



WATER INSTITUTE SYMPOSIUM

FEBRUARY 24-26, 2026

GAINESVILLE, FL

	Tuesday, February 24, 2026
7:30am-8:30am	<p>Check-in for Preregistered Attendees - Pickup Symposium Materials <i>Onsite registration not available</i></p> <p>Early Morning Refreshments [Grand Ballroom - 2nd Floor]</p>
8:30am-10:00am	<p>Opening Plenary Session [Rion Ballrom - 3rd Floor]</p> <p>Introduction and Welcome Matt Cohen, Director, University of Florida Water Institute</p> <p>David P. Norton, Vice President for Research, University of Florida</p> <p>Keynote Speaker Joseph Shapiro <i>Associate Professor, Agricultural & Resource Economics Department, UC Berkeley</i> "The New Economics of U.S. Water Quality Policy"</p>
10:00am-10:30am	<p>Morning Refreshment Break [Grand Ballroom - 2nd Floor]</p>

	Tuesday, February 24, 2026 (continued)						
	Concurrent Sessions — 1:30pm - 3:00pm						
Room	2335	2340	2355	2365	Auditorium	3315	3320
Session	8	9	10	11	12	13	14
Session Title	Understanding Water Quantity Dynamics	AI, ML and Big Data for Water Systems	Integrating Science and Community Engagement to Strengthen Sustainable Watershed Stewardship	Managing and Restoring Submerged Aquatic Vegetation: Science and Practice	Extreme Events and Coastal Hazards	Water and Nutrient Dynamics in Agricultural Systems	Advancement of Fate and Transport of Per- and Polyfluoroalkyl Substances (PFAS) in the Soil
Moderator/ *Session Organizer	Olesya Savchenko University of Florida	Joel Harley University of Florida	*Kassy Holmes Rollins College	Savanna Barry University of Florida	Katherine Serafin University of Florida	Haimanote Bayabil University of Florida	*Rafael Muñoz-Carpena University of Florida
1:30pm	Introduction	Introduction	Introduction	Introduction	Introduction	Introduction	Introduction
1:35pm	Tara Bongiovanni St. Johns River Water Management District	Gregory Conde University of Florida	This interactive, three-part session begins with a panel discussion introducing the topic and speakers’ relevant experience. Speakers then rotate among small audience groups (10–15 people) for facilitated, in-depth conversations supported by roaming note takers. Audience members actively contribute ideas and questions throughout. The session concludes with speakers sharing key takeaways from the small-group dialogues.	Andrew Altieri University of Florida	Dushan Kavishka Mulkrigala Kankanamalage University of North Florida	Duplicate Sambani University of Florida	Dengjun Wang University of Florida
	Taylor Creek Reservoir / St. Johns River Water Supply Project Water Yield Analysis	Physics-Informed Neural Networks for Predicting Crop Water Needs		Simple Sustainable Intervention to Reverse Ecological Feedback Driving Seagrass Retreat	Numerical Simulation of Hurricane-Driven Sediment Transport Processes of a Florida Barrier Island	The Use of Organic Acids to Improve Soil Health and Nutrient Uptake in HIB-Affected Citrus	A Review of In-Situ PFAS Treatment Technologies in Soil and Groundwater
1:50pm	Johanna Engstrom University of Florida	Nicolas Fernandez University of Florida	Keeli Carlton Seminole County Florida	Savanna Barry University of Florida	Xiaohui "Sherry" Qiao University of Florida	Katie Pisarello American Farmland Trust	Andrew Zimmerman University of Florida
