2019 FALL CONFERENCE
Building a Resilient Utility

Download the 2019 FSAWWA Fall Conference App

December 8 to December 12, 2019
Omni Orlando Resort at ChampionsGate
Welcome to the 2019 FSAWWA Fall Conference. We meet once again at the Omni Orlando Resort at ChampionsGate. We hope that you find the fall conference informative, educational, and fun. Use our mobile app to optimize your conference experience by providing quick access to the exhibitors and other events. The fall conference starts with Monday’s specialty workshops and a utility symposium. The Florida Section AWWA is proud to announce the opening keynote speaker for 2019. This year’s keynote speaker is Dr. Jonathan Foley, a world-renowned climate scientist, sustainability expert, and public speaker. Don’t miss Dr. Foley during the Opening General Session on Monday afternoon. 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, Kim Kowalski, and ends with the poker tournament.

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

Tuesday/Wednesday highlights: technical sessions all day and specialty workshops: Community Engineering Corps (CECorps) “What’s in My Backyard” and “How to Address Your Infrastructure Needs Now!” Operator competitions: backhoe rodeo, hydrant hysteria, tapping competitions, and meter madness. Students and young professionals: water bowl and fresh ideas posters session. Meet and Greet at the exhibit hall from 4:00 – 6:00 PM. At 5:30 PM, join us at the Omni’s Lazy River for the Water For People Duck Race.

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

The golf tournament marks the end of the conference on Thursday. The net proceeds from the tournament benefits the Roy Likins Scholarship Fund and Water Equation.

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.

Michael Bailey, PE
FSAWWA Chair, 2018-19
VISITING OFFICERS

Richard Hope
Vice-President (2019-2021)
American Water Works Association

Richard is a Senior Vice President for AECOM and lives in Stevens Point, Wisconsin. With over 38 years of experience managing water-engineering projects in the water industry, Richard has been an active member of AWWA since 1990.

Richard is the Global Water Technical Practices Network Leader. At the Association level, he has served as a past chair of the Engineering and Construction Division and the Infrastructure Management Committee. He is also a current member of the International Council. Richard has served as a past chair of the Wisconsin Section and currently serving as the Wisconsin Director and Vice President. Richard is a frequent speaker at conferences. He has experience as both a design and field engineer and is a specialist in asset management, master planning, hydraulic modeling and water loss control. Richard has received the George Warren Fuller and the Kenneth Miller Founders awards.

Richard holds a Bachelor's degree in Civil Engineering from Teesside Polytechnic and diploma in Business Administration from Warwick University. He is a licensed Professional Engineer (P.E.) in the State of Wisconsin and a Chartered Engineer in the United Kingdom.

OPENING GENERAL SESSION

Dr. Jonathan Foley
Keynote Speaker
Expert on Global Sustainability, Food Security, Freshwater & Climate Change

Dr. Jonathan Foley is a world-renowned climate scientist, sustainability expert, and public speaker. He is the executive director of Project Drawdown — the world's leading resource for climate solutions. His work focuses on finding solutions to sustain the climate, ecosystems, and natural resources we all depend on.

Foley's groundbreaking work has led him to become a trusted advisor to governments, foundations, non-profits, and business leaders around the world. He and his colleagues have made major contributions to our understanding of climate change, ecosystems, food systems, and the sustainability of the world's resources. He has published over 130 peer-reviewed scientific articles, including many highly cited works in Nature and Science. He is among the top 1 percent most cited global scientists.
Monday, December 9, 2019
7:30 AM – 4:30 PM | Harmony A

Workshop 1E:
Utility Systems Symposium – “It’s Getting Crowded Down Here”
Certification: 0.8 CEU, 8.0 PDH

7:30 - 8:00  Sign In and Coffee
8:00 – 8:15  Symposium Introductions
8:15 – 9:00  Inflow & Infiltration, Fabier Fernandez, InfraTEch Group
9:00 - 9:45  Wastewater AML, Eric Corey, The Avanti Company
9:45 - 10:00  Break
10:00 - 10:45  Distribution Symposium Asset Management
Tom Hogeland, Data Flow Systems
9:00 - 9:30  Developing an Agency-Specific Approach to
AWWA Compliance
Thea Dunmire, Tampa Bay Water
9:45 - 10:00  Break
10:00 - 10:45  Distribution Symposium Asset Management
Tom Hogeland, Data Flow Systems
10:45 - 11:30  One System/Multiple Solutions,
Hassan Cruz, E.H. Wachs
11:30 - 12:00  Open Discussion Roundtable,
John Corey and Tom Hogeland
12:00 - 1:00  Lunch (on site)
1:00 - 1:45  Asset Management & Maintenance Services
Mark McDowell, RM Associates
1:45 - 2:30  Proper Selection, Install and Maintenance of
Backflow Devices
Scott Shugart, Specific Sales
2:30 - 3:15  Simple Steps for Creating a Sustainable System,
Tony Shriner, iamGIS
3:15 - 3:30  Break
3:30 - 4:15  Repair Clamps and Restraining Joints,
Carlos Gonzalez, Smith Blair
4:15 - 4:30  Open Panel Discussion, John Corey & Tom Hogeland
Monday, December 9, 2019
8:00 AM -10:30 AM | Lanier A

**Workshop 1A:**
Water Utilities’ Responses to AWIA’s Risk & Resiliency Assessment Requirements
Certification: 0.25 CEU, 2.5 PDH
**Moderator:** David T. Yonge, PhD, PE

