



October 8–12, 2022 • NEW ORLEANS, LA

#WEFTEC

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TRANSFORM TOMORROW.



WEFTEC Workshops are a wonderful way to gain in-depth, hands on knowledge in smaller groups. Workshops take place on Saturday, Sunday and Tuesday this year. They all have an additional fee- make plans to register now and don't miss your chance to learn with the experts!

SATURDAY, OCTOBER 8

W01 Making Resource Recovery Concepts Come to Life: Operator Education through Interactive Simulation	Facility Operations and Maintenance	8:30 AM	5:00 PM	\$240.00	\$45.00	\$270.00	\$240.00
W02 Wastewater Microbiology	Facility Operations and Maintenance	8:30 AM	5:00 PM	\$240.00	\$45.00	\$270.00	\$240.00

SUNDAY, OCTOBER 9

W06 Activated Sludge and BNR Process Control: Hands-On in the Real World, hosted by the St. Bernard Parish Munster Wastewater Treatment Plant	Facility Operations and Maintenance	6:45 AM	3:00 PM	\$250.00	\$45.00	\$280.00	\$250.00
W03 Refinery and Petrochemical Wastewater Treatment: Concepts, Operation, and Troubleshooting	Industrial Issues and Treatment Technologies	8:30 AM	5:00 PM	\$210.00	\$45.00	\$240.00	\$210.00
W04 Game Based Modeling	Municipal Wastewater Treatment Process and Design	8:30am	5:00 PM	\$240.00	\$45.00	\$270.00	\$240.00
W05 Wastewater Microbiology	Facility Operations and Maintenance	8:30 AM	5:00 PM	\$240.00	\$45.00	\$270.00	\$240.00

W07 Current Status of Co-digestion and the Journey to Energy Neutrality	Residuals and Biosolids Management/Energy	8:30 AM	5:00 PM	\$210.00	\$45.00	\$240.00	\$210.00
W08 Overcoming Uncertainty: Confident Decisions in the Face of Climate Change	Collection Systems	8:30 AM	5:00 PM	\$240.00	\$45.00	\$270.00	\$240.00
W09 So You Thought You Were Done? Finding the End Point of Wet Weather Control Programs	Collection Systems	8:30 AM	5:00 PM	\$210.00	\$45.00	\$240.00	\$210.00
W10 WEF/WRF Emerging Pathogens and Microconstituents in Wastewater/Water Reuse: Challenges and Opportunities	Disinfection	8:30 AM	5:00 PM	\$240.00	\$45.00	\$270.00	\$240.00
W11 Equipping Your Utility to Address PFAS in Water Reuse: State of the Science, Emerging Trends, and Navigating the Regulatory Pathway	Water Reuse	8:30 AM	5:00 PM	\$210.00	\$45.00	\$240.00	\$210.00
W12 Transformative Opportunities in Stormwater: Elevating Resilience, Equity, and Workforce Development	Stormwater Management	8:30 AM	5:00 PM	\$210.00	\$45.00	\$240.00	\$210.00
W13 Successful Commissioning of Capital Projects by Understanding Commissioning Failure Modes and Engaging Stakeholders	Utility Management	8:30 AM	5:00 PM	\$210.00	\$45.00	\$240.00	\$210.00
W14 Brainstorming How to Prioritize Equity and GHG Benefits in CIP and Services Decisions	Utility Management	8:30 AM	5:00 PM	\$210.00	\$45.00	\$240.00	\$210.00
W15 Reimagining the Water Sector through Equity and Justice	Diversity, Equity & Inclusion	8:30 AM	5:00 PM	\$210.00	\$45.00	\$240.00	\$210.00
TUESDAY, OCTOBER 11							
W16 Are You Talkin' To Me? Learning How to Communicate with Your Audience	Utility Management	12:30 PM	5:00 PM	\$105.00	\$25.00	\$135.00	\$105.00

W01 Making Resource Recovery Concepts Come to Life: Operator Education Through Interactive Simulation

Saturday, October 8, 2022 8:30 AM - 5:00 PM

Workshop Number: 01

Process simulators are a valuable operator teaching tool because they allow operators to explore the consequences of operational decisions across a resource recovery facility in an interactive, risk-free way. This workshop will demonstrate the strength of simulators to illustrate fundamental resource recovery concepts to operators by offering simulator-based training on operating a nitrifying activated sludge system to achieve year-round nitrification and assessing the effects of secondary clarifier operation on process performance.