	How Vulnerable is Florida to Drought? A National Comparison	Florida Water Quality and Quantity Enhanced Synthesis Tools - FFlow Q2uest		Addressing Stakeholder Goals of Seagrass Conservation Through Actionable Research	Incorporating Water-Related Processes for Quantifying Hurricane Impacts on Agricultural Production	Crop Nutrient Profile Linkages to Water Resources Across Conus	Biochar Adsorption of PFAS, with Emphasis on Biosolid Biochar
2:05pm	Stephanie Long-Marquez Chen Moore & Associates	Robin Speidel Southwest Florida Water Management District	Edward Millar University of Windsor	Jian Jun Di St. Johns River Water Management District	Aditia Rojali University of Florida	Henry Pittman University of Florida	Katherine Deliz Quinones University of Florida
	Different Tools, Different Goals: Hydrologic Modeling of South Florida’s Western Basins	A Decade of Data Stewardship: Evolving the Water Resources Data Collection Assessment Process	Tom Mould Rollins College	Establishing Suspended Sediment Targets to Support Continuing Expansion of Aquatic Vegetation	Probabilistic Compound Flood Inundation Mapping for the Lower Suwannee River FL	North Florida Water Impacts of Automation Technology Extension Programming for Drip Irrigated Crops	Machine Learning Reveals Environmental Drivers of PFAS Distribution in Soils
2:20pm	Qing Sun St. Johns River Water Management District	Catherine Wolden Southwest Florida Water Management District	UF/IFAS Extension	Kevin Grace DB Environmental, Inc.	Y. Peter Sheng Affiliation	Josue St Fort University of Florida	AJ Reisinger University of Florida
	Delineation of Selected Springsheds Utilizing Regional Numerical Groundwater Flow Models	Aligning Data with Purpose: Southwest Florida Water Management District’s Data Governance Journey	Emily Nodine Rollins College	Sav Recovery at Scale: Response of Managed Wetlands to Drawdown and Large Lake to Turbidity Controls	Role of Mangroves for Reducing Hurricane-Induced Flood Losses	Modeling Infiltration and Runoff During Strawberry Transplants Establishment Using Hydrus 1D	PFAS Risks of Repurposing Wastewater and Biosolids for Environmental Benefits
2:35pm	Patrick Tara INTERA	Saba Shaghaghi Khajehdehi University of Florida		Laura Reynolds University of Florida	Piash Chowdhury University of North Florida	Shin-Ah Lee University of Florida	Jonathan Judy University of Florida
	The Construction and Calibration of a Hydrodynamic Model of the Upper Withlacoochee To Support MFLs	Predicting Water Quality and Quantity in Florida Using Soft Computing Techniques		Monitoring Trends in the Large Intact Seagrass Meadows Florida’s Nature Coast	Water Quality Modeling of the St. Johns River Estuary During Sea-Level Rise and Disaster Scenarios	Coupled C, N, and P Cycling within an Agriculturally Dominated Watershed	PFAS Concentrations and Partitioning Trends in Wastewater and Drinking Water Treatment Wastes
2:50pm	Discussion	Discussion	Discussion	Discussion	Discussion	Discussion	Discussion
3:00pm-3:30pm	Afternoon Refreshment Break [Grand Ballroom - 2nd Floor]						