8:00 – 8:30  Strategic Risk & Resilience for Water Utilities
Chris Moody, AWWA Regulatory Technical Manager

8:30 – 9:00  New Risk Assessment and Emergency Response Plan Requirements and Tools for Water Utilities
Nushat Dyson, EPA - Office of Water’s Water Security

9:00 – 9:30  Developing an Agency-Specific Approach to AWIA Compliance
Thea Dunmire, Tampa Bay Water

9:30 – 10:00  A Consecutive System’s Path to AWIA Certification
Dave Adams, Pinellas County

10:00 – 10:30  How FRWA Can Assist With Your RRA and ERP
Jim McClougherty, Florida Rural Water Association

Monday, December 9, 2019
8:00 AM -10:30 AM | Lanier B

**Workshop 1B:**
Customer Water Quality Concerns and Consumer Confidence Reports - What does it really mean?
Certification: 0.25 CEU, 2.5 PDH
**Moderator:** Pamela London-Exner, FSAWWA TEC Chair

- Managing Multiple Consumer Confidence Reports from Multiple Agencies  |  Vanessa Shook, Pasco County Utilities
- What Might Be New and Different or Just More of the Same with Consumer Confidence Reports  
  Therese LaDouceur, Florida Department of Health, Hillsborough County
- Customer Service Website Planning  
  Chris M. Collier, City of Cocoa Utilities
Monday, December 9, 2019
8:00 AM -10:30 AM | Heritage Park

Workshop 1C:
Succession Planning- Getting Creative and Innovative to Keep Positions Filled
Certification: 0.25 CEU, 2.5 PDH
Moderator: Shea N Dunifon, Pinellas County Utilities

8:00 – 8:30 Pinellas Counties Educational Program
Shea N Dunifon, Pinellas County Utilities

8:30 – 9:00 How an After-School Program is Working to Offer Training for Potential New Operators
Karen McCullen & Ed Torres, City of Altamonte Springs

9:00 – 9:30 High School Operations Training Overview and Updates
Steve Soltau, Pinellas County Utilities

9:30 – 10:00 Let’s Talk About Me: Listening to Our Staff
Emilie Moore, Tetra Tech

10:00 – 10:30 How a Utility is Looking at Succession Planning

Monday, December 9, 2019
8:00 AM -10:30 AM | Seminole

Workshop 1D:
Development of a Project Delivery Manual for Hillsborough County
Certification: 0.25 CEU, 2.5 PDH
Moderator: Jason Parrillo, Hillsborough County
Speaker: Albert D. Martini & William Harrington, Hillsborough County

Workshop will cover Capital Improvement Program (CIP) Life Cycle.

- Project Planning Phase:
  Project Identification, Planning, Project Development

- Project Review and Approval

- Project Implementation Phase:
  Design and Permitting, Construction, Closeout
Monday, December 9, 2019
11:30 AM - 2:30 PM | Lanier A

Workshop 2A:
SCADA Resiliency: Back-Up’s, Disaster Recovery, Remote Access, Resilient Architectures, Instrumentation & Controls Design
Certification: 0.3 CEU, 3.0 PDH
Moderator: Mike Stoup, P.E., McKim & Creed

- Backups and Disaster Recovery
  Mike Stoup, P.E., McKim & Creed

- Resilient Instrumentation
  Evan Curtis, Hazen and Sawyer

- Remote Access, Resilient Architectures
  Abdel Hussein, Tampa Bay Water

Monday, December 9, 2019
11:30 AM - 2:30 PM | Lanier B

Workshop 2B:
UCMR-4 And LCR Sampling, Interpreting The Data - When Can You Trust the Data?
Certification: 0.3 CEU, 3.0 PDH
Moderator: Rae Hafer, P.E., Gainesville Regional Utilities

- Unregulated Contaminant Monitoring Rule (UCMR 4): Why are we looking and what are we finding?
  Moderator: Stephanie Ishii, PhD, Principal Scientist, Hazen and Sawyer

- Regulatory Technical Manager, AWWA "Federal Actions to Address Lead and Copper"
  Chris Moody, Regulatory Technical Manager, AWWA

- Experiences and Challenges Faced by Utilities in Optimizing Corrosion Control Strategies: Testing, Selection, Monitoring, and Unintended Consequences
  Becki Rosenfeldt, Senior Principal Engineer, Hazen and Sawyer
Monday, December 9, 2019
11:30 AM - 2:30 PM | Heritage Park

Workshop 2C:
Sustainable Finances for Your Utility
Certification: 0.3 CEU, 3.0 PDH
Moderator: Tony Hairston, Raftelis Financial Consultants, Inc

- Workshop overview:
  Tony Hairston, Raftelis

- RevPlan Financial Planning for Florida Rural Water Utilities
  Joe Williams, Raftelis

- Utility Capital Planning & Budgeting Best Practices
  Diane Reichard, City of Plant City

- Funding/SRF/Alternative Funding
  Sharon Simington, Arcadis

- Facilitated Roundtable

Monday, December 9, 2019
11:30 AM - 2:30 PM | Seminole

Workshop 2D:
Potable Reuse in Florida: Current Status, Opportunities and Challenges
Certification: 0.3 CEU, 3.0 PDH
Moderator: Rae Hafer, P.E., Gainesville Regional Utilities

- An Update on Potable Reuse Commission in Florida
  Lynn Spivey, Director of Utilities, City of Plant City

