November 28 to December 1, 2021
Hyatt Regency Grand Cypress
2021 FALL CONFERENCE

Negotiating the New Normal

Welcome to the 2021 FSAWWA Fall Conference. We are thrilled to have an in-person event. We meet this time at the Hyatt Regency Grand Cypress. We hope that you find the fall conference informative, educational, and fun.

The fall conference starts with Monday’s specialty workshops and a utility symposium. On Monday afternoon, we are proud to present for the 9th year, the Opening General Session. This year’s keynote speaker is George S. Hawkins, Esq. George is a seasoned water executive with more than two decades of organizational leadership and environmental law experience who currently serves as CEO of Moonshot, a leadership and innovation-focused consulting platform. At 4:00 PM, the exhibit hall opens with a meet and greet until 6:00 PM. Monday night continues with the BBQ Challenge and reception for our incoming chair, Emilie Moore, and ends with the poker tournament. The net proceeds from the poker event benefit the Water Equation and Water For People.

We encourage you to make time to visit our conference exhibitors.

Tuesday/Wednesday highlights: technical sessions all day; operator competitions: backhoe rodeo, hydrant hysteria, tapping competitions, and meter madness; students & young professionals: water bowl and Fresh Ideas posters session. Meet & Greet at the exhibit hall from 4:00 – 6:00 PM.

Don’t miss out on attending the FSAWWA Annual Business and Awards Luncheon on Wednesday.

Par-Tee at TopGolf is the perfect ending to the fall conference on Wednesday night. The net proceeds from the golf event benefit the Water Equation and Water For People.

Thank you to the FSAWWA MAC’s fall conference committee! The fall conference is a successful event because of their leadership and participation.

Please let us know how we can make the fall conference a better event. We welcome your feedback and ideas.

Dr. Fred Bloetscher, PE
FSAWWA Chair, 2020-21
Chi Ho Sham
President (2021-2022)
American Water Works Association

Dr. Chi Ho Sham is a Vice President and Chief Scientist for Eastern Research Group, Inc. in Lexington, Massachusetts. Chi Ho has worked on drinking and source water protection, water quality assessment, watershed management, underground injection control, and natural resources conservation issues for over three decades. In his current role, he is developing a “total water solutions” platform that integrates practice areas including wastewater management, water conservation, water resource planning, drinking water protection, and water quality restoration. He provides technical leadership and advice on scientific research and policy development issues, with current projects in source water protection, premise plumbing, and water quality assessment. He has been an active member of AWWA since joining in 1990.

Chi Ho volunteers for not only AWWA, but the University of Buffalo College of Arts and Sciences, Dean’s Advisory Council, the Urban Watershed Research Institute, and the Conservation Law Foundation as well. He received the Volunteer of the Year Award in 2016, and now serves as chair of the Technical and Educational Council.

Chi Ho holds a B.A. in geography (with a focus on planning) from the University of Regina in Saskatchewan, Canada. He received his M.A. and Ph.D., both in geography (with focus on fluvial geomorphology and hydrology), from the State University of New York at Buffalo. Currently, he is an adjunct professor at Clark University in Worcester, Massachusetts, teaching a course on natural resources management. When not at work, Chi Ho enjoys visiting national parks and spending time with family and friends.
George S. Hawkins, Esq.
Keynote Speaker
Founder and CEO, Moonshot Missions

Hand over Fist: A Path to Innovation and Performance in a Time of Chaos and Change

Five challenges plague every water utility (the Fist). Five steps can be embraced to overcome them for any utility (the Helping Hand). George Hawkins, the prior General Manager of DC Water, will present from his own experience a guide to utility transformation – why, how, and when... including fun stories and anecdotes from real experience throughout.

George’s focus is public utilities that are often known to be conservative – not in a political sense, but in a caution to take risks and innovate. These agencies, conventional wisdom suggests, are hampered by rigid bureaucracies that are hostile to changing layers of standard procedures. George who transformed the District of Columbia Water and Sewer Authority into DC Water, from an organization resistant to change into an innovative powerhouse, believes that a resistance to change is almost always rooted in understandable principles and practices.

He will suggest a simple and practical seven step process to encourage innovation that is founded on understanding the values of an organization, and using them as a motivator for change within a secure process and structure.

George will conclude with some observations about the recently passed Infrastructure Bill, and how utilities can prepare to benefit from a generational increase in federal support for water.practices.
Monday, November 29, 2021
8:30 AM-11:00 AM | Regency Hall 5

Workshop 1A:
Looking Down the Road -
What to Expect in the Regulatory Future
Certification: 0.25 CEU, 2.5 PDH
Moderator: Chris Moody, PE

- Regulatory Update - What’s Next
  Chris Moody, PE - AWWA

- Requirements of Florida Senate Bill 64 - Reclaimed Water
  Jo Ann Jackson · Black & Veatch

- A Refresher on the History of Reuse Regulations and
  Practice in Florida
  David Ammerman, PE - City of Altamonte Springs

- Understanding the New Florida Potable Reuse Regulations
  Pranjali Kumar, PE - Carollo Engineers

Monday, November 29, 2021
8:30 AM-11:00 AM | Regency Hall 6

Workshop 1B:
Automation and SCADA Technology Workshop
Certification: 0.25 CEU, 2.5 PDH
Moderator: Evan Curtis, PE

- Industrial Internet of Things (IIOT)
  Mike Sutton, PE - Phoenix Contact

- ANSI/ISA-101 - Human Machine Interfaces
  Nick Claudio - EMA

- Data Analytics and Visualization
  Elizabeth Keddy - Hazen and Sawyer

Monday, November 29, 2021
8:30 AM-11:00 AM | Regency Hall 7

Workshop 1C:
Get Your Research On
Certification: 0.25 CEU, 2.5 PDH
Moderator: Bina Nayak, PhD

- Water Research Foundation: Research Priorities and
  Involvement Opportunities
  Alice Fulmer - The Water Research Foundation

- Applying the 5 Ws and 1 H to Utility Participation in Research
  Bina Nayak, PhD - Pinellas County Utilities

- Targeted Research for Utility Applications
  Ryan Popko - JEA

- HyBrTec Biosolids-to-Hydrogen Research
  Jason Grant - Miami-Dade WASD
TECHNICAL PROGRAM

Monday, November 29, 2021
7:45 AM-5:00 PM | Regency Hall 9

Workshop 1E:
Utility Symposium - Wastewater Collection Systems
"Keeping it Moving"
Certification: 0.8 CEU, 8.0 PDH
Moderator: Tom Hogeland

