Resiliency Assessments through Main Break Flood Modeling Ben Chenevey, Arcadis; Gregg Loegg, City of Akron	WWW NEORSO Southerly WWTC Traveling Bridge Retrofit and Benefits of SRT Control and a Wasting Clarifier Jeff Ifft, Brown and Caldwell; Brian Flanagan and Harry Shaposka, NEORSO	W Intermittent Raw Water Quality Issues Require Intermittent Responses Matt Leach, Jacobs; Mark Eppich, City of Columbus
11:20am-11:50am	W Building and Maintaining Infrastructure to Attract Development: A Case Study of Beech Road Tank Michele Gilkerson and Ben Ellsesser, City of Columbus	WWW Disinfection Improvements at Tri-Cities North Regional WWTP with CMAR Will Martin, Hazen and Sawyer	W UV-AOP as an Additional Cyanotoxin and Microbial Barrier at the City of Celina, Ohio Matt Charles and Bret Casey, Hazen and Sawyer
12:00pm-12:30pm	W Innovative Technologies to Effectively Manage Deteriorating Infrastructure - State-of-the-Art Review Mutiaru Ayu Sari and Erez Allouche, Stantec	WWW Wastewater Disinfection with Combined Peracetic Acid and UV Treatment: A Plant Scale Pilot Study Achal Garg, Metro Sewer District of Greater Cincinnati	W Improving PAC Storage and Feed to Respond to HABs Gerry Wright and Damon Roth, Cornwell Engineering Group;
	Residuals	Nutrient Removal	Sourcewater
2:00pm-2:30pm	W Brine/Concentrate Management - Technologies and Trends Troy Walker, Hazen and Sawyer	WWW Phosphorous Removal Challenges for a Highly Variable Influent: A Brewery's Road to NPDES Compliance Connor Smith and Jim Fitzpatrick, Black & Veatch	W Akron's Multi-Barrier Approach to HAB Prevention, Avoidance and Treatment George Sendrey, Environmental Design Group
2:40pm-3:10pm	W Don't "Screw Press" Around: Applying Screw Press Technology to WTP Residual Solids Dewatering Mark Petrie, Cleveland Water, Hana Litwin, Stantec	WWW Optimizing Lagoon Based Treatment Systems for Improved BOD, TSS & Nutrient Removal Jim Martin, Lemna Environmental Technologies	W Five Years Later: Active Watershed Management Demonstrates Consistent Reduction in Pollution Jessica Glowczewski and Charles Lacy, City of Akron
3:20pm-3:50pm	WWW Lessons Learned from the Design, Start-up, and Operation of the First Full Scale Post-Aerobic Digest Sam Jeyanayagam, Jacobs	WWW Delaware County's Self Help Efforts to Increase Capacity Out of WWTP Dale Kocarek, Stantec; Cory Smith, Delaware County Sanitary Engineering	W Implementing a Dynamic Source Water Protection Management Plan for the City of Canton Kerry Zwierschke, Bennett & Williams Environmental Consultants; Annette Mollet, City of Canton
4:00pm-4:30pm	WWW Rolling the Dice: Using the Monte Carlo Method to Optimize Solids Management Kevin Campanella, Burgess & Niple; Tyler York, Black & Veatch	WWW Chemical Precipitation as Primary, Polishing or Back-up Process for Phosphorus Removal Jurek Patoczka, Mott MacDonald	PFAS Concentrations in Surface Waters in Region Surrounding Fluoropolymer Production Plant Jason Galloway, Ohio State University
4:40pm-5:10pm	WWW Net zero for free. How one utility did it. David Wrightsman, Energy Systems Group	WWW Dual-Purpose Filtration: Same Facility for Wet-Weather Capacity AND Dry-Weather Phosphorus Removal Jim Fitzpatrick, Black & Veatch	W Watershed Management - New Strategies for Updated Risks Lorraine Krzyzewski and Christopher Harper, City of Columbus;

