

Conference at a Glance

| WEDNESDAY, MAY 20 | ACTIVITY | LOCATION | ROOM |
|-------------------|--|--|------------------------|
| 6:30 AM-7:45 AM | Jim Shaw Memorial 5k Run/Walk | Start in Front of Science Museum of Minnesota Mississippi River Path | - |
| 8:00 AM-8:55 AM | Opening Session & Keynote | Saint Paul RiverCentre | Ballroom E-F |
| 9:00 AM-6:00 PM | Exhibits | Saint Paul RiverCentre | Ballroom A-D/Concourse |
| 9:00 AM-10:00 AM | Technical Sessions | Saint Paul RiverCentre | Meeting Rooms 2-6 |
| 10:00 AM-11:00 AM | Exhibits Only/Morning Break/Poster Session 1 | Saint Paul RiverCentre | Ballroom A-D/Concourse |
| 11:00 AM-12:00 PM | Technical Sessions | Saint Paul RiverCentre | Meeting Rooms 2-6 |
| 12:00 PM-1:00 PM | Exhibitor Lunch | Saint Paul RiverCentre | Ballroom A-D/Concourse |
| 1:00 PM-2:00 PM | Technical Sessions | Saint Paul RiverCentre | Meeting Rooms 2-6 |
| 2:00 PM-2:30 PM | Afternoon Break/Poster Sessions 2 | Saint Paul RiverCentre | Ballroom A-D/Concourse |
| 2:30 PM-3:30 PM | Technical Sessions | Saint Paul RiverCentre | Meeting Rooms 2-6 |
| 3:30 PM-6:00 PM | Exhibitor Reception | Saint Paul RiverCentre | Ballroom A-D/Concourse |
| 4:00 PM-4:15 PM | 7S Meeting | Saint Paul RiverCentre | Meeting Room 2 |
| 4:15 PM-4:30 PM | Golden Manhole Society | Saint Paul RiverCentre | Meeting Room 2 |
| 4:30 PM-5:30 PM | YP and New Member Meeting | Saint Paul RiverCentre | Meeting Room 4 |
| 6:30 PM-7:00 PM | Pre-Awards Reception | Landmark Center | Musser Cortile |
| 7:00 PM-9:00 PM | Annual CSWEA Awards Banquet | Landmark Center | Musser Cortile |
| 9:00 PM-10:00 PM | Post Awards Celebration & Networking Event | Landmark Center | Musser Cortile |

| THURSDAY, MAY 21 | ACTIVITY | LOCATION | ROOM |
|-------------------|--|------------------------|------------------------|
| 7:00 AM-8:00 AM | State Section Meeting | Saint Paul RiverCentre | Meeting Rooms 10-12 |
| 8:00 AM-8:45 AM | Annual Business Meeting | Saint Paul RiverCentre | Meeting Rooms 10-12 |
| 9:00 AM-10:00 AM | Technical Sessions | Saint Paul RiverCentre | Meeting Rooms 3-8 |
| 9:00 AM-12:00 PM | Exhibits | Saint Paul RiverCentre | Ballroom A-D/Concourse |
| 10:00 AM-11:00 AM | Poster Sessions 2, Morning Break | Saint Paul RiverCentre | Ballroom A-D/Concourse |
| 11:00 AM-12:00 PM | Technical Sessions | Saint Paul RiverCentre | Meeting Rooms 3-8 |
| Ends 11:30 AM | Silent Auction Bids Due | Saint Paul RiverCentre | Exhibitor Concourse |
| 12:00 PM-1:00 PM | Association Luncheon | Saint Paul RiverCentre | Meeting Rooms 10-12 |
| 1:00 PM-3:00 PM | Technical Sessions / Ethics / Ops Training | Saint Paul RiverCentre | Meeting Rooms 4-8 |

Thank You to Our Platinum and Gold Sponsors

PLATINUM SPONSORS



GOLD SPONSORS



Technical Program

| WEDNESDAY, MAY 20, 2026 | | | | | |
|--------------------------------|--|---|--|---|--|
| Keynote Speaker: Racquel Vaske | | | | | |
| SESSION | A | B | C | D | E |
| | ADVANCES IN AERATION STRATEGIES | BIO SOLIDS | OPTIMIZATION | ARTIFICIAL INTELLIGENCE AND DIGITAL SOLUTIONS | COLLECTION SYSTEMS AND CONVEYANCE |
| LOCATION | Meeting Room 2 | Meeting Room 3 | Meeting Room 4 | Meeting Room 5 | Meeting Room 6 |
| Moderator | Colin Fitzgerald | Steve Graziano | Carly Amstadt | Chris Buckley | Brad Bennett |
| YP Moderator | Nicole Heyniger | Nicholas Domalewski | Leah Fields | Rahim Ansari | Samrat Dahal |
| 9:00 am-9:30 am | Advanced Aeration Control in Action: Diagnosing and Resolving Infrastructure Limitations Bryan Coday , Carollo Engineers | Got Options? A Case Study on Biosolids Adaptive Planning John Borghesi , Jacobs | Optimizing Suspended Solids Removal in Secondary Clarifiers from DAS Systems Will Martin , Hazen and Sawyer | Let's Get Digital: Tools for Efficient Startup and Optimization Jennifer Loconsole , Black & Veatch | Met Council's Strategic Approach to Condition Assessment of Inverted Siphons and Forcemains Jeff Schwarz , Metropolitan Council Environmental Services |
| 9:30 am-10:00 am | Full-Scale Low DO Operation Lee Pinkerton , Metropolitan Council Environmental Services | River Falls WWTF Biosolids Case Study: Transferring from Regional Facility to Starting Its Own Biosolids Program Ryan Yentz , Strand Associates, Inc. | Nanobubble Pretreatment: Breaking the Upset Cycle and Intensifying Nutrient Removal in Water-Stressed Regions John Crisman , Moleaer | Using AI to Determine the Root Cause of Storm Overflows: A Case Study with Southern Water James Ogden , StormHarvester | Pumping up Performance for Lift Station Rehab Projects Casey Leaf , Carollo Engineers |
| 10:00 am-11:00 am | Break/Poster Session I | | | | |
| 11:00 am-11:30 am | Right Sizing Aeration Controls to Achieve your Nutrient Removal and Energy Efficiency Goals Leon Downing , Black & Veatch | Full-Scale Implementation of Anaerobic Digestion with MHP Stephanie Cope , Jacobs | Advancing Energy Resilience and Optimization in Wastewater Utilities: Lessons from a Comprehensive Facilities and Energy Planning Approach Maitilee Das Lappin , TYLin | Integration of Digital Twins and Machine Learning for Real-Time Wastewater Treatment Optimization Anjan Goswami , Brown & Caldwell | Catch the Wave! Relief Force Main Planning & Operation with Surge Analysis Chase Przybylski , MSA Professional Services |
| 11:30 am-12:00 pm | Optimizing Aeration Through Integrated System Modeling Colin Fitzgerald , Jacobs | Can Pyrolysis Solve the PFAS Problem? Test Results from Two Biosolids Studies Lloyd Winchell , Brown & Caldwell | Simultaneous Nitrification-Denitrification at NEW Water Gretchen Gutenberger , Black & Veatch | Machine Learning Insights into Methane Inhibition Caused by Quaternary Ammonium Compounds (QACs) in Anaerobic Digestion Zihao Lu , Marquette University | Inflow & Infiltration (I&I) Management: Drivers, Tools, and Real-World Outcomes Brendan Ward , HDR |
| 12:00 pm-1:00 pm | Exhibitors Lunch | | | | |
| SESSION | F | G | H | I | J |
| | TAKE A STEP: WHOLISTIC PLANNING | FACILITY DESIGN | DISINFECTION | ASSET MANAGEMENT | COLLECTION SYSTEM SAFETY |
| LOCATION | Meeting Room 2 | Meeting Room 3 | Meeting Room 4 | Meeting Room 5 | Meeting Room 6 |
| Moderator | Chris Buckley | Steve Graziano | Colin Fitzgerald | Brad Bennett | Shanna Czeck |
| YP Moderator | Kaitlyn Hague | Emma Forthaus | Rahim Ansari | Leah Fields | Samrat Dahal |
| 1:00 pm-1:30 pm | Applying the Water Sector Climate Emissions Guidelines: Practical Lessons from Halton Region David Ponder , Eddyline Strategies | Adapting Existing Facilities to Address Multiple Long-Term Needs Evan Hunsanger , Strand Associates, Inc. | Optimization of Disinfection Instrumentation and Control Adam Sealock , Metropolitan Council Environmental Services | What's Coming Next: Evolving Asset-Management Requirements for Utilities Marcus Bush , TYLin | Flying Into the Future Rafael Estrada Moncada , SEH |
| 1:30 pm-2:00 pm | Alternative Water Supplies for Data Centers Robert Mccandless , Stantec | Regionalization, we are all in this together! Paul Saffert , Bolton & Menk, Inc. | Mankato Disinfection & Digestion Imprvmnts: Navigating Disease, Delays, & Disruptions with Direction & Dialogue Josh Gad , City of Mankato | Modernizing Water & Sewer Asset Decisions: A Case Study in Kenosha Water Utility's Digital Transformation James Kelleher , APX10 | Conveyance System Rehabilitation Prioritizes Operator Safety While Maximizing Community Value Matt Eberhardt , Foth Infrastructure & Environment, LLC |
| 2:00 pm-2:30 pm | Break/Poster Session II | | | | |
| | POLLUTANTS OF EMERGING CONCERN | FACILITY DESIGN | INTENSIFICATION | ADVANCES IN IMPLEMENTATION | WATERSHED MANAGEMENT |
| 2:30 pm-3:00 pm | A Comparative Analysis of Sediment Microplastics Insolation Unit (SMIU) and Chemical Dispersant Methods Emeka Ngene , University of Minnesota Duluth | Designing Process Control Pumping with Field Data and Modeling Software Allen Williams , Donohue & Associates, Inc. | Pushing the Boundaries of Convention: Process Intensification for Achieving Nutrient Removal Limits Rahim Ansari , Jacobs | Preparing the Operator - Excited Ownership through Inclusive Project Commissioning Leslee Storie , Hazen and Sawyer | Prediction of Future River Floods and Droughts in Minnesota Nigel Pickering , Geosyntec Consultants |
| 3:00 pm-3:30 pm | Sulfate Removal from Wastewater: Fate in Secondary Treatment and Design of Tertiary Treatment Facilities McKenna Farmer , Black & Veatch | Controlling WRRF Odors: Using a Plantwide Level of Service Based Approach Isabel Reams , Hazen and Sawyer | Process Intensification at Winona, MN: Operational and Design Insights from InDENSE and Nuvoda Full-Scale Pilots Susan Danzl , SEH | Modernizing Construction Cost Estimation: Lessons Learned and Future Directions Benjamin Burroughs , Arcadis | Milwaukee MSD's Response to the August 9-10 Historic Flood Micki Klappa-Sullivan , Milwaukee Metropolitan Sewerage District |

Technical Program

| THURSDAY, MAY 21, 2026 | | | | | |
|---|---|--|--|---|---|
| Annual Member Association Business Meetings | | | | | |
| SESSION | K | L | M | N | O |
| | R&D AND NOVEL APPROACHES | PFAS | NUTRIENTS | OPERATIONS | FILTRATION |
| LOCATION | Meeting Room 3 | Meeting Room 4 | Meeting Room 5 | Meeting Room 6 | Meeting Rooms 7-8 |
| Moderator | Carly Amstadt | Shanna Czeck | Brad Bennett | Steve Graziano | Colin Fitzgerald |
| YP Moderator | Nicole Heyniger | Kaitlyn Hague | Nicholas Domalewski | Jonathan Kolweier | Rahim Ansari |
| 9:00 am-9:30 am | A New Lens to See Carbon: Full-Scale Bio-Electrochemical Sensor Trial Nathaniel Stein, Ovivo USA LLC | Targeting PFAS Reduction: Leachate, Filtrate, or Biosolids? Patrick McNamara, Black & Veatch | A Workable TP Trade to Meet 0.075 mg/L Eric Lynne, Donohue & Associates, Inc. | Benefits of Using Microscopes to Aid in Wastewater Operations Adib Amini, University of Wisconsin-Madison | Holistic Approach Provides Optimized Low-Level Phosphorus Removal at the City of Marshfield WWTP Troy Larson, Strand Associates, Inc. |
| 9:30 am-10:00 am | Internal Substrate Selection of Granules in A Flow-Through Activated Sludge System via Biological Selectors Kam Law, Donohue & Associates, Inc. | Study of PFAS in Domestic Wastewater in Minnesota Martina Nelson, Metropolitan Council Environmental Services | Otsego MBR: Construction through Start-Up Jason Benson, AE2S | | Filtering for Clarity: What Years of Real Data Tell Us About Low-Level TP and TSS Removal Matthew Castillo, MSA Professional Services |
| 10:00 am-11:00 am | Break | | | | |
| 11:00 am-11:30 am | Using Fingerprint Soft Sensor to Monitor and Control Biofilm Thickness in Membrane Aerated Biofilm Reactors (MABRs) Yi Cao, Carollo Engineers | Life-Cycle Environmental Impacts of Removing and Destroying PFAS from Wastewater Effluent Scott Kyser, Minnesota Pollution Control Agency | Blue Lake EBPR Upset Investigation Hannah Molitor, Metropolitan Council Environmental Services | Sniffing Out H ₂ S: Smarter Monitoring for Proactive Control Jason Neighbors, City of Lockport | Novel Uses of Manganese Greensand for Hydrogen Sulfide Treatment in Wastewater Austin Konrath, University of Minnesota Duluth |
| 11:30 am-12:00 pm | Improving Nitrogen Recovery Efficiency from Wastewater by Electrodialysis Using Bipolar Membranes Tyler Anderson, University of Wisconsin-Madison | The Importance of Collaboration in Regional Concept Pilot Planning Kelsey Klucas, MnTAP | Activating Steel Slag into a New Paradigm for Nutrient Removal Jonathan Teaford, Green Steel Environmental | CSWEA Operations Challenge & Tips for Attending CSWEA Operations Challenge Team | Diagnosing Disc Filters Christine Schlingen, Donohue & Associates, Inc. |
| 12:00 pm-1:00 pm | Association Luncheon | | | | |
| SESSION | | P | Q | R | S |
| | | R2E | INDUSTRIAL TREATMENT | NUTRIENTS | ENGINEERING ETHICS |
| LOCATION | | Meeting Room 4 | Meeting Room 5 | Meeting Room 6 | Meeting Rooms 7-8 |
| Moderators | | Chris Buckley | Shanna Czeck | Carly Amstadt | Steve Graziano |
| YP Moderator | | Kaitlyn Hague | Ethan Redlin | Charlie Farmer | Rahim Ansari |
| 1:00 pm-1:30 pm | | Sustainable Resource Recovery at the Metropolitan Wastewater Treatment Plant David Quast, SEH | What Makes a Significant Industrial User (SIU) - Case Study: Castle Danger Brewery in Two Harbors Luke Heikkila, Bolton & Menk, Inc. | Nitrogen Removal Toolkit - Guide to Informed Planning Eric Redmond, Black & Veatch | Two-Hour Ethics Seminar: Where'd I Go Wrong? Top Ethics Issues for MN Engineers Kristine A. Kubes, Kubes Law Office, PLLC. |
| 1:30 pm-2:00 pm | Rerouting Towards Energy Neutrality: Carbon Diversion with TripleA Settler Anndee Huff Chester, Brown and Caldwell | Losing the Leinie's Load Al Robertsen, AE2S | Densified Activated Sludge - Unlocking the fullpotential of MBR Ana Calderon, Veolia Water Tech | | |
| No Break | | | | | |
| 2:00 pm-2:30 pm | Pilot Results for a Novel Decentralized Treatment System for Resource Recovery from High-Strength Food and Beverage Wastewater Kendall A.B. Johnson, University of Minnesota, Twin Cities | Impact of Landfill Leachate on UVT and Nitrification at a Municipal WRRF Kayla Bauhs, Brown and Caldwell | Assessing the Benefits of MABR for Cold Climates Brendan Wolohan, Carollo Engineers | | |
| 2:30 pm-3:00 pm | Owatonna Biogas Utilization - Renewable Natural Gas (RNG) Quality for Direct Injection to the Grid Jason Benson, AE2S | Case Study: Advanced, Onsite Pretreatment for Dairy Processing Wastewater with the Torrent3 Treatment System Paige Peters, Rapid Radicals Technology, Inc. | A Tale of Two Retrofits: How the MOB Process Enabled Cold-Weather Nitrification at Two MN WWTPs Alex Danuser, Nuvoda | | |

CSWEA'S 99TH ANNUAL MEETING

Exhibitors

The Exhibit Hall will be open two days: Wednesday and Thursday, May 20-21, 2026. There will be an Exhibitor Lunch from 12:00 pm-1:00 pm on Wednesday in Ballroom A-D/Concourse for those who wish to attend. As well, the conference provides longer breaks during the technical sessions with refreshments in the exhibit hall.

Exhibitor Lunch

12:00-1:00 pm

Wednesday

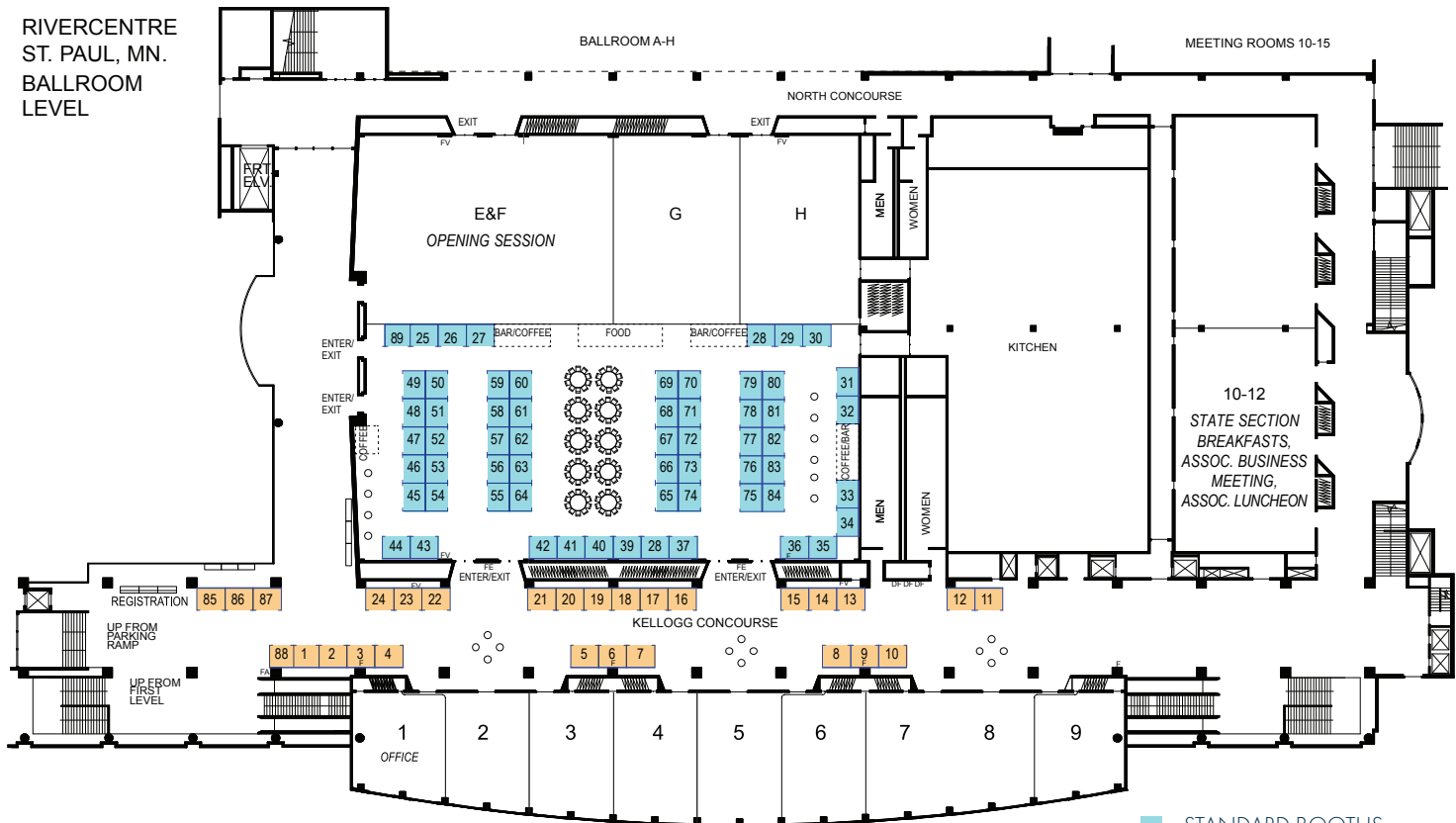
| BOOTH | COMPANY NAME |
|-------|---|
| 24 | 360water |
| 57 | ADS Environmental Services |
| 68 | AE2S |
| 1 | Alfa Laval - Coplastix |
| 2 | ANDRITZ |
| 7 | Apex Engineering Group |
| 12 | APXIO Inc. |
| 52 | Aquatic Informatics - Hach Software Company |
| 3 | Atlas Copco |
| 20 | Automatic Systems Co |
| 5 | Azuria-Underground Solutions-Corpro |
| 43 | Berg-Johnson Associates |
| 82 | BioAir Solutions |
| 38 | BMP Compliance Software |
| 67 | Boerger, LLC |
| 15 | Bolton and Menk, Inc. |
| 29 | Brierley Associates Corporation |
| 54 | CB&I Storage Tank Solutions |
| 6 | Centrisys/CNP |

| BOOTH | COMPANY NAME |
|-------|----------------------------------|
| 44 | Clarke Energy |
| 18 | Clean Water Technology |
| 11 | CRETEX Specialty Products |
| 63 | DeZURIK |
| 77 | DN, LLC |
| 53 | Ecosorb by OMI Industries |
| 23 | ECT2 |
| 37 | Electric Pump |
| 46 | Flow Control Automation |
| 78 | Force Flow/Halogen Valve Systems |
| 19 | Foth Companies |
| 35 | GPM, Inc. |
| 73 | Great Northern Environmental |
| 22 | Green Steel Environmental |
| 26 | Groth Biogas |
| 4 | H2O Innovation |
| 41 | HDR Inc. |
| 21 | HR Green, Inc. |
| 55 | IDEXX |
| 47 | Inland Environmental Resources |

| BOOTH | COMPANY NAME |
|-------|--|
| 36 | Jim Jolly Sales, Inc. |
| 48 | Kodru Mooney |
| 30 | Ladtech Inc |
| 31 | LINOH2O |
| 13 | Lystek International |
| 25 | Mid America Meter |
| 83 | Miller Mechanical Specialties |
| 88 | MXN inc |
| 65 | MSA Professional Services |
| 58 | Mulcahy Company |
| 33 | Northwestern Power Equipment Co., Inc./Serpentix |
| 27 | Ops Challenge |
| 72 | PPG/Raven Linings |
| 32 | Prime Resins |
| 9 | Progressive Business Solutions |
| 86 | Parafil |
| 34 | RedZone Robotics |
| 62 | Rice Lake Construction |
| 39 | RMB Environmental Laboratories |

| BOOTH | COMPANY NAME |
|-------|------------------------------|
| 76 | RootX |
| 89 | Schneider Electric |
| 75 | SEH |
| 81 | SewerAl |
| 61 | Sherwin Williams Co. |
| 14 | SmartCover Systems |
| 71 | Source One Environmental |
| 10 | StormHarvester |
| 8 | TKDA |
| 87 | Triplepoint |
| 16 | Trotter and Associates, Inc. |
| 51 | Unison Solutions |
| 85 | Universal Blower Pac |
| 84 | USALCO |
| 45 | Veolia |
| 64 | Vesso, Inc. |
| 42 | Victraulic |
| 40 | Visu-Sewer, Inc. |
| 66 | WaterSurplus |

Exhibit Hall Floor Plan



Poster Competition is being held at booths 49, 50, 79 & 80.
Silent Auction is being held at booths 59, 60, 69 & 70.

- STANDARD BOOTHS
- PREMIUM BOOTHS