Workshop Chair A. Menniti

Workshop Vice Chair P. Dombrowski

8:30 AM	Welcome and Introduction A.Menniti
8:40 AM	Overview of Available Simulators A.Menniti
9:00 AM	Conceptual Introduction to Nitrification and Aerobic SRT P.Dombrowski
9:15 AM	Tour of Simuworks S.Snowling
9:30 AM	Steady State Training Exercise Hands-on Time Continued S.Snowling
10:00 AM	Networking Break
10:30 AM	Steady State Training Exercise Hands-on Time Continued S.Snowling
10:50 AM	Dynamic Training Exercise Introduction and Hands-on Time S.Snowling
11:40 AM	Experience with Simulator Based Training at New Have, CT and Ellsworth, ME J.Nenninger; M.Harris
11:50 AM	Discussion: How Effective Was the Teaching Exercise?
12:00 PM	Lunch
1:30 PM	Conceptual Introduction: Secondary Clarifier Operational Impacts on Process Performance E.Belia
1:45 PM	Tour of Biowin C.Bye
2:00 PM	Steady State Training Exercise Introduction and Hands On C.Bye
2:50 PM	Dynamic Training Exercises Introduction E.Belia
3:00 PM	Networking Break
3:30 PM	Dynamic Training Hands On
4:10 PM	Experience with Simulator-based Training at Grand Rapids and Oakland County, MI B.Vu; M.Daniels
4:20 PM	Final Discussions

W02 Wastewater Microbiology

Saturday, October 8, 2022 8:30 AM - 5:00 PM

Workshop Number: 02

Facility operators, managers and engineers will use staining techniques and phase-contrast microscopes to analyze floc and will identify protozoa, metazoan, and filaments to develop practical information to help them control their processes. Lecture will discuss types of microorganisms involved, environmental factors affecting them, and metabolism and growth characteristics that may affect participant's processes. This combination of learning styles should enable participants to immediately help with related process control problems at their facilities.

Workshop Chair R. Schuyler

Workshop Vice Chair R. Weigand

Workshop Facilitator S. Schuyler

8:30 AM	Introduction
8:45 AM	Biochemistry and Microbiology Basics R.Schuyler
9:30 AM	Microscope Basics (Students at Scopes) R.Weigand
10:00 AM	Networking Break
10:30 AM	Protozoa and Metazoa S.Leach
10:55 AM	Micro Exam Basics and Demo S.Leach; L.Swain
11:10 AM	Micro Exam Practice (Students at Scopes)
12:00 PM	Lunch
1:30 PM	Filament Identification & Oil Immersion E.Stover; T.Stover
2:00 PM	Staining Demonstration E.Stover; T.Stover
2:15 PM	Filament ID Practice with Staining (Students at Scopes)
3:00 PM	Networking Break
3:30 PM	Molecular Testing S.Leach
3:45 PM	Filament Causes and Control S.Scuras
4:00 PM	Final Sample Evaluation (Students at Scopes)
4:35 PM	Final Reports and Wrap Up

W03 Refinery and Petrochemical Wastewater Treatment: Concepts, Operation, and Troubleshooting

Sunday, October 9, 2022

8:30 AM - 5:00 PM

Workshop Number: 03

This workshop will focus on the operational elements of major unit operations of a typical refinery wastewater treatment system. First, participants will receive a general overview of treatment processes and its function. Second, a facilitator will present an operational issue for that unit process. The workshop attendees will separate into groups and identify how the issue could be resolved. Once the groups have presented possible solutions, the facilitator will then provide an example on how the issue was resolved at a specific facility. A panel of experts will be available to answer any broader questions from participants on related and relevant issues.

