

WEFTEC 2023 Technical Sessions



MONDAY, OCTOBER 2, 2023 | 1:30 PM

Biosolids & Residuals Management/Energy

Understanding and Addressing PFAS in Biosolids
Advances in Anaerobic Digestion and Sidestream
Treatment

Collection Systems & Distribution

The Ultimate Collection Systems Basics Trivia
Challenge 2.0

Disinfection & Public Health

What's Next for Wastewater Surveillance?

Facility Operations & Maintenance

Biomass Fermentation for Carbon Efficient
Biological Phosphorus Removal

Future Issues & Global Insight

Global Approaches to Tackling Fugitive Methane
Emissions
Aquanomics: Future Economics of Water Risk and
Energy Food Nexus

Industrial Issues & Treatment Technologies

Industrial Pretreatment Trends
Food and Beverage: Upgrades and
Troubleshooting

Municipal Wastewater Treatment Process & Design

Sweat Your Assets Off: BNR Optimization
Primary Treatment Technologies: Should We Settle
for Conventional Primary Sedimentation?

Research & Innovation

WEF/AEESP Master Lecture: Belinda Sturm

Stormwater Management

Latest in Stormwater Trends

Utility Management & Leadership

Water Policy Update
Asset Management Journeys: A Tale of Three
Utilities
Optimizing Energy Investments Part I: Energy
Master Planning

Water Reuse & Reclamation

The Water Reuse Landscape Through the Eyes of
Industry Leaders

Watershed Resources

Management & Sustainability

Nutrient Management: Growing Water Quality

MONDAY, OCTOBER 2, 2023 | 3:30 PM

Biosolids & Residuals

Management/Energy

Full-scale Thermal Drying System Implementation

Collection Systems & Distribution

Technology Driven Optimization of Collection Systems

Disinfection & Public Health

Advancements and Optimization with Chlorine, Peracetic Acid, and Performic Acid Disinfection
Wastewater Surveillance: How Does the Sewer Impact the Data?

Facility Operations & Maintenance

Managing the Third Effluent Part I
Extracting Carbon for Nutrient Removal

Future Issues & Global Insight

Decarbonization Case Studies

Industrial Issues & Treatment

Technologies

Water Reuse & Resource Recovery: Brines, Trains, and (EV) Automobiles

Municipal Wastewater Treatment

Process & Design

Alternative Approaches to Intensify Secondary Treatment
Thinking Outside the Basin: Auxiliary Wet Weather Treatment

Research & Innovation

Improving Biosolids Treatment Efficiency

Stormwater Management

Understanding the Basics of Stormwater Design
Creative Stormwater Program Management
Resources: Finance, O&M, and Asset Management

Utility Management & Leadership

Optimizing Energy Investments Part II: Energy Use is in the Details
Equitable Service Delivery Approaches and Community Bridging

Water Reuse & Reclamation

Ozonation: Water Reuse on a New Level

Watershed Resources

Management & Sustainability

I Plan, You Plan, We All Plan for Integrated Plans



TUESDAY, OCTOBER 3, 2023 | 8:30 AM

Biosolids & Residuals

Management/Energy

Translating Bench-scale to Full-scale Operations:
Is Food Waste Co-digestion Right for You?

Collection Systems & Distribution

Innovative Project Delivery Methods

Disinfection & Public Health

Pathogens and Indicator Update for 2023

Facility Operations & Maintenance

The BNR Instrumentation and Controls Selection
Adventure
Sidestream Nitrogen Removal: From Established to
NextGen

Future Issues & Global Insight

Environmental Social Justice: Enduring Issues After
the Spotlight Fades

Industrial Issues & Treatment

Technologies

Operation and Trouble Shooting of Flotation
Technologies in Petroleum Refinery Wastewater
Treatment

Municipal Wastewater Treatment

Process & Design

The Big Bad Blower: Huffing and Puffing Air
Through Your Aeration Basins
Low Carbon BNR Fundamentals and Controls

Research & Innovation

Updates on Microplastic Occurrence, Regulation,
and Removal

Stormwater Management

Flood Modeling Case Studies

Utility Management & Leadership

Unprecedented Weather Events: Planning for
Organizational and Operational Resiliency
A National Bioresources Strategy for England
Capital Project Management in Today's
Challenging Times
Managing the Modern Media Mix to Keep Your
Community Engaged