	Tuesday, February 24, 2026 (continued)
3:30pm-5:30pm	<p>Plenary Session: <i>Telling the Water Story: Science Communication for Impact and Action</i> [Rion Ballrom - 3rd Floor]</p> <p><i>"The Science of Great Science Communication"</i> Ann Christiano, Director, Center for Public Interest Communications, University of Florida</p> <p><i>"Getting to the Heart of Science Communication: Navigating Emotion and Conflict While Engaging"</i> Faith Kearns, Director of Research Communications, Arizona Water Innovation Initiative</p> <p><i>"I'm a Reporter. You Should Talk to Me"</i> Jenny Staletovich, Environmental Reporter,WLRN</p>
5:30pm - 7:00pm	<p>Career Fair and Networking Reception With sponsor networking opportunities and light refreshments [Grand Ballroom - 2nd Floor]</p>

	Wednesday, February 25, 2026 (continued)
7:30am-8:30am	Early Morning Refreshments [Grand Ballroom - 2nd Floor]
8:30am-10:00am	<div>Plenary Session [Rion Ballroom - 3rd Floor]</div> <div>Introduction and Welcome Matt Cohen, Director, University of Florida Water Institute</div> <div>Plenary Session: <i>From Data to Decisions: Advancing Water Quality Concepts, Models, and Measurements</i> [Rion Ballroom - 3rd Floor]</div> <div>"Making it Matter: Designing Scientific Research to Achieve Decision-Support Outcomes" Mark Rains, Professor of Geology, University of South Florida & Chief Science Officer, State of Florida</div> <div>"Current Trends in Legacy and Emerging Contaminants in Florida Waterways" Joseph Bisesi, Associate Director, UF/IFAS Center for Aquatic and Invasive Plants (CAIP)</div> <div>"Technological Frontiers in Data-Driven Water Modeling" Alison Appling, Water Data Scientist, U.S. Geological Survey</div>
10:00am-10:30am	Morning Refreshment Break [Grand Ballroom - 2nd Floor]

