DETAILED AGENDA

	Tuesday, February 20, 2024
7:30am	Check-in for Preregistered Attendees - Pickup Symposium Materials Onsite registration not available
3	Early Morning Refreshments [Grand Ballroom Hallways]
8:	Opening Plenary Session [Grand Ballroom] Introduction and Welcome Matt Cohen, Interim Director, University of Florida Water Institute Scott Angle, Provost and Senior Vice President for Academic Affairs, University of Florida
8:30am	Keynote Speaker Stephen Loheide Professor Department of Civil and Environmental Engineering University of Wisconsin "What Can Ecohydrology Do for You? Developing a Scientific-basis for Decision Making"
	Morning Refreshment Break 10:00am

NOTES			

	Tuesday, February 20, 2024 (continued)							
		T	1	nt Sessions — 10:30am				
	Room 2335	Room 2340	Room 2355	Room 2365	Auditorium	Room 3315	Room 3320	
	Session 1	Session 2	Session 3	Session 4	Session 5	Session 6	Session 7	
Session Title	Adaptation Planning Strategies for Flood Resilience	Legacy Phosphorus in the Upper St. Johns River: Emerging Issues and Solutions	Environmental Justice Approaches in Water Research, Education and Policy	Linkages between Land Use, Climate and Downstream Effects on Coastal Natural Resources	Collective Action to Illuminate the Ecological Effects of Hurricane lan	Precision Irrigation: Sensors, IoT, Data Analytics, and Machine Learning	Continuously Monitored and Adaptive Control "Smart" Ponds for Multiple Water Resource Benefits in Florida	
Moderator	Hongying Zhao SFWMD	Todd Osborne University of Florida	Jason von Meding University of Florida	Mike Allen University of Florida	Christine Angelini University of Florida	Haimanote Bayabil University of Florida	Ann Shortelle Bio-Tech Consulting, Inc.	
				Introduction 10:30am	1			
	Akintunde Owosina SFWMD	Joshua Papacek SJRWMD	Andrea Galinski University of Florida	Kym Rouse Holzwart SWFWMD	Chris Anastasiou SWFWMD	Davie Kadyampakeni	Michael Register SJRWMD	
10:35am	FPLOS: Assessing Vulnerability of SFWMD's Flood Protection Assets and Proposing Adaptive Solutions	Evaluation of Nutrient Sources and Loading to Waterbodies in the Upper St. Johns River Basin	A New Model for Vulnerability Assessments: Compounding Vulnerabilities + Housing	Landscape-Level Minimum Flows Development Methods in the Southwest Florida Water Management District	Impacts of Hurricane Associated WQ Changes to Ecosystem Health: Implications for Future Coordination	University of Florida Optimizing Citrus Irrigation Management with Soil And Plant-Based Sensors	Florida Policy and Innovations in Water Quality and Resilence	
	Carol Ballard SFWMD	James Jawitz University of Florida	Michael Borbolla Florida International	Nathan Reaver University of Florida	Miles Medina ECCO Scientific, LLC	Sandra Guzman University of Florida	Mark Thomasson National Stormwater	
10:50am	C&SF Section 216 Flood Resiliency Study: Modeling Approach	Timescales and Magnitude of Legacy Biosolids Phosphorus Transport	University Against the Current: Experiences and Perceptions of Anglers along the Miami River	Quantifying Impacts of Climate and Land Use Change on the Waters of the Suwannee River Basin	Water Quality Trend Analysis for the Charlotte Harbor Estuary in Southwest Florida, 2000–2021	IoT and AI for Sustainable Specialty Crop Irrigation Management	Trust, Inc. Innovative Smart Ponds: How Do They Work?	