Water Reuse & Reclamation

Water Reuse Regulations Across the States

Watershed Resources

Management & Sustainability

Roadmap: Integrated Planning from Municipal
and Stormwater



TUESDAY, OCTOBER 3, 2023 | 1:30 PM

Biosolids & Residuals Management/Energy

Behavior of Emerging Contaminants in Thermal Treatment Processes

Collection Systems & Distribution

Pump Stations: Lessons Learned

Disinfection & Public Health

Disinfection in the 2020s

Facility Operations & Maintenance

Lessons Learned from Early PdNA Implementation
Applications of Machine Learning in Full-scale Nutrient Management Part I

Future Issues & Global Insight

Indigenous Environmental Practices: Lessons from the Past

Industrial Issues & Treatment Technologies

Microelectronics Industry: Challenges and Solutions
The Future of Datacenters: From Water Users to Water Stewards

Municipal Wastewater Treatment Process & Design

Advancing Low-energy Biological Nitrogen and Phosphorus Removal Through Low DO Operation
Connecting Molecular Biology and Sensors to EBPR Performance

Research & Innovation

Making Forever Chemicals Gone Forever

Stormwater Management

Stormwater Design Case Studies

Utility Management & Leadership

Utility Leaders Afternoon & Utility of the Future
Today Awards
Small Communities Utilize Decentralization Effectively
Stories of Digital Transformation: It's Not About the Journey but the Destination
Recognize the DRIFT in Asset Management Implementation

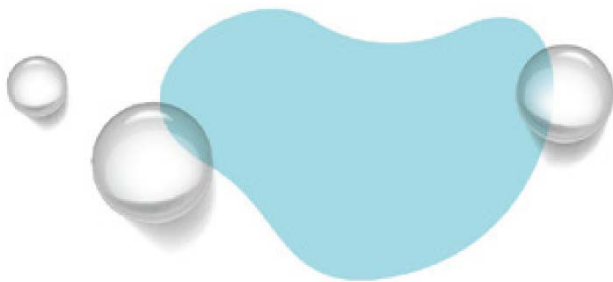
Water Reuse & Reclamation

Reconsidering Biological Treatment for Water Purification: Reuse-nutrient Removal-nexus Part I

Watershed Resources

Management & Sustainability

Long-term Control Planning and Consent Decree Orders



TUESDAY, OCTOBER 3, 2023 | 3:30 PM

Biosolids & Residuals Management/Energy

Creating Renewable Revenue Streams with RNG

Collection Systems & Distribution

Perspectives on Inflow and Infiltration Reduction
Cost Effectiveness

Disinfection & Public Health

PFAS Impacted WRFs: Knowledge Update
Novel Applications of QMRA for Sizing Wastewater
UV Systems and Identifying Shellfish Harvesting
Zones

Facility Operations & Maintenance

Case Studies of Machine Learning in Full-scale
Nutrient Management Part II

Future Issues & Global Insight

From Global Best Science to Mitigation of Nitrous
Oxide

Industrial Issues & Treatment Technologies

The A to Z's of Refinery Wastewater Treatment

Municipal Wastewater Treatment Process & Design

Design Tools for Preliminary and Primary
Treatment

Research & Innovation

Full-scale Continuous Flow Densification Systems

Stormwater Management

Stormwater Capture and Release: Emerging
Regulatory Paradigms
Predicting Flooding Before It Happens

Utility Management & Leadership

Communications Plans and Actions: Septics,
Source Control, and Stakeholders
Small Community Applications of Decentralization
and Associated Management Approaches
Utility Leaders Roundtable

Water Reuse & Reclamation

Refining Wastewater Effluent for Purification:
Reuse-nutrient Removal-nexus Part II

Watershed Resources

Management & Sustainability

Better Outcomes with CSO Administrative Orders
and Consent Degrees



WEDNESDAY, OCTOBER 4, 2023 | 8:30 AM

Biosolids & Residuals Management/Energy

Intensifying and Optimizing Anaerobic Digestion

Collection Systems & Distribution

Design and Construction Challenges for CSO
Control Implementation

Disinfection & Public Health

UV Disinfection: Where are we? Where are we
going?