7:45 - 8:00  Opening Statements and Introduction
8:00 - 8:55  Optimizing WW Collection with AML
Eric Corey - Core and Main, Inc.
9:00 - 9:55  FOG & H2S Removal in WW Collection
Bill Cox - Kationix Inc.
10:00 - 10:55  Keeping Up, Not Backing Up
Bill Pittman - US Water Inc.
11:00 - 11:55  Collection System Lining Options
Louis Woska - Shenandoah Pipe Inspection and Rehabilitation
12:00 - 12:30  (Onsite) Lunch and Open Audience Discussion on Morning Topics
12:30 - 1:25  Benefits of Collection System Aeration
Rob Teegarden and Larry Ruffin - Nano Technologies
1:30 - 2:25  Oil Separators vs. Grease Interceptors
Silvano Ferrazo - Zurn
2:30 - 3:25  Industrial Pre-Treatment & Collection Systems
Anne Li Steutel-Maron - Hach Instrumentation
3:30 - 4:25  Biogenic Corrosion Process in Municipal Sewer Systems
Clay Waters, Porter Associates
4:30 - 5:00  Open Audience Discussion on Afternoon Topics

Monday, November 29, 2021
12:00 PM-2:30 PM | Regency Hall 5

Workshop 2A:
Cybersecurity in the Water Sector - Regulatory Updates, Resources, and Next Steps
Certification: 0.25 CEU, 2.5 PDH
Moderator: David Yonge, PhD, PE

Water Sector Legislative and Policy Updates
Kevin Morley, PhD - American Water Works Association

AWWA Tools and Resources for Small Systems
Andrew Ohrt - West Yost

What’s Next for the Sector
Kevin Morley, PhD - American Water Works Association
and Andrew Ohrt - West Yost

Q&A
Monday, November 29, 2021
12:00 PM - 2:30 PM | Regency Hall 6

**Workshop 2B:**
From High School to Hired
Certification: 0.25 CEU, 2.5 PDH
*Moderator:* **Shea Dunifon**

12:00 - 12:30
Inspiring Future Utility Workers Through Summer Science Camps
Mary Rose Cox - Toho Water

12:30 - 1:00
A Teacher's Journey from the Treatment Facility to the Classroom
Jerry Cantrell - Seminole High School

1:00 - 1:30
Career Academy to a Career
Tony Cubbede - St. Johns County Utilities

1:30 - 2:00
Apprenticeships, Internships, or Mentorships...Help!
Shea Dunifon - Pinellas County Utilities
and Ryan Popko, PE - JEA

2:00 - 2:30
Q & A

Monday, November 29, 2021
12:00 PM - 2:30 PM | Regency Hall 7

**Workshop 2C:**
Utility Finances in Challenging Times
Certification: 0.25 CEU, 2.5 PDH
*Moderator:* **Tony Hairston**

- Orange County Experience with ARPA Funding
  Charles (Tad) Parker, PE and Davis S. Arms, PE - Orange County Utilities

- A Utility’s Approach to Optimizing Their Water Resources to Improve System Operations and Financial Stability for Their Customers
  Sergio Hoyos, PE - Stantec

- Raising Water Rates During a Pandemic
  Constance Heppenstall - Gannett Fleming

- Florida Water Rate Survey and Affordability Trends
  Nick Smith - Raffelis

- Water Impact Fees and the Florida Statutes - How Does the Puzzle Fit Together?
  Susan Schoettle-Gumm - Susan Schoettle-Gumm PLLC
**Monday, November 29, 2021**  
**12:00 PM–2:30 PM | Regency Hall 8**

**Workshop 2D:**  
Water Conservation Symposium:  
How to Lower Our Water Use Footprint  
**Moderator:** Deirdre Irwin

**12:00 - 12:30**  
Sustainable Irrigation Efficiency - What We Have Learned Over 40 Years of Design, Installation, and Management  
Kurt Thompson - IrrTech Training

**12:30 - 1:20**  
Water Conservation Plan Expectations for Water Use Permits, Josh Madden - SWFWMD, Jim Harmon - SFWM, and Deirdre Irwin - SJRWMD

**1:20 - 2:20**  
Water Conservation Updates from the University of Florida  
1. Annual WC Survey Results  
   Dr. Laura Warner - Dept. of Agricultural Education & Communication, UF  
2. New Insights from H2OSAV  
   Dr. Nick Taylor - Center for Land Use Efficiency, UF  
3. Compost Research Findings  
   Dr. Eban Bean - Center for Land Use Efficiency, UF

**2:20 - 2:30**  
Open Discussion and Wrap Up

---

**Tuesday, November 30, 2021**  
**8:30 AM-11:30 AM | Regency Hall 5**

**Session 1A:**  
Potable Reuse  
**Certification:** 0.3 CEU, 3.0 PDH  
**Moderator:** Michael Acosta, PE

**8:30-8:40**  
Moderator Comments

**8:40-9:10**  
Clay County Utility Authority Evaluating Potable Reuse to Diversify Water Portfolio, Kevin Ledbetter, PE and Paul Steinbrecher, PE - Clay County Utility Authority; Pranjali Kumar, PE and Jason Assouline, PE - Carollo Engineers, Inc.

**9:10-9:40**  
Innovation in the Face of Necessity: When Potable Reuse Becomes the Only Option, Andrea Netcher, PhD, PE and Ellen McDonald, PhD, PE - Plummer Associates

**9:40-10:10**  
Strategies for Implementing Cost-Effective Potable Reuse Projects, Vijay Sundaram, PhD, PE - AECOM

**10:10-10:30**  
Break

**10:30-11:00**  
Recycled Water: Could Floridians Finally Have a Taste for the Future? John Truitt – Florida Department of Environmental Protection

**11:00-11:30**  
Déjà Vu: Case Studies in Wastewater Reuse, Jason Afinowicz, PE and Lissa Greg, PE - Freese and Nichols, Inc.
Tuesday, November 30, 2021
8:30 AM-11:30 AM | Regency Hall 6

Session 1B:
Membranes and Chartering Resilient Water Solutions for Raw Water Quality Challenges
Certification: 0.3 CEU, 3.0 PDH
**Moderator:** Jennifer Ribotti, PE

8:30 - 8:40  Moderator Comments
9:10 - 9:40  Using Biological Filtration to Optimize Membrane Pretreatment on High TOC Florida Surface Waters, Arun Subramani, PhD, PE; GJ Schers, MSC; Joe Elarde and Nick Easter - Jacobs
9:40 - 10:10 Energy Recovery and Interstage Boosting Under Variable Salinity Conditions in BWRO Applications, Giancarlo Barassi, PhD - FedCo
10:10 - 10:30 Break
10:30 - 11:00 Closed Circuit Reverse Osmosis Adaptive Control, Matt Jones - Dupont Water Solutions
11:00 - 11:30 My Raw Water is Giving Me High Blood Pressure: Adapting to Rising Salinity in the Floridan Aquifer, Rebecca Wilder and Amanda Barnes - Town of Jupiter, Jon Friedrichs and Jim Andersen, PG - JLA Geosciences; Jason Lee, PE - Kimley-Horn & Associates

Tuesday, November 30, 2021
8:30 AM-11:30 AM | Regency Hall 7

Session 1C:
Navigating the New Normal
Certification: 0.3 CEU, 3.0 PDH
**Moderator:** Ronald Cavaliere, PE, BCCEE

8:30 - 8:40  Moderator Comments
8:40 - 9:10  Water Sensitive Cities Index: Guiding One Water Policy and Action, Gage Muckleroy - GHD
9:40 - 10:10 Turn the Tide - Veterans and the Future of Water, Isaiah Moss - Tampa Bay Water
10:10 - 10:30 Break

Continued >>
10:30-11:00 Strategies to Help Manage an Increasing Project Workload, Tricia Hatley, PE and Chuck Gilman, PE - Freese and Nichols, Inc.