Workshop Chair E.Gill

Workshop Vice Chair J.Shamas

8:30 AM	Introduction
8:40 AM	Topic 1: How To Decide If A New Waste Should Be Accepted D.Marrs
9:30 AM	Topic 1: Problem Solving Session
10:00 AM	Networking Break
10:30 AM	Topic 2: Challenges with Refinery Oil/Water Separators and Impacts on Performance T.Schultz
11:00 AM	Topic 2: Problem Solving Session
11:30 AM	Topic 3: Bio-inhibition and Aquatic Toxicity Issues, Causes, Troubleshooting, and Mitigation J.Shamas
12:00 PM	Lunch
1:30 PM	Topic 3: Problem Solving Session
2:00 PM	Topic 4: Alleviating Overloaded Conditions in Aeration Basins and Clarifiers E.Gill
2:30 PM	Topic 4: Problem Solving Session
3:00 PM	Networking Break
3:30 PM	Topic 5: Cost-effective Solutions for Removing Total Nitrogen, Particularly Nitrates Will Be Evaluated G.Dicataldo
4:00 PM	Topic 5: Problem Solving Session
4:30 PM	Group Discussion

W04 Game-Based Modeling

Sunday, October 10, 2022 8:30 AM - 5:00 PM

Workshop Number: 04

Teams of five to six wastewater professionals will compete for prizes and glory in a process modeling competition at the Game-Based Modeling workshop. Teams will work together to optimize, strategize, and execute operation techniques in five different simulation platforms. Each platform (BioWin, GPS-X, SIMBA#, Sumo, and WEST) will present an existing facility process model with unique objectives and restrictions. New modelers will be exposed to the capabilities of process simulators with a focus on problem-solving during this very interactive workshop.

Workshop Chair H.Stewart

Workshop Vice Chair M.Miller

8:30 AM	Welcome and Introductions
8:40 AM	Why Do We Use Process Models? H.Stewart
9:00 AM	Brief Overview of Process Simulation Software and Description of Gaming Stations C.Bye; O.Schraa; I.Takacs; S.Snowling; E.Remigi
9:50 AM	Competition Scoring and Break Out Into Teams M.Miller
10:00 AM	Networking Break
10:30 AM	Gaming Station 1
11:15 AM	Gaming Station 2
12:00 PM	Lunch
1:30 PM	Gaming Station 3
2:15 PM	Gaming Station 4
3:00 PM	Networking Break
3:30 PM	Gaming Station 5
4:15 PM	Wrap-up and Announcement of Winners

W05 Wastewater Microbiology

Sunday, October 8, 2022 8:30 AM - 5:00 PM

Workshop Number: 05

Facility operators, managers and engineers will use staining techniques and phase-contrast microscopes to analyze floc and will identify protozoa, metazoan, and filaments to develop practical information to help them control their processes. Lecture will discuss types of microorganisms involved, environmental factors affecting them, and metabolism and growth characteristics that may affect participant's processes. This combination of learning styles should enable participants to immediately help with related process control problems at their facilities.

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3:30 PM	Molecular Testing S.Leach
3:45 PM	Filament Causes and Control S.Scuras
4:00 PM	Final Sample Evaluation (Students at Scopes)
4:35 PM	Final Reports and Wrap Up

W06 Activated Sludge and BNR Process Control: Hands-On in the Real World (Off-Site)

Sunday, October 9, 2022

6:45 AM - 3:00 PM

Workshop Number: 06

Leading practitioners will present this comprehensive workshop and share their experiences in an interactive environment. The all-star cast of presenters first will cover the basics of activated sludge and biological nutrient removal (BNR). Then, they will focus on overcoming practical design problems that have plagued many systems. Process control parameters, side-stream considerations, and tips for identifying microorganisms and establishing a healthy biomass all will be part of the day's demonstrations. The format is informal and real-life examples and questions are welcomed.