	Francisco Pena SFWMD	Jonathan Judy University of Florida	James Ji University of Florida	Mike Allen University of Florida	Brandon Moody Charlotte County	Vivek Sharma University of Florida	Jeff Littlejohn National Stormwater	
11:05am	Characterizing Compound Flooding Potential and Assessing Adaptation Strategies in Collier County	Application of Phosphorus Immobilizing Technology on a Legacy Biosolids Site	Water, Water Everywhere, Nor Any Drop to Drink? Ocean Salinity, Early-Life Health, and Adaptation	Projecting Future Land Use and Climate Change Impacts on the Suwannee River Estuary	Board of County Commissioners Hurricane Ian and Water Quality in Charlotte County: Collaborations, Observations, Lessons Learned	Integration of Sensor, IoT, and Machine Learning in Precision Irrigation and Nutrient Management	Trust, Inc. Smart Pond Technology for Improved Water Resource Benefits	
	Katharine Mach University of Miami	Sarah Guzman Black & Veatch	S.M. Mushfiqul Hoque Florida State	Roberto Koeneke University of Florida	David Tomasko Sarasota Bay Estuary	Judyson Oliveira University of Florida	Amy Wicks Wicks Consulting	
11:20am	Collaborative Flood Modeling for Inclusive and Time-Efficient Climate Adaptation	Evaluating Phosphorus Recovery from Biosolids to Address Eutrophication in Florida	University A Justice-Based Decision Support Tool for Integrating Stormwater BMPs In Nutrient Removal in Florida	Suwannee River Estuary Non-market Valuation Studies of Recreational Saltwater Fisheries	Program Documenting lan's Effects on Sarasota Bay – Impacts and Timeline for Recovery	Evaluating Automated Drain Tile System in Subirrigated Vegetable Production Areas	Group Case Study 1: Babcock Ranch and Hurricane lan	
	David Colangelo SFWMD	Tracey Schafer University of Florida	Katherine Deliz University of Florida	Sydney Honeycutt University of Florida	Maryam Pakdehi Florida State	Boaz Tulu University of Florida	Jose De Jesus Port Tampa Bay	
11:35am	South Florida Water Management District Sea Level Rise and Flood Resiliency Plan, 2023	Internal Phosphorus Loading from USJRB Lakes	A Socio- Environmental Cluster Analysis to Assess Vulnerability to Per- and Polyfluoroalkyl Substances (PFAS) Exposure in Brevard County, Florida	Engaging Stakeholders to Enhance Resilence in the Suwannee River Basin	University Hindcasting Flood Depths Across Florida During Hurricane Ian Using Machine Learning Algorithms	Streamlining Precision Irrigation: Developing A Decision Support Tool for Sensor Data Processing	Case Study 2: Port Tampa Bay and Hurricane lan	
				Discussion 11:50am				
			Lunch Pro	vided (Grand Ballroom)	12:00pm			

Secretary Secr		Tuesday, February 20, 2024 (continued)							
Session 6 Session 10 Session 12 Session 12 Session 13 Session 14 Session 15 Sess						-	T	ı	
Data-driven Insights Investigating Planning Data-driven Insights The Role of Resilience Planning Data depends on Sol P Remediation Data Physicians Data Physic									
Tara Root U.S. Geological Survery Data Integration, Data Integrati	Session Title	Data-driven Insights for Resilience	Investigating Hotspots of Soil Legacy Phosphorus and Management for	Community Stormwater Ponds: Intersecting Science, Stakeholders &	Advances in Hydroecological	Recovering Our Coastal Waters: Human Interventions to Restore Water Quality and Coastal	Irrigation and Nutrient Management Technology	Volunteer Power: The Role of Community Science in Water Research	
Tars Root U. S. Geological Suvery Data Integration, Analysis, and Phart Pottical Markin U. S. Geological Suvery Data Integration, Analysis, and Phart Pottical International U. S. Geological Suvery Data Analysis, and Phart Pottical Markin U. S. Geological Suvery Daily Estimates of Grass Spocies Daily Estimates of Grass Spocies Differ in their Effect of Formal Archbold Biological Station Daily Estimates of Grass Spocies Differ in their Effect of Formal Archbold Biological Station Daily Estimates of Grass Spocies Daily Estimates of Grass Spocies Differ in their Effect of Formal Archbold Biological Station Daily Estimates of Grass Spocies Differ in their Effect of Formal University of Florida International University of Florida University	Moderator		_			Ashley Smyth		Gretchen Lescord University of Florida	
