

Tentative Agenda



<https://conference.ifas.ufl.edu/GEER>

The Greater Everglades Ecosystem Restoration (GEER) science conference is designed to bring together scientists and engineers, policy makers, planners, and partners actively involved in or affected by all aspects of Everglades ecosystem restoration. Participants will interact in an interdisciplinary setting to summarize and review state-of-the-art planning, management activities, and science in Everglades restoration.

Science is the foundational element for Everglades restoration and management and GEER is the premier showcase for Everglades science. Sessions will feature presentations by the best and brightest working in the Everglades, addressing the most pressing and complex science issues that we face now and into the future of restoration – a future that includes a changing climate, threats from invasive species, altered hydrology, development pressure, and degraded water quality. Sound science relevant to these challenges and the restoration efforts is required to provide resource managers and policy-makers with the best information possible.

High-quality science has supported many facets of Everglades restoration, including:

- the ecological and hydrological effects of new CERP projects and a revised Lake Okeechobee operating schedule
- investigating invasive species and how we can better detect and control them in the future
- providing advanced and easy-to-use scientific tools for restoration managers
- studying how to best achieve balance between restoration goals and endangered species protection
- assessing how a degraded Everglades will respond to restored sheet flow

Looking to the future, scientists are using innovative approaches – think molecular biology, ecosystem modeling, artificial intelligence, advanced remote sensing -- to provide more data for restoration planning and decision-making. As we progress, we look for opportunities to integrate these innovative data with measurements from the ground, such as, integrating satellite-derived Lidar ground elevation data and water-level surfaces with EDEN. This example is just one that shows that how collaboration can take advantage of innovation to lead to integration, and ultimately synthesis. For GEER 2025, speakers have been asked to consider where we are now, and what is possible by sharing data, collaborating, and synthesizing to build consensus and provide a vision for the future.

GEER will continue its legacy of providing a valuable forum for scientists and engineers to showcase and communicate the latest scientific developments, and to facilitate information exchange that builds shared understanding among federal, state, local, and tribal scientists and decision-makers, academia, non-governmental organizations, the private sector, and private citizens.

A premier gathering, GEER is a collaborative effort and if you are working in the Everglades, you should make plans to join us!

Monday, April 21, 2025	
3:00pm	Pre-Conference Briefings (Moderators & Volunteers)
4:00pm-6:00pm	Conference Registration Opens <i>(Poster presenters and sponsors set up displays)</i>
5:00pm-6:30pm	Informal Early Bird Networking Social on the Terrace
Tuesday, April 22, 2025	
7:30am-5:00pm	Conference Registration Open
7:30am-8:30am	Morning Refreshments in Poster Hall
8:30am-10:00am	<p>Opening Plenary Session</p> <p><u>Welcome to GEER</u> Dr. Nick Aumen, Conference Chair, and Regional Science Advisor – South Florida, US Geological Survey, Davie, FL</p> <p><u>Opening Remarks</u> Dr. J. Scott Angle, Senior Vice President of Agriculture and Natural Resources University of Florida, Gainesville, FL</p> <p><u>Keynote Presentation</u> "Climate Change 2025: Challenge and Opportunity" Dr. Jonathan T. Overpeck, Samuel A. Graham Dean and William B. Stapp Collegiate Professor of Environmental Education, University of Michigan, School for Environment and Sustainability, Ann Arbor, MI</p>
10:00am-10:30am	AM Break in Poster Hall