Workshop Chair D. Nelson

Workshop Speakers N.Cassity; E.Lynne; J.MacDonald; S.Myers; A.Jennings; J.Esler

6:45 AM	Board Bus
7:00 AM	Travel Time to Off-Site Venue
7:30 AM	Welcome/Orientation and Plant Introduction
7:45 AM	Morning Station Rotations
11:05 AM	Lunch
11:40 AM	Afternoon Station Rotations
2:00 PM	Wrap Up and Board Bus

W07 Current Status of Co-Digestion and the Journey to Energy Neutrality

Sunday, October 9, 2022

8:30 AM - 5:00 PM

Workshop Number: 07

This workshop will give participants a holistic understanding of the effects of co-digestion. Topics will range from feedstock handling to liquid sidestream and downstream effects and all the way to energy neutrality. Through interactive hands-on activities, participants will learn the operational considerations needed to harness maximum benefits of co-digestion while mitigating negative effects. The morning session of the workshop will focus on the effects of co-digestion and the afternoon session will focus on practical paths to achieving energy neutrality.

Workshop Chair J.Ohemeng-Ntiamoah

Workshop Vice Chair R.Schroedel

8:30 AM	Welcome and Overview
8:35 AM	Getting Started? Lessons Learned and Operational Issues to Note M.Streicher
9:00 AM	Feedstock Depackaging/Material Handling J.Koch; T.Darby
9:30 AM	Downstream Impacts of Co-Digestion: Biogas Microconstituents, Dewatering, and Cake Quality M.Higgins
10:00 AM	Networking Break
10:30 AM	Liquid Sidestream Treatment Impacts of Co-Digestion J.Koch
11:00 AM	Feedstock Evaluation Interactive Activity
12:00 PM	Lunch
1:30 PM	WEF Energy Neutrality Tool A.Umble
2:00 PM	Net Zero Utility Case Study: Hermitage Municipal Authority S.Viswanathan
2:30 PM	Better With Two Than One: Kishwaukee Water Reclamation District's Approach to Energy Neutrality M.Eddington; M.Holland
3:00 PM	Networking Break
3:30 PM	Energy/RNG Markets B.Pleima
4:00 PM	The Biogas Utilization Alternative Analysis Exercise A.Underwood

W08 Overcoming Uncertainty: Confident Decisions in the Face of Climate Change

Sunday, October 9, 2022

8:30 AM - 5:00 PM

Workshop Number: 08

Although advances in climate science have dramatically enhanced our understanding of changes in extreme weather and sea level rise, long-term projections are widely divergent due to natural variability, model uncertainty, and unknown future emissions. We must plan and make decisions without accurately predicting future conditions using new approaches to engineering and planning. This workshop explores the latest science, trends, data interpretation, and practical applications for adaptation and risk management that support confident decisions under uncertainty.

Workshop Chair C.Toro-Escobar

Workshop Vice Chair B.Vieux

8:30 AM	Welcome and Introductions
8:40 AM	General Introduction and Key Concepts N.Foged; T.Sprague
9:15 AM	What To Expect During the Workshop & Introductions J.Sinderbrand; J.Shiner
9:30 AM	SLR and Precipitation Changes: A National Perspective J.Rockwell
10:00 AM	Networking Break
10:30 AM	Data Analysis Techniques and Risk Planning M.Bartlett; E.Othmer
11:00 AM	Machine Learning Exercise M.Bartlett; C.Toro-Escobar
11:30 AM	Northeast Perspective: Strategies to Reduce Climate Change Risks J.Sinderbrand
12:00 PM	Lunch
1:30 PM	Climate Science to Support Utility Decisions N.Foged
2:00 PM	West Coast Perspective: Renegotiating a Consent Decree
2:20 PM	Approaches to Adaptation Planning T.Sprague
2:40 PM	Climate-Ready Planning in Boston W.Jewell
3:00 PM	Networking Break
3:30 PM	Rainfall Characterization B.Vieux
4:00 PM	Make Your Own Projected Design Event C.Toro-Escobar; B.Vieux
4:30 PM	Central and Gulf Coast Perspectives: How to Manage Uncertainty for Long-Term Planning J.Shiner; T.Antrup