- Pathogen Risk in Potable Reuse: Emerging Tools, QMRA and Treatment Redundancy
  Chris Owen, PhD, Director of Water & Reuse Innovations, Hazen and Sawyer

- Impacts of PFAS to Potable Reuse and Considerations for Enhanced Source Control
  Chris Hill, PE/BCEE/ENV SP, National Technical Leader for Water, Mead & Hunt

- Talk and Drink Your Way to Potable Reuse
  Bart Weiss, P.G., Chief Officer, Innovation and Resiliency, Hillsborough County Public Utilities Department.
TUESDAY, DECEMBER 10, 2019
1:30PM-3:00PM | POINCIANA

Job Order Contracting and Continuing Services:
How to Address Your Infrastructure Needs Now
Course #05100545 | Credits: 0.15 CEUs / 1.5 PDHs

Come join our panel of industry experts for an open discussion on these delivery methods including procurement, lessons learned, and the right fit project scopes.

Presented by: FSAWWA Contractor’s Council

PANELISTS:
John J. Masche, P. E.
Project Manager
City of Phoenix Water Services Department

Michael Schlesinger, CPPB
Senior Procurement Analyst
City of St. Petersburg

John French
Project Manager
Pinellas County Utilities

Rachel A. Haeseleer, P.E.
Supervising Utility Engineer
Gainesville Regional Utilities

Andrew T. Franosz
Manager of Preconstruction Services
PCL Construction
Tuesday, December 10, 2019
8:30 AM - 11:30 AM | St. Cloud A

Session 1A:
Building in Resiliency
Certification: 0.3 CEU, 3.0 PDH
Moderator: Richard Gallant, E.I., City of Wellington

8:30 – 8:40  Moderator Comments

8:40 – 9:10  Active Resilience Through Distributed Energy Generation & Storage,
Charles Moseley, Black & Veatch and Ilya Tabakh, SunCrater Energy

9:10 – 9:40  The Importance of Climate Downscaled Projections and Mechanisms to Mitigate Uncertainty through Scenario Planning, Adaptive Pathways, and Decision Scaling Methods for Utility Planning and Operations, Carlos Tamayo, AECOM


10:10 – 10:30  Break

10:30 – 11:00  Resilient Utilities Dashboard - Meeting Future Water Vulnerability through Adaptive Management, Carolina Maran and Katie Lelis, Broward County

11:00 – 11:30  Improving Climate Change Resilience of Municipal Wastewater Infrastructure, Da Yu and Edward Talton, Reiss Engineering, Inc., and Nancy Gassman, City of Fort Lauderdale

Tuesday, December 10, 2019
8:30 AM - 11:30 AM | St. Cloud B

Session 2A:
SEDA-AMTA Session on Membrane Technology
Certification: 0.3 CEU, 3.0 PDH
Moderator: Karla Berroteran, Village of Wellington, SEDA Board

8:30 – 8:40  Moderator Comments

8:40 – 9:10  A Regulatory Perspective on Concentrate Management in Florida, Christine Owen, Hazen and Sawyer

9:10 – 9:40  Experiences with Concentrate Disposal Permitting, Ed Weinberg, PWS EW Consultants, Inc.

9:40 – 10:10  Concentrate as a Resource, Harold Fravel, American Membrane Technology Assoc.

10:10 – 10:30  Break

Continued >>
10:30 – 11:00 Concentrate Disposal Considerations for In-Land Desalination: A Comparison of Case Studies from Florida and Texas, Jarrett Kinslow, P.E., Tetra Tech

11:00 – 11:30 Case Study of the Boca WTP and the Current Concentrate Disposal Method, Rick Channess, City of Boca Raton

Tuesday, December 10, 2019
8:30 AM -11:30 AM | Celebration A

Session 3A:
Water Quality
Certification: 0.3 CEU, 3.0 PDH
Moderator: Paul Chadik, University of Florida

8:30 – 8:40 Moderator Comments

8:40 – 9:10 Is Our Copper Piping Going Down The Drain? 
James Christopher & Stephen Rousseau, Tetra Tech, Inc.

9:10 – 9:40 Dealing with Widespread PFAS Contamination,
David D. Peters, City of Stuart,
Mark D. Miller, Evan Ghidella, Kimley-Horn & Assoc., Inc.

9:40 – 10:10 Ion Exchange Processes for Drinking Water Treatment,
Daniel Whalen and Steven Duranceau, PhD, P.E.,
University of Central Florida

10:10 – 10:30 Break

10:30 – 11:00 Color Related Water Quality Issues? – A Utility’s path to finding the correct solution,
Nita Naik, Sean Chaparro, & Sean Pitcher, Arcadis US, Inc.

11:00 – 11:30 Disinfection By-Products Control For a Small System,
Tulsi Shukla, Steven Duranceau, PhD, P.E., Dale Lance,
David Ruggiero, & Gary Rudolph, UCF

Tuesday, December 10, 2019
8:30 AM -11:30 AM | Celebration B

Session 4A:
Groundwater Sustainability Challenges
Certification: 0.3 CEU, 3.0 PDH
Moderator: Paul Biscardi, PhD, P.E. Hazen and Sawyer

8:30 – 8:40 Moderator Comments

8:40 – 9:10 Evaluation of the Lower Floridan Aquifer for Future Brackish Water Supply in Central Florida,
George Schlutermann, Southwest Florida Water Management District, Amanda Berens, Jacobs Engineering and Peter Larkin, ASRus, LLC
9:10 – 9:40  Reuse, Replenish, Recover – The Potential of using Alternative Water Supplies for ASR and MAR in North Pinellas County, David T. Yonge and Tom Friedrich, Jones Edmunds & Associates, Michael Weatherby, HydroGeo Consulting, Dave Adams, Pinellas County Utilities and Mark McNeal, ASRus, LLC