U.S. Geological Survey Survey Data Integration, Aralysis, and Particular Processing for Horizontal Processing of Protas And Tools Protas A					Introduction 1:30pm				
Assessment of Trends Daily Rainfall Michelle Irizarry-Ortz Us Geological Survey Massessment of Trends of Proposition and Proposition of Evapotranspiration and Projected Future Droughts for South Florida Michelle Irizarry-Ortz Us Geological Survey Michelle Irizarry-Ortz Us Geological Survey Mater Supply Vulnerability Assessment for Forsot Composition and Projected Future Droughts for South Florida Massessment for Forsot Composition and Projected Future Droughts for South Florida Massessment for Florida Projected Future Droughts for South Florida Mater Supply Vulnerability Assessment for Florida Sassessment for Florida's Lover East Coast Planning Region Michelle Survey Mater Supply Vulnerability Assessment for Florida Survey Mater Supply Vulnerability Florida Mater Supply Vulnerability Florida Mater Supply Vulnerability Florida Mater Supply Vulnerability Practices Mark Rains University of Florida Spatial and environmental Environmental Survey Mater Supply Vulnerability Assessment for Florida's Lover East Coast Planning Region Michelle Irizarry-Ortical Grasslands Mark Rains University of Florida Mark Rains University of Florida Morting Mater Total Survey Mater Supply Vulnerability florida Agriculture Mater Supply Vulnerability florida Agriculture Mater Supply Vulnerability of Mark Agriculture Mater Supply Vulnerability of Mark Agriculture for Florida's Survey Mater Supply Vulnerability of Mark Agriculture for Florid	1:35pm	U.S. Geological Suvery Data Integration, Analysis, and Forecasting for Coastal Areas: An Overview of USGS	Cornell University Grass Species Influences Phosphorus Losses in Historically Fertilized Pasture Soil: A	Russell Hoffman Steven Postle Alexander Reisinger Mary Lusk Paul Monaghan Panel Focus: Stormwater ponds are designed	Florida Fish and Wildlife Conservation Commission Including Hydroecologic Connections at the Land-Sea Interface in Conservation of	Guana Tolomato Matanzas National Estuarine Research Reserve Water Quality in the Guana Tolomato Matanzas National Estuarine Research	Martin University of Florida Microwave Remote Sensing-Based Machine Learning Method for Irrigation	University of Florida Challenges and Successes of Community Science: Perspectives from Multiple Programs in	
Cornell University Cornell University Tracing Source and Mobility of Legacy Phorphorus in Ranch Solls- Insights from Uranium Isotopes Management of these ponds many limit their potential to provide multiple ecosystem services. This panel wileyplore various management styles and some of their consequences on the Confidence of t	1:50pm	U.S. Geological Suvery Daily Estimates of Evapotranspiration for Florida and the Southeastern US,	Archbold Biological Station Grass Species Differ in their Effect on P Runoff from Phytoredemedication Harvest Strips in a FL	and managed by individual, community, and regulatory levels of society. These ponds are designed to provide primary services (flood control, pollutant removal) but also	Waters Without Borders Relation Between Science and Current Management in the Apalachicola- Chattahoochee-Flint	University of Florida Sources of Water in Salt Marshes: Detangling Drivers of Nutrient Processing,	University of Florida Irrigation Efficiency and Water Conservation: Standard Sprinkler Nozzles Vs. High	Laurentian University Quantifying Contaminants in Subsistence Fish from Traditional Territory of Wahnapitae First	
Michelle Irizarry-Ortiz U.S. Geological Suvery Characterizing Historical and Projected Future Droughts for South Florida Anushi Obeysekera SFWMD Water Supply Vulnerability Assessment for Florida's Lower East Coast Planning Region Michelle Irizarry-Ortiz U.S. Geological Suvery Anushi Obeysekera SFWMD Water Supply Vulnerability Assessment for Florida's Lower East Coast Planning Region Michelle Irizarry-Ortiz University of Florida Unravelling Spatial Heterogeneity of Soil Legacy Phosphorus in Subtropical Grasslands Marina Schwartz University of Florida Seagrasses: Both Indicators and Drivers of Coastal Water Quality Mark Rains University of Florida Seagrasses: Both Indicators and Drivers of Coastal Water Quality Mark Rains University of Florida Morking Waterfronts for You: Using Shellfish Aquaculture for Water Quality