

# TECHNICAL PROGRAM

TUESDAY, AUGUST 8, 2023

MAINTENANCE	Dave Badgley, Chair	Jason Badgley, Co-Chair	SHOWROOM	SESSION
7:30 AM – 8:20 AM	<b>Maintenance Headaches Caused by Commissioning Failures</b> – Ralph Stevens, Facilitation Unlimited			1106
8:30 AM – 9:20 AM	<b>Integrating Valve Inspections With Pipeline Inspections 2023</b> – Britt Klein, Xylem Inc.			1206
9:40 AM – 10:30 AM	<b>Overview of Classic and the New State of the Art Pipeline Rehabilitation Technology</b> Dave Badgley, Performance Pipeline Technologys			1306
10:40 AM – 11:30 AM	<b>Trenchless Rehabilitation for Pressure Water, Sewer Force Mains and Treatment Plants</b> Jeff Cauffman, Primus Line			1406
11:40 AM – 12:30 PM	<b>Demands for High Performance Specialty Coatings</b> Greg Wallace, Imerys Sewpercoat; Kim Almeida, Imerys			1506
2:00 PM – 2:50 PM	<b>Composite Manhole Covers Help Solve A Leading Cause of Water Pollution</b> Chad Nunnery, Composite Access Products (CAP)			1606
3:00 PM – 3:50 PM	<b>Hydraulic Odor and Corrosion Control in Sewer Drops and Water Tank Aeration</b> Kerry Koressel, IPEX USA Vortex			1706
WASTEWATER COLLECTION	Brandon Martinez, Chair	Andy Keller, Co-Chair	GRAND BALLROOM B	SESSION
7:30 AM – 8:20 AM	<b>12 Years &amp; Counting: City of Las Vegas Small Diameter Sewer Assessment Program Achievement</b> Marco Velarde, Brown and Caldwell; Jon Osborne, Brown and Caldwell			1102
8:30 AM – 9:20 AM	<b>Pilot Tube Guided Boring for New Gravity Sewer Installation in San Diego</b> Jeff Boschert, National Clay Pipe Institute			1202
9:40 AM – 10:30 AM	<b>Nozzle Capacity Cleaning</b> – Malvin Nezat, Nezat Training and Consulting Inc.			1302
10:40 AM – 11:30 AM	<b>Wastewater Inspection Technologies - Complete Understanding of Your System</b> – Matt Olson, CUES Inc.			1402
11:40 AM – 12:30 PM	<b>Bakersfield's Odor Control Breakthrough: SulFeLox Saves Money, Improves Performance</b> Michael Collins, USP Technologies; Kevin Peoples, City of Bakersfield			1502
2:00 PM – 2:50 PM	<b>Know Your Sewer Cleaning Hose - Practices, Identification, Repair, and Safety</b> Kevin Witt, UEMSI/HTV; Bob Glick, Piranha Hose Products Inc.			1602
3:00 PM – 3:50 PM	<b>Advancements in Underground Infrastructure Data Collection and Analysis</b> Mike Russin, WinCan; Andrew Wicker, Envirosight, LLC			1702
WASTEWATER TREATMENT	LeAnna Risso, Chair	Sidney Innerebner, Co-Chair	SONOMA C & D	SESSION
7:30 AM – 8:20 AM	<b>Keys to Practical Equipment and Process Troubleshooting - Part 1</b> – Ken Schnaars, Brown and Caldwell			1110
8:30 AM – 9:20 AM	<b>Keys to Practical Equipment and Process Troubleshooting - Part 2</b> – Ken Schnaars, Brown and Caldwell			1210
9:40 AM – 10:30 AM	<b>BNR Optimization to Achieve Very Low Effluent Nitrogen</b> – John Richardson, Garver USA			1310
10:40 AM – 11:30 AM	<b>Evaluating Facility Process Control Modification for Consistent NH<sub>3</sub> Removal Pilot Study</b> Dave Commons, Valley Sanitary District; James Mills, Valley Sanitary District			1410
11:40 AM – 12:30 PM	<b>Troubleshooting with Microbiology</b> – Steve Leach, Leach Microbial			1510
2:00 PM – 2:50 PM	<b>Troubleshooting an MBR Process Upset in a Landfill Leachate Treatment Facility</b> Ronald Overholt, U.S. Water Industrial Group			1610
3:00 PM – 3:50 PM	<b>Case Studies for Aerobic Granular Sludge in North America</b> – Brett Quimby, Aqua-Aerobic Systems			1710
WATER DISTRIBUTION	Ken Snow, Chair	Steve Davis, Co-Chair	GRAND BALLROOM A	SESSION
7:30 AM – 8:20 AM	<b>Cathodic Protection Monitoring in Water and Wastewater Systems</b> – Jamey Hilleary, Elecsys Corporation			1111
8:30 AM – 9:20 AM	<b>Leak Detection and Pressure Modulation to Reduce Non-Revenue Water Loss</b> Kevin Barnes, Fluid Conservation Systems			1211
9:40 AM – 10:30 AM	<b>Pipeline Contingency Planning and Selection of Mechanical Repair Fittings</b> Mike Scholz, JCM Industries			1311
10:40 AM – 11:30 AM	<b>Why Reline Instead of Dig and Replace? An Eco-Friendly, Cost-Effective Approach for Waterlines</b> Steve Burks, CPM Pipelines; Levi Hawkins, CPM Pipelines			1411
1:00 PM – 1:50 PM	<b>Waterline Joint Restraints: Why, Where, and Which One?</b> – Jeff Phillips, Star Pipe Products			1511
2:00 PM – 2:50 PM	<b>Peristaltic &amp; Diaphragm Chemical Metering Pump, Accessories and Systems for Water Systems</b> Richard Hopkins, Blue-White			1611
3:00 PM – 3:50 PM	<b>Chlorine Measurement - The Pros and Cons of Different Methods in Water Systems</b> Amirali Jiwani, HF Scientific			1711