Tuesday, April 22, 2025					
Concurrent Sessions [10:30am - 12noon]					
	Great Cypress	Royal Poinciana	Ibis	Egret	Sandpiper
	Session 1	Session 2	Session 3	Session 4	Session 5
Session Title	DECOMP Futures: Hydrologic, Vegetation, and Water-quality Responses to Restored Sheetflow	When Peter Pays Paul: Identifying Trade-Offs Among Multiple Restoration Objectives: Part 1	Restoring the Everglades and the Road to Resilience	Assessment of Restoration Progress from CERP: Bridging System-Wide Predictions & Real-World Data	Update on Restoration Strategies: Science and Management in Everglades STAs
Moderator	Jud Harvey U.S. Geological Survey	Mark Cook South Florida Water Management District	Paul Julian The Everglades Foundation	Phyllis Klarmann South Florida Water Management District	Jill King South Florida Water Management District
10:30am	Introduction & Overview	Introduction & Overview	Introduction & Overview	Introduction & Overview	Introduction & Overview
10:35am	Deusdedith Rugemalila Spatio-temporal Dynamics of Vegetation Species Abundance in Response to Hydrologic Changes in the Ridge and Slough Landscape of Everglades Ecosystem	Fred Sklar Ecological Thresholds and How They Inform Potential Tradeoffs	Steve Davis Everglades Restoration is Foundational to South Florida Resilience	Tasso Cocoves Are We There Yet? How RECOVER Determines Restoration Progress and Success	Tracey Piccone Restoration Strategies STA Expansions and Flow Equalization Basins Construction Status Update
10:50am	Zhiqiang Chen Use of Deep Learning to Assist in Vegetation and Microtopography Input Classifications for Regional Modeling	Sue Newman Understanding The Water Quality-Water Quantity Tradeoffs: Can We Find a Balance?	Paul Julian Balancing Estuarine Light and Salinity with Restoration and Operations on the Resiliency Superhighway	Curtis Szewczyk Assess for Success: Science Supporting CERP Restoration in Lake Okeechobee and the Northern Estuaries	Tom James Integrating Restoration Strategies Science And STA Management: Part I Synthesis of Findings
11:05am	Colin Saunders Application of the Blue Shanty Flowway Model to Achieve CEPP Restorative Flow Targets	Christa Zweig The Everglades Wasn't Built in a Day: Micro and Major Transitions in Restoration	Ana Carolina Coelo Maran Building Resiliency: Integrating Flood Protection, Water Supply and Ecosystem Restoration for South Florida's Future	Jenna May Syncing Success: Linking Modeling and Monitoring to Track Restoration Progress in the Greater Everglades	Jill King Integrating Restoration Strategies Science and STA Management: Part II Management Strategies
11:20am	Jay Choi Biophysical Simulation of Sheetflow at the DECOMP Physical Model (DPM) to Assess Restoration Effectiveness	Nathan Barrus Apple Snail Management: A Critical Need for Population-Level Not Reproductive-Level Targets	Meenakshi Chabba Mainstreaming Environment and Equity in Resilience Infrastructure Assessment (MEERIA): An Alternative Valuation Methodology	Stephanie Verhulst Advancing Predictive and Assessment Tools in the Everglades' Southern Coastal Systems	Ryan Goebel Integrating Restoration Strategies Science and STA Management: Part III Field Scale Trial of Soil Consolidation and SAV Recovery
11:35am	Jud Harvey Performance Standards from a Biophysical Simulation of Everglades Sheet Flow	Eric Cline What Do We "Know" about Historical Tree Island Ecology in the Central Everglades? New Insights from Historical Literature and Current Science	Tiffany Troxler Investigating Adaptive Capacity to Climate-Related Shocks and Stressors in Southeast Florida	Phyllis Klarmann Where Do We Go From Here? System-Wide Synthesis and Uncertainties for Everglades Restoration	Jing Guan Characterization of Spatial and Temporal Dynamics for Vegetation in the Everglades Stormwater Treatment Areas Through a Spectrally Focused Remote Sensing Approach
11:50am	DISCUSSION	DISCUSSION	DISCUSSION	DISCUSSION	DISCUSSION
12noon - 1:30pm	Group Lunch Buffet				