10:10 – 10:30  Break

10:30 – 11:00  The Resurrection of Aquifer Storage and Recovery in Miami-Dade County, Virginia Walsh, Miami-Dade Water and Sewer Dept., Edward Rectenwald, Black & Veatch

11:00 – 11:30  Can Updating the National ASR Survey Provide a Means To Predict Success Of Future Aquifer Storage and Recovery Systems? Frederick Bloetscher, PhD, P.E., Florida Atlantic University and Chi Ho Sham, Eastern Energy Group

Tuesday, December 10, 2019
9:00 AM – 12:00 PM | Poinciana

Community Engineering Corps Workshop
“What’s in My Backyard?”

Are you interested in learning more about the Community Engineering Corps (CECorps) and how to get a project started in Florida? You’re in luck! Steve Barr, the Community Engineering Programs Manager for AWWA, will be hosting a CECorps workshop at this year’s FSAWWA Fall Conference. At the workshop, we’ll learn about the CECorps project process and best practices to working with underserved communities. At the end of the class, volunteers will feel ready to develop and implement a CECorps project in Florida and make a lasting and meaningful impact on our local community.

Tuesday, December 10, 2019
1:30 PM – 4:30 PM | St. Cloud A

Session 1B:
Resiliency and Sanitary Sewers
Certification: 0.3 CEU, 3.0 PDH
Moderator: Emilie Moore, P.E., TetraTech

1:30 – 1:40  Moderator Comments

1:40 – 2:10  Weathering the Storm: Keeping Your Lift Stations Clear in Emergency Conditions, Jason Warren, Tetra Tech, Inc., David Nowell & Laura Woodbury, Orange County Utilities

Continued >>
2:10 – 2:40 Hillsborough County Wet Well Dilemma: Fall Protection Evaluation and Implementation at 830 Pump Stations, Brian Lewis, David Fox, and Nicholas Eckhardt, Black &Veatch

2:40 – 3:10 Annual I&J Mitigation Planning Keeps the City of Altamonte Springs Poised to Handle Storm Events, Eric Gassen and Ed Talton, Reiss Engineering, Inc. and Kipton Lockcuff, City of Altamonte Springs

3:10 – 3:30 Break

3:30 – 4:00 Innovative Method to Maximize the Water Conservation Impacts of Reclaimed Water Reuse While Increasing Total Revenue, Edward H. Talton, Reiss Engineering, Inc.

4:00 – 4:30 Water Balances and Hydraulic Analysis: Maximizing the Beneficial Use of Reclaimed Water Through Seasonal Changes and Growth, Kirsten Burns and David Ammerman, Carollo Engineers, Inc.

Tuesday, December 10, 2019
1:30 PM – 4:30 PM | St. Cloud B

Session 2B:
Potable Reuse
Certification: 0.3 CEU, 3.0 PDH
Moderator: Deb Beatty, Toho Water Authority

1:30 – 1:40 Moderator Comments

1:40 – 2:10 Septic to Sewer for Commercial and Industrial Corridors in Miami-Dade County Yields a Safer Water Supply, Christopher A. Zavatsky and Ken Caban, Tetra Tech, Inc. and Annalise Mannix, Miami-Dade Water & Sewer Dept.

2:10 – 2:40 Achieving the Intent of a Pilot Scale Study Utilizing a Full-Scale Demonstration for an Indirect Potable Reuse Project, Seung Park, Brad Baird and Chuck Weber, City of Tampa, David Ammerman, Sarah Burns and Tyler Smith Semago, Carollo Engineers, Inc.

2:40 – 3:10 Negotiating an Uncertain Landscape: Health and Regulatory Considerations for Potable Reuse, Dave MacNevin, CDM Smith

3:10 – 3:30 Break

3:30 – 4:00 Adaptation in the Face of Adversity: The Persistent Trend of Membranes in Water Reuse, Jennifer Ribotti and James Christopher, Tetra Tech

4:00 – 4:30 Natural Contaminant Attenuation During Reclaimed Water Aquifer Recharge (Destin, Florida), Robert G. Maliva, Florida Gulf Coast University, Scott Manahan, WSP, and Monica Autrey, P.E., City of Destin
Tuesday, December 10, 2019
1:30 PM - 4:30 PM | Celebration A

Session 3B:
Information to Build in Resiliency – SCADA Saves the Day
Certification: 0.3 CEU, 3.0 PDH
Moderator: Steven King, P.E., Black and Veatch

1:30 – 1:40    Moderator Comments

2:40 – 2:10    Machine-intelligent Technology Using Low Voltage Conductivity to Locate and Measure Pipeline Leaks, Chuck Hansen; Michael Condron, Electro Scan Inc.