7:00 AM - 7:30 AM - JAVA JOLT

9:20 AM - 9:40 AM - JAVA JOLT

LUNCH A - 11:30 AM - 1:00 PM / LUNCH B - 12:30 PM - 2:00 PM

# TECHNICAL PROGRAM

TUESDAY, AUGUST 8, 2023

ELECTRICAL / INSTRUMENTATION & CONTROLS		Heath Szymanski, Chair	Shane Hershey, Co-Chair	SONOMA B	SESSION
7:30 AM – 8:20 AM	<b>Protecting Wastewater System Motors from Damage on PWM Systems</b> – Mark Gaskill, Nidec Motor Corporation				1114
8:30 AM – 9:20 AM	<b>Out of Paper – Transitioning To Digital Field Forms For Daily Production and Treatment</b> Mark French, NJBSoft; Joshi Pranam, NJB Soft				1214
9:40 AM – 10:30 AM	<b>How Cloud-Based SCADA Provides True System Redundancy</b> – Mauritz Botha, XiO, Inc.				1314
10:40 AM – 11:30 AM	<b>Benefits of Online Amperometric Chlorine Measurement and Control</b> – Chris LaCour, ProMinent Fluid Controls				1414
1:00 PM – 1:50 PM	<b>Cover Your Ass(ets) by Developing a Dynamic Asset Management Program</b> – Alec Hanson, Hazen and Sawyer				1514
2:00 PM – 2:50 PM	<b>Convergence: Operational Technology Networks and the Evolving Cyber Threatscape</b> Tony Bryson, Town of Gilbert				1614
3:00 PM – 3:50 PM	<b>The Modern Water/Wastewater Control System Demystified: SCADA Foundations for Users</b> Luke Stephenson, Enterprise Automation, A Tetra Tech Company; Nicholas Blischak, Enterprise Automation, A Tetra Tech Company				1714
GROUNDWATER/RECHARGE		Geno Mammini, Chair	Don Hanson, Co-Chair	NAPA C & D	SESSION
7:30 AM – 8:20 AM	<b>Understanding Well Fouling and Developing Accurate Strategies - Part 1</b> Michael Schnieders, Water Systems Engineering; Edd Schofield, Johnson Screens				1104
8:30 AM – 9:20 AM	<b>Understanding Well Fouling and Developing Accurate Strategies - Part 2</b> Michael Schnieders, Water Systems Engineering; Edd Schofield, Johnson Screens				1204
9:40 AM – 10:30 AM	<b>Well Life and Renewal Program - Part 1</b> – Geoffrey Bates, California Water Service				1304
10:40 AM – 11:30 AM	<b>Well Life and Renewal Program - Part 2</b> – Geoffrey Bates, California Water Service				1404
11:40 AM – 12:30 PM	<b>Water Well Rehabilitation: Benefits, Risks, &amp; Costs Associated with the Newest Technology</b> Michael Bodart, General Pump Company, Inc.				1504
2:00 PM – 2:50 PM	<b>Griggs-Walnut Groundwater Plume Superfund Site: From Dry Cleaner to Clean Drinking</b> Chase Stearnes, Daniel B. Stephens & Associates, Inc.				1604
3:00 PM – 3:50 PM	<b>Recharge Wells Revisited</b> – Roxanne Holland, City of Sedona; Mike Atwater, City of Sedona				1704
LABORATORY		John Shephard, Chair	Dana LaRance, Co-Chair	SONOMA A	SESSION
7:30 AM – 8:20 AM	<b>Advanced Dose Control: iCT-based Optimization of Disinfection Chemistries</b> – Ian Watson, USP Technologies				1103
8:30 AM – 9:20 AM	<b>Ins and Outs of BOD</b> – Rita Rasmussen, City of Henderson				1203
9:40 AM – 10:30 AM	<b>Proper Record Keeping for Sample Collection and Analysis at Water and Wastewater Plants</b> Peter Strimple, CTI & Associates				1303
10:40 AM – 11:30 AM	<b>QC Procedures for pH, Chlorine, and Turbidity Analyses at In-House Laboratories</b> – Peter Strimple, CTI & Associates				1403
1:00 PM – 1:50 PM	<b>Micro ELN<sup>®</sup>, an Innovative Data Management System for Automated Microbiological Analysis</b> Victoria Littlepage, BT Soft; Devon Morgan, Clark County Water Reclamation District				1503
2:00 PM – 2:50 PM	<b>Wastewater Testing: Enzymatic Methods Used to Detect Indicator Bacteria</b> – Shawn Dubois, IDEXX				1603
3:00 PM – 3:50 PM	<b>The Environmental Laboratory: Sample Collection Procedures</b> Marci Payne, Legend Technical Services of Arizona, Inc.				1703
RECLAIM / REUSE		Frederick Tack, Chair	Coenraad Pretorius, Co-Chair	NAPA A & B	SESSION
7:30 AM – 8:20 AM	<b>Virus Log Reduction Values (LRV) for Secondary Biological Treatment</b> Phillip Wang, Southern Nevada Water Authority; Tyler Hill, Southern Nevada Water Authority				1109
8:30 AM – 9:20 AM	<b>Reverse Osmosis in Potable Reuse: Increasing LRV Credit Through Different Virus Surrogates</b> Hannah Ray, Southern Nevada Water Authority				1209
9:40 AM – 10:30 AM	<b>WRF Expansion and Optimization: Squeezing Every Drop Out of Resources and Footprint</b> Gary Whitten, GHD; Todd Hansen, MGC Contractors				1309
10:40 AM – 11:30 AM	<b>Utilizing MBR+RO to Reduce Water Consumption by 70% at a Tractor Manufacturing Facility</b> Larry Morris, Kubota Membrane USA Corporation				1409
1:00 PM – 1:50 PM	<b>Urban Run-Off &amp; Storm Water Purification for Reuse</b> – Brian Butters, Purifics Water Inc.; Tony Powell, Purifics Water Inc.				1509
2:00 PM – 2:50 PM	<b>Source Water Optimization Solutions for Nutrient Control and Reduced Carbon Emissions</b> Steven Myers, Hach				1609
3:00 PM – 3:50 PM	<b>Advanced Controls for UV Disinfection and Advanced Oxidation</b> – Andrew Daley, Trojan Technologies				1709