Tuesday, April 22, 2025					
Concurrent Sessions [1:30pm - 3:00pm]					
	Great Cypress	Royal Poinciana	Ibis	Egret	Sandpiper
	Session 6	Session 7	Session 8	Session 9	Session 10
Session Title	Honoring the Science and Legacy of Joan Browder: Part 1	When Peter Pays Paul: Identifying Trade-Offs Among Multiple Restoration Objectives: Part 2	Between Flood Pulses: Stage Ascension and Recession on the Kissimmee River Floodplain	Understanding Constituent Transport and Implementing Engineering Solutions for Everglades Restoration	Environmental and Management Controls on Dissolved Organic Matter in the Greater Everglades Ecosystem
Moderator	Sarah Bellmund National Park Service	Eric Cline South Florida Water Management District	Steve Bousquin South Florida Water Management District	Jodie Hutchins South Florida Water Management District	Brett Poulin University of California, Davis
1:30pm	Introduction & Overview	Introduction & Overview	Introduction & Overview	Introduction & Overview	Introduction & Overview
1:35pm	Overview and Discussion of the Broad Extent of Dr. Joan Arrington Browder's Interests and Work: Lynn Wingard, USGS; Sarah Bellmund, NPS; Andre Daniels, USGS; Anna Wachnicka, SFWMD	Kevin Cunniff Synthesizing ITEK and Western Science to Refine Everglades Baseline Conditions and Achieve Balanced Multi-Species Management	Darryl Marois Trends in River and Floodplain Water Depths During Ascension and Recession Events	Yuncong Li Cross-sectional Monitoring at S333 to Investigate Flow Dynamics and Gate Structure Impacts on Phosphorus Entrainment	Shin-Ah Lee Seasonal Dissolved Organic Matter Dynamics in Two South Florida Estuaries
1:50pm	Jerome Lorenz Comparing Methods of Monitoring Nesting Success of Florida Bay's Roseate Spoonbills: Mark/Revisit Versus Camera Traps	Nathan Dorn What Could Be Lost If Lostmans Slough Gets Lost in the Hydro Shuffle?	Richard Botta Wading Birds and Their Prey: Hydrologic-Driven Responses on the Kissimmee River Floodplain	Tibebe Dessalegne Application of Computational Fluid Dynamics (CFD) to Inform Engineering and Maintenance Solutions at S333	Elise Morrison Dissolved Organic Matter Cycling in the Everglades Stormwater Treatment Areas
2:05pm	Andre Daniels Fish and Invertebrate Assessment Network: A Tribute to Joan Browder and Mike Robblee's Research in South Florida	Mark Cook Are We Getting the Water Right for Wood Storks? New Insights from Landscape-Scale Foraging Patterns	Erik Tate-Boldt Effects of Stage Ascension and Recession on Dissolved Oxygen Concentrations in the Kissimmee River and its Floodplain	Jodie Hutchins Engineering and Maintenance Solutions for Addressing the Elevated Total Phosphorus Concentrations at S333	Brett Poulin Consequences of Sulfur Applications on DOM Chemistry Across the Greater Everglades Ecosystem
2:20pm	Thomas Frankovich An Introduction to Biscayne Bay Benthic and Planktonic Diatoms	Laura Brandt Where the Rubber Meets the Road: The Processes for Decision Making	Brent Anderson Using a Motion-activated Camera to Document Wildlife using a Drying Pool on the Kissimmee River	Nenad Iricanin Engineering and Maintenance Solutions Monitoring and Assessment Plan	Francisco Fernandez-Lima Characterization of DOM Using TIMS-UHR-MS/MS and Graph-DOM Routines
2:35pm	John F. Meeder Joan Browder on Shrimp, Water and Marsh-Estuarine Management, Southern Louisiana Coastal Marshes and Biscayne Bay	DISCUSSION	David Anderson Managing Ascension and Recession in the Kissimmee River	Hui Zhao Marsh and Canal Flow Connectivity Approximations to Explore Influence of Marsh on Constituent Transport	John Kominoski Shifting Freshwater Hydrology and Saltwater Intrusion Characterize Changing Dissolved Organic Matter Along Coastal Wetland Gradients
2:50pm	DISCUSSION		DISCUSSION	DISCUSSION	DISCUSSION
3:00pm-3:30pm	PM Break in Poster Hall				