W09 So You Thought You Were Done? Finding the End Point of Wet Weather Control Programs

Sunday, October 9, 2022

8:30 AM - 5:00 PM

Workshop Number: 09

Regulatory and utility leaders from across the United States representing decades of implementation experience will discuss current challenges with wet weather programs. Combined sewer overflow (CSO) program leaders will discuss regulatory and technology trends. Workshop participants will work collaboratively to consider the challenges that are facing these programs and propose solutions which will then be compared with the utility's planned direction. Participants will gain insights into critical issues facing these municipalities under current regulatory structures.

Workshop Chair C.Hufnagel

Workshop Vice Chair E.Harold

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|-----------------|--|
| 8:30 AM | Welcome and Review of Agenda |
| 8:45 AM | Regulatory Background and Regulated Community Perspective
F.Andes; D.Nagle |
| 9:30 AM | Rapid Fire Question Session with Utility Leaders
B.Bingham; A.Mockos; S.Vallabhaneni; B.Kubaska; Z.Monge |
| 10:00 AM | Networking Break |
| 10:30 AM | Problem Solving Session: Adaptive Management/Changing Direction
S.Vallabhaneni; A.Mockos |
| 12:00 PM | Lunch |
| 1:30 PM | Wet Weather Technologies: What Is Working?
B.Bingham; B.Kubaska |
| 3:00 PM | Networking Break |
| 3:30 PM | Facilitated Discussion on Meeting Regulatory Standards
F.Andes; W.McMillin; S.FitzGerald |
| 4:30 PM | Final Thoughts and Wrap Up |

W10 Emerging Pathogens and Microconstituents in Wastewater/Water Reuse: Challenges and Opportunities

Sunday, October 9, 2022

8:30 AM - 5:00 PM

Workshop Number: 10

The wastewater and water reuse sector continues to advance the scientific understanding of the risks, fate, and control of pathogens and constituents of emerging concern. Topics examined will include the latest information on risks, fate, and control of pathogens; antibiotic resistant genes and bacteria; hormonally active substances; pharmaceuticals; microplastics; personal care products; and per- and poly-fluorinated alkyl compounds (PFAS) (including fire-fighting foams). These factors will be examined in various water sources —wastewater, non-potable reclaimed water, and purified reclaimed water for potable water reuse.

Workshop Chair J.Reina

Workshop Vice Chair S.Schaefer

8:30 AM	Opening
8:45 AM	Contaminants of Emerging Concern in Septic Systems and During De Facto Water Reuse S.Glassmeyer
9:10 AM	Microplastics: Interaction with Pathogens and Other Microplastics in Treated Wastewater B.Sturm
9:35 AM	Largest Global Sampling/Sequencing Campaign for the Development of an International Wastewater Surveillance Database to Support Public Health Decision-Making D.Fatta-Kassinos
10:00 AM	Networking Break
10:30 AM	Quantitative Microbial Risk Assessment (QMRA) in Combination with New Molecular Methods (WRF Project #4774) B.Pecson
10:50 AM	Antibiotic Resistance Bacteria Research (included WRF Project #4813) I.Keenum
11:10 AM	Development of Analytical Protocols for Bioassays to Analyze Chemicals of Emerging Concern
11:40 AM	Extreme Weather Events: Causes of Increased Microconstituents Occurrence in Surface Waters
12:00 PM	Lunch
1:30 PM	Disinfection Byproduct Formation in Treated Wastewater and Key Considerations for Potable and Non-potable Reuse
1:55 PM	PFAS in Treated Wastewater: Solutions and Technology Updates in the Application of Conventional and Emerging PFAS-selective Adsorbents S.Grieco
2:20 PM	HRSD Sustainable Water Initiative for Tomorrow (SWIFT) Updates G.Salazar-Benites
2:40 PM	Schematic Design Competition
3:00 PM	Networking Break
3:30 PM	Schematic Design Competition, Break-Neck Competitive Gaming & Wrap Up