7:00 AM - 7:30 AM - JAVA JOLT

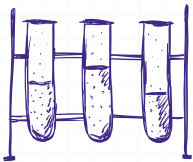
9:20 AM - 9:40 AM - JAVA JOLT

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# TECHNICAL PROGRAM

TUESDAY, AUGUST 8, 2023

STORMWATER	Jennifer Davis, Chair	Jessica Gaffney, Co-Chair	GRANDVIEW LOUNGE	SESSION	7:00 AM - 7:30 AM - JAVA JOLT
7:30 AM – 8:20 AM	<b>Cigarette Waste and the Waters of America</b> – <i>Kenneth Beckstead, Cigarette Pollution Solutions</i>			1113	
8:30 AM – 9:20 AM	<b>Lower Las Vegas Wash – Seeking Stability in a Dynamic Stream System</b> <i>Matt Wilkinson, Atkins; Anita Marquez, Southern Nevada Water Authority</i>			1213	
9:40 AM – 10:30 AM	<b>Retrofit and Rehabilitation of Bioretention LID BMPs</b> – <i>Adrian Montoya, Riverside County Flood Control &amp; Water Conservation District; Matt Yeager, Riverside County Flood Control &amp; Water Conservation District</i>			1313	
10:40 AM – 11:30 AM	<b>Stormwater Capture and Recycling in an Urban Park</b> <i>Ron Rovanseck, PACE Advanced Water Engineering; James Matthews, PACE Advanced Water Engineering</i>			1413	
1:00 PM – 1:50 PM	<b>Nevada Division of Environmental Protection (NDEP): What's New in Stormwater?</b> <i>Kathryn Foxworthy, Nevada Division of Environmental Protection (NDEP)</i>			1513	
2:00 PM – 2:50 PM	<b>No More Rock, Paper, Scissors: The Shift to Dynamic, Interactive, and Digital Reporting</b> <i>Elizabeth Ruedas, Michael Baker International; Leigh Patterson, California State Parks</i>			1613	
3:00 PM – 3:50 PM	<b>Resilient Stormwater Infrastructure – Wildfires, Emergency Evacuation, and Recovery</b> <i>Gean Na, American Concrete Pipe Association of California</i>			1713	



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ONCE THE SEMINAR IS OVER, YOU WILL NEED YOUR CONFIRMATION NUMBER TO RETRIEVE YOUR CEU INFORMATION.

#16  
Smith & Loveless Inc  
1/2H  
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# TECHNICAL PROGRAM