Tuesday, April 22, 2025					
Concurrent Sessions [3:30pm - 5:00pm]					
	Great Cypress	Royal Poinciana	Ibis	Egret	Sandpiper
	Session 11	Session 12	Session 13	Session 14	Session 15
Session Title	Honoring the Science and Legacy of Joan Browder: Part 2	Water Quality and Water Quantity Targets - Big Cypress and Central Everglades	Examining the Fate, Transport, and Bioaccumulation of Contaminants of Concern in the Everglades	Managing the Recovery of Apple Snails and Snail Kites in the Greater Everglades System	Plant-based Performance: The Latest in STA Vegetation Research
Moderator	Lynn Wingard U.S. Geological Survey	Becky Allenbach US Environmental Protection Agency	Maite De Maria Cherokee Nation System Solutions in Support of USGS Wetland and Aquatic Research Center	Tyler Beck Florida Fish and Wildlife Conservation Commission	Jacob Dombrowski South Florida Water Management District
3:30pm	Introduction & Overview	Introduction & Overview	Introduction & Overview	Introduction & Overview	Introduction & Overview
3:35pm	G. Lynn Wingard Historical Salinity and Flow in Biscayne Bay – The Pathway to Performance Measures	Chris Decker Water Quality and Environmental Protection in Big Cypress National Preserve: History, Science and Management - REMAP Big Cypress 2023 Results: A Baseline for WERP	Tracie Baker A Historic Voyage Through the Everglades with an Eye on Modern Pollutants	Ken Meyer Evaluating Apple Snail Responses to Changes in Hydrology: Implications for Snail Kite Recovery and Everglades Restoration Efforts	Matt Powers Phosphorus Retention within STA Ecotopes
3:50pm	Michael Schmale Historical Perspectives on Faunal Abnormalities and Contaminants in Biscayne Bay	Kelsey Solomon Establishing a Protective Phosphorus Target for the WERP Region of Big Cypress National Preserve: Experiment	Gretchen Lescord All Drains Lead to the Everglades: A Review of Hg Research in Inland Freshwaters of Florida	Tiffany Trent A Closer Look at Native Apple Snail Hydrology in Water Conservation Area 3A	Jacob Dombrowski SAV in the STAs: Insights into Phosphorus Retention
4:05pm	Sarah Bellmund Current Water Flow Into Biscayne National Park and Biscayne Bay	Melissa Nasuti Development of Hydrologic Targets to Inform the Central Everglades Planning Project Operational Plan (Increment 1)	Ania Sziembaraska Effects of Salinity on Methylmercury Production and Microbial Community Composition in Everglades Coastal Mangroves	Phil Darby Habitat Improvements that Benefit Apple Snails on Central Florida Lakes	Camille Herteux Impact of Large Fishes on SAV Growth and Establishment in the STAs
4:20pm	Open Sharing: Memories of Joan Browder	Bradley Foster Anticipated Benefits from the Western Everglades Restoration Project Recommended Plan	Maite De Maria Contaminants of Global Concern: Under Investigated Issues for the Greater Everglades	Lara Elmquist Impacts of Boating Activity on Foraging and Breeding Snail Kites (<i>Rostrhamus sociabilis plumbeus</i>)	Megan Feeney Metagenomics Characterization of Periphyton Nutrient Cycling in the STAs
4:35pm		DISCUSSION	Collin Eagles-Smith Spatial and Temporal Patterns in Mercury Concentrations of Native and Invasive Forage Fish in the Florida Everglades	Brian Jeffery What Happened to Snail Kites in the Water Conservation Areas?	Nathan Gavin Elevated Science: Drone Use in STA Vegetation Research
4:50pm			DISCUSSION	DISCUSSION	DISCUSSION
5:00pm - 7:00pm	Poster Session One and Networking Reception				