Restoration Practices: The Role of Soil Moisture Sensors in Florida Agriculture Communities Laura Reynolds University of Florida Seagrasses: Both Indicators and Drivers of Coastal Water Quality Mark Rains University of Florida Seagrasses: Both Indicators and Drivers of Coastal Water Quality Mark Rains University of Florida Working Waterfronts for You: Using Shellfish Aquaculture for Water Quality Restoration Practices: The Role of Soil Moisture Sensors in Florida Agriculture Communities Exposed to Cyanobacterial Harmful Algal Bloo	2:05pm	Obeysekera Florida International Unviersity Assessment of Trends in South Florida Sub-	Cornell University Tracing Source and Mobility of Legacy Phorphorus in Ranch Soils- Insights from	Management of these ponds may limit their potential to provide multiple ecosystem services. This panel will explore various management styles and some of their consequences on social, economic, and environmental conditions within the community and beyond.	Management of these ponds may limit their potential to provide multiple ecosystem services. This panel will explore various management styles and some of their	University of Florida Investigating Hydrologic Alteration as a Main Driver of Forest Composition Shifts in a Florida	Rowan University Accidential Intervention: Prescribed Burning Alters Tidal Marsh	University of Florida Adaptive And Predictive Decision Support System for	University of Florida Citizen Science; An Effective Method of Educating the Public About the Health of
SFWMD Water Supply Vulnerability Assessment for Florida's Lower East Coast Planning Region Practices SFWMD University of Florida Nutrient Distribution Across Deep Soil Profiles Under Different Management Practices University of South Florida Working Waterfronts for You: Using Shellfish Aquaculture for Water Quality in Hydrological Connectivity in Stream-Wetland Flow Networks University of Florida Working Waterfronts for You: Using Shellfish Aquaculture for Water Quality Restoration Prakash Vaddevolu University of Florida Optimizing Irrigation Practices: The Role of Soil Moisture Sensors in Florida Agriculture Harmful Algal Bloo	2:20pm	Ortiz U.S. Geological Suvery Characterizing Historical and Projected Future Droughts for South	University of Florida Unravelling Spatial Heterogeneity of Soil Legacy Phosphorus in Subtropical		USDA Forest Service Comparison of Evapotranspiration Between Croplands and Forest Lands in a Humid Subtropical	University of Florida Seagrasses: Both Indicators and Drivers of Coastal Water	Linares University of Florida Innovation and Technologies in Agricultural Nutrient Management: Sensing Techniques	University of Florida Florida Lakewatch: 37 Years of Volunteerism Driving Research of Florida's Aquatic	
Dispussion 1 0/50mm	2:35pm	Anushi Obeysekera SFWMD Water Supply Vulnerability Assessment for Florida's Lower East Coast Planning	University of Florida Nutrient Distribution Across Deep Soil Profiles Under Different Management		University of South Florida Spatial and Temporal Variability in Hydrological Connectivity in Stream-Wetland Flow	University of Florida Working Waterfronts for You: Using Shellfish Aquaculture for Water Quality	Uday Bhanu Prakash Vaddevolu University of Florida Optimizing Irrigation Practices: The Role of Soil Moisture Sensors	University of Miami Public Health Impacts of Florida Communities Exposed to	
Discussion 2:50pm					Discussion 2:50pm				
Afternoon Refreshment Break 3:00pm				Afternoo		3:00pm			

	Tuesday, February 20, 2024 (continued)								
				ent Sessions — 3:30pm					
	Room 2335	Room 2340	Room 2355	Room 2365	Auditorium	Room 3315	Room 3320		
Session Title	Florida's Water Management Districts: Aligning Resilience and Restoration Efforts	Session 16 Water Quality Drivers and Impacts on Public Wildlife and Ecosystem Health	Session 17 Integrating Collaborative and Multi-disciplinary Approaches for Effective Water Resource Management	Session 18 Hydrologic Modeling to Advance Water Management	Coastal Resilience, Nature-Based Solutions, Ecosystem Conservation and Connectivity	Session 20 Rethinking Urban Landscapes to Protect Our Water	Great Florida Riverway Restoration: Launching a Vital New Beginning		