WEDNESDAY, AUGUST 9, 2023

MAINTENANCE	Dave Badgley, Chair	Jason Badgley, Co-Chair	SHOWROOM	SESSION
7:30 AM – 8:20 AM	<b>Will Your Tank Survive a Major Earthquake</b> – Mark Moore, Blue Locker Commercial Diving			2106
8:30 AM – 9:20 AM	<b>Maintenance Hole, Pump &amp; Lift Station, Utility Vault Structure Rehabilitation Technologies</b> Dave Badgley, Performance Pipeline Technologies			2206
9:40 AM – 10:30 AM	<b>Structural Assessments and Asset Preservation Strategies for Steel Water Tanks</b> Leslie Scott, Tank Industry Consultants			2306
10:40 AM – 11:30 AM	<b>Optimizing Water Main Rehabilitation Using the “Assess-and-Fix” Approach</b> Randall Cooper, Envirologics Engineering			2406
11:40 AM – 12:30 PM	<b>Jeopardy: An Interactive Lesson on the Functions of Water &amp; Wastewater Air Valves</b> Crystal Flitton, GSM Arizona			2506
2:00 PM – 2:50 PM	<b>The Answer to Sustainable Wastewater Treatment, Conveyance &amp; Surface Water Protection</b> Suzan Chin-Taylor, Creative Ravin; Rodney Dickerson, PE, EnBiorganic Technologies			2606
3:00 PM – 3:50 PM	<b>Predictive Maintenance for Electric Motors</b> – Don Taft, Valley Power Systems			2706
WASTEWATER COLLECTION	Brandon Martinez, Chair	Andy Keller, Co-Chair	GRAND BALLROOM B	SESSION
7:30 AM – 8:20 AM	<b>Hotspot and Periodic Line Cleaning Best Practices</b> – Sean Dingman, Websoft Developers			2102
8:30 AM – 9:20 AM	<b>Principles of Root Foaming - Implementing a Chemical Sewer Root Control Program</b> Tom Edwards, Duke's; Brian Conroy, Duke's			2202
9:40 AM – 10:30 AM	<b>Systematically Analyzing Wastewater Collections Data to Drive Decisions</b> Joseph Siva, Pima County; Jessica McGullam, Pima County			2302
10:40 AM – 11:30 AM	<b>How Will the New ASTM Cleaning Standards Affect Your Sewer Collections Organization?</b> Kent Carlson, National Clay Pipe Institute			2402
11:40 AM – 12:30 PM	<b>Hydraulic Odor &amp; Corrosion Control in Sewer Drops</b> – Kerry Koressel, IPEX USA Vortex			2502
2:00 PM – 2:50 PM	<b>Applications of Wastewater-Based Epidemiology in Public Health: SARS CoV-2 and Beyond</b> Kathrine Crank, Southern Nevada Water Authority; Casey Barber, University of Nevada Las Vegas			2602
3:00 PM – 3:50 PM	<b>Small City, Big Dreams - Implementing an In-House CCTV Program</b> Roxanne Holland, City of Sedona; Greg Payne, City of Sedona			2702
WASTEWATER TREATMENT	LeAnna Risso, Chair	Sidney Innerebner, Co-Chair	SONOMA C & D	SESSION
7:30 AM – 8:20 AM	<b>Densification: Combining Biological, Chemical, and Physical Selection Approaches</b> Daniel Dair, World Water Works			2110
8:30 AM – 9:20 AM	<b>Smart Water: Primer and Case Study Grab Bag</b> – Chris Maher, Clean Water Services			2210
9:40 AM – 10:30 AM	<b>Optimizing Polymer Activation for Improved Dewatering: Following the Science</b> Kevin Sanner, UGSI Solutions; Robin Giguere, UGSI Solutions			2310
10:40 AM – 11:30 AM	<b>The Mechanics of Centrifuge Biosolids Dewatering and Thickening Optimization</b> – Sean Tierney, Frazenburg			2410
11:40 AM – 12:30 PM	<b>Clarifiers: A Discussion of Critical Design Details</b> – John Esler, Clarifiers.com			2510
2:00 PM – 2:50 PM	<b>Put in a Pipe! Closed Vessel UV for Wastewater Disinfection</b> – Patrick Bollman, Evoqua			2610
3:00 PM – 3:50 PM	<b>Applying Ozone and AOP for Multiple Processes at Industrial WWTPs</b> Alex Bettinardi, De Nora Water Technologies			2710
WATER DISTRIBUTION	Ken Snow, Chair	Steve Davis, Co-Chair	GRAND BALLROOM A	SESSION
7:30 AM – 8:20 AM	<b>Why Mix? The Key Benefits and Technology Behind Reservoir Mixing</b> David Hartwig, D&H Water Systems, Inc.			2111
8:30 AM – 9:20 AM	<b>Solutions for Control Tapping, Line-Stops, Valve Insertions</b> – Michael Urwin, Hydra-Stop			2211
9:40 AM – 10:30 AM	<b>Intro to Line Stops, Valve Insertions, Hot Taps, &amp; Pipe Freezing</b> Steven Helm, Tap Master, Inc.			2311
10:40 AM – 11:30 AM	<b>Hydrant Flushing Distribution Water Mains During the Drought, Without Wasting Water!</b> Chris Wilkinson, NO-DES			2411
1:00 PM – 1:50 PM	<b>Fundamentals of Ductile Iron Fittings in Waterlines</b> – Jack Lewis, Tyler Union			2511
2:00 PM – 2:50 PM	<b>New Technologies for Joining &amp; Restraining Pipe in Water Distribution Systems</b> Kenneth Alessi, Hymax a Mueller Brand			2611
3:00 PM – 3:50 PM	<b>Cured-In-Place Pipes - Pipe In Pipe Solution for Ageing Waterlines</b> Lutz Kaiser, IBG HydroTech GmbH			2711

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LUNCH A - 11:30 AM - 1:00 PM / LUNCH B - 12:30 PM - 2:00 PM