Wednesday, April 23, 2025	
7:30am-5:00pm	Conference Registration Open
7:30am-8:30am	Morning Refreshments in Poster Hall
8:30am-10:00am	<p style="text-align: center;">Plenary Session</p> <p style="text-align: center;">Design, Innovation, and Governance (DIG): Solutions for Everglades Restoration</p> <p style="text-align: center;">Six Ted-style presentations will offer a unique blend of the art of communication with a passion for science on Everglades science and restoration topics.</p> <p style="text-align: center;">Welcome Remarks:</p> <p style="text-align: center;">Nick Aumen, Conference Chair, and Regional Science Advisor – South Florida, US Geological Survey, Davie, FL</p> <p style="text-align: center;">DIG Session Organizer & Moderator:</p> <p style="text-align: center;">Fred Sklar, Director and Section Administrator, Everglades Systems Assessment Section South Florida Water Management District, West Palm Beach, FL</p> <p style="text-align: center;">DIG Presentations:</p> <p style="text-align: center;">Michelle Afkhami, Associate Professor of Biology, University of Miami, Miami, FL</p> <p style="text-align: center;">Andrew Baker, Director, Coral Reef Futures Lab, Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL</p> <p style="text-align: center;">Jennifer Jurado, Chief Resilience Officer and Deputy Director, Resilient Environment Department, Broward County, Fort Lauderdale, FL</p> <p style="text-align: center;">Sparkle Malone, Assistant Professor, Yale University, New Haven, CT</p> <p style="text-align: center;">Michael Osland, Research Ecologist, USGS Wetland & Aquatic Research Center, Lafayette, LA</p> <p style="text-align: center;">Colin Polsky, Associate Vice President, Broward Campuses, Professor of Geosciences, Florida Atlantic University, Davie, FL</p>
10:00am - 10:30am	AM Break in Poster Hall