W11 Equipping Your Utility to Address PFAS in Water Reuse: State of the Science, Emerging Trends, and Navigating the Regulatory Pathway

Sunday, October 9, 2022

8:30 AM - 5:00 PM

Workshop Number: 11

This workshop aims to highlight the far-reaching impacts of PFAS in the water/wastewater/reuse sector. Topics covered will include chemical and physical properties of PFAS with an emphasis on their health effects, federal regulations and anticipated timeline for the development of MCLs, best practices in field sampling and lab analysis for all water, established and emerging technologies to treat/remediate PFAS in water reuse projects, and lessons learned from case studies of successful PFAS treatment on One Water projects.

Workshop Chair P.Kumar

Workshop Vice Chair T.Moore

Workshop Vice Chair R.Dominguez-Ramirez

8:30 AM	Introduction and Welcome
8:45 AM	PFAS Primer and PFAS Measurement in Water & Wastewater T.McKnight
9:30 AM	How Will PFAS Be Regulated? The EPA PFAS Strategic Roadmap C.Moody
10:00 AM	Networking Break
10:30 AM	PFAS Basics Work Groups
11:00 AM	Established Treatment Practices in Water Reuse: U.S. Perspective E.Steinle-Darling
11:30 AM	Established Treatment Practices in Water Reuse: Global Perspective I.Ross
12:00 PM	Lunch
1:30 PM	Emerging Technology: De-Fluoro Electrochemical Oxidation R.Gwinn
1:50 PM	Emerging Technology: Destruction of PFAS in IX Still Bottoms – Finding the Right Fit E.Houtz
2:10 PM	Technology Demonstrations
3:00 PM	Networking Break
3:30 PM	Case Study: PFAS Removal Using GAC and IX at City of Stuart’s WTP M.Miller; D.Peters
3:45 PM	Case Study 2: Evolution of PFAS Management at the GWRS and Related Research at OCWD J.Dadakis
4:00 PM	Case Study 3: Results of PFAS Investigations on Potable Reuse at the SWIFT Research Center and Biosolids at HRSD D.Gonzalez
4:15 PM	Case Study Analysis

W12 Transformative Opportunities in Stormwater: Elevating Resilience, Equity, and Workforce Development

Sunday, October 9, 2022

8:30 AM - 5:00 PM

Workshop Number: 12

Join an inspired discussion about municipal-led innovation to manage stormwater in a manner that advances social equity. Listen to remarkable stories exploring critical challenges and offering insights. Explore the newly published Equity Guide for Green Stormwater Infrastructure Practitioners, which identifies equity best practices and metrics. The session will feature engaging activities related to preventing green displacement and centering community. Attendees will gain tangible strategies and next steps to advance equity in their communities.