# TECHNICAL PROGRAM

## WEDNESDAY, AUGUST 9, 2023

ELECTRICAL / INSTRUMENTATION & CONTROLS		Heath Szymanski, Chair	Shane Hershey, Co-Chair	SONOMA B	SESSION
7:30 AM – 8:20 AM	<b>Chandler Pecos SWTP SCADA Upgrades - Discovery Through Design</b> <i>Teresa Smith-DeHesus, Jacobs; Jay Hardison, Jacobs</i>				2114
8:30 AM – 9:20 AM	<b>Consequences of Water and Wastewater Cyber Breaches and Potential Mitigation Strategies</b> <i>Constantine Antoniou, Schneider Electric</i>				2214
9:40 AM – 10:30 AM	<b>SCADA Network Connectivity Hurdles with Geographically Challenged Sites</b> <i>Mark Reski, Quantum Engineering</i>				2314
10:40 AM – 11:30 AM	<b>Instrumentation Diagnostics Deserve Their Own PLC – Nick Hanson, Endress+Hauser</b>				2414
1:00 PM – 1:50 PM	<b>eRIS - Log Your Data From Anywhere at the Plant &amp; Manage Multiple Data Sources</b> <i>Mike Espejo, Suez; Tim Kruse, Suez</i>				2514
2:00 PM – 2:50 PM	<b>The Electrical Trilogy – Ralph Stevens, Facilitation Unlimited</b>				2614
3:00 PM – 3:50 PM	<b>Masaqua: A New Control System to Streamline MBR Operations and Decrease OPEX and CAPEX</b> <i>Larry Morris, Kubota Membrane USA Corporation</i>				2714
ENVIRONMENTAL COMPLIANCE/PRETREATMENT		Nicole deMoet, Chair	Stephanie Pezzelle, Co-Chair	NAPA C & D	SESSION
7:30 AM – 8:20 AM	<b>Regulating Commercial Customers – Randy De La Garza, City of Surprise, AZ</b>				2107
8:30 AM – 9:20 AM	<b>Managing Ordinances for FOG and Industrial Users – Rick Allen, BioLynceus, LLC</b>				2207
9:40 AM – 10:30 AM	<b>Managing Your Septic and Grease Haulers – Rick Allen, BioLynceus, LLC</b>				2307
10:40 AM – 11:30 AM	<b>Smart POTW Approaches to PFAS – John Shaffer, EEC Environmental</b>				2407
11:40 AM – 12:30 PM	<b>THC in Water and Wastewater – Zachary Golden, Golden Environmental LLC</b>				2507
2:00 PM – 2:50 PM	<b>A Semiconductor in the Desert: An Industrial Pretreatment Case Study</b> <i>Chelsey Weaver, City of Phoenix</i>				2607
3:00 PM – 3:50 PM	<b>Hazardous Building Materials - More Than Just a Requirement</b> <i>Chris Cisneros, Phoenix Sky Harbor Int'l Airport</i>				2707
ENVIRONMENTAL HEALTH/SAFETY & SECURITY		Tim Page-Bottorff, Chair	Jon Cordoba, Co-Chair	NAPA A & B	SESSION
7:30 AM – 8:20 AM	<b>Elevating Safety Culture: A Journey Towards World-Class Leadership</b> <i>Jon Cordoba, P3 Safety Solutions</i>				2108
8:30 AM – 9:20 AM	<b>The Humor in Safety – Tim Page-Bottorff, SafeStart</b>				2208
9:40 AM – 10:30 AM	<b>Cell Phones Don't Cause Accidents; People Do: A Look at Human Factors</b> <i>Dave Silva, Silva Performance Solutions</i>				2308
10:40 AM – 11:30 AM	<b>Influencing Your Organization's Culture to Build Resilience – Maribeth Anderson, Xylem</b>				2408
1:00 PM – 1:50 PM	<b>Your Ace in the Hole - Supervisors Are the Key to Safety Leadership</b> <i>Mary Silva, Crum and Forster</i>				2508
2:00 PM – 2:50 PM	<b>STCKY Chemicals: Real-World Hazard Communications</b> <i>Russell Duren, PGM Safety Services</i>				2608
3:00 PM – 3:50 PM	<b>Active Shooter and Workplace Violence – Shayne Anderson, Eye On Safety</b>				2708
STORMWATER		Jennifer Davis, Chair	Jessica Gaffney, Co-Chair	GRANDVIEW LOUNGE	SESSION
7:30 AM – 8:20 AM	<b>Construction Site Stormwater Inspections Made Simple</b> <i>T. Luke Owen, NPDES Stormwater Training Institute</i>				2113
8:30 AM – 9:20 AM	<b>Between a Rock Bag and a Hard Place: Enforcement and the Non-Compliant Construction Site</b> <i>Shawnetta Grandberry, City of Carlsbad</i>				2213
9:40 AM – 10:30 AM	<b>The Runway to Success is Always Under Construction: CGP Stormwater Compliance at an Airport</b> <i>Rick Rogowski, City of Phoenix Aviation Department; Lisa Farinas, City of phoenix</i>				2313
10:40 AM – 11:30 AM	<b>Breachable Moments: Responding to Stormwater Discharges at Large-Scale Construction Sites</b> <i>Shawnetta Grandberry, City of Carlsbad</i>				2413
1:00 PM – 1:50 PM	<b>Stormwater Collection &amp; Removal of Suspended Debris, Hazardous Metals, and Organics</b> <i>James Impero, Ovivo USA, LLC; Abner Aviles, OVIVO, USA, LLC</i>				2513
2:00 PM – 2:50 PM	<b>Evaluating TMDL Pollutants from ADOTs Storm System Discharges</b> <i>David Mack, ADOT Environmental Planning; Rebecca Sydnor, Hazen and Sawyer</i>				2613
3:00 PM – 3:50 PM	<b>Stormwater Treatment: Metals Removal with Ion Exchange</b> <i>Cathy Swanson, Puro-lite LLC, an Ecolab Company</i>				2713