Facility Operations & Maintenance

PdNA Whole Plant Considerations

Future Issues & Global Insight

Intentional Integration of Social Equity into
Climate Planning

Industrial Issues & Treatment Technologies

Approaches to PFAS Destruction and Centralized
Treatment
Food and Aquaculture Wastewater Treatment

Municipal Wastewater Treatment Process & Design

Chemical Phosphorus Removal
Re-direct Carbon for Better Use

Stormwater Management

Urban Stormwater Controls Operation and
Maintenance

Utility Management & Leadership

Qualifications-based Selection: Get What You
Need, Show What You've Got
Emerging AI Technologies and Ways of Working to
Optimize Water

Water Reuse & Reclamation

Water Reuse: Challenges and Opportunities

Watershed Resources

Management & Sustainability
Let Me Know About BMPs



WEDNESDAY, OCTOBER 4, 2023 | 10:30 AM

Biosolids & Residuals Management/Energy

Making Money from Biogas: RNG to RINs

Collection Systems & Distribution

Public and Private Rehabilitation Strategies for I/I
Reduction

BAP Tunnels and Interceptors

Disinfection & Public Health

Microplastics Interaction with Pathogens and
Other Microconstituents

Facility Operations & Maintenance

Unlocking Hydrolysis and Internally Stored Carbon
Utilization for Nitrogen Removal

Future Issues & Global Insight

Building a Hydrogen Future



Industrial Issues & Treatment Technologies

Using Modeling to Improve Industrial Wastewater
Treatment

Advancements in Anaerobic Treatment of
Industrial Wastewater

Municipal Wastewater Treatment Process & Design

Secondary Clarification Advancements

Healthy as a Horse: Assessing Bio-P Stability

Research & Innovation

Pushing the Boundaries of Our Biological Models

Stormwater Management

Leveraging Stormwater Infrastructure to Build
Better Community

Utility Management & Leadership

Solving Customer Affordability Concerns with
Innovative Rate Structures

Project Delivery Challenges: Continued Operations
and Commissioning

Strategies for Transformational Change,
Innovation, and Operational Efficiency

Water Reuse & Reclamation

Water Reuse: Plan It Properly

Watershed Resources

Management & Sustainability

Nutrient Reduction Planning and Implementation
Roadblocks

Information as of April 21, 2023

WEDNESDAY, OCTOBER 4, 2023 | 1:30 PM

Biosolids & Residuals

Management/Energy

Upgrading and Optimizing Thickening and Dewatering

Collection Systems & Distribution

Conveyance Modeling

Facility Operations & Maintenance

Managing the Third Effluent Part II

Advances in Preventative Maintenance

Industrial Issues & Treatment

Technologies

Membrane Filtration and Zero Liquid Discharge (ZLD) Wastewater Treatment System

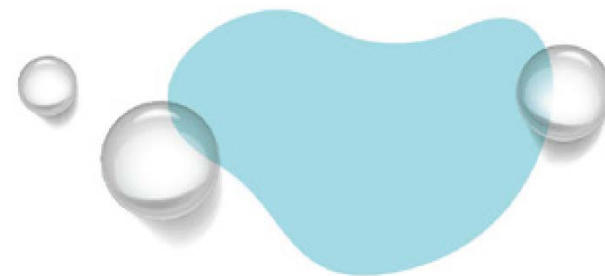
Municipal Wastewater Treatment

Process & Design

Conversion of Conventional Activated Sludge to Suboxic (Low DO) Nutrient Removal

Applying Hydrocyclones for Densification

Planning and Process Improvement Case Studies



Research & Innovation

Removing Emerging Contaminants: Beyond PFAS

Stormwater Management

Creating Resilience with Stormwater Projects

Utility Management & Leadership

Collection System Predictive Analysis

Cybersecurity

Water Reuse & Reclamation

Advancing Desalination and Treatment of Non-traditional Source Waters

Watershed Resources

Management & Sustainability

From Fish Passages Design to Ocean Discharges: Going Coastal