Moderator	Wesley Brooks State of Florida	Mary Lusk University of Florida	Lisa Krimsky University of Florida	Jeffery King ATM - A Geosytec Company	Afsheen Sadaf University of Florida	Stacie Greco Alachua County EPD	Casey Fitzgerald Florida Springs Council		
				Introduction 3:30pm					
3:35pm	Ron Brockmeyer SJRWMD Collaborative Restoration of Coastal Wetlands	Paul Donsky University of Florida Flood Disturbances Impact the Autotrophic Communities in the Karst Springs of the Suwannee River, FL	Darlene Saindon Velez University of Florida Healthy Farms- Healthy Bays – Finding Common Ground Within Uncommon Partnerships	Joe Carter SRWMD Data-Driven Analysis of Patterns and Drivers of Flow Change in the Santa Fe River Basin of Florida	Jules Bruck University of Florida Coastal Resilience & Nature Based Solutions- a Deed Project	Nicholas Taylor University of Florida The Thirst of Our Urban Landscapes	Stephen Walsh Florida Museum of Natural History Potential Implications for Fish Populations of a Restored Free- Flowing Ocklawaha River		
3:50pm	Cassondra Armstrong SFWMD Strengthening Climate Resilience: Key CERP Projects for Greater Everglades Restoration	Mileisha Velázquez López University of Florida Impacts of PFAs and Microplastics in Aquatic Systems: A Critical Review	Beatriz Inacio University of South Florida Using Community Based Research to Advance Equitable Infrastructure	Rob de Rooij University of Florida Simulating Nitrate Concentrations in the Suwannee River by combining SWAT- MODFLOW with MODPATH	Afsheen Sadaf University of Florida Coastal Resilience Through Nature- Based Solutions-A GIS Model for Living Shorelines at APG, Maryland	Eliana Bardi Alachua County EPD Local Government Tools To Shift Our Landscaping Paradigm	Gian Basili U.S. Fish and Wildlife Service Enhanced Manatee Population Viability Via Ocklawaha River and Springs Restoration		
4:05pm	Fred Sklar SFWMD Building Adaptive Foundational Resilience for Coastal Wetlands: An Everglades	Shin-Ah Lee University of Florida Sources and Seasonal Distributions of Organic Matter in the Caloosahatchee River Estuary	Lisa Krimsky University of Florida Progress & Priorities for Cyanohabs in Florida: Insights From the State of the Science Symposium li	Jeff Geurink Tampa Bay Water Continuous Improvement for the Integrated Hydrologic Model and Integrated Northern Tampa Bay Model	Martha Ryan University of Delaware Improving the Surface Water Quality of Coastal Basins with Resilient Land Cover Scenarios	Basil lannone University of Florida Alternative Landscaping as a Water Conservation Strategy In Expanding Residential Landscapes	John Hendrickson SJRWMD (Retired) Macronutrient Delivery from a Free- Flowing Ocklawaha: Implications for the Lower St. Johns River		
4:20pm	Experiment Tom Frick SJRWMD A Collaborative Approach to Resilience	Madison Trowbridge SWFWMD Iron: A Limiting Nutrient for Benthic Macroalgae in Florida Springs?	Yilin Zhuang University of Florida Florida Well Owner Network: Extension Outreach to Improve Private Well Water Quality and Stewardship	Mark Ross University of South Florida Framework to Improve Simulation Processes of the Integrated Hydrologic Model	Mojtaba Tahmasebi University of Florida Anticipating Future Land Use and Land Cover Transformations in Aberdeen Proving Ground, Maryland, via MOLUSCE Plugin Modeling	Emily Lang FDEP Florida Friendly Landscaping™ Beautiful Landscapes Protecting Florida's Water	Thomas Hoctor University of Florida Ocklawaha River Restoration: A Critical Florida Wildlife Corridor Connection		
4:35pm	Ana Carolina Maran SFWMD South Florida Water Management District' Resiliency Efforts and Coordination	Edgar Marcillo University of Florida How Do Environmental Risks Affect the Profitability of the Aquaculture Industry in Florida?	Keeli Carlton Sustainable Water Communities One Water Master Planning: Achieving the Full Benefits Of Water	Yu Zhang University of Central Florida A Multi-Scale Framework for the Integrated Hydrologic Model	Y. Peter Sheng University of Florida Mangroves Provide Significant Flood Protection Service in a Changing Climate	Discussion	Margaret Spontak Great Florida Riverway Trust The Great Florida Riverway: How Economics, Recreation and Social Marketing Shifted Public Opinion		
				Discussion 4:50pm					
	Poster Session & Reception with Student Poster Competition and Judging								

with Student Poster Competition and Judging