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	Collections	Lab	Asset Management
8:00am-8:30am	WW City of Columbus OARS- How deep tunnels can have big impacts on Combined Sewer Overflows Brandon Fox, City of Columbus; Ed Heyob, CDM Smith;	B Going to the Dark Side: Comparing Drinking Water and Wastewater from a Laboratory Perspective Fritz Schroder, City of Dayton	W Applying Asset Management Principles in Water Treatment Plants Damon Roth and Gerry Wright, Cornwell Engineering Group
8:40am-9:10am	WW Dayton's New Parallel Interceptor-Redundancy for Critical Service Using Custom Pipe Technology Peter Kube and Dane Brown, Arcadis; Dan Martin, RA Consultants	W Cross-reactivity of Microcystin Congeners: Effects on Quantification and Monitoring Debmalya Bhattacharyya, NEORS	B Asset Management Regulations Are Coming, Are You Ready? Kevin Slaven, Arcadis
9:20am-9:50am	WW Getting to the Source: SSES Zeroes in on Problems, Cuts Estimates and Extends Deadline John Swartzbaugh, Burgess & Niple; Carla Odebrski, City of Upper Arlington	B Clear Results You Can Count On Eric Link, LabtronX	B Eating the Elephant 1 Bite at a Time - Asset Management Programs at Small and Mid-Size Utilities Bryan Dickerson, Black & Veatch
10:00am-10:30am	WW Integrative Planning for the City of Napoleon Justin Batt, Stantec	W qPCR Analysis of Cyanobacteria Toxins: How it works and what your results mean Megan Hurd, Alloway	WW Gateway to Success: Practical Asset Management at MSD Anne Kennedy, Brown and Caldwell
10:40am-11:10am	WW Comprehensive Collection System Study for Odor and Corrosion Mitigation Lee Weber, Black & Veatch; Elizabeth Buening, Delaware County Regional Sewer District	W Cyanotoxins in Drinking Water Resources: Best Management Practices and Regulations Brad Bartelme, EnviroScience	B AMP Integration - Lessons Learned from a Neighboring State James Bearman and Andrew Faley, Stantec
11:20am-11:50am	WW Sinking Caisson Method - Temporary Excavation Support, Permanent Possibilities AJ Smith and Jacob Scotese, HR Gray; Brian Daugherty, NEORS	B Lab Automation Today: Advances & Trends in the Water/Wastewater Sector Stacey Brewer and Ken Ochi, Accelerated Technology Labs	B Utility Report Card and Capital Efficiency Planning for Reinvestment Glenn Marzluf, Del-Co Water
12:00pm-12:30pm	WW Pumping a splash? It's a gas(-gas-gas)! Is your force main vulnerable to interior corrosion? Dan Porter, Brown and Caldwell	B High Performance Laboratory Essentials Karen Tenore, City of Dayton	W Reduce the Consequences of Failure by Assessing and Rehabilitating Critical Valves Dave Lewis, Wachs Water Services
	Collections Rehabilitation	Stormwater	Customer Service
2:00pm-2:30pm	WW A Museum of Early Sewer Construction Mark Hudak and Erez Alouche, Stantec	WW Planning for Future Development: A Framework to Guide On-Site Stormwater Management in Cleveland Joseph Danyluk, Jacobs; Lita Laven, NEORS	A Discussion of Utility Billing, Customer Service and Revenue Generation Billy Bulloch, Utility Revenue Management Company Inc.
2:40pm-3:10pm	WW Monitoring Effectiveness of Sump Pump on Reducing Private Infiltration/Inflow Fang Cheng, City of Columbus	WW Realtime Nutrient Monitoring System and Data Analysis Platform Offers New Insight to Stream Dynamics Nathan Zgnilec, OHM Advisors	Apparent Water Loss Kelly Byrd, NECO
3:20pm-3:50pm	B Managing Risk in the Trenchless World Rory Ball, Mott MacDonald	WW Small Project Challenges: Innovation to a Storm Culvert's Accelerated Schedule Using New Technology Derek Vogel, NEORS; Randall Berkley, Jacobs	Fraud/Theft Prevention Diana Steck, Software Solutions, Inc.
4:00pm-4:30pm	WW Making the Old New Again - Retrofitting an 87-Year-Old Lift Station Aaron Hutton, Wessler Engineering	WW Time Savings with ESRI Collector Application for Stormwater Management Justin Kerns, ms consultants	Vehicle Safety Everyone Can Use/Run-Hide-Fight Kevin Allen & Joe Whitlock, Montgomery County Environmental Services
4:40pm-5:10pm	WW Lessons Learned: The Challenges of Upgrading Infrastructure in a Congested, Urbanized Community John Lyons, Strand Associates	WW Flood Protecting Critical Assets at The Ohio State University Travis Eifert, EMH&T	Simple Customer Service for Complex Projects Mo Wright, RAMA Consulting