Wednesday, April 23, 2025					
Concurrent Sessions [10:30am - 12:00pm]					
	Great Cypress	Royal Poinciana	Ibis	Egret	Sandpiper
	Session 16	Session 17	Session 18	Session 19	Session 20
Session Title	From Rivers to Reefs: Linking Water Quality Impacts to Ecosystem Declines in Greater Biscayne Bay	National Academies' 2024 Review of Everglades Restoration Progress	Tree Island Science, Evaluation, and Assessment Session: Part 1 of 2	Integrated Water Resources Protection and Resiliency: Addressing Climate Challenges in South Florida	Water, Soil, and Vegetation Interactions Drive Performance of the Stormwater Treatment Areas
Moderator	Laura Eldredge Miami-Dade County Division of Environmental Resources Management (RER-DERM)	Stephanie Johnson National Academies	Sharon Ewe Stantec Consulting Inc	Shimelis Setegn South Florida Water Management District	Mike Jerauld DB Environmental
10:30am	Introduction & Overview	Introduction & Overview	Introduction & Overview	Introduction & Overview	Introduction & Overview
10:35am	Laura Reynolds 40 Years of Increased Phosphorous Availability Impact Seagrasses in Biscayne Bay, Implications for Water Quality Management and BBSEER Project	William Hopkins Recent Progress Towards Achieving Natural Ecosystem Restoration Goals in the Florida Everglades	Kristin Vaughan Tree Island Structure and Composition in Water Conservation Area 3	James Beerens Supporting Ecological Functions in South Florida with the Minimum Flows and Levels Program	Jessica Vaccare Role of Vegetation on Local Water Column Phosphorus Dynamics in the Everglades STAs
10:50am	Brian Walker Hydrographic Connections of Inland Water to Diseased Corals and Water Quality Sites on Florida's Coral Reef	Helen Regan Applying Indigenous Knowledge in the Comprehensive Everglades Restoration Plan (CERP)	Jay Sah Vegetation Dynamics In Tree Islands Within Ridge And Slough Landscape In Southern Everglades	Jayantha Obeysekera Dynamically Resilient Water Resources System in an Environment of a Nonstationary Climate	Kevin Grace Physical Stability of Typha and Marl Soils in Everglades STAs
11:05am	Galia Varona Seagrass Changes Associated with Long-Term Algae Blooms in Biscayne Bay	Tracy Quirk Tools to Evaluate the Effects of Climate Change in CERP	Jacob Larsson Tree Island Restoration Within the Everglades and Francis S. Taylor Wildlife Management Area	Girma Awoke Solute Transport in Seawater-Flooded Soils: Environmental Impacts and Insights from Experiments, Numerical Modeling, and Machine Learning	Jessica Jenison Phosphorus Dynamics in Stormwater Treatment Areas: Changes in Phosphorus Forms and Concentrations from Inflow to Outflow
11:20am	Jhon Mojica Multi-Year, High-Frequency Assessment of Water Quality in Biscayne Bay, Florida	John Callaway Adaptive Management and Use of New Information in Decision Making	Jean Woodmansee <i>Lygodium microphyllum</i> Presence and Prevalence in WCA-3	Seneshaw Tsegaye Water Quality in the Peace River Watershed: An Analysis of Current Conditions and Mitigation Strategies	Mike Jerauld Dissolved Organic Matter Optical Properties in Treatment Wetlands: Associations with Plants, Soils, and Treatment Performance
11:35am	Pamela Sweeney Biscayne Bay Reasonable Assurance Plan: The Path to Restoring Water Quality and Habitat	DISCUSSION	Ximena Mesa Quantifying Spatial Patterns of Woody Vegetation Embedded in Everglades Freshwater Wetland Ecosystems	Kelton Maystrick Investigating Seasonal Patterns of Normalized Difference Vegetation Index in a Southwest Florida Cypress Dome	Luke Evans Synthesizing Effects of Soil Dryout, Vegetation Disturbance, and Other Perturbations on Everglades STA Treatment Performance
11:50am	DISCUSSION		DISCUSSION	DISCUSSION	DISCUSSION
12noon - 1:30pm	Lunch Buffet				

Wednesday, April 23, 2025					
Concurrent Sessions [1:30pm - 3:00pm]					
	Great Cypress	Royal Poinciana	Ibis	Egret	Sandpiper
	Session 21	Session 22	Session 23	Session 24	Session 25
Session Title	Planning for Resilience in Changing Seas: Biscayne Bay Southeastern Everglades Restoration (BBSEER)	Recent Advances in Research and Management of Invasive Species in the Greater Everglades	Tree Island Science, Evaluation, and Assessment Session: Part 2 of 2	Integrating Watershed Modeling and Resiliency Strategies for Enhanced Flood Protection in South Florida Ecosystems: Part 1 of 2	Student Advancement of Everglades Research through Federally Funded Collaborations: Part 1 of 2
Moderator	Nicole Niemeyer South Florida Water Management District	Melissa Miller University of Florida	Gina Paduano Ralph U.S. Army Corps of Engineers	Shimelis Setegn South Florida Water Management District	Paige Kleindl Florida International University
1:30pm	Introduction & Overview	Introduction & Overview	Introduction & Overview	Introduction & Overview	Introduction & Overview
1:35pm	Jennifer John BBSEER and Beyond: Restoration Resilience in Plan Formulation	LeRoy Rodgers Enhancing Invasive Plant Management Through Multi-Scale Monitoring in the A.R.M. Loxahatchee National Wildlife Refuge	Nicholas Gonzalez Indigenous Traditional Ecological Knowledge and Species Distributions Update Water Level Targets.	Hongying Zhao Flood Protection Level of Service Program: A Systematic Approach to Vulnerability Assessment and Mitigation Planning	Veronica Restrepo Quantifying Marsh Aboveground Net Primary Productivity Along Shifting Freshwater-to-