11:00-11:30 Surviving SCADA Ransomware Attacks, Bob George, Tetra Tech

**Tuesday, November 30, 2021**
8:30 AM-11:30 AM | Regency Hall 8

**Session 1D:**
Lead Copper
Certification: 0.3 CEU, 3.0 PDH
Moderator: Rae Hafer, PE

8:30 - 8:40 Moderator Comments

8:40 - 9:10 Addressing a 10 μg/L Lead Trigger Level for a Blended Supply by Evaluating Alternative Corrosion Control Inhibitors, Paula Campesino, MS, EI and Steven J. Duranceau, PhD, PE - University of Central Florida


9:40 - 10:10 Lead and Copper Rule Revisions Compliance Strategies for Systems with and without Lead Service Lines, Christopher Hill, PE; Quirien Muylywjk, PE; and John Konkus, PE - AECOM

10:10 - 10:30 Break

10:30 - 11:00 Water Quality Considerations for Customers and Utilities Amidst Covid Re-openings, Christopher Makransky, EI and David T. Yonge, PhD, PE - Jones Edmunds & Associates, Inc.

11:00 - 11:30 Old Pipe Doesn’t Mean Bad Pipe: Development and Implementation of a Risk-Based Condition Assessment Program for a Water Transmission System, Susan Donnally - HDR, Inc.

**Tuesday, November 30, 2021**
1:30 PM-4:30 PM | Regency Hall 5

**Session 2A:**
Asset Management
Certification: 0.3 CEU, 3.0 PDH
Moderator: James Barton, PE

1:30 - 1:40 Moderator Comments

1:40 - 2:10 Retire or Rehab? Optimizing the Use of Wastewater Facilities and Collection System Flexibility, Nichole Lloyd - City of Daytona Beach and Kirsten Burns - Carollo Engineers, Inc.

Continued >>
2:10 - 2:40  Improve, Not Replace: Utility Focuses their SCADA Master Plan on Advancing the Use of Existing Systems, Nick Claudio, PE - EMA and Chris Martin - Mount Pleasant Waterworks

2:40 - 3:10  Boca Raton’s Telemetry System Upgrade Enhances Operations and Analytics of Water and Wastewater Conveyance, Lauren Burack, PE - City of Boca Raton and Evan Curtis, PE - Hazen and Sawyer

3:10 - 3:30  Break

3:30 - 4:00  The Right Tools for Planning: How Pearland Applied Apps, Data Analytics, and Visualization Tools to Optimize their Collection System, Kendall Ryan, Ishita Rahman and Bailey Keller - Freese and Nichols, Inc., and Jameson Appel - City of Pearland, TX

4:00 - 4:30  The Best Defense is a Good Defense - Using a Multi-criteria Decision Process to Site Infrastructure Projects Brings the Right Solutions to Water Supply Planning, Katie S Duty, PE, Richard LeBlanc, P.E. - HDR Engineering, Inc. and Terri Holcomb, PE - Peace River Regional Water Supply Authority

**Tuesday, November 30, 2021**
**1:30 PM-4:30 PM | Regency Hall 6**

**Session 2B:**
**Addressing Water Treatment Process Improvements**
Certification: 0.3 CEU, 3.0 PDH
Moderator: Ben Yoakum, PhD, PE

1:30 - 1:40  Moderator Comments

1:40 - 2:10  GAC Performance for Several Central Florida Full-Scale Facilities, Christophe Robert, PhD, PE; Robert Reiss, PhD, PE; Jonathan McCarthy, PE; and Glenn Dunkelberger - CHA Consulting, Inc.

2:10 - 2:40  Evaluation of Mixing, Mass Transfer, O&M, Energy, and Material Requirements for H2S Oxidation at the Orlando Utilities Commission WTPs, Srikanth. S. Pathapati, PhD and Thomas Steinke - Mazzei Injector Company; Chris Schulz, PE and John Healy, PE - CDM Smith; Brad Jewell, PE and Quyen Newell, PE - OUC


3:10 - 3:30  Break

Continued >>
3:30 - 4:00  Filter Frets and Fixes: Prioritizing Improvements of Aging Filters at a Drinking Water Treatment Plant, Carlee Chaffin, El; Stuart Jeffcoat, PhD, PE; Ryan Messer, PE; Samantha Black, PE; Jerrine Foster, PhD, El; and Jorge Camacho, PE - HDR Engineering, Inc.

4:00 - 4:30  Evaluating Ozone Oxidation and Granular Activated Carbon for Treatment of UCF’s Groundwater Supply for Disinfection By-Product Formation Control, Steven J. Duranceau, PhD, PE; Devon Higgins, El; and Tulsi L. Shukla, El - University of Central Florida

Tuesday, November 30, 2021
1:30 PM-4:30 PM | Regency Hall 7

Session 2C: Collaboration, Communication, and Protecting Critical Knowledge
Certification: 0.3 CEU, 3.0 PDH
Moderator: Christine Ellenberger

1:30 - 1:40  Moderator Comments

1:40 - 2:10  Connecting in a Changed World: Strategies to Understand and Engage your Audience, Michele Brennan, Trinity Otero, and Teresa Donaldson - HDR

2:10 - 2:40  Cities Collaborating to Build Resilience and Leverage Funding, Sarah Deslauriers and Juan O’quendo - Carollo Engineers, Inc. and Rebecca Harvey - City of Boynton Beach

2:40 - 3:10  Using Information to Improve Team Efficiency and Citizen Satisfaction, John Bertrand - Daupler

3:10 - 3:30  Break

3:30 - 4:00  Knowledge Capture – How to Keep Your Knowledge from Retiring with Your Workers, Steven J. Duranceau, PhD, PE - University of Central Florida

4:00 - 4:30  Cybersecurity for Regulated Critical Infrastructure / Water and Wastewater Utilities: AWIA 2.0, J. Mark McKinney - Tetra Tech