2:10 – 2:40    Evaluation of Energy Use and Optimization Strategies for the City of Venice’s Water & Wastewater Treatment Plants, Steven King, Black and Veatch, Ryan Eck, Lucas Botero, John Banks

2:40 – 3:10    After the Assessment: A Practical Approach to Implementing Cybersecurity, Bob George, Tetra Tech

3:10 – 3:30    Break


4:00 – 4:30    Using Satellite RADAR Imaging to Detect Pipeline Leaks in Hilton Head – A Case Study, James Perry, Utilities

Tuesday, December 10, 2019
1:30 PM - 4:30 PM | Celebration B

Session 4B:
Water Supply Planning Solutions
Certification: 0.3 CEU, 3.0 PDH
Moderator: Christine Ellenberger, P.E., Jacobs

1:30 – 1:40    Moderator Comments

1:40 – 2:10    Alternative Water Supply and Water Conservation Projects Included into Regional Water Supply Plans: An Economic Analysis, Tatiana Borisova, University of Florida, Matthew Cutillo and Krystle Hoestlne, Economic and Demographic Research

2:10 – 2:40    Water for a Thirsty Florida – A Regional Approach, Kathleen N. Gierok, Greg Taylor, Benjamin Yoakum, Wright-Pierce


3:10 – 3:30    Break

Continued >>
3:30 – 4:00  Polk County’s Water Facility Consolidation Journey: The Central Regional Utility Service Area (CRUSA) Water Production Facility, Mark Addison, P.E., Steve Whidden, Polk County Utilities and Ervin Myers, P.E., Glenn Dunkelberger, P.E., Lawrence Rolle, P.E., Ed Talton, P.E., Reiss Engineering, Inc.

4:00 – 4:30  To the Aquifer and Beyond! A Path for Expanding the City of Port St. Lucie’s Water Supply Portfolio, Andrea Netcher, PhD, P.E., and James Christopher, P.E., Tetra Tech, Brad Macek and John Eason, P.E., City of Port St. Lucie, GJ Schers, Jacobs

Wednesday, December 11, 2019
8:30 AM – 11:30 AM | Kissimmee A

Session 1C:
Case Studies in Water Treatment Advances
Certification: 0.3 CEU, 3.0 PDH
Moderator: Steven King, P.E., Black and Veatch

8:30 – 8:40  Moderator Comments

8:40 – 9:10  Water Treatment Resiliency - Can Your Plant Handle What is Coming? Rebecca Slabaugh, Nita Naik, and Sean Chaparro, Arcadis US, Inc.

9:10 – 9:40  Scale Inhibitor Dosage: How Low Can You Go? Carlyn Higgins and Steven Duranceau, PhD, P.E., University of Central Florida


10:10 – 10:30  Break

10:30 – 11:00  Reverse Osmosis to Nanofiltration Membrane Conversion: A Case Study of the Village of Wellington’s Water Treatment, Matthew Tebow and John Potts, Kimley-Horn, Shannon LaRocque, Village of Wellington

11:00 – 11:30  Operation and Maintenance Comparative Assessment of Co-located Nanofiltration, Lime Softening and Low-Pressure Reverse Osmosis Systems at the Norwood Water Treatment Plant, Veronica Llaneza, Moises Sierra Ortiz, Carlos Carrazana, Cristina Ortega-Castineiras, P.E., Jacobs, and Jafeth Baez, City of North Miami Beach

Continued >>
Wednesday, December 11, 2019
8:30 AM - 11:30 AM | Kissimmee B

Session 2C:
Innovative Water Pipe Solutions
Certification: 0.3 CEU, 3.0 PDH
Moderator: Michael Demko, Wade Trim

8:30 – 8:40 Moderator Comments
8:40 – 9:10 City of Taylor Embraces Pre-Chlorinated Pipe Bursting and Directional Drilling, Kelly McRobb-Ackland, Wade Trim
9:10 – 9:40 Legionella Building Water Management and the Local Water Utility: Proactive Approaches that can Reduce End-User Risk, Alex LeBeau
9:40 – 10:10 The Economic Advantage of Critical Valve Assessment and Rehabilitation, Wayne Pratt, Wachs Water Services
10:10 – 10:30 Break
10:30 – 11:00 Method to Evaluate Fatigue Life Calculations in PVC Pipe, Steven Folkman, Utah State University and Jay Parvez, Uni-Bell PVC Pipe Association
11:00 – 11:30 Innovative Technologies to Manage Aging Infrastructure, Ayu Sari, Erez Allouche, Pete Perciavalle, Laith Alfaqih, Joan Oppenheim, Russ Snow, Joseph G. Jacangelo, Carla Cherchi, Sangeeta Dhulashia, Susette Irizarry, Stantec

Wednesday, December 11, 2019
8:30 AM - 11:30 AM | St. Cloud A

Session 3C:
Water Distribution
Certification: 0.3 CEU, 3.0 PDH
Moderator: Jay Madigan

8:30 – 8:40 Moderator Comments
8:40 – 9:10 Updates in Second Edition of AWWA M55 HDPE, Amster Howard
9:10 – 9:40 Sustainability of Lower Energy Costs by Utilization of Proper Pipeline Materials, John Simpson, McWane Inc.
10:10 – 10:30 Break

Continued >>

16 FSAWWA 2019 Fall Conference
10:30 – 11:00  Evaluating a Novel Treatment Process for the Control of Total Trihalomethanes and Haloacetic Acids in Potable Water, Angela B. Rodriguez, Hazen and Sawyer Inc., and Steven Duranceau, PhD, P.E., UCF

11:00 – 11:30  Providing Resiliency in the Operation of a Transmission System, Stefano Ceriana, Reiss Engineering Inc. and Ed Gil de Rubio, South Seminole & North Orange County Wastewater Transmission Authority

Wednesday, December 11, 2019
8:30 AM - 11:30 AM | St. Cloud B

Session 4C:
What's in your Conservation Portfolio -
Current programs and Trends and Future Projections
Moderator: Deirdre Irwin, SJRWMD

8:40 – 9:10  Water Demand and the Economy: Lessons Learned from the Great Recession, Dr. Jack Kiefer, Hazen and Sawyer Inc.