	Wednesday, February 25, 2026 (continued)						
	Concurrent Sessions — 10:30am - 12:00pm						
Room	2335	2340	2355	2365	Auditorium	3315	3320
Session	15		16	17	18		19
Session Title	Perspectives on Tool Improvements for Water Supply and Delivery System Sustainability and Operations		New Frontiers of Remote Sensing in Hydrology	Spring Ecosystem Dynamics	Resiliency Planning Initiatives for Water Resources Management in South Florida		Advancing Fecal Contamination Detection with Tryptophan-Like Fluorescence: Florida and Global Perspectives
Moderator/ *Session Organizer	*Jeffrey Geurink Tampa Bay Water		*Nargiza Ludgate University of Florida	Madison Trowbridge Southwest Florida Water Management District	*Nicole Cortez South Florida Water Management District		*Ansley Tilley EcoStasis
10:30am	Introduction		Introduction	Introduction	Introduction		Introduction
10:35am	Kshitij Parajuli Tampa Bay Water Initial Steps to Assess Water Supply Sustainability Change Due to Land Use Change		This interactive session explores the emerging frontiers of remote sensing technologies in hydrology across diverse sectors, including GeoHealth, Agriculture, Aquaculture, Geology, Bathymetry etc. Designed as a World Café-style session, this format promotes dynamic dialogue through short lightning talks followed by small-group rotating discussions. The goal is to promote multidisciplinary dialogues, peer exchange, and practical insights into the real-world applications of remote sensing.	Brett Connell Trutta Environmental Solutions, LLC Wekiva River Eelgrass Mapping Using High-Definition Stream Survey (HDSS)	Al Ali South Florida Water Management District Rainfall Trends in South Florida		James Sorensen British Geological Survey Fluorescence spectroscopy for the real-time detection of faecally contaminated freshwater
10:50am	Mark Ross University of South Florida New Physical Process Simulation of Surface and Vadose Zone Hydrology for HSPF			Katie Schoenberger Suwannee River Water Management District Hydrodynamics of Submerged Aquatic Vegetation Motion: A Case Study in Florida Springs	Tibebe Dessalegne South Florida Water Management District Flood Control Effectiveness Evaluations at South Florida Coastal Structures		Whitney Knopp CU Boulder/Virridy Fluorescence in the Field: Validating and Applying a TIF Sensor to Monitor Microbial Water Quality
11:05am	Yu Zhang Michael Baker International Improving Effectiveness and Efficiency of Hydrologic Modeling Using Multiple Spatial Scales		PANEL: Jasmeet Judge Univeristy of Florida Shirley Baker University of Florida Mickey MacKie University of Florida Peter Ifju University of Florida	Madison Trowbridge Southwest Florida Water Management District Drivers Of Benthic Macroalgae in Florida's Coastal Springs	Nicole Cortez South Florida Water Management District Enhancing Regional Resilience Through Flood Occurrence Data Collection and Stakeholder Engagement		Terri Lewis CereBulb Condition-Based Operations: Real-Time Intelligence for Florida's Water Quality Management
11:20am	Manoj Shrestha University of Central Florida Operational Seasonal Streamflow Forecasts with Rainfall Uncertainty for Water Supply Availability			Katherine Wardinski University of Florida The Influence of Dissolved Organic Carbon on Water Quality in Florida Springs and Groundwater	Charles Jacoby Florida Flood Hub Statewide Coupled Ocean-Atmosphere Regional Model		Matthew Ross OpenCurrent Skip The Proxy: Trustworthy, Direct Modeling of Water Quality Constituents
11:35am	Solomon Erkyihun Tampa Bay Water Simulation and Calibration of Tampa Bay Water's Regional Hydraulic Model		John Conklin University of Florida Group Discussion	Paul Donsky Suwannee River Water Management District Hypoxia and Dissolved Oxygen Dynamics During River Intrusion Events in Florida's Springs	Anushi Obeysekera South Florida Water Management District Lower East Coast Water Supply Vulnerability Assessment		Alex Johnson Virridy How Low-Cost Continuous Sensor Arrays Create New Monitoring Paradigm for Utilities and Local Governments
11:50am	Discussion			Discussion	Discussion		Discussion
12:00pm-1:30pm	Lunch [Grand Ballroom - 2nd Floor]						