Tuesday, November 30, 2021
1:30 PM-4:30 PM | Regency Hall 8

Session 2D: PFAS/PFOS
Certification: 0.3 CEU, 3.0 PDH
Moderator: Pamela London-Exner

1:30 - 1:40  Moderator Comments

1:40 - 2:10  Holding Polluters Accountable for PFAS Contamination in Florida, Joshua Harris - Levin Papantonio Rafferty

Continued >>
2:10 - 2:40  Latest PFAS Regulations in the U.S. as well as Site Investigation Update and Cleanup Efforts in Florida, Viraj deSilva, PhD, PE - Freese and Nichols

2:40 - 3:10  PFAS-Track: Build a PFAS Treatment System in Three Months, Rob Little and Raj Vaidya - Woodard & Curran

3:10 - 3:30  Break

3:30 - 4:00  Water Quality Modeling of PFOA in Water Distribution Systems, Christopher C. Baggett, PE and Saheb Mansour-Rezaei, PhD, PE - Wright-Pierce

4:00 - 4:30  Addressing PFAS Through Source Water Assessments and Advanced Treatment Using PAC, GAC, IX, and Novel Sorbent Technologies, Samantha Black, PhD, PE; Pete D’Adamo, PhD, PE and Katie Walker, PE - HDR and Dell Harney - City of Greensboro

Wednesday, December 1, 2021
8:30 AM-11:30 AM | Regency Hall 5

Session 3A:
GIS, SCADA, and Asset Management
Certification: 0.3 CEU, 3.0 PDH
Moderator: James Barton, PE

8:40 - 9:10  Applying GIS, Data, and Technology Tools to Support Managing the Lifecycle of Water, Jayson Brennen and Andy Baranowski - CDM Smith

9:10 - 9:40  Integration of a Distribution System Tracer Study into a Water Quality Model to Control DBPs in a Potable Water System, Curt Wade - University Central Florida; Ben Yoakum, PhD, PE and Greg Taylor, PE - Wright-Pierce

9:40 - 10:10  3D GIS for Asset Management, Zachary Jaffe - Land’Tech Consultants Inc.

10:10 - 10:30  Break


11:00 - 11:30  Setting up Your GIS System to Facilitate Better Analysis, James Barton, Paula Fonseca and Teresa Chapman - Florida Technical Consultants and Frederick Bloetscher, PhD, PE - Florida Atlantic University
Wednesday, December 1, 2021
8:30 AM-11:30 AM | Regency Hall 6

Session 3B:
Alternative Water Supplies
Certification: 0.3 CEU, 3.0 PDH
Moderator: Emilie Moore, PE

8:40 - 9:10  Reuse, Recharge, Reduce, Restore, & Recreate - The Ocala Wetland Park, Allison Lewis, PE - Jacobs Engineering and Rachel Slocumb - City of Ocala

9:10 - 9:40  Challenges and Solutions to Developing Alternative Water Supplies in Central Florida: PRWC Experiences, Robert G. Maliva, PhD, PG; Scott Manahan; Mary Thomas; Stephen James; and Ryan Taylor - WSP

9:40 - 10:10  Disinfection of Raw Surface Water to Improve Storage Potential and Cost-Effectiveness of Aquifer Storage and Recovery, Mike Coates and Richard Anderson - PRMRWSA, Stephanie Ishii, PhD, PE, and Andre Dieffenthaller, PE - Hazen and Sawyer

10:10 - 10:30  Break

10:30 - 11:00  Increasing the City of Naples Reclaimed Water Supply with Multiple Supplemental Sources and Effective Seasonal Storage, Ronald R. Cavalleri, PE - AECOM

11:00 - 11:30  Disinfection By-product Precursor Management at Hillsborough County’s Drinking Water Treatment Facilities, Yan Zhang, Isabella Silverman, Sahand Iman Shayan, Dr. Qiong Zhang - University of South Florida

Wednesday, December 1, 2021
8:30 AM-11:30 AM | Regency Hall 7

Session 3C:
Alternative Water Supplies
Certification: 0.3 CEU, 3.0 PDH
Moderator: Marjorie Craig, PE

8:40 - 9:10  Case Study to Reduce Lead and Copper Corrosion Through Water Quality Optimization and Control of Nitrification, GJ Schers, PMP and Richie Angley, PE - Jacobs; Peter Davis - City of Cocoa Beach


9:40 - 10:10  Choosing the Right Rehabilitation Solution for Pressurized Pipelines, Steve Soldati, PE - Aegion Corporation

10:10 - 10:30  Break

Continued >>
10:30 - 11:00 Improving Residual Stability in a Chloraminated Distribution System: City of Titusville Case Study, William Lovins, PhD, PE; Sean Stauffer, PE; Gene Demayo; Andrew Jantzer, PE; Jennifer Lyons, PE - AECOM; Ashleigh Smith, PE - City of Titusville, FL

11:00 - 11:30 Find the Leaks from Sound to Satellites, Weston Haggen, PE and Emily Staubus Williamson, EI - CHA Consulting, Inc.; Todd Kuhnelt; Richard Gardner, PE; and Jeremy Brown, PE - City of Clearwater

Wednesday, December 1, 2021
8:30 AM-11:30 AM | Regency Hall 8

Session 3D:
Water Treatment - Disinfection By-Products
Certification: 0.3 CEU, 3.0 PDH
Moderator: Rasesh Shah, PE

8:40 - 9:10 Comparing Conventional Cascade Tray and Perforated Tray Aerators for Total Trihalomethane Post-Formation Control, Steven J. Duranceau, PhD, PE and Nino Stea - University of Central Florida


9:40 - 10:10 Evaluating Granular Activated Carbon for Disinfection By-Product Control in a Small System Treating Sulfur-Laden Groundwater, Jessica Corrion and Steven J. Duranceau, PhD, PE - University of Central Florida

10:10 - 10:30 Break

10:30 - 11:00 Maintain Disinfection Residuals and Reduce Flushing with Chlorine Dioxide, Shelby Hughes, PE and Madison Rice, EI - Kimley-Horn and Associates, Inc.

11:00 - 11:30 Putting Florida's DPR Rules into Context: Regulatory Developments Across the US, Eva Steinle-Darling, PhD, PE and Pranjal Kumar, PE - Carollo Engineers, Inc
Incoming Chair’s Reception & BBQ Challenge
Monday, November 29, 2021
6:00 PM | Hyatt Regency Portico Patio

Come join the festivities which include the BBQ, networking, entertainment and toast to Emile Moore, our 2022 Section Chair.

BBQ is serious business! BBQ teams from utilities and firms from around the state compete in Culinary Abilities with beef brisket, chicken, pork ribs, and pork butt. 1st place trophies for each category, and of course, BRAGGING RIGHTS for Overall Champion!