Rion Ballroom | 5:30pm - 7:30pm

	Wednesday, February 21, 2024
	Early Morning Refreshments [Grand Ballroom Hallways] 7:30am
	Opening Plenary Session [Grand Ballroom] Introduction and Welcome Matt Cohen, Interim Director, University of Florida Water Institute Mark Rains, Chief Science Officer, Florida Department of Environmental Protection
8:30am	Keynote Speaker Catherine L. Kling Professor Charles H. Dyson School of Applied Economics and Management Cornell University "Measuring the Economic and Social Benefits of Water Quality Improvements"
	Morning Refreshment Break 10:00am

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	Wednesday, February 21, 2024 (continued)								
				nt Sessions — 10:30am					
	Room 2335	Room 2340	Room 2355	Room 2365	Auditorium	Room 3315 Session 27	Room 3320		
Session Title	Session 22 Intersecting Resilience Planning and Decision- Making: Responding to Today's Needs and Future Conditions	Technology and Decision Tools for Improved Water Management	Session 24 Impacts of Climate Variability and Change on Water Availability and Quality	Application of Al/ Machine Learning Approaches in Water Resources Management	Session 26 Synthesizing Data and Models to Inform Lake Okeechobee Management in the LOSOM Era	Education Tools, Approaches and Programs for Water Protection	Session 28 Advancing Water Resources Protection in Response to Environmental and Management Challenges		
Moderator	Ana Carolina Maran SFWMD	Paloma Carton de Grammont University of Florida	Young Gu Her University of Florida	Tirusew Asefa Tampa Bay Water	David Kaplan University of Florida	Sadie Hundemer University of Florida	Shimelis Setegn SFWMD		
				Introduction 10:30am	1	1			
10:35am	Asif Mohamed SFWMD Water Resources Management and Operational Decisions in the Context of Evolving Conditions	Cristian Cardenas- Lailhacar University of Florida Carbon Emissions Reduction and Nutrients Recovery in Wastewater Treatment Plants	Nicole Cortez SFWMD SFWMD's Water and Climate Resilience Metrics: A Status Update	Tirusew Asefa Tampa Bay Water Two Decades of Machine Learning Applications in Water Supply Management	Jessica Mallett U.S. Army Corps of Engineers LOSOM: Bringing Together Data, Models and Water Management Lessons-Learned	Shannon Carnevale UF/IFAS Extension Empowering the Public to Make Change Through Watershed Education and Stewardship	Shimelis Setegn SFWMD Coupled Watershed Water Quality Model as a Decision Support Tool for Water Resources Protection		
10:50am	Yanbing Jia SJRWMD Enhancing Flood Resilience: A Real-Time Flood Forecasting Model for the Upper St. Johns River Basin	Ronald Fick Center for Coastal Solutions Optimizing Septic to Sewer Conversion Projects	Megan Black University of Florida Quantifying Yearly High-Latitude Lake CDOM from Ice Sheet to Coast in Southwestern Greenland	Hui Wang Tampa Bay Water Multi-objective Optimization for Monthly Water Resources Allocation from Multiple Supply Sources	Anna Wachnicka SFWMD Learning From the Past to Inform Lake Okeechobee Management in the LOSOM Era	Lisa Sanderson UF/IFAS Extension Wiser Lawns and Landscape Workshops for New Residents Lead to Water Savings	Dan Dai University of Florida Spatial Stability of Water Quality in the Lake Okeechobee Watershed		
11:05am	Christine Carlson SFWMD Defining Flood Prone Areas and Estimating Flood Extent Area and Volume	Katie Glodzik University of Florida Enhancing Hydrological Studies Through Precise Wetland Shape Mapping With LIDAR- Derived Dems	Kathleen Coates NWFWMD Factors Driving Persistent Compound Flooding in Northwest Florida: 2018 - 2022	Shubo Fang University of Florida Critical Source Areas Identifying to Enhance Water Quality: A Case Study in Panhandle Florida	Maitane Olabarrieta University of Florida Forcasting the Impacts of Lake Opperations on the Estuarine Hydrodynamics and Pollutant Transport	Michael D'Imperio UF/IFAS Extension Educating Through Technology: Influencing Decision Makers and the Public on Water Quality	Seneshaw Tsegaye Florida Gulf Coast University Application of Virtual Reality (VR) for Urban Flood Modeling and Mitigation		