	Wednesday, February 25, 2026 (continued)						
	Concurrent Sessions — 1:30pm - 3:00pm						
Room	2335	2340	2355	2365	Auditorium	3315	3320
Session	20	21	22	23	24	25	26
Session Title	One Water in Action: Breaking Silos, Building Resilience, Managing Every Drop	Education and Outreach for Water Sustainability	Data for Decisions: Facilitating Florida's Enhanced Resilience	Restoring Spring Flows and Lake Levels in North Florida through Enhanced Aquifer Recharge	Central and Southern Florida Project: Evolution, Collaboration, and Lessons Learned: Part I	Nutrient Dynamics and Restoration Strategies	Tracking Change: Monitoring Water Quality and Ecosystem Health
Moderator/ *Session Organizer	*Kelly Flowers Hass Jones Edmunds	Cynthia Nazario-Leary University of Florida	*Lacey Lingelbach Florida Flood Hub	*Rick Hutton GRU	*Carolina Maran South Florida Water Management District	Luna Phillips Florida AWA/ Gunster	Rick Copeland AquiferWatch
1:30pm	Introduction	Introduction	Introduction	Introduction	Introduction	Introduction	Introduction
1:35pm	This session will explore how Florida is implementing One Water principles through beneficial reuse, regulatory innovation, and strategic public outreach. We'll connect these efforts to the upcoming Chapter 373 revisions, highlighting implications for permitting, water supply planning, and regional water coordination. Discussion will emphasize how integrated management, interdisciplinary collaboration, and public engagement can help communities and utilities adapt and thrive in a changing regulatory landscape.	Cynthia Nazario-Leary University of Florida Follow the Water: An Immersive Educational Approach to Building Water Resource Awareness	Heidi Brockhaus Florida Flood Hub Overview of the Florida Flood Hub	Chris Keller Wetland Solutions, Inc Recharge Wetlands for Environmental Restoration and Public Access	Tarana Solaiman South Florida Water Management District Bringing Critical Flood Control Infrastructure Projects into Design and Construction	Edgar Guerron Orejuela University of South Florida What Are the Chances? A Geospatial Tool for Predicting Nutrient Loading to Florida's Waterbodies	Rick Copeland AquiferWatch Nitrate Concentration Declines in Groundwater of the Santa Fe River Basin, Florida (2014 – 2024)
1:50pm		Aishwarya Shankar University of Florida Emriver Table as an Interdisciplinary Teaching Tool in Landscape Architecture Visualization	Gary Mitchum University of South Florida Sea Level Change Workgroup	Robert Naleway St. Johns River Water Management District Black Creek Water Resource Development Project	Jason Engle U.S. Army Corps of Engineers Talking Operations in the C&SF Project	David Tomasko Sarasota Bay Estuary Program Development and Implementation of the Pollutant Load Reduction Goal for Sarasota Bay	David Duffy University of Florida River DNA Long-Read Sequencing: Rapidly Monitor Biodiversity, Wildlife, Pollution and Ecosystem Health
2:05pm	Lee Hale Hale Innovation Gary Hubbard City of Winter Haven Kassidy King City of Winter Haven	Marianne Vernetson University of Florida Bridging the Civic Gap: Engaging Students in Gulf Communities in Florida's Water Challenges	Jayantha T. Obeysekera Florida International University Rainfall Workgroup	Warren Zwanka Suwannee River Water Management District Enhanced Aquifer Recharge in the Santa Fe River Basin	Bradley Foster U.S. Army Corps of Engineers Comprehensive Everglades Restoration Plan: A Puzzle Piece of the Central and Southern Florida Project	Dan Dai University of Florida Seasonal Patterns in Solute Concentrations in the North Lake Okeechobee Basin	Morgan Edwards University of Florida Tracking Water Quality in the Nature Coast Aquatic Preserve
2:20pm		Jamielyn Daugherty University of Florida Water Schools Build Local Capacity for Water Resource Management in Central Florida	Amanda Barroso Florida Flood Hub Regional Climate Model	Timothy Perkins St Johns River Water Management District Water First North Florida Project	Gustavo Suarez-Narvaez U.S. Army Corps of Engineers Addressing Change Conditions with the Central and Southern Florida Flood Resiliency (Section 216) St	Shannon Salvatori St. Johns River Water Management District Internal Phosphorus Recycling in Lake Jesup: A New Focus for Restoration	Renee Price University of Florida Vegetation Dynamics and Community Divergence in Central Florida Reference Wetlands
2:35pm	David Rathke Resiliency Florida	Elizabeth Kelly Martin County BOCC Regulations, Research, and Reaching Out: The Martin County Water Ambassadors Program	Discussion	Ryan Popko JEA JEA H2.0 Purification and Replenishment	Walter Wilcox South Florida Water Management District Broward Basins C&SF Flood Resiliency Project (Section 203) Alternatives and Comprehensive Benefits	Madeline Sutherland University of Florida St. Lucie Estuary, Where is the Carbon and Nitrogen Coming From?	Patrick Williamson Badger Meter Texas-Sized Resilience: How Galveston's Smart Water Network Endured Hurricane Beryl
2:50pm	Discussion	Discussion		Discussion	Discussion	Discussion	Discussion
3:00pm-3:30pm	Afternoon Refreshment Break [Grand Ballroom - 2nd Floor]						