Program:
- 6:00 pm  Event Opens
- 7:00 pm  Incoming Chair Presentation and toast (Stage)
- 8:30 pm  BBQ Challenge Awards (Stage)
- 9:00 pm  Event Closes

Food Sponsors:
- Barney’s Pumps
- C&T Contracting Services
- Core & Main
- CPH Corp
- Envirosales of Florida, Inc.
- Integ-Crete
- MCO Construction & Services Inc
- Petticoat Schmidt Civil Contractors, Inc.
- PSI Technologies
- REVERSE Controls
- Torishima Pumps
- TSC Jacobs North
- Victaulic
- Woolpert

Bar Sponsors:
- Black & Veatch
- CROM
- C&T Contracting Services
- Electric Services Inc
- Integ-Crete
- Kamstrup
- Sinns and Thomas
- TESCO Controls
- Torishima Pumps
- VMG
- Woolpert

16  FSAWWA 2021 Fall Conference
EVENTS

Opening General Session
Monday, November 29, 2021
2:30 - 4:00 PM | Windsong 1-4

Keynote Speaker: George S. Hawkins, Esq.
Founder and CEO, Moonshot Missions

Five challenges plague every water utility (the Fist). Five steps can be embraced to overcome them for any utility (the Helping Hand). George Hawkins, the prior General Manager of DC Water, will present from his own experience a guide to utility transformation — why, how, and when... including fun stories and anecdotes from real experience throughout.

Poker Night & Happy Hour
Monday, November 29, 2021
9:00 PM | La Coquina & Alcove

Join us for a good cause and a lot of fun at the Florida Section Poker Tournament. There will be a cash bar and hors d’oeuvres will be served. All proceeds benefit Water Equation and Water for People.

Buy-in entry fee:
Blackjack Buy in | $30.00 (2000 in chips)
Poker Buy in | $50.00 (5000 in chips)

Games: Texas Hold’Em for Grand Prize | Black Jack

Grand Prize: 50” HDTV!

Royal Flush Sponsors:
AECOM
American Cast Iron Pipe
CHA Consulting, Inc.
Core & Main
CS3 Waterworks
Data Flow Systems
Ferguson Waterworks
Freese and Nichols
Jacobs
Jones Edmunds and Associates, Inc.
Kimley-Horn and Associates, Inc.
National Metering Services, Inc.
Public Utility Management & Planning Services, Inc.
Sigma Corporation
Sundt Construction, Inc.
Wager Company of Florida, Inc.
Wharton-Smith, Inc.
Wright-Pierce, Inc.
EVENTS

Student & Young Professionals Conference Activities
Tuesday, November 30, 2021
10:00 AM - 6:00 PM

At a Glance:
10:00 am - 11:00 am YP Committee Meeting | Regency 2
11:30 am - 1:30 pm Lunch | Windsong 3-4
2:00 pm - 3:00 pm Water Bowl Competition | Grand Cypress
3:00 pm - 6:00 pm Fresh Ideas Poster Session
Grand Cypress Foyer

FSAWWA Operators Initiative
High School Academy Student Session
Tuesday, November 30, 2021
11:30 AM - 1:30 PM | Windsong 1-2

As a part of this initiative, FSAWWA provides support to two technical high schools in Florida that provide four years of coursework and training in preparation to take the C License Operator Exam. Students from Heritage High School Academy of Environmental Water Technology and St. Johns Technical High School Academy of Coastal and Water Resources will attend the fall conference. One of their activities will include a panel of experienced and new operators to discuss their careers as operators and managers.

Full STEAM Ahead Youth Program Meeting
Tuesday, November 30, 2021
3:00 - 4:00 PM | Regency 4

The AWWA Diversity and Member Inclusion Committee and FSAWWA Young Professionals will discuss the future of the Full STEAM Ahead Youth Program and Robot Challenges.

18 FSAWWA 2021 Fall Conference
Competitions
Tuesday & Wednesday
November 30 - December 1, 2021

FSAWWA hosts fun and lively competitions between municipalities to find the most skilled person or team in the Meter Madness, Tapping, Back Hoe Rodeo and Hydrant Hysteria contests.

**BACK HOE RODEO**
**Tuesday | 10:00 am - 12:00 pm**
Backhoe operators show off their expertise by executing several challenging lifts and drops of various objects in the fastest time.

**TAPPING CONTESTS**
**Tuesday | 11:00 am - 2:30 pm**
In a contest of skill and dexterity as well as speed, teams of four compete for the fastest time while they perform a quality drill and tap of pipe under available pressure. Penalties are assessed in seconds for infractions of rules such as leaking connections or safety violations. Only two taps are allowed per team.

**Ductile Iron Tap:** 11:00 am - 12:00 pm
**Fun Tap:** 1:00 - 2:30 pm

**METER MADNESS**
**Tuesday | 4:00 - 5:00 pm**
Contestants are challenged to put together a completely disassembled meter against the clock. To make the contest more interesting, three to six miscellaneous parts are included in the bucket of meter components. Once the meter is assembled, it must operate correctly and not leak.

**HYDRANT Hysteria**
**Wednesday | 9:00 am - 11:00 am**
Hydrant Hysteria is a fast paced two person competition as to who can assemble a fire hydrant quickly, totally, and accurately. Two or more teams go head to head while assembling the hydrant. All parts will be assembled in proper manner and reassembled hydrant shall be tested by the judges for ability to operate correctly.

Questions: Mike George | tapitflorida@att.net | (352) 200-9631
EVENTS

ANNUAL BUSINESS LUNCHEON & AWARDS CEREMONY
Wednesday, December 1, 2021
12:00 - 2:00pm | Windsor Park 1-6

Another networking opportunity! Join us at for lunch on Wednesday. At the awards presentation, we will honor and recognize FSAWWA members for their contribution in meeting the goals of the FSAWWA. Come cheer on your peers! Tickets are available for sale at the conference registration table.

Golf Tournament
Wednesday, December 1, 2021
6:00 - 9:00 PM | TopGolf Orlando

Come enjoy a fun golf experience and network with water industry professionals. Your participation will benefit Water Equation and Water For People.

Registration starts at 5:00 pm

Location:
TopGolf Orlando
9295 Universal Blvd.
Orlando, FL 32819
(407) 218-7714 | topgolf.com/us/orlando

Eagle Sponsors:
AECOM
Carollo Engineers, Inc.
CHA Consulting, Inc.
CONSOR Engineers
CS3 Waterworks
Data Flow Systems Inc.
Ferguson Waterworks
Ford Meter Box Company Inc.
Freese and Nichols
Innovyze
Jacobs
Jones Edmunds & Associates, Inc.
Kimley-Horn and Associates, Inc.
National Metering Services
Public Utility Management and Planning Services, Inc.
Sensus, a Xylem Company
Sigma Corporation
Spirit Group, Inc.
Sundt Construction, Inc.
Wager Company of Florida, Inc.
Wharton-Smith, Inc.
Wright-Pierce, Inc.