9:10 – 9:40  Climate Change and Water Conservation, Dr. Chris Martinez, University of Florida and Florida Water and Climate Alliance

9:40 – 10:10 Landscaping and Conservation in Alachua County (Recent code updates), Rebecca Hoffmann, Alachua County Environmental Protection Department

10:30 – 11:30  University of Florida, Soil and Water Sciences Research Advances in Water Conservation Accelerating Soil Formation for Irrigation Conservation in New Landscapes, Dr. Eban Bean, University of Florida

Compost topdressing as an alternative landscaping practice, AJ Reisinger, University of Florida

Irrigation Stuff, Michael Dukes, University of Florida

H2OSAV: Moving from Data to Insights, Nick Taylor, University of Florida
BATTLE OF THE FLORIDA SCHOOL FLAGS
Show off your Florida University spirit. Donate $5 or more and you get to raise your school flag. Flag will stay on the pole until the next donation. Donations will be collected throughout Conference at the FSAWWA tabletop | Foyer 9.

WATER FOR PEOPLE RAFFLE
The FSAWWA Conference Exhibitors are sponsoring a raffle to support water projects in developing countries. Each participating exhibitor will receive raffle tickets to distribute for free to those who visit the firm’s booth. Signage/balloons will be posted to direct visitors to the participating booths to obtain a free raffle ticket.

Raffle tickets will also be sold for $5 each at the Water for People booth. Winners will be drawn on Tuesday, December 10, 2019 at 3:00pm in the Exhibit Hall. You may enter as many times as you wish by filling out a ticket and bringing it to the Water for People booth. You may win only once.

For more information contact: Juan Aceituno (305) 905-3492

WATER FOR PEOPLE DUCK RACE FUNDRAISER
The Water for People committee is hosting a Duck Race at this year’s Conference to support water and sanitation projects in developing countries. Three Visa Gift Cards will be awarded.

1st Place: $100 | 2nd Place: $50 | 3rd Place: $25

Adopt a duck: 1 for $5 | 5 for $20

The race will be in the Lazy River area of the hotel on Tuesday, December 10, 2019 at 5:30pm.

Hors d’oeuvres provided from 5:30 - 6:30pm courtesy of Tetra Tech.

For more information visit the Water for People table in the foyer.
STUDENTS & YOUNG PROFESSIONALS
CONFERENCE ACTIVITIES
Tuesday, December 10, 2019
10:00am - 6:00pm

At a Glance:
10:00am -11:00am YP Committee Meeting | Kissimmee B
11:30am - 1:30pm Lunch | Lanier
2:00pm – 3:00pm Water Bowl Competition | Osceola Ballroom
3:00pm - 6:00pm Fresh Idea Poster Session | Osceola Promenade

FSAWWA OPERATORS INITIATIVE
HIGH SCHOOL ACADEMY STUDENT SESSION
Tuesday, December 10, 2019
11:30am - 1:30pm | Seminole

As 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.

Join the AWWA Diversity and Member Inclusion Committee and FSAWWA Young Professionals for

Full STEM Ahead
YOUTH PROGRAM
ROBOT CHALLENGE
Tuesday, December 10, 2019
9:00am - 4:00pm | Heritage Park
Competitors: Jackson Middle School Students
Come join the festivities which include the BBQ, networking, entertainment, and a toast to Kim Kowalski, our 2020 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, People’s Choice award, 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:
C&B Piping
Construction Services Corporation of Tallahassee
Electric Services, Inc.
GML Coatings
HDR
Integ-crete Construction
Kiewit Water Facilities Florida Co.
McDade Waterworks
Reynolds Construction
TSC-Jacobs North, Inc.
Woolpert

Bar Sponsors:
Barney’s Pumps, Inc.
Core & Main
Electric Services, Inc.
Exceltech Coating & Applications
GML Coatings
North Lake Electric, Inc.
PSI Technologies, Inc.
Rocha Controls
Wade Trim
**Opening General Session**

**Monday, December 9**
2:30-4:00 PM | National A

**Keynote Speaker:** Dr. Jonathan Foley | Expert on Global Sustainability, Food Security, Freshwater & Climate Change

**Topics:**

- **DRAWDOWN:** A Global Plan to Address Climate Change
- Fixing the Global Food System
- Why Businesses Should Care About the Environment
- Standing Up for Science is Standing Up for America

---

**POKER NIGHT & Happy Hour**

**Monday, December 9**
9:30 - 12:00 PM | The Grand Salon

Join us for a good cause and a lot of fun at the Florida Section AWWA Poker Tournament featuring a cash bar and hors d’oeuvres.