	Thursday, February 26, 2026
7:30am-8:30am	Early Morning Refreshments [Grand Ballroom - 2nd Floor]
8:30am-10:00am	<div>Plenary Session</div> <div>[Rion Ballroom - 3rd Floor]</div> <div>Introduction and Welcome</div> <div>Matt Cohen, Director, University of Florida Water Institute</div> <div>Keynote Speaker</div> <div>Elizabeth Anderson</div> <div>Freshwater Conservation Ecologist, Florida International University</div> <div>"Interdisciplinary and Intercultural Collaboration in Water Resources Science"</div>
10:00am-10:30am	Morning Refreshment Break [Grand Ballroom - 2nd Floor]

	Thursday, February 26, 2026 (continued)						
	Concurrent Sessions — 10:30am - 12:00pm						
Room	2335	2340	2355	2365	Auditorium	3315	3320
Session	34		35	36	37	38	39
Session Title	Managing Water for Urban Landscapes		AI Application in Soil and Water Resources Management in Florida	Building Resilience Through Multi-Stakeholder Partnerships	Innovations in Projects and Modeling Tools to Increase Resilience of Communities and Natural Systems	Understanding and Predicting Harmful Algal Blooms	Emerging Contaminants in Aquatic Systems
Moderator/ *Session Organizer	Eliana Bardi Alachua County Environmental Protection		*Golmar Golmohammadi University of Florida	Darlene Velez University of Florida	*Ann Shortelle Bio-Tech Consulting	Lisa Krimsky University of Florida	Amanda Subaluskyy University of Florida
10:30am	Introduction		Introduction	Introduction	Introduction	Introduction	Introduction
10:35am	Beth Alvi Audubon Florida Florida's Hidden Water Supply: Reducing Irrigation to Secure a Sustainable Water Future		Nasser Najibi University of Florida Spatiotemporal Learning of Clustered Weather Extremes in a Changing Climate	Megan Brinton Stetson University The Social Science of Stewardship: Evaluating the Surface to Springs RCPP	F. Warren McKinnie Streamline Technologies, Inc. Proactive Resilience: Protecting Communities with Real-Time Flood Forecasting	Stacy Cecil St. Johns River Water Management District Drivers of Sustained Algal Blooms in the Indian River Lagoon, FL	Tracie Baker University of Florida Contaminants of Emerging Concern and Antimicrobial Resistance in Great Lakes Water and Fish Species
10:50am	Bernard Cardenas University of Florida Are Watering Restrictions Effective in Decreasing Irrigation Water Use?		Haimanote Bayabil University of Florida Simulating Soil Hydrologic Dynamics Using Conventional and Machine Learning Techniques	Amy Goodden Wetland Solutions, Inc. Lake Alice Watershed Management Plan	Nicola Ianeselli WGI Inc Digital Twin & AI for Resilience	Nicholas Chin Water Institute Identifying the State Dependent Drivers of Florida Red Tide (Karenia Brevis) Dynamics	Katherine Milla Florida A&M University Microplastics Transport Within an Interconnected Surface Water-Ground Water Hydrogeologic System
11:05am	Hollie Greer Alachua County Alachua County's Florida-Friendly Landscaping™ Code: Implications for Statewide Efforts		Nikolaos Tziolas University of Florida An Interactive Chat-Map Platform for Rapid, Uncertainty-Aware EO Insights	Jun Kim Florida Polytechnic University Sustainable Water-Ecosystem Development Through City-University Partnership	Tom Frick St Johns River Water Management District Unique Potential Uses for Real-time Flood Forecasting	Josh Papacek St. Johns River Water Management District Harmful Algal Bloom Monitoring in the St. Johns River	Joshua Benjamin University of Florida Trace Elements in the Mara River: Implications for Water and Ecosystem Health
11:20am	Megan McKinsey University of Florida The Impact of Restrictive Irrigation Ordinances on Establishment of Newly Planted Landscape Trees		Rafael Muñoz-Carpena University of Florida TEK in Tech: Merging Physics and AI with Traditional Ecological Knowledge (TEK) for Flood Modeling	Mary Szafraniec Resource Environmental Solutions (RES) Enhancing Water Quality Through Innovative Canal Restoration—A Multistage Channel Design Pilot Study	John Lesman Bio-Tech Consulting Enhancing Resilience of Green Infrastructure with Mitigation Banking	Syed Usama Imtiaz Florida State University Self-Supervised Learning (SSL) for Cyanobacterial Blooms Prediction	Lakshay Dhamania University of Florida Fluorine-free, Chemically Modular Polymer Adsorbents for Capturing PFOA
11:35am	Laura Vasquez University of Florida Landscape Irrigation Retrofits and Water Savings in Miami-Dade County		Nikolay Bliznyuk University of Florida Forecasting Monthly Streamflow in West-Central Florida using Statistical Machine Learning	Monica Wilson University of Florida Operation TRAP – Using Interceptor Devices for Trash Reduction in Florida's Aquatic Preserves	Carolina Maran South Florida Water Management District Innovation in Resiliency: Integrating Green and Gray Critical Flood Infrastructure Projects	Mitra Nasr Azadani Florida State University Quantifying Drivers of Cyanobacterial Blooms with Causal Spatiotemporal AI	Amanda Sills University of Florida Ecotoxicological Impacts of PFAS Mixtures: Mechanistic Insights from Menidia beryllina
11:50am	Discussion		Discussion	Discussion	Discussion	Discussion	Discussion
12:00pm-1:30pm	Lunch [Grand Ballroom - 2nd Floor]						

3:30pm- 5:30pm	Thursday, February 26, 2026 (continued)
	<p><u>Closing Plenary Session</u> [Rion Ballroom - 3rd Floor]</p> <p><u>Presentation of Student Poster Competition Awards</u></p> <p>Closing Panel: <u><i>Harnessing Data for Florida's Water Future</i></u></p> <p>Panelists: Beth Alvi, National Audubon Society Tirusew Asefa, Tampa Bay Water Amy Brown, Suwannee River Water Management District Sara Davis, Florida Department of Environmental Protection Jayantha Obeysekera, Florida International University Matthew Ross, Radical Open Science Syndicate</p>
5:30pm	Symposium Concludes