Birdie Sponsors:
Carter VerPlanck, Inc.
NEFCO Systems, Inc.
Tridational Inc.
EXHIBIT HALL DIAGRAM
November 28 - December 1, 2021

Monday, November 29
Set-Up: 7:00am - 3:00pm
Meet & Greet: 4:00pm - 6:00pm

Tuesday, November 30
Hall Opens: 8:00am - 6:00pm
Closed: 11:30am - 1:30pm
Meet & Greet: 4:00pm - 6:00pm

Wednesday, December 1
Hall Open: 8:00am - 12:00pm
Tear-Down: 12:00pm - 6:00pm
<table>
<thead>
<tr>
<th>Organization</th>
<th>Booth #</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.Y. McDonald Manufacturing</td>
<td>606</td>
</tr>
<tr>
<td>ABM Building Services</td>
<td>1000</td>
</tr>
<tr>
<td>Advanced Drainage Systems, Inc.</td>
<td>103</td>
</tr>
<tr>
<td>Aegion-Insituform Technologies, LLC-Underground Solutions, Inc</td>
<td>1101</td>
</tr>
<tr>
<td>AECOM</td>
<td>305</td>
</tr>
<tr>
<td>American Cast Iron Pipe</td>
<td>517</td>
</tr>
<tr>
<td>American Flow Control</td>
<td>519</td>
</tr>
<tr>
<td>Anthrafilter</td>
<td>1010</td>
</tr>
<tr>
<td>ARCOS</td>
<td>914</td>
</tr>
<tr>
<td>Armorock Polymer Concrete</td>
<td>216</td>
</tr>
<tr>
<td>Avanti Company</td>
<td>200</td>
</tr>
<tr>
<td>Avista</td>
<td>108</td>
</tr>
<tr>
<td>Badger Meter</td>
<td>417</td>
</tr>
<tr>
<td>Bingham &amp; Taylor</td>
<td>713</td>
</tr>
<tr>
<td>Blue Planet Environmental Systems, Inc.</td>
<td>600, 602, 604</td>
</tr>
<tr>
<td>Carboline</td>
<td>307</td>
</tr>
<tr>
<td>Carollo Engineers</td>
<td>701, 703</td>
</tr>
<tr>
<td>Carter &amp; VerPlanck</td>
<td>616, 618</td>
</tr>
<tr>
<td>CHA Consulting, Inc.</td>
<td>313</td>
</tr>
<tr>
<td>Clow Valve</td>
<td>813, 815</td>
</tr>
<tr>
<td>Commerce Controls, Inc.</td>
<td>715</td>
</tr>
<tr>
<td>Consolidated Pipe &amp; Supply</td>
<td>808</td>
</tr>
<tr>
<td>Core &amp; Main LP</td>
<td>314, 316</td>
</tr>
<tr>
<td>Cornerstone H2O</td>
<td>817</td>
</tr>
<tr>
<td>CROM</td>
<td>317</td>
</tr>
<tr>
<td>Danus Utilities</td>
<td>916</td>
</tr>
<tr>
<td>Data Flow Systems, Inc.</td>
<td>501</td>
</tr>
<tr>
<td>Dewberry</td>
<td>918</td>
</tr>
<tr>
<td>Ductile Iron Pipe Research Association</td>
<td>112</td>
</tr>
<tr>
<td>EJ Company</td>
<td>518</td>
</tr>
<tr>
<td>Empire Pipe &amp; Supply</td>
<td>104, 106</td>
</tr>
<tr>
<td>England-Thims &amp; Miller, Inc.</td>
<td>1109</td>
</tr>
<tr>
<td>Environmental MD, Inc.</td>
<td>707</td>
</tr>
<tr>
<td>EnviroSales of Florida, Inc.</td>
<td>801, 803, 805, 807, 809</td>
</tr>
<tr>
<td>F.J. Nugent &amp; Associates Inc.</td>
<td>206, 208, 210, 212, 1103, 1105</td>
</tr>
<tr>
<td>Ferguson Waterworks</td>
<td>500, 502, 504</td>
</tr>
<tr>
<td>Florida Aqua Store</td>
<td>1107</td>
</tr>
<tr>
<td>Florida Pipeline Sales</td>
<td>300, 302, 304, 306, 308</td>
</tr>
<tr>
<td>Florida Protective Coatings Services, Inc.</td>
<td>1006</td>
</tr>
<tr>
<td>Florida Section AWWA</td>
<td>911</td>
</tr>
<tr>
<td>Flotech Inc.</td>
<td>217</td>
</tr>
<tr>
<td>Organization</td>
<td>Booth #</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>Fluid Control Specialties Inc.</td>
<td>700, 702, 704, 706, 708, 710</td>
</tr>
<tr>
<td>Ford Meter Box</td>
<td>608, 610</td>
</tr>
<tr>
<td>Fortiline</td>
<td>114, 116, 118</td>
</tr>
<tr>
<td>Freese and Nichols</td>
<td>619</td>
</tr>
<tr>
<td>FTC</td>
<td>906</td>
</tr>
<tr>
<td>FWRC/FWRJ</td>
<td>907</td>
</tr>
<tr>
<td>Garney Construction</td>
<td>315</td>
</tr>
<tr>
<td>GK Solutions</td>
<td>800</td>
</tr>
<tr>
<td>GML Coatings</td>
<td>109</td>
</tr>
<tr>
<td>Guardian Equipment, Inc.</td>
<td>717, 719</td>
</tr>
<tr>
<td>Halff Associates</td>
<td>712</td>
</tr>
<tr>
<td>Harry Warren Inc.</td>
<td>110</td>
</tr>
<tr>
<td>Haskell</td>
<td>806</td>
</tr>
<tr>
<td>Hawkins Inc.</td>
<td>900, 902</td>
</tr>
<tr>
<td>Hazen &amp; Sawyer</td>
<td>515</td>
</tr>
<tr>
<td>HDR</td>
<td>613</td>
</tr>
<tr>
<td>Hydromax USA</td>
<td>209, 211</td>
</tr>
<tr>
<td>IDEXX Laboratories</td>
<td>214</td>
</tr>
<tr>
<td>Infratech Group</td>
<td>405, 407, 409</td>
</tr>
<tr>
<td>ISCO Industries</td>
<td>401, 403</td>
</tr>
<tr>
<td>Itron</td>
<td>202</td>
</tr>
<tr>
<td>Jacobs</td>
<td>505</td>
</tr>
<tr>
<td>JCM Industries</td>
<td>607</td>
</tr>
<tr>
<td>Jones Edmunds &amp; Associates</td>
<td>415</td>
</tr>
<tr>
<td>Kamstrup Water</td>
<td>319</td>
</tr>
<tr>
<td>Kennedy/M&amp;H Valve &amp; Hydrant</td>
<td>503</td>
</tr>
<tr>
<td>Kimley-Horn and Associates</td>
<td>609</td>
</tr>
<tr>
<td>KUBOTA Membrane USA</td>
<td>1111</td>
</tr>
<tr>
<td>Lake Cane Restoration Society</td>
<td>910</td>
</tr>
<tr>
<td>Lazenby &amp; Associates</td>
<td>912</td>
</tr>
<tr>
<td>Matco-Norca and Milwaukee Tool</td>
<td>100, 102</td>
</tr>
<tr>
<td>McWane Ductile</td>
<td>418</td>
</tr>
<tr>
<td>Mississippi Lime Company</td>
<td>714</td>
</tr>
<tr>
<td>Moss-Kelley, Inc.</td>
<td>213</td>
</tr>
<tr>
<td>MTS Environmental</td>
<td>101</td>
</tr>
<tr>
<td>Mueller Co.</td>
<td>601, 603, 605</td>
</tr>
<tr>
<td>Nanostone Water, Inc.</td>
<td>107</td>
</tr>
<tr>
<td>National Metering Services, Inc.</td>
<td>716</td>
</tr>
<tr>
<td>Neptune Technology</td>
<td>507</td>
</tr>
<tr>
<td>Nicor</td>
<td>204</td>
</tr>
<tr>
<td>Odyssey Manufacturing Co.</td>
<td>920, 922</td>
</tr>
<tr>
<td>Porter Associates</td>
<td>612, 614</td>
</tr>
<tr>
<td>Organization</td>
<td>Booth #</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>Precon Tanks</td>
<td>802</td>
</tr>
<tr>
<td>PSI Technologies</td>
<td>901, 903</td>
</tr>
<tr>
<td>PVC Pipe Association</td>
<td>811</td>
</tr>
<tr>
<td>R&amp;M Service Solutions</td>
<td>512, 514</td>
</tr>
<tr>
<td>RiebertLok</td>
<td>413</td>
</tr>
<tr>
<td>RK&amp;K</td>
<td>1002</td>
</tr>