Workshop Chair A.Mendez

Workshop Chair L.Adams

Workshop Vice Chair D.Sjostrom

Workshop Vice Chair B.Ohene-Okae

8:30 AM	Introductions; Review of the Agenda, Objectives, Expectations, and Aspirations
9:00 AM	Community Water Equity Frontline Story Y.Noibi
9:10 AM	The Role of Stormwater in Climate Resilience K.Baja
9:20 AM	Infrastructure Investment and Gentrification D.Schrauth
9:30 AM	Stormwater and Health Equity D.Sjostrom
9:40 AM	Stormwater and Workforce Development K.Brown
9:50 AM	Discussion and Questions
10:00 AM	Networking Break
10:30 AM	Introduction to Co-Production N.Herbert
10:45 AM	Exploration of Guiding Principles for Stormwater & Equity
11:30 AM	Collectively Draft Framework of Common Guiding Principles for Stormwater & Equity L.Adams
12:00 PM	Lunch
1:30 PM	Fostering a Shared Language: Equity and Green Infrastructure B.Ohene-Okae
1:45 PM	Exploring the Equity Guide & How to Use It To Effect Change A.Mendez
2:00 PM	Mini-Workshop Prep: Deeper Overview of Centering Community & Preventing Displacement, and Bright Spots K.Ihinchak; T.Hill; S.Cubillo; L.Webster
3:00 PM	Networking Break
3:30 PM	Mini-Workshops: Centering Community or Preventing Displacement
4:30 PM	Workshop Wrap Up

W13 Successful Commissioning of Capital Projects by Understanding Commissioning Failure Modes and Engaging Stakeholders

Sunday, October 9, 2022

8:30 AM - 5:00 PM

Workshop Number: 13

Successful commissioning of capital projects requires that operations and maintenance (O&M) related downstream costs, which represents 80% of the life cycle cost of any capital project, are safeguarded. The workshop is designed to highlight the role that all stakeholders play in ensuring successful commissioning. These include the utility management and engineering staff, design consultants, contractors, equipment suppliers, O&M specialists, construction managers and O&M staff. The workshop will explain the failure modes in a commissioning effort and demonstrate how strategic engagement of stakeholders can ensure smooth commissioning for all parties.

Workshop Chair S.Kharkar
Workshop Vice Chair S.Passaro
Workshop Facilitator D. Parker
Workshop Facilitator J.Alba
Workshop Facilitator C.deBarbadillo
Workshop Facilitator M.Cecil
Workshop Facilitator B.Fairweather

8:30 AM **Welcome, Commissioning Overview and Learning Objectives**
S.Kharkar

8:40 AM **Defining Commissioning and Project Delivery Methods to Create a Common Language for Workshop Participants**
S.Kharkar; H.Dandach

9:00 AM **Breakout Session 1: Establishing A Common Understanding of Commissioning Interfaces**

9:30 AM **Breakout Session 2: Identifying Potential Commissioning Problems At Each Commissioning Interface**

10:00 AM **Networking Break**

10:30 AM **Facilitated Discussion: Providing Solutions to Problems Identified at Each of the Commissioning Interfaces**

11:40 AM **Summary of Morning Discussion and Preview of Afternoon Session**
S.Kharkar

12:00 PM **Lunch**

1:30 PM **Restructuring Operator Training for Effectiveness**
S.Passaro

2:00 PM **Reinforcing Appreciation of Required Interaction: Via Game 1**
S.Passaro

2:30 PM **Understand the P-F Curve and Defect Elimination in Design**
T.Bruton

3:00 PM **Networking Break**

3:30 PM **Understanding Equipment and Installation Defects and How to Uncover Them in Commissioning Phase including Hands-on Demonstration of Technologies**
T.Bruton

4:25 PM **Reinforcing Understanding of Maintenance: Via Game 2**

W14 Brainstorming HOW to Prioritize Equity and GHG Benefits in CIP and Services Decisions

Sunday, October 9, 2022

8:30 AM - 5:00 PM

Workshop Number: 14

Thought leaders will convene to brainstorm how environmental justice and greenhouse gas (GHG) reduction can be more accurately valued and considered when evaluating where to invest a utility's limited capital or which new services to offer for underserved segments of their communities. The workshop hopes to create new decision templates that better account for triple-bottom-line effects.