11:20am	Timothy Gysan USACE Comprehensive Central and Southern Florida Study – Multipurpose Study for Building Resiliency	Antonio Diaz University of Florida The "Bathy-drone" for Underwater Survey and Mapping	Donghyeon Kim University of Florida Investigation of Historical Changes in Air Temperature and Rainfall Events in Florida	Enrique Orozco Lopez University of Florida Interpretable Transformer Neural Network Prediction of Diverse Environmental Time Series	Jordan Beckler Florida Atlantic University Parameterization of Temporally-Resolved Benthic Nutrient Fluxes in Lake Okeechobee	Laura Warner University of Florida No More Sprinklers in the Rain! – Insights from an Innovative Rainfall Communication Intervention	Jie (Jack) Zeng SFWMD Application Of 2D Hydraulic Model to Kissimmee River Restoration Project		
11:35am	Angela Schedel HDR Leveling the Playing Field: Taking Social Equity into Account in Adaptation Alternatives	Sandie Will SWFWMD An Overview of the Southwest Florida Water Management District's Available Monitoring Data and Maps	Kevin Zhu SFWMD ET Trends and the Influencing Factors and Correlations	Katie Pisarello USDA-ARS Hydrologic Impact of Agricultural Management and Climate in the Little River Experimental Watershed	Mauricio Arias University of South Florida Nutrient Management and Optimization for Algae Bloom Reduction in Lake Okeechobee	Steven Noll University of Florida Florida's Springs- A Personal Journey	Kai Rains University of South Florida Tool for Wetland and Water Project Prioritization in the Indian River Lagoon Watershed		
			Lunch Pro	Discussion 11:50am vided (Grand Ballroom)	12:00pm				

	Wednesday, February 21, 2024 (continued)								
			Concurre	ent Sessions — 1:00pm	- 2:30pm				
	Room 2335	Room 2340	Room 2355	Room 2365	Auditorium	Room 3315	Room 3320		
	Session 29	Session 30	Session 31	Session 32	Session 33	Session 34	Session 35		
Session Title	Building Resilience in Water Resource Management	The Complex Nature of Invasive Species in Aquatic Ecosystems	Climate Changed: How Research, Science, and Reporting Translate to Policy and Practice	Forecasting Impacts of Climate Change, Extreme Events and Sea Level Rise	Understanding and Addressing Nitrogen Contamination in Florida's Groundwater	Development and Assessment of Payment for Water Service Programs on Ranchlands in the Northern Everglades	Strategies for Advancing Water Resources Protection		
Moderator	Cassondra Armstrong SFWMD	Matthew Thomas University of Florida	Pierce Jones University of Florida	Katherine Serafin University of Florida	Hailey Hall AquiferWatch Inc	Elizabeth Boughton Archbold Biological Station	Darlene Saindon Velez University of Florida		
				Introduction 1:00pm					
1:05pm	Ann Shortelle Bio-Tech Consulting, Inc. Rethinking Water Supply Strategies for a Resilient Future	Stephen Enloe University of Florida A Long Hard Look at Invasive Aquatic Macrophytes and Water Issues in Florida	Panelists: Jason Evans Brenda Defoe-Suprenant Jennison Searcy Gerald Murphy Panel Focus: Changing climate	Fatih Gordu SJRWMD Can We Reliably Forecast the Future Without Knowing the Past? UFA Level Predictions in North Florida	Rick Copeland AquiferWatch Inc Results of a Decade of Monitoring Groundwater Nitrogen Concentrations in Florida's Santa Fe Basin	Benita Whalen Florida Cattlemen's Association Development of Payment for Water Services in the Northern Everglades	Brooke Moffis UF/IFAS Extension Lake County Enhancing Water Conservation and Pollinator-friendly Landscapes through Industry Education		
1:20pm	Karin Smith SFWMD The Role of MFLs in Conserving and	University of Florida Shifting Macrophytes: development in Florida. Learn ho communities can	has altered policy development in Florida. Learn how communities can respond to changing climate dynamics by embracing these policy changes and implementing comprehensive plan policies, land development	Yogesh Khare SFWMD A Stochastic Framework	Weizhe Weng University of Florida Assessing Health and Economic Impacts of	Amartya Saha Archbold Biological Station Estimating Water/	Lorna Bravo UF/IFAS Extension Broward County Rain Barrell Water		
pm	Protecting Water Resources in Southeast Florida	Caulerpa Support Unique Ecological Communities		Implementation to Forecast Stages in the Everglades for Operational Planning	Nitrate Contamination in Florida's Private Wells	Nutrient Retention of Payment for Water Services Programs on S. Florida Ranchlands	Quality in South Florida		