<tr>
<td>Sensus/Xylem</td>
<td>318</td>
</tr>
<tr>
<td>Sigma Corporation</td>
<td>309, 311</td>
</tr>
<tr>
<td>SKS Waterworks, LLC</td>
<td>705</td>
</tr>
<tr>
<td>Smith-Blair, Inc.</td>
<td>419</td>
</tr>
<tr>
<td>Specified Sales Associates</td>
<td>400, 402</td>
</tr>
<tr>
<td>Spirit Group Inc.</td>
<td>414, 416</td>
</tr>
<tr>
<td>Stenner Pumps</td>
<td>105</td>
</tr>
<tr>
<td>SUEZ Advanced Solutions</td>
<td>819</td>
</tr>
<tr>
<td>Swan Analytical</td>
<td>709</td>
</tr>
<tr>
<td>Tetra Tech</td>
<td>312</td>
</tr>
<tr>
<td>Thames &amp; Associates</td>
<td>201, 203, 205, 207</td>
</tr>
<tr>
<td>Thompson Pipe Group</td>
<td>904</td>
</tr>
<tr>
<td>Thompson Pump &amp; Manufacturing</td>
<td>218</td>
</tr>
<tr>
<td>Tradewinds Power Corp</td>
<td>219</td>
</tr>
<tr>
<td>Trihedral</td>
<td>615, 617</td>
</tr>
<tr>
<td>U.S. Pipe</td>
<td>404</td>
</tr>
<tr>
<td>U.S. Submerged Technologies</td>
<td>908</td>
</tr>
<tr>
<td>U.S. Water Services Corporation</td>
<td>215</td>
</tr>
<tr>
<td>UF TREEO Center</td>
<td>909</td>
</tr>
<tr>
<td>USSI LLC</td>
<td>905</td>
</tr>
<tr>
<td>Utility Services Associates, LLC</td>
<td>804</td>
</tr>
<tr>
<td>Volition Controls Corp.</td>
<td>1008</td>
</tr>
<tr>
<td>Wachs Utility</td>
<td>406</td>
</tr>
<tr>
<td>Wager Company of Florida</td>
<td>506, 508</td>
</tr>
<tr>
<td>WAPRO Valve</td>
<td>1004</td>
</tr>
<tr>
<td>Water Werks</td>
<td>711</td>
</tr>
<tr>
<td>Wharton-Smith, Inc.</td>
<td>301, 303</td>
</tr>
<tr>
<td>Woolpert</td>
<td>718</td>
</tr>
<tr>
<td>Wright Pierce</td>
<td>516</td>
</tr>
<tr>
<td>Time</td>
<td>Event Description</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------------------------------------------</td>
</tr>
<tr>
<td>Sunday, November 28, 2021</td>
<td>Executive Committee Meeting</td>
</tr>
<tr>
<td>12:00 PM</td>
<td>Registration</td>
</tr>
<tr>
<td>1:00 PM</td>
<td>Board of Governors Meeting</td>
</tr>
<tr>
<td>Monday, November 29, 2021</td>
<td>Workshop 1A: Looking Down the Road-What to Expect in the Regulatory Future</td>
</tr>
<tr>
<td>8:30 AM</td>
<td>Workshop 1B: Automation and SCADA Technology Workshop</td>
</tr>
<tr>
<td>8:30 AM</td>
<td>Workshop 1C: Get Your Research On</td>
</tr>
<tr>
<td>8:00 AM</td>
<td>Workshop 1E: Utility Systems Symposium</td>
</tr>
<tr>
<td>9:00 AM</td>
<td>Top Ops &amp; Operators / Maintenance Council Meeting</td>
</tr>
<tr>
<td>9:00 AM</td>
<td>Member Engagement &amp; Development Council Meeting</td>
</tr>
<tr>
<td>9:30 AM</td>
<td>Finance and Rates Committee Meeting</td>
</tr>
<tr>
<td>10:00 AM</td>
<td>Distribution Division Meeting</td>
</tr>
<tr>
<td>10:00 AM</td>
<td>Public Affairs Council Meeting</td>
</tr>
<tr>
<td>10:00 AM</td>
<td>Water Use Efficiency Division Meeting</td>
</tr>
<tr>
<td>11:00 AM</td>
<td>Automation Committee Meeting</td>
</tr>
<tr>
<td>12:00 PM</td>
<td>Workshop 2A: CyberSecurity 2021</td>
</tr>
<tr>
<td>12:00 PM</td>
<td>Workshop 2B: From High School to Hired</td>
</tr>
<tr>
<td>12:00 PM</td>
<td>Workshop 2C: Utility Finances in Challenging Times</td>
</tr>
<tr>
<td>12:00 PM</td>
<td>Workshop 2D: Water Conservation Symposium</td>
</tr>
<tr>
<td>11:30 AM</td>
<td>Regions / Council Chairs Lunch Meeting</td>
</tr>
<tr>
<td>2:30 PM</td>
<td>Opening General Session</td>
</tr>
<tr>
<td>4:00 PM</td>
<td>Exhibit Hall Meet &amp; Greet</td>
</tr>
<tr>
<td>6:00 PM</td>
<td>BBQ Challenge &amp; Incoming Chair's Reception</td>
</tr>
<tr>
<td>9:00 PM</td>
<td>Poker Tournament</td>
</tr>
<tr>
<td>Tuesday, November 30, 2021</td>
<td>Registration</td>
</tr>
<tr>
<td>7:00 AM</td>
<td>Continental Breakfast</td>
</tr>
<tr>
<td>8:00 AM</td>
<td>Session 1A: Potable Reuse</td>
</tr>
<tr>
<td>8:30 AM</td>
<td>Session 1B: SEDA/Membranes</td>
</tr>
<tr>
<td>8:30 AM</td>
<td>Session 1C: Navigating the New Normal</td>
</tr>
<tr>
<td>8:30 AM</td>
<td>Session 1D: Lead &amp; Copper</td>
</tr>
<tr>
<td>9:00 AM</td>
<td>FWR/FWR Board Meeting</td>
</tr>
<tr>
<td>9:30 AM</td>
<td>Water Equation Committee Meeting</td>
</tr>
<tr>
<td>10:00 AM</td>
<td>Young Professionals Meeting</td>
</tr>
<tr>
<td>10:00 AM</td>
<td>Backhoe Rodeo</td>
</tr>
<tr>
<td>11:00 AM</td>
<td>Ductile Iron Tap Competition</td>
</tr>
<tr>
<td>11:30 AM</td>
<td>High School Academy Students Session</td>
</tr>
<tr>
<td>Time</td>
<td>Event</td>
</tr>
<tr>
<td>------------</td>
<td>------------------------------------------------------------------------</td>
</tr>
<tr>
<td>11:30 AM</td>
<td>Students / Young Professionals Lunch</td>
</tr>
<tr>
<td>1:00 PM</td>
<td>Contaminants Committee Meeting</td>
</tr>
<tr>
<td>1:00 PM</td>
<td>Technical &amp; Educational Council Meeting</td>
</tr>
<tr>
<td>1:00 PM</td>
<td>Fun Tap Competition</td>
</tr>
<tr>
<td>1:30 PM</td>
<td>Session 2A: Asset Management</td>
</tr>
<tr>
<td>1:30 PM</td>
<td>Session 2B: Addressing Water Treatment Process Improvements</td>
</tr>
<tr>
<td>1:30 PM</td>
<td>Session 2C: Collaboration, Communication, and Protecting Critical Knowledge</td>
</tr>
<tr>
<td>1:30 PM</td>
<td>Session 2D: PFAS/PFOS</td>
</tr>
<tr>
<td>2:00 PM</td>
<td>Young Professionals Water Bowl</td>
</tr>
<tr>
<td>2:00 PM</td>
<td>Water Utility Council Meeting</td>
</tr>
<tr>
<td>3:00 PM</td>
<td>Full STEAM Ahead Youth Program Meeting</td>
</tr>
<tr>
<td>3:00 PM</td>
<td>Young Professionals Poster Session</td>
</tr>
<tr>
<td>4:00 PM</td>
<td>FL2040 Committee Meeting</td>
</tr>
<tr>
<td>4:00 PM</td>
<td>Meter Madness</td>
</tr>
<tr>
<td>4:00 PM</td>
<td>Water Quality &amp; Resources Division Meeting</td>
</tr>
<tr>
<td>4:00 PM</td>
<td>Meet &amp; Greet</td>
</tr>
</tbody>
</table>

**Wednesday, December 1, 2021**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:00 AM</td>
<td>Registration</td>
<td>Grand Cypress Foyer</td>
</tr>
<tr>
<td>8:00 AM</td>
<td>Exhibits</td>
<td>Grand Cypress</td>
</tr>
<tr>
<td>8:15 AM</td>
<td>Continental Breakfast</td>
<td>Grand Cypress</td>
</tr>
<tr>
<td>8:30 AM</td>
<td>Session 3A: GIS, SCADA, and Asset Management</td>
<td>Regency Hall 5</td>
</tr>
<tr>
<td>8:30 AM</td>
<td>Session 3B: Alternative Water Supplies</td>
<td>Regency Hall 6</td>
</tr>
<tr>
<td>8:30 AM</td>
<td>Session 3C: Alternative Water Supplies</td>
<td>Regency Hall 7</td>
</tr>
<tr>
<td>8:30 AM</td>
<td>Session 3D: Water Treatment - Disinfection - By-Products</td>
<td>Regency Hall 8</td>
</tr>
<tr>
<td>9:00 AM</td>
<td>Hydrant Hysteria Competition</td>
<td>Grand Cypress</td>
</tr>
<tr>
<td>12:00 PM</td>
<td>Annual Business Lunch &amp; Awards Ceremony</td>
<td>Windsong 1-6</td>
</tr>
<tr>
<td>12:00 PM</td>
<td>Tear Down / Move Out</td>
<td>Grand Cypress</td>
</tr>
<tr>
<td>5:00 PM</td>
<td>Golf Tournament</td>
<td>TopGolf Orlando</td>
</tr>
</tbody>
</table>
2021 FALL CONFERENCE

SPONSORS

Premier:
AECOM
CHA Consulting, Inc.
CS3 Waterworks
Data Flow Systems Inc.
Ferguson Waterworks
Freese and Nichols
Jacobs
Jones Edmunds & Associates, Inc.
Kimley-Horn & Associates, Inc.
National Metering Services, Inc.
Public Utility Management and Planning Services, Inc.
Sigma Corporation
Spirit Group Inc.
Sundt Construction, Inc.
Wager Company of Florida, Inc.
Wharton-Smith, Inc.
Wright-Pierce

Gold:
Carollo Engineers
Fortiline Waterworks
Trihedral Inc.
Woolpert

Silver:
GHD
McWane Ductile

Platinum:
American Cast Iron Pipe Company
Atkins
Core and Main
England-Thims & Miller, Inc.
Haiff Associates
HDR
ISCO Industries
Kiewit
MeterSYS
Nanostone Water
PSI Technologies Inc
Tetra Tech
Thames & Associates
The Ford Meter Box Company
U.S. Water Services Corporation
Wade Trim