**Buy-In entry fee:**
- **Spade:** $20 for 2,000 chips
- **Heart:** $40 for 5,000 chips

**Games:** Texas Hold’Em for Grand Prize | BlackJack

**Grand Prize:** 50” HDTV!

**Royal Flush Sponsors:**
- AECOM
- American Cast Iron Pipe
- Core & Main
- DATA FLOW SYSTEMS
- EMA Inc.
- Ferguson Waterworks
- First Billing Services, Inc.
- Jones Edmunds
- Kinley-Horn and Associates, Inc.
- Reiss Engineering, Inc.
- Sensus
- Sigma Corporation
- Sks Waterworks, LLC
- Wager Company of Florida, Inc.
- Wharton-Smith
- Wright-Pierce

**Full House Sponsors:**
- Atkins
- Veith Engineering & Business Solutions
FSAWWA hosts fun and lively competitions between municipalities to find the most skilled person or team in the Meter Madness, Tapping, and Back Hoe Rodeo 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
ANNUAL BUSINESS LUNCHEON & AWARDS CEREMONY
Wednesday, December 11, 2019
12:00 - 2:00pm | Grand Salon

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

Thursday, December 12
Registration & Practice: 7:00 - 8:00am
Shotgun Start: 8:00am (4 person scramble)

Location: International Golf Course at ChampionsGate

Contests: Longest Drive| Putting | Closest to the Pin

Mulligan Package: $35/person

For more information: Chase Freeman | Cfreeman@spiritgroupinc.com

Eagle Sponsors:
- AECOM
- American Cast Iron Pipe
- Archer Western
- Data Flow Systems
- EMA Inc.
- Environmental Equipment Services
- Environmental MD
- Ferguson Waterworks
- Jacobs Engineering

Birdie Sponsors:
- CPH, Inc.
- Florida Pipeline Sales Llc
- WL Plastics

Par Sponsors:
The Avanti Company

Lunch Sponsors:
- Star Pipe Products
- The Ford Meter Box Company

Benefiting The Roy Likins Scholarship Fund

Water Equation. Funding the Future of Water
EVENTS

EXHIBIT HALL DIAGRAM
December 8 - December 12, 2019

Monday, December 9
Set-Up: 7:00am - 3:00pm
Meet & Greet: 4:00pm - 6:00pm

Tuesday, December 10
Hall Opens: 8:00am - 6:00pm
Closed: 11:30am - 1:30pm
Meet & Greet: 4:00pm - 6:00pm

Wednesday, December 11
Hall Open: 8:00am - 12:00pm
Tear-Down: 12:00pm - 6:00pm

24 FSAWWA 2019 Fall Conference
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<td>AECOM</td>
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<td>American Cast Iron Pipe</td>
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<td>American Flow Control</td>
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<td>American Membrane Technology Assoc.</td>
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<td>Ameris Bank</td>
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<td>ARCOS LLC</td>
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<td>Bingham &amp; Taylor</td>
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<td>CROM</td>
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<td>Ductile Iron Pipe Research Association</td>
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<td>Electro Scan Inc.</td>
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<td>Empire Pipe &amp; Supply</td>
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<tr>
<td>10:00 AM</td>
<td>Executive Committee Meeting</td>
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<tr>
<td>12:00 PM</td>
<td>Registration</td>
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<tr>
<td>1:00 PM</td>
<td>Board of Governor's Meeting</td>
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<tr>
<td>7:00 AM</td>
<td>Registration</td>
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<td>8:00 AM</td>
<td>Workshop 2A: Water Utilities' Responses to AWA's Risk &amp; Resiliency Assessment Requirements</td>
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<tr>
<td>8:00 AM</td>
<td>Workshop 1B: Customer Water Quality Concerns and Consumer Confidence Reports</td>
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<tr>
<td>8:00 AM</td>
<td>Workshop 1C: Succession Planning - Getting Creative and Innovative to Keep Positions Filled</td>
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<tr>
<td>8:00 AM</td>
<td>Workshop 1D: Development of a Project Delivery Manual for Hillsborough County</td>
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<tr>
<td>8:00 AM</td>
<td>Workshop 1E: Utility Systems Symposium - &quot;It's Getting Crowded Down Here&quot;</td>
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<tr>
<td>9:00 AM</td>
<td>Member Engagement &amp; Development Council Meeting</td>
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<td>9:00 AM</td>
<td>Operators/Maintenance Council Meeting</td>
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<td>9:00 AM</td>
<td>FWRC/FWRU Board Meeting</td>
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<td>9:00 AM</td>
<td>FlaWARN Meeting</td>
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<td>9:30 AM</td>
<td>Finance and Rates Committee Meeting</td>
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<td>10:00 AM</td>
<td>Public Affairs Council Meeting</td>
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<td>10:00 AM</td>
<td>Water Equation Committee Meeting</td>
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<td>10:00 AM</td>
<td>Member Engagement Committee</td>
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<td>FL2040 Committee Meeting</td>
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<td>11:00 AM</td>
<td>Water for People Committee Meeting</td>
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<td>11:30 AM</td>
<td>Regions/Council Chairs Lunch Meeting</td>
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<tr>
<td>11:30 AM</td>
<td>Workshop 2A: SCADA Resiliency</td>
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<td>11:30 AM</td>
<td>Workshop 2B: UCMR-4 and LCR Sampling, Interpreting the Data</td>
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<td>11:30 AM</td>
<td>Workshop 2C: Sustainable Finances for Your Utility</td>
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<td>11:30 AM</td>
<td>Workshop 2D: Potable Reuse in Florida - Current Status, Opportunities and Challenges</td>
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<tr>
<td>2:30 PM</td>
<td>Opening General Session</td>
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<td>4:00 PM</td>
<td>Exhibit Hall Meet and Greet</td>
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<td>6:00 PM</td>
<td>BBQ Challenge &amp; Incoming Chair's Reception</td>
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<tr>
<td>9:00 PM</td>
<td>Poker Tournament</td>
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<tr>
<td>7:00 AM</td>
<td>Registration</td>
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<tr>
<td>8:00 AM</td>
<td>Exhibit Hall Open (closed 11:30 am – 1:30 pm)</td>
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<tr>
<td>8:15 AM</td>
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<tr>
<td>8:30 AM</td>
<td>Session 1A: Building Resiliency</td>
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<tr>
<td>8:30 AM</td>
<td>Session 2A: SIDA AMTA Session on Membrane Technology</td>
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<tr>
<td>8:30 AM</td>
<td>Session 3A: Water Quality</td>
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<td>Session 4A: Groundwater Sustainability Challenges</td>
<td>Celebration B</td>
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<tr>
<td>9:00 AM</td>
<td>Community Engineering Corps (CECorps)</td>
<td>Poinciana</td>
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<tr>
<td>9:20 AM</td>
<td>Full STEAM Ahead Youth Program</td>
<td>Heritage Park</td>
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<tr>
<td>10:00 AM</td>
<td>Young Professionals Meeting</td>
<td>Kissimmee B</td>
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<tr>
<td>10:00 AM</td>
<td>Backhoe Rodeo</td>
<td>Parking Lot</td>
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<tr>
<td>11:00 AM</td>
<td>Ductile Iron Tap Competition</td>
<td>Parking Lot</td>
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<tr>
<td>11:00 AM</td>
<td>Top Ops Brainstorming</td>
<td>Harmony A</td>
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<tr>
<td>11:30 AM</td>
<td>Students/Young Professionals Lunch</td>
<td>Lanier</td>
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<td>11:30 AM</td>
<td>High School Academy Students Session</td>
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<td>Biological Contaminants Committee Meeting</td>
<td>Kissimmee A</td>
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<td>Technical &amp; Educational Council Meeting</td>
<td>Kissimmee B</td>
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<tr>
<td>1:00 PM</td>
<td>Fun Tap Competition</td>
<td>Parking Lot</td>
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<tr>
<td>1:30 PM</td>
<td>Contractors Council Workshop: How to Address Your Infrastructure Needs Now!</td>
<td>Poinciana</td>
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<tr>
<td>1:30 PM</td>
<td>Session 1B: Resilience and Sanitary Sewers</td>
<td>St. Cloud A</td>
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<tr>
<td>1:30 PM</td>
<td>Session 2B: Potable Reuse</td>
<td>St. Cloud B</td>
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<tr>
<td>1:30 PM</td>
<td>Session 3B: Information to Build in Resiliency - SCADA Saves the Day</td>
<td>Celebration A</td>
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<td>2:00 PM</td>
<td>Young Professionals Water Bowl</td>
<td>Osceola Ballroom</td>
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<td>Automation Committee Meeting</td>
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<td>MeterMadness</td>
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<td>Water Quality &amp; Resources Division Meeting</td>
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<td>5:00 PM</td>
<td>Meet and Greet</td>
<td>Osceola Ballroom</td>
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<tr>
<td>5:30 PM</td>
<td>Water for People Duck Race</td>
<td>Lazy River</td>
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</tbody>
</table>