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THURSDAY | August 30

Technical Sessions

	Regulatory	Potpourri	Energy Efficiency/Sustainability
8:00am-8:30am	<p>W DDAGW Update Amy Jo Klei, Ohio EPA</p>	<p>WW Bridging the Gap - Phasing into Operation a New, Aerated Grit System Tony Blanc and Cindy Biacofsky, Brown and Caldwell; Bob Bonnett, NEORS</p>	<p>WW Dayton Wastewater Treatment Facility Downsizes Blowers to Upsize Energy Savings Phil Bennington, City of Dayton; Jim Pelton, Pelton Environmental</p>
8:40am-9:10am	<p>WW DSW Update Tiffani Kavalec, Ohio EPA</p>	<p>B Intelligent Water Systems: From Understanding Concepts to Current Practices and Future Innovations Jim Cooper, Arcadis</p>	<p>WW Considering a Plethora of Options...for an Energy Efficient Aeration System Scott Phipps, Hazen and Sawyer</p>
9:20am-9:50am	<p>W Target 2033: Cincinnati's Program to Eliminate Lead Pipes Jason DeLaet, Greater Cincinnati Water Works</p>	<p>WW Don't Just say "Hi!" - Getting the Most Out of Your Physical Model Steve Janosko, NEORS; Dave Gleason, Stantec</p>	<p>WW Power Quality Study Offers Solutions with Added Benefits - Improved Operability and Energy Savings Doug Reed, Stantec; Bruce Buchanan, NEORS</p>
10:00am-10:30am	<p>W Corrosion Control with Consecutive Systems and Simultaneous Compliance Considerations Andrew Skeriotis, Stantec</p>	<p>WW When Proactive Investigations and Test Section Construction Lead to Substantial Cost Savings Scott Hostetter, HR Gray; Travis Capper, City of Akron</p>	<p>WW NEORS Southerly WWTC Valve Selection and Flexible Aeration Control for Energy Efficiency Jeff Ifft and Matt McElroy, Brown and Caldwell; Harry Shaposka, NEORS</p>
10:40am-11:10am	<p>W Development of Design Criteria to Supplement TSSs for a Selected Ohio EPA Emerging Technology Zuzana Bohrerova, Ohio State University; Megan Patterson, Stantec</p>	<p>W Considerations in Evaluating Groundwater to Deliver a Reliable and High Quality Water Supply Amber McDonough and Todd Tharpe, Black & Veatch</p>	<p>WW Innovative Delivery Yields Innovative Technical Solutions Mike Hanna, Black & Veatch</p>
11:20am-11:50am	<p>WW Degradation and Recovery of the Scioto River (Ohio-USA) Related to Reductions in Sewage Pollution Chris Yoder, Midwest Biodiversity Institute</p>	<p>W Factors Limiting Success in Well Rehabilitation for Asset Management and How to Improve the Odds Stuart Smith, Ground Water Science</p>	<p>B Conducting Successful Energy Audits for both Water and Wastewater Facilities Rich Atoulikian, HDR Engineering</p>

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