	Young Gu Her University of Florida	Lindsey Reisinger University of Florida		Vladimir Paramygin University of Florida	Hailey Hall AquiferWatch Inc	Betsey Boughton Archbold Biological	Pamela Dugan EutroPHIX		
1:35pm	Climate Change Impact on the Water Quality of the Kissimmee River – Lake Okeechobee System	Parasite-Mediated Invasion of Freshwater Crayfish	regulations, and stormwater management criteria. Community leaders, planners, stormwater professionals, and interested	Forecasting of Coastal Inundation Risk in Current and Future Climates	Is Your Water Well? Private Well Test Awareness and Nitrate Monitoring in the Suwannee River Basin	Station Development and Assessment of Payment for Water Service Programs on Ranchlands in the Northern Everglades	Accelerated Water Restoration Approaches in Florida		
	Tibebe Dessalegne SFWMD	Nathan Burkett- Cadena	citizens can better address increasing	Sangdon So ATM - A Geosytec	Stacie Greco Alachua County EPD	Anthony Betts SFWMD	Tracey Piccone SFWMD		
1:50pm	Characterizing Water Level Trends at South Florida Coastal Structures	University of Florida Impacts of Invasive Species on Arbovirus Transmsission Ecology in The Everglades	stormwater quantities and improving water quality with adopted community adaptations for a changing climate.	Company Island-Wide Flood Hazard Risk Mapping and Assessments in Grand Bahama	Nitrogen Load Reduction from Alachua County's Fertilizer Ordinance and Behavior Change Campaign	Dispersed Water Management - Programmatic Perspective	Everglades Stormwater Treatment Areas: The World's Largest Constructed Treatment Wetland Project		
	Zoë Stroobosscher University of Florida	Melissa Miller University of Florida		Dat Tran EDR	Ryan Smart Florida Springs	Matt Pearce Pearce Cattle	Gabriela Sullivan City of Ocala		
2:05pm	The Past 10 Years of Water Quality Research on the Indian River Lagoon: An Ongoing Review	Linking Burmese Python Ecology with Removal Efforts in The Everglades		Forecasting Costs of Meeting Future Water Demand Under Climate Variability and Socioeconomic Change	Council Building a Better Basin Management Action Plan for the Santa Fe River	Company The Role of Dispersed Water Management in the Northern Everglades - A Rancher Perspective	Reuse, Restore, Recharge, Reduce, & Recreate—The Ocala Wetland Recharge Park		
				Discussion 2:20pm					
	Afternoon Refreshment Break 2:30pm								

Wednesday, February 21, 2024 (continued) **Closing Plenary Session** [Grand Ballroom] Tribute to Dr. Wendy Graham's legacy as founding Director of the UF Water Institute **Presentation of Student Poster Competition Awards** Closing Panel: Translating Scientific Insights to Decision Making **Panel Description:** The scientific process is about answers to questions. This Water Institute symposium was created to share the insights from that process for improving water sustainability in Florida and beyond, with the goal of aiding policy makers in their process of meeting our myriad water challenges. Florida is already a leader in water governance, but as our modern challenges reveal, there is much to be done to protect our aquifer, our aquatic ecosystems, our coastal infrastructure, and our legacy as natural resource stewards. This panel explores the pathways of scientific knowledge reaching our governance structures at all levels, the reciprocal pathways of information that help guide crucial research questions, and the best practices for ensuring open discourse between scientists, decision makers, regulators, and the public. Panelists: Virginia Barker, Director, Brevard County Natural Resources Management Department Wesley Brooks, Chief Resilience Officer, State of Florida Rick Hutton, President, FWEA Utility Council and Supervising Engineer, Gainesville Regional Utilities (GRU) Cathy Kling, Professor, Charles H. Dyson School of Applied Economics and Management, Cornell University Steve Loheide, Professor, Department of Civil and Environmental Engineering, University of Wisconsin Michael A. Register, Executive Director, St. Johns River Water Management District Timothy Gysan, Resilience Senior Project Manager, Ecosystem Branch, U.S. Army Corps of Engineers, Jacksonville District Julie Wraithmell, Executive Director, Audubon Florida Moderator: Lisa Krimsky, Regional Water Resources Extension Agent IV, UF/IFAS Southeast District Symposium Concludes | 5:00pm NOTES