### WEDNESDAY, DECEMBER 11, 2019

<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>Osceola Promenade</td>
</tr>
<tr>
<td>8:00 AM</td>
<td>Exhibit Hall Open</td>
<td>Osceola Ballroom</td>
</tr>
<tr>
<td>8:15 AM</td>
<td>Continental Breakfast</td>
<td>Osceola Ballroom</td>
</tr>
<tr>
<td>8:30 AM</td>
<td>Session 1C: Case Studies in Water Treatment Advances</td>
<td>Kissimmee A</td>
</tr>
<tr>
<td>8:30 AM</td>
<td>Session 2C: Innovative Water Pipe Solutions</td>
<td>Kissimmee B</td>
</tr>
<tr>
<td>8:30 AM</td>
<td>Session 3C: Water Distribution</td>
<td>St. Cloud A</td>
</tr>
<tr>
<td>8:30 AM</td>
<td>Session 4C: What’s in Your Conservation Portfolio - Current Programs &amp; Trends and Future Projections</td>
<td>St. Cloud B</td>
</tr>
<tr>
<td>9:00 AM</td>
<td>Hydrant Hysteria Competition</td>
<td>Osceola Ballroom</td>
</tr>
<tr>
<td>12:00 PM</td>
<td>Annual Business Lunch &amp; Awards Ceremony</td>
<td>The Grand Salon</td>
</tr>
<tr>
<td>2:00 PM</td>
<td>Water Use Efficiency Division Meeting</td>
<td>Celebration</td>
</tr>
</tbody>
</table>

### THURSDAY, DECEMBER 12, 2019

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 AM</td>
<td>Golf Tournament</td>
<td>International Golf Course</td>
</tr>
<tr>
<td>10:00 AM</td>
<td>Lunch and Awards</td>
<td>International Golf Course</td>
</tr>
</tbody>
</table>
2019 FALL CONFERENCE
Building a Resilient Utility

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- Data Flow Systems
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- Sigma Corporation
- SKS Waterworks, LLC
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- Wharton-Smith
- Wright-Pierce

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- Freese and Nichols, Inc.
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- HDR
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- Jacobs Engineering
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- Tetra Tech
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- Core & Main
- Florida Aquastore
- & Utility Construction, Inc.
- Hydra Service Inc.
- MARS Company

Silver:
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- Consolidated Pipe & Supply
- McWane Ductile
- Smith-Blair
- Xylem Dewatering Solutions, Inc.
- Xylem, Inc.