7:00 AM - 7:30 AM - JAVA JOLT

9:20 AM - 9:40 AM - JAVA JOLT

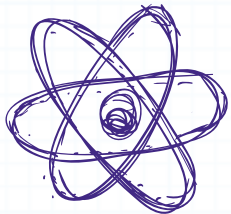
LUNCH A - 11:30 AM - 1:00 PM / LUNCH B - 12:30 PM - 2:00 PM

# TECHNICAL PROGRAM

WEDNESDAY, AUGUST 9, 2023

SURFACE WATER/WATER TREATMENT	Raj Chavan, Chair	Blake Gonska, Co-Chair	SONOMA A	SESSION
7:30 AM – 8:20 AM	<b>Chemical and Microbial Fingerprints of Unsheltered Homelessness in an Urban Watershed</b> <i>Katerina Papp, Southern Nevada Water Authority</i>			2112
8:30 AM – 9:20 AM	<b>Water Treatment in Small Communities and Developing Countries</b> – <i>Sujit Pawar, Atkins</i>			2212
9:40 AM – 10:30 AM	<b>City of Alamosa Evaluates In-Situ Electrogenerated Ferrous Reagent for Arsenic Removal</b> <i>Vladimir Dozortsev, Banning and AMS; Roy Sanchez CWP, City of Alamosa</i>			2312
10:40 AM – 11:30 AM	<b>Cleaning Optimization: Selecting the Best Conditions for RO Effective Cleaning</b> <i>Joshua Utter, American Water Chemicals</i>			2412
1:00 PM – 1:50 PM	<b>Combating Water Scarcity – Achieving ZLD For Drinking Water Using SiC Ceramic Membranes</b> <i>Brian Butters, Purifics Water Inc.; Tony Powell, Purifics Water Inc.</i>			2512
2:00 PM – 2:50 PM	<b>Reverse Osmosis Fundamentals: Basics to Form a Solid Understanding of Operating Principles</b> <i>Brad Reisinger, Hazen</i>			2612
3:00 PM – 3:50 PM	<b>Maximizing Both Pathogen and Chemical Contaminant Treatment Commitments with UV AOP</b> <i>Scott Bindner, Trojan Technologies; Kamrun Ahmadi, City of Reno</i>			2712

7:00 AM - 7:30 AM - JAVA JOLT



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#3  
JA Crawford  
1/2H

# TECHNICAL PROGRAM

## THURSDAY, AUGUST 10, 2023

MAINTENANCE	Dave Badgley, Chair	Jason Badgley, Co-Chair	SHOWROOM	SESSION
7:30 AM – 8:20 AM	<b>Leak Detection 101 - Basic Methodology and Troubleshooting</b> – James Maushart, SebaKMT			3106
8:30 AM – 9:20 AM	<b>Ice Pigging - Advanced Pipe-Cleaning Technology</b> – Paul Treloar, American Pipeline Solutions			3206
9:40 AM – 10:30 AM	<b>Maintaining Your Automatic Control Valve</b> – Jim Lugo, Watts Water Technologies; Scott Allison, Delco Sales			3306
10:40 AM – 11:30 AM	<b>Smart Phone, Smart Cars, Smart Cathodic Protection systems?</b> – Charlie Poore, MESA Products, Inc.			3406
11:40 AM – 12:30 PM	<b>Well System Management and Rehabilitation Program</b> – Jason Mace, Southern Nevada Water Authority			3506
2:00 PM – 2:50 PM	<b>Water Flush, Oil Lube, Water Lube, or Submersible Well Pumps?</b> Mike Bodart, General Pump Company, Inc.			3606
3:00 PM – 3:50 PM	<b>Training For Compliance and Competency</b> James Mcpherson, CTS International, Inc.; Ralph Stevens, Competency Training Systems			3706
WASTEWATER COLLECTION	Brandon Martinez, Chair	Andy Keller, Co-Chair	GRAND BALLROOM B	SESSION
7:30 AM – 8:20 AM	<b>Overview of Classic and State of the Art Gravity Pipeline Rehabilitation Technologies</b> David Badgley, Badgley & Associates			3102
8:30 AM – 9:20 AM	<b>Transitioning from a Reactive to a Proactive CCTV Program</b> Stephanie Prescott, Jack Doheny Company; Kyle Secrist, Rapidview IBAK			3202
9:40 AM – 10:30 AM	<b>Gas Detectors Calibration &amp; Bump Test Requirements: What Do Negative Display Readings Mean?</b> Michael Calvo, GFG Instrumentation			3302
10:40 AM – 11:30 AM	<b>Combo Machine Maintenance</b> Jake Haaker, Haaker Equipment Company; Jake Boyle, Haaker Equipment Company			3402
11:40 AM – 12:30 PM	<b>Lower Costs, Lower Risks - New Relief from Optimized Cleaning</b> – Jay Boyd, ADS Environmental Services			3502
2:00 PM – 2:50 PM	<b>Collection System Life Cycle Cost Consideration Comparing Options</b> Derek Lachut, Environment One Corporation			3602
3:00 PM – 3:50 PM	<b>How the Inland Empire Utilities Agency Turbocharged Their Collection System</b> Megan Livak, SmartCover Systems; Lucia Diaz, Inland Empire Utilities Agency			3702
WASTEWATER TREATMENT	LeAnna Risso, Chair	Sidney Innerebner, Co-Chair	SONOMA C & D	SESSION
7:30 AM – 8:20 AM	<b>Wastewater Treatment Aeration Applications and Blower Technologies</b> Richard Barile, Sulzer; Steven Seymour, Saddleback Environmental			3110
8:30 AM – 9:20 AM	<b>Mitigating Energy Demand Charges: Putting Energy Optimization in the Hands of Operators</b> George Schuitt, AESC-Inc.			3210
9:40 AM – 10:30 AM	<b>Do I Need Grit Removal?</b> – Eric Tobin, Hydro International			3310
10:40 AM – 11:30 AM	<b>How Design Impacts Headworks Screening Systems</b> – Dave Barkey, JWC Environmental			3410
11:40 AM – 12:30 PM	<b>New Screen Capture Efficiency Sampling and Testing Protocol for WWTP Screens</b> Abner Aviles, OVIVO, USA, LLC			3510
2:00 PM – 2:50 PM	<b>Enhanced Domestic Primary Wastewater Treatment Utilizing Pile Cloth Media Filtration</b> John Dyson, Aqua-Aerobic Systems, Inc.			3610
3:00 PM – 3:50 PM	<b>Master Planning for Risk-Based Prioritization of Asset Replacement - Case Study</b> Coral Taylor, Carollo Engineers			3710
WATER DISTRIBUTION	Ken Snow, Chair	Steve Davis, Co-Chair	GRAND BALLROOM A	SESSION
7:30 AM – 8:20 AM	<b>Pumps and Motors for Water Operators</b> Chase Stearnes, Daniel B. Stephens & Associates, Inc.; Michael Alvidrez, Alvidrez Water Operations			3111
8:30 AM – 9:20 AM	<b>AWWA D102 Tank Coatings: Which Systems Offer Longest Service Life Lowest Life Cycle Costs in Water Systems</b> – Randy Moore, Tnemec; Travis Gold, Atlantic Coating Consultants/Tnemec			3211
9:40 AM – 10:30 AM	<b>How to Develop a Valve Maintenance Program, No Matter the Size of Your Budget</b> Sharon Lydon, Wachs Utility Products			3311
10:40 AM – 11:30 AM	<b>History of Water Service Line Materials</b> – Whit Hall, REHAU - MUNICIPEX / Golden Sun Marketing			3411
1:00 PM – 1:50 PM	<b>Increasing Data Collection Accuracy to Solve the Hydraulic Model Mystery in Water Systems</b> Will Bowman, Kimley-Horn; Taylor Townes, Kimley-Horn			3511
2:00 PM – 2:50 PM	<b>How New Technology Extends the Life of Aging Water Infrastructure</b> – Jasmine Kim, Olea Edge Analytics			3611
3:00 PM – 3:50 PM	<b>Out of Sight But Not Out of Mind - Managing Buried Water Distribution Assets</b> Wei Liao, Purdue University; Tom Iseley, Purdue University			3711

7:00 AM - 7:30 AM - JAVA JOLT

9:20 AM - 9:40 AM - JAVA JOLT

LUNCH A - 11:30 AM - 1:00 PM / LUNCH B - 12:30 PM - 2:00 PM

# TECHNICAL PROGRAM

THURSDAY, AUGUST 10, 2023

BACKFLOW PREVENTION		Nathan Ellis, Chair	TBD, Co-Chair	SONOMA B	SESSION
7:30 AM – 8:20 AM	<b>Backflow Troubleshooting 101</b> – Chris Castaing, San Diego County Water Authority				3101
8:30 AM – 9:20 AM	<b>Developing a Backflow Program Start to Implementation</b> – Ken Ashlock, Cross Connection Environmental				3201
9:40 AM – 10:30 AM	<b>Basics of Backflow and Troubleshooting - Part 1</b> – Sean Perry, Apollo Valves				3301
10:40 AM – 11:30 AM	<b>Basics of Backflow and Troubleshooting - Part 2</b> – Sean Perry, Apollo Valves				3401
1:00 PM – 1:50 PM	<b>Running a Backflow Cross-Connection Program</b> – Randy De La Garza, City of Surprise				3501
2:00 PM – 2:50 PM					3601
3:00 PM – 3:50 PM					3701
ENVIRONMENTAL COMPLIANCE/PRETREATMENT		Nicole deMoet, Chair	Stephanie Pezzelle, Co-Chair	NAPA C & D	SESSION
7:30 AM – 8:20 AM	<b>Digital Transformation - Automating Industrial Pretreatment Permits</b> Mark French, NJB Soft; Alex Chakmak, NJB Soft				3107
8:30 AM – 9:20 AM	<b>Creating a Municipal Fats, Oils, &amp; Grease Program</b> – Sam Mcleod, FOG BMP				3207
9:40 AM – 10:30 AM	<b>Sustainable W &amp; WW Collection System Cleaning, Odor, FOG &amp; HAB Reduction Is Under Our Feet</b> Jim Aanderud, Permidian Technologies LLC; Suzan Chin-Taylor, The TUIT Group and Creative Raven				3307
10:40 AM – 11:30 AM	<b>The Building Blocks of FOG - How to develop a FOG Control Program</b> Joseph Jenkins, EEC Environmental				3407
11:40 AM – 12:30 PM	<b>Co-Contaminants in Water - Achieving Compliance with a Mix of Influent Chemicals</b> Cathy Swanson, Purolite LLC, an Ecolab Company				3507
2:00 PM – 2:50 PM	<b>Pretreatment Compliance Audits and Inspections</b> – James Polek, US EPA Region 9				3607
3:00 PM – 3:50 PM	<b>EPA Pretreatment Update</b> – Amelia Whitson, US EPA Region 9				3707
ENVIRONMENTAL HEALTH/SAFETY & SECURITY		Tim Page-Bottorff, Chair	Jon Cordoba, Co-Chair	NAPA A & B	SESSION
7:30 AM – 8:20 AM	<b>Arc Flash and Electrical Safety: A Review of NFPA 70E</b> – Alex VandenBroeck, ATM Electric				3108
8:30 AM – 9:20 AM	<b>Safety Issues Facing Collection System Workers</b> – Malvin Nezat, Nezat Training and Consulting				3208
9:40 AM – 10:30 AM	<b>Ensuring Safety Compliance in Your Training Program</b> James Mcpherson, CTS International; Ralph Stevens, Competency Training Systems				3308
10:40 AM – 11:30 AM	<b>The Big Hole in Confined Space - Gas Meter Competence Training</b> – Jason Call, Tinosi				3408
1:00 PM – 1:50 PM	<b>What is Process Safety Management (PSM) of Highly Hazardous Chemicals?</b> Shayne Anderson, Eye On Safety				3508
2:00 PM – 2:50 PM	<b>Safety Is No Accident - Pump Station Safety</b> – Joe Schmidt, Smith and Loveless				3608
3:00 PM – 3:50 PM	<b>2023 Trench Safety Awareness: What You Need to Know About Excavations</b> Kris Graham, United Rentals				3708
LEADERSHIP DEVELOPMENT		Brett Offerman, Chair	Lisa Farinas, Co-Chair	GRANDVIEW LOUNGE	SESSION
7:30 AM – 8:20 AM	<b>Bridging the Generational Gap in Operations</b> Chris Carey, City of Sedona; Greg Payne, City of Sedona				3105
8:30 AM – 9:20 AM	<b>Developing Frontline Supervisors for Leadership Success - Are They Ready?</b> Michele Rodriguez-Florez, Ridgecresta; Jennifer Rojas, Long Beach Water Department				3205
9:40 AM – 10:30 AM	<b>Building Your Water Career - Part 1</b> – Michele Rodriguez-Florez, Ridgecresta				3305
10:40 AM – 11:30 AM	<b>Building Your Water Career - Part 2</b> – Michele Rodriguez-Florez, Ridgecresta				3405
1:00 PM – 1:50 PM	<b>Managing the Training Function</b> James Mcpherson, CTS International, Inc.; Ralph Stevens, Competency Training Systems				3505
2:00 PM – 2:50 PM	<b>The Best Way to Attract and Retain OITs/Interns – Holistic Early Career Programming</b> Jordan Rodriguez, Stantec				3605
3:00 PM – 3:50 PM	<b>Passing the Torch: Mentoring Future Generations to Leadership</b> Greg Potter, Sunrise Engineering, Inc.				3705

7:00 AM - 7:30 AM - JAVA JOLT

9:20 AM - 9:40 AM - JAVA JOLT

LUNCH A - 11:30 AM - 1:00 PM / LUNCH B - 12:30 PM - 2:00 PM



# TECHNICAL PROGRAM

THURSDAY, AUGUST 10, 2023

SURFACE WATER/WATER TREATMENT	Raj Chavan, Chair	Blake Gonska, Co-Chair	SONOMA A	SESSION
7:30 AM – 8:20 AM	<b>PFAS - Chasing the Regulations with Treatment</b> – Cathy Swanson, Purolite LLC, an Ecolab Company			3112
8:30 AM – 9:20 AM	<b>Water Challenges Facing Native American Tribes and Potential Solutions</b> <i>Jeremiah Brosowski, Colorado River Regional Water System</i>			3212
9:40 AM – 10:30 AM	<b>PFAS - The Latest and Greatest</b> – Heather Jennings, Probiotic Solutions			3312
10:40 AM – 11:30 AM	<b>Treatment for PFAS: Are There Advantages to Incorporating Dual Adsorbents?</b> <i>Scott Grieco, Jacobs</i>			3412
1:00 PM – 1:50 PM	<b>Policy to Planning: Non-Functional Turf Removal and Its Effect on the Flood Control Plan</b> <i>Emily Thornley, Atkins North America; Brian Rowley, Clark County Regional Flood Control District</i>			3612
2:00 PM – 2:50 PM	<b>Regenerable Ion Exchange Systems for the Treatment of Nitrate Contaminated Groundwater</b> <i>Todd Webster, Envirogen Technologies, Inc.; Tim Berschauer, Charles P. Crowley Company</i>			3712
3:00 PM – 3:50 PM	<b>Plant and Vertical Asset Inspection Best Practices</b> – Sean Dingman, Websoft Developers			3712

7:00 AM - 7:30 AM - JAVA JOLT



## HANG ON TO YOUR BADGE

ONCE THE SEMINAR IS OVER, YOU WILL NEED YOUR CONFIRMATION NUMBER TO RETRIEVE YOUR CEU INFORMATION.

#6  
Neptune Technology Group  
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