Workshop Chair S.Ude

Workshop Vice Chair J.Gajwani

- | | |
|-----------------|---|
| 8:30 AM | Introductions |
| 8:45 AM | Opportunities for More Complete and Better Service
C.Peot; S.Ude |
| 9:00 AM | How Prioritizing Social and Environmental Needs Enhances Utility Resilience
HG.Chissell |
| 9:20 AM | Breakout #1: Goal Setting |
| 10:00 AM | Networking Break |
| 10:30 AM | Report-outs from Breakout #1 |
| 10:40 AM | Louisville MSD's Values and Successes
Z.English |
| 10:50 AM | How Reducing GHGs Affects Vancouvers Priorities
J.Carmichael |
| 11:00 AM | Breakout #2: Service Offerings |
| 11:35 AM | Report-outs from Breakout Group #2 |
| 11:45 AM | Breaking Core vs. Non-Core Inertia Enables Opportunities
J.Willis |
| 12:00 PM | Lunch Break |
| 1:30 PM | Equity and GHG Drivers and Governance at SFPUC
K.Ving |
| 1:45 PM | Breakout #3: Capital Improvements Planning |
| 2:15 PM | Report-outs from Breakout #3 |
| 2:25 PM | Overview of Breakout Exercise #3 |
| 2:35 PM | Breakout #4: Consolidated Decision-Making Systems |
| 3:00 PM | Networking Break |
| 3:30 PM | Report-outs from Breakout #4 |
| 4:25 PM | Final Plenary and Round Robin Q&A |
| 4:50 PM | Closing and Final Summary of Take Home Ideas |

W15 Reimagining the Water Sector Through Equity and Justice

Sunday, October 9, 2022

8:30 AM - 5:00 PM

Workshop Number: 15

This workshop will focus on understanding existing dynamics and considering innovative approaches and partnerships to transforming into communities of the future through a water equity mission. The workshop will seek to maximize community benefits from water infrastructure investment through possibilities of community and utility partnerships/outreach, expanding collaboration and supplier diversity, affordability programs for vulnerable communities, facilitating community resilience in the face of climate change, policy/legislation, and integrating these environmental/social/governmental (ESG) factors into long-term watershed management and planning.

Workshop Chair W.Walker

Workshop Vice Chair V.Johnson

8:30 AM **Introductions, Workshop Overview, Group Activities to Set the Stage and Current Landscape Presentation**

W.Walker; V.Johnson

9:30 AM **A Call to Action for Climate Mitigation and Climate Justice**

L.Carpenter

10:00 AM **Networking Break**

10:30 AM **Legislative Overview**

L.Carpenter

10:50 AM **Racial Equity**

C.Pichon Battle

11:10 AM **Group Activity**

12:00 PM **Lunch Break**

1:30 PM **How Multi-Sector Partnerships Advance Equity**

T.Parrot; S.Horne

1:55 PM **Water Equity Roadmap Case Studies: Buffalo, Camden, DC/Atlanta**

O.McFoy; A.Kricun

2:30 PM **Case Study Breakouts**

3:00 PM **Networking Break**

3:30 PM **Exploratory Writing Session**

4:00 PM **Facilitated Discussion**

4:30 PM **Call to Action**

W16 Are You Talkin' To Me? Learning How to Communicate With Your Audience

Tuesday, October 11, 2022 12:30 PM - 5:00 PM

Workshop Number: 16

Expert water communicators will lead this workshop on how to effectively present on water through storytelling and connection with audiences. Participants will learn best practices directly from subject matter experts through interactive activities. Throughout the workshop participants will prepare presentation materials using the lessons and takeaways from the speakers to improve their skills. This workshop is recommended for anyone looking to improve their skills in preparing technical presentations and delivering them to diverse audiences.

Workshop Chair G.Yager

Workshop Vice Chair V.Chou

Workshop Vice Chair E.Katsoulas

12:30 PM	Introduction & Concepts
12:35 PM	Keynote Presentation S.Corso
1:05 PM	Group Session 1
2:00 PM	Networking Break
2:15 PM	Case Study 1: Understanding Different Audience Perspectives D.Duncan
2:30 PM	Group Session 2
3:15 PM	Networking Break
3:30 PM	Case Study 2: Connecting With Your Audience S.Dunifon
3:45 PM	Group Session 3
4:45 PM	Group Reflections