DETAILED AGENDA

Tuesday, February 22, 2022	
7:30am-8:30am	**Check-in for Preregistered Attendees -** Pickup Symposium Materials *Onsite registration not available*
	Early Morning Refreshments [Grand Ballroom Hallways]
8:30am-10:00am	**Opening Plenary Session** [Grand Ballroom] **Introduction and Welcome** **Wendy Graham,** Director, University of Florida Water Institute **David Norton**, Vice President for Research, University of Florida
	Keynote Speaker **Margaret Palmer** Distinguished University Professor, University of Maryland, College of Park and Director, National Socio-Environmental Synthesis Center (SESYNC) **"Restoration of Aquatic Ecosystems: the Search for a Process-based Understanding"**
10:00am-10:30am	**Morning Refreshment Break**

NOTES

Tuesday, February 22, 2022 (continued)						
Concurrent Sessions — 10:30am - 12:00pm						
	2365	3320	3315	2335	2355	Auditorium
	1	2	3	4	5	6
Session Title	**Historical Perspectives on Climate Change**	**Analysis of Environmental Flows, and Relationship Between Flow and Ecosystem Vitality**	**Climate Change and Sea Level rise Impact on Water Resources**	**Stakeholder Engagement in Water Solutions**	**Water Policies and Programs for Water Quality**	**CCS1: The Role of Data Fusion and Artificial Intelligence in Transforming Coastal Hazard Detection and Monitoring**
Moderator	**Mark Brenner** University of Florida	**Jeffrey King** ATM, A GeoSyntec Company	**Young Gu Her** University of Florida	**Yilin Zhuang** UF/IFAS	**Karen Schlatter** University of Florida	**Zhe Jiang** University of Florida
10:30am	Introduction	Introduction	Introduction	Introduction	Introduction	Introduction
10:35am	**Bruce MacFadden** University of Florida Geological History of Florida's Water Over the Past 40 Million Years	**Andrew Sutherland** St. Johns River Water Management District Environmental Flows and Levels: Determining Impact Thresholds and Allowable Change	**Jung-Hun Song** University of Florida Performance of Climate Models in Reproducing the Hydrological Characteristics of Rainfall Events in Florida	**Mark Hoyer** Florida LAKEWATCH A Limnological Yardstick Based on Phosphorus Limitation	**Robert Knight** Florida Springs Institute A Prescription for Cost Effective Restoration of Florida's Springs	**Barbara Kirkpatrick** Gulf Coast Ocean Observing System (GCOOS) Data Aggregation, Citizen Science, and AI - Oh My!
10:50am	**Jason Bellino** U.S. Geological Survey Reference and Potential Evapotranspiration, Solar Radiation, and Albedo Over Florida, USA, 1985-2020	**Gabriel Herrick** Southwest Florida Water Management Instream Habitat Quantification Using System for Environmental Flow Analysis	**Ziwen Yu** University of Florida Stochastic Downscaling of Hourly Precipitation Series from Climate Change Projections	**Ernie Cox** Family Lands Remembered Innovative Water Resources Projects Through Alternative Delivery Methods	**Christopher Pettit** Florida Department of Agriculture and Consumer Services Agricultural Water Governance and Management	
11:05am	**Rick Copeland** AquiferWatch, Inc. Regional, Passive Saline Encroachment in the Springs of Florida (1991 – 2020)	**Sean King** Suwannee River Water Management District Development of Environmental Flow Analyses for Spring Systems in the Suwannee River Basin	**Young Gu Her** University of Florida Impacts of Climate Change and Sea Level Rise on Southeast Florida's Groundwater Resources	**Steve Leitman** Apalachicola Bay Science Initiative, Florida State University The Development of Performance Metrics for the ACF Watershed	**Del Bottcher** Soil and Water Engineering Technology, Inc. Agricultural Best Management Practices Assessment Tool (BMPAT)	**Zhe Jiang** UF Department of Computer & Information Science & Engineering Spatiotemporal Machine Learning for Hydrology: A Couple of Examples
11:20am	**Ying Ouyang** USDA Forest Service Contribution of Streams to Groundwater Resource in the Mississippi Embayment Over the Past 100 Years	**Paul Thurman** Northwest Florida Water Management District Minimum Flows Development in a Spring System Displaying Increased Flows	**Yogesh Khare** Everglades Foundation Phosphorus Source Contributions Under Current and Future Climate in a Lake Okeechobee Subwatershed	**Shannon Monahan** Lake Cane Restoration Society Lake-in-a-Box: How Citizens are Taking Responsibility for Domestic Water Quality	**M. Jennison Kipp** UF/IFAS Extension Lightening the Water Footprint of Florida's New Residential Developments	**Ronald Fick** University of Florida Fusing Remote Sensing Data with Spatiotemporal in Situ Samples for Red Tide Detection
11:35am	**Gerald Murphy** and **Thomas Ruppert** UF Program for Resource Efficient Communities Navigating the Waters of Future Climate: Law & Policy	**Tracey Piccone** South Florida Water Management District Everglades Stormwater Treatment Areas: Managing Flows to Achieve Performance Goals	**Peter Sheng** University of Florida Adaptation of Coastal Communities and Natural Ecosystems in a Changing Climate	**Olesya Savchenko** University of Florida Public Preferences for Management of Aquatic Invasive Species in Florida Waters	**Matthew DePaolis** University of Florida A Restoration Aquaculture Approach to Water Quality	**Guangming Zheng** UMD, NOAA/NESDIS/ Center for Satellite Applications and Research Hypoxia Forecast in the Chesapeake Bay using CNN and LSTM
11:50am	**Discussion**	**Discussion**	**Discussion**	**Discussion**	**Discussion**	**Discussion**
12:00pm-1:00pm	**Lunch**					

	Tuesday, February 22, 2022 (continued)					
	Concurrent Sessions — 1:00pm - 2:30pm					
	2365	3320	3315	2335	2355	Auditorium
	7	8	9	10	11	12
Session Title	**FLWCA1: Water and Climate Resiliency Metrics: Long Term Data Trends**	**Water Availability and Allocation**	**Water Quality Drivers and Impacts**	**Education & Outreach Programs**	**The Floridan Aquifer Collaborative Engagement for Sustainability Project**	**CCS2: Unlocking Benthic-Pelagic Coupling Controls of Coastal Eutrophication**
Moderator	**Nicole Cortez** WSP USA	**Samuel Smidt** University of Florida	**Matt Whiles** UF/IFAS	**Yilin Zhuang** UF/IFAS	**Paloma Carton de Grammont** University of Florida	**Ashley Smyth & Betty Staugler** UF/IFAS
1:00pm	Introduction	Introduction	Introduction	Introduction	Introduction	Introduction
1:05pm	**Karin Smith** South Florida Water Management District Sea Level Rise and Saltwater Intrusion into Aquifers along the Southeast Florida Coast	**Samuel Smidt** University of Florida Estimating Historical Irrigated Production of Major US Row Crops	**Andy Canion** St. Johns River Water Management District Biosolids Applications and Nutrient Export in Tributary Watersheds of the Upper St. Johns River	**Yilin Zhuang** University of Florida Challenges and Opportunities Facing the Florida Well Owner Network	**Nathan Reaver** University of Florida Environmental and Economic Tradeoffs of Land Use and Management in the Floridan Aquifer Region	**Jim Fourqurean** Florida International University Decomposition and Lability of Soil Organic Matter and Carbon Stocks across a Seagrass Landscape
1:20pm	**Yibing Zhu** South Florida Water Management District Evapotranspiration Trend in South Florida	**Katie McCurley Pisarello** USDA Long Term Water Yield Impacts from Pine Plantation Management Strategies in the Southeast	**Shourish Chakravarty** UF/IFAS SWFREC Assessing Impacts of Deforestation on Water Quality in Agricultural Landscape in Indiana	**Tina McIntyre** UF/IFAS Extension Seminole County Quantifying Fertilizer Impacts: A Case Study Investigating Years of Educational Workshops	**Rob De Rooij** University of Florida Simulating Nitrate Transport to the Devil's Springs Complex Using Swat-Modflow and Modpath	
1:35pm	**Tibebe Dessalegne** South Florida Water Management District Water Level Trends at South Florida Coastal Structures and Implications to Water Management	**Louis Mantini** Suwannee River Water Management District Biological Metrics for Development of Minimum Flows and Levels in the Suwannee River Basin	**Kai Rains** University of South Florida Forensic Mapping of the Stunning Transformation of Florida's Coastal Watersheds over 150+ Years	**Morgan Pinkerton** UF/IFAS Pesticide CEUs as a Platform for Water Resource Education	**Wendy-Lin Bartels** University of Florida The Room Where It Happens: Co-Producing Scenarios for the FACETS Project	**Chris Anastasiou** Southwest Florida Water Management District The Hangover Effect: Coupling Seagrass Loss, Macroalgal Growth, & Water Quality in Charlotte Harbor
1:50pm	**Tara Root** U.S. Geological Survey Identifying Hydrologic Changes and Trends using Automated Statistical Analyses	**Marco Pazmiño-Hernandez** USGS Caribbean-Florida Water Science Center A New Method for Estimating Water Withdrawn from Private Domestic Wells in Florida	**Tracey Schaefer** University of Florida Spatial Distribution of Sediment and Porewater Biogeochemical Characteristics in Lake Okeechobee	**Tiare Silvasy** UF/IFAS Water Wednesday Program Educates Urban Residents About Actionable Water Conservation Practices	**Damian Adams** University of Florida Payments for Forest Ecosystem Services: an Integrated Approach to Value Forest Water Benefits	**Annie Murphy** INSPIRE Environmental Human-Facilitated Bivalve Populations Effects on Energy and Nitrogen Flow Through Marine Ecosystems
2:05pm	**Nenad Iricanin** South Florida Water Management District Water Quality Trends in Lake Okeechobee: Climate Change or Other Influence?	**Dat Tran** Florida Legislature-EDR Water Demand and Supply in Florida: Past, Current, and Future Trends	**Mary Szafraniec** Wood Testing Performance Efficiency of Innovative Nutrient Reduction Technologies With In-Situ Mesocosms	**Carrie Stevenson** UF/IFAS Extension Resilience to Future Flooding in the Gulf of Mexico	**Sadie Hundemer** University of Florida The Water Science Communication Problem: Water Knowledge and Acceptance/Rejection of Water Science	**Ashley Smyth** University of Florida The Role of Sponges in Modulating Nitrogen Cycling in the Florida Keys
2:20pm	**Discussion**	**Discussion**	**Discussion**	**Discussion**	**Discussion**	**Discussion**
2:30pm-3:00pm	**Afternoon Refreshment Break**					
3:00pm - 5:00pm	**Poster Session** **with Student Poster Competition and Judging** [Rion Ballroom]					

	Wednesday, February 23, 2022					
7:30am-8:30am	Early Morning Refreshments [Grand Ballroom Hallways]					
	Concurrent Sessions — 8:30am - 10:00am					
	2365	3320	3315	2335	2355	Auditorium
	13	14	15	16	17	18
Session Title	**FLWCA2: Future Trends in Climate and Sea Level Rise**	**Harmful Algal Blooms**	**BMP Adoption in Agricutlural and Urban Systems**	**Technology and decision tools for Water Management**	**Water and Wetlands Challenges in the Tropics**	**CCS3: Improving the Condition of Coastal Ecosystems through Collaboration: A Panel Discussion of Lessons from Decades of Estuarine Nutrient Assessment and Management**
Moderator	**Tom Frazer** University of South Florida	**Dail Laughinghouse** UF/IFAS	**Andrea Albertin** UF/IFAS	**Davie Kadyampakeni** UF/IFAS	**Catherine Tucker** University of Florida	**Elise Morrison** University of Florida
8:30am	Introduction	Introduction	Introduction	Introduction	Introduction	Introduction
8:35am	**Michelle Irizarry-Ortiz** U.S. Geological Survey Development of Projected (2050–2089) Precipitation Depth-Duration-Frequency Curves for South Florida	**Katherine Hubbard** Florida Fish and Wildlife Conservation Commission Integrating Observations to Investigate Harmful Algal Bloom Dynamics in Florida's Marine Waters	**Sawssan Boufous** University of Florida Florida Farmers' Multi-BMPs Adoption: A Survey Analysis	**Bernardo Cardenas** University of Florida Irrigation Savings from Smart Irrigation Technologies and a Smartphone App on Turfgrass	**Catherine Tucker** University of Florida Coffee Production, Water Use, and Watershed Protection in Honduras: A Community Case Study	**Panel**: **Ed Sherwood** Director, Tampa Bay Estuary Program **David Tomasko,** Director, Sarasota Bay Estuary Program **Duane De Freese**, Director, Indian River Lagoon Council **Matt Posner** Director, Pensacola and Perdido Bays Estuary Program **Panel Focus**: 1) the monitoring collaborations necessary to initially develop goals and document coastal habitat recovery in Florida estuaries; 2) contemporary triggers and conditions that have led to additional coastal eutrophication concerns for maintaining coastal habitats and natural resources within Florida's urbanizing coast; and 3) a vision for ecosystem monitoring collaborations and needs within Florida's estuaries of national significance that will help ascertain whether recovery and positive restoration trajectories are maintained into the future. Specific case studies from Florida's estuaries, such as Tampa Bay, Sarasota Bay, and the Indian River Lagoon, will be discussed.
8:50am	**Carolina Maran** South Florida Water Management District Regional Climate Projections – Future Rainfall Estimates for Florida	**Christa Court** University of Florida Measuring the Impact of Florida Red Tide Events on Recreational Fishing Effort and Expenditures	**Sanjay Shukla** University of Florida Integrating Stakeholder Relevant Economic, Risk, and Health Factors Improves Water Sustainability	**Paul Gray** Audubon Florida GIS Tool for Distributed Water Management Projects in the Central Florida Water Initiative Region	**Oswaldo Medina-Ramírez** University of Florida "We Are Exhausted": Navigating Interagency Coordination for Water Management in the Tropics	
9:05am	**John Stamm** U.S. Geological Survey The Weather Research and Forecasting Model (WRF) Development for the United States and Florida	**Elizabeth Staugler** University of Florida Key Elements of Red Tide Messaging and Modes of Communication Gleaned from Multiple Focus Groups	**Md Azhar Uddin** University of Florida The US Consumers' Willingness to Pay for Best Management Practice Labels	**Abbey Tyrna** UF/IFAS Extension Sarasota County Bay-Friendly Fertilizing Tools for Reclaimed Water Users	**Percy Peralta** Ramsar Regional Center for the Western Hemisphere Effects of Water Availability on Coffee Production, Farmer Livelihoods and Adaptive Strategies	
9:20am	**Gary Mitchum** University of South Florida Projections of Sea Level Rise and High Tide Flooding for the Southeast and for Florida in Particular	**Forrest Lefler** University of Florida Cyanobacterial Diversity Within the Eutrophic Lake Okeechobee and the St. Lucie Estuary, Florida	**Stacie Greco** Alachua County Nitrogen Load Reduction from Alachua County's Fertilizer Ordinance and Behavior Change Campaign	**Hossein Ghoveisi** CREC - UF/IFAS Water Use in Young Citrus Trees on Metalized UV Reflective Mulch Compared to Bare Ground	**Conrado De Leon** Ramsar Regional Center for the Western Hemisphere Evapotranspiration and Water Demand Analysis for Coffee Farms in the Upper Santa Maria River	
9:35am	**Jayantha Obeysekera** Florida International University Development of Future Climate Scenarios for Regional Hydrologic Simulations in South Florida	**Yi Guo** University of Florida Exploring the Relationship between Cyanobacterial Toxins and Human Diseases in Florida	**Laura Warner** University of Florida Human Dimensions of Water Conservation: What Drives Residents to Eliminate Irrigation in Landscapes?	**Stephen Curless** CCI Engineering Services Microwatershed Analysis and Management: Florida Residential Lake Case Studies	**David Kaplan** University of Florida Drivers of Water Balance Variability in the "Ciénega De Las Macanas" Wetland, Panama	
9:50am	**Discussion**	**Discussion**	**Discussion**	**Discussion**	**Discussion**	**Discussion**

10:00 am-10:30am	Morning Refreshment Break					
	Wednesday, February 23, 2022 (continued)					
	Concurrent Sessions — 10:30am - 12:00pm					
	2365	**3320**	**3315**	**2335**	**2355**	**Auditorium**
	19	**20**	**21**	**22**	**23**	**24**
Session Title	**FLWCA3: Assessing Flood and Sea Level Rise Vulnerability and Best Adaptation Solutions**	**Lake Okeechobee Water Quality Issues**	**Stormwater and Wastewater treatment**	**Smart-irrigation and Sensor-based Irrigation for Water Savings**	**Tribal Communities and Water Issues**	**CCS4: The Frontier of Earth Systems Modeling for Hazard Prediction & Management**
Moderator	**Drew Bartlett** South Florida Water Management District	**Nancy Denslow** University of Florida	**Andrea Albertin** UF/IFAS	**Davie Kadyampakeni** UF/IFAS	**Paloma Carton de Grammont** University of Florida	**Olabarrieta Maitane & David Kaplan** University of Florida
10:30am	Introduction	Introduction	Introduction	Introduction		Introduction
10:35am	**Alberto Pisani** Miami-Dade County Update of the Stormwater Master Plan of Miami-Dade County for Current and Future Conditions	**Joseph Gilio** Limnological Science for Lake Okeechobee Lake Okechobee's Trophic "Temperature"	**Christopher Keller** Wetland Solutions, Inc Mcintosh Preserve Wetlands Project – Integrated Water Resources Management for Multiple Benefits	**Vivek Sharma** University of Florida Florida Agricultural Soil Moisture Sensor Network	*This session contains three 30 minute separate presentations that begin immediately.* **Steven Chischilly & Abhishek RoyChowdhury** Navajo Technical University Water Quality on the Navajo Nation and How it has Contributed to the Spread of Covid-19 (30 mins) **Stacy Myers** Heritage and Environment Resources Office, Seminole Tribe of Florida & **Joe Frank** Resident of Big Cypress Reservation, Seminole Tribe of Florida Water Issues Affecting Big Cypress Reservation and the Seminole Tribe of Florida (30 mins) **Houston R. Cypress** Love the Everglades Movement & **Amelia Winger-Bearskin** UF Digital Worlds Institute Water Protection from Artists and Activists Perspective: a Conversation with Houston Cypress and Amelia Winger-Bearskin (30 mins)	**Ben Kirtman** University of Miami Global High-Resolution Earth System Models Representation of Regional Climate Change and Variability
10:50am	**Christine Carlson** South Florida Water Management District Documenting Flood Occurrence and Exposure	**Sangdon So** Applied Technology and Management Tidal and Subtidal Nutrient Flux Forced by Lake Okeechobee Drawdown	**Scott Knight** Wetland Solutions, Inc. Quantifying the Ancillary Benefits of Constructed Treatment Wetlands	**Haimanote Bayabil** University of Florida Potentials of Variable Rate Irrigation for Vegetable Production in South Florida		
11:05am	**Tom Frick** St. Johns River Water Management District Resilience – A Water Management District Perspective	**Viviana Mazzei** U.S. Geological Survey Effects of Experimental Nutrient Enrichment on Phytoplankton Assemblage Structure and Cyanotoxins	**Jinsheng Huang** University of Florida Ball Milled Biochar Effectively Removes Sulfamethoxazole and Sulfapyridine Antibiotics From Water and Wastewater	**Sandra Guzman** University of Florida Tools to Address Current Irrigation Management Challenges in Citrus Production		**Xingyuan Chen** Pacific Northwest National Laboratory Integrated Modeling of Carbon and Nitrogen Cycling in River Corridors and Watersheds
11:20am	**Kevin Hart** South Broward Drainage District South Broward Drainage District Green Infrastructure Projects and Climate Change Impacts	**Miles Medina** University of Florida Nitrogen Enriched Discharges from a Vast Watershed Intensify Red Tide	**Tricia Kyzar** Wildwood Consulting Inc Assess Vulnerability of OSTDS to SLR and Storm Surge to Develop Adaptation Plans	**Lincoln Zotarelli** University of Florida Rethinking Seepage Irrigation Management for Horticultural Production in Florida		**Maitane Olabarrieta** University of Florida **John Warner** US Geological Survey Advancements of a Coupled Ocean Nearshore Forecasting System
11:35am	**Akintunde Owosina** South Florida Water Management District Assessing and Mitigating the Impacts of Sea Level Rise on Flooding in South Florida	**Mohsen Tootoonchi** University of Florida Decadal Changes in Nitrogen and Phosphorus Species along the Lake Worth Lagoon in South Florida	**Lisa Krimsky** UF/IFAS Informing Septic to Sewer Conversion Outreach in Florida through Community-Based Social Marketing	**Davie Kadyampakeni** University of Florida Implementing Full and Deficit Irrigation Practices using Soil Moisture and Sapflow Sensors for Water Savings in Citrus Production Systems		
11:50am	**Discussion**	**Discussion**	**Discussion**	**Discussion**		**Discussion**
12:00pm-1:00pm	**Lunch**					

	Wednesday, February 23, 2022 (continued)					
	Concurrent Sessions — 1:00pm - 2:30pm					
	2365	3320	3315	2335	2355	Auditorium
	25	26	27	28	29	30
Session Title	**FLWCA4: Using Rainfall and Wet Season Conditions to Analyze Compound Flooding Risks**	**Watershed Provisioning in Estuarine Food Webs**	**Urban Water Quality and Quantity**	**Artificial Intelligence in Water Systems**	**Navigating a Professional Job in Water**	**CCS5: Accelerating the Infusion of Science in Coastal Policy - A Panel**
Moderator	**Carolina Maran** South Florida Water Management District	**Mike Allen** UF/IFAS	**Eban Bean** UF/IFAS	**Rafael Muñoz-Carpena** UF/IFAS	**Kati Migliaccio** UF/IFAS	**Tom Ankersen** University of Florida
1:00pm	Introduction	Introduction	Introduction	Introduction	Introduction	Introduction
1:05pm	**Al Ali** South Florida Water Management District Regional Trend Analysis for Rainfall of South Florida	**Eric Nagid** FL Fish & Wildlife Conservation Com Evaluating Changes and Predicting Impacts to Freshwater Fish Communities in Florida	**Eban Bean** UF/IFAS Moving Florida Forward on Low Impact Development + Green Stormwater Infrastructure	**Ray Huffaker** University of Florida AI Modeling of Complex Real-World Ecosystem Dynamics	**Panel Focus:** The goal of this session is to introduce students to different professional water careers, to provide them information on the skills and experience employers prefer, and to give them the opportunity to network with leading water professionals. The session will consist of a panel discussion of water professionals and follow with a networking period between students and water professionals.	**Panel:** **Annie Brett** University of Florida Levin College of Law **Rachel Silverstein** Miami Waterkeeper **Adam Blalock** Florida Department of Environmental Protection **Christine Angelini** University of Florida College of Engineering **Panel Focus:** Driven by rapid developments in sensor design and deployment, robotics, big data acquisition, storage and analytics, artificial intelligence and Earth Systems modeling, the pace of coastal science has accelerated. At the same time, the scale and gravity of the hazards confronting coastal waters, shorelines and communities has also been accelerating. Many of these coastal hazards are systemic - warmer water, rising seas, tropicalization - the result of the changing climate. Others are more localized – legacy pollution, altered hydrologic regimes, ecosystem disturbance. Synergies between these global and local impacts, coupled with multidecadal time horizons, present a profound policymaking challenge.
1:20pm	**Francisco Peña Guerra** Florida International University Compounding Effects of Surface-Subsurface Water Interactions and Sea Level Rise in North Miami	**Jordan Miller** Southwest Florida Water Management District Establishment and Use of Nature Coast Springs Systems by Common Snook (Centropomus undecimalis)	**Cristian Cardenas-Lailhacar** University of Florida Energy Efficiency Assessments of Wastewater Treatment Plants in Florida	**Berry Wen** University of Florida Using Explainable AI Models for Precipitation Retrievals to Bridge NASA and NOAA Observation Systems		
1:35pm	**Vasu Misra** Florida State University Monitoring the Wet Season over the Five Water Management Districts of Florida	**Kym Rouse Holzwart** Southwest Florida Water Management District Use of Snook Thermal Refuge Criteria for Minimum Flows Development in Coastal Springs	**Mary Lusk** University of Florida Beneficial Reuse of Wastewater: An Update on Trends in Florida and Interdisciplinary Research Opportunities	**Alina Zare** University of Florida Underwater Intensity-to-Height Domain Translation for Synthetic Aperture Sonar		
1:50pm	**Angela Schedel** Taylor Engineering Combined Probability of Coastal and Riverine Flooding	**Charles Martin** University of Florida Snook Use of Thermal Refugia along the Nature Coast: Implications for Minimum Flows and Levels	**Kathleen Sealey** University of Miami Florida Keys Residential Canal Development Impacts on Nearshore Water Quality and Benthic Diversity	**Robert Currier** Texas A&M University STAMPing out HABs: Materials and Methods for Training an AI Classifier for HAB Detection		
2:05pm	**Kevin Reed** Stony Brook University Improving Modeling of Earth System and Intersectoral Dynamics at Local Scales: Hurricane Storylines	**Philip Stevens** Florida Fish and Wildlife Conservation Commission Identifying Freshwater Inflow Needs for Estuarine Fishes: A Statewide Perspective	**Kristen Sealey** Gainesville Regional Utilities GRU Groundwater Recharge Wetlands – Past, Present and Future	**Nikolay Bliznyuk** University of Florida Spatio-Temporal Forecasting of Urban Household-Level Water Demand with Statistical Machine Learning		
2:20pm	**Discussion**	**Discussion**	**Discussion**	**Discussion**	**Discussion**	**Discussion**
2:30pm-3:00pm	**Afternoon Refreshment Break**					

	Wednesday, February 23, 2022 (continued)
3:00pm-5:00pm	**Closing Plenary Session** [Grand Ballroom] **Introductory Remarks** **Scott Angle**, Vice President for Agriculture and Natural Resources, University of Florida **Presentation of Student Poster Competition Awards** **Closing Panel: Climate Resilience in a Ground Zero State** **Moderator:** **Wendy Graham,** Director, University of Florida Water Institute
	Panel Description: Resilience generally refers to the ability to persist or adapt in the wake of disruption. In Florida, climate change is already disrupting local communities, economies, infrastructure, ecosystems and human health. Indeed, Florida has been described as America's "ground zero" for climate change. What does climate resilience mean for Florida's water sector? This panel consists of a group of leading scientists, engineers, water managers and policy makers representing agriculture, the environment, water management, and academic interests. Panel members will discuss initiatives, opportunities, and timeframes for developing water-related resilience in the face of climate impacts. The panel will conclude with open questions and dialogue with the audience. **Panelists:** **Beth Lewis**, Director of Water Resources, The Nature Conservancy Florida Chapter **Carolina Maran**, Chief Resiliency Officer, South Florida Water Management District **Chris Pettit**, Director of Agricultural Water Policy, Florida Dept. of Agriculture & Consumer Services **Mark Rains**, Chief Science Officer, Florida Department of Environmental Protection **Jason von Meding**, Associate Professor, Florida Institute for Build Environment Resilience, University of Florida
5:00pm	**Symposium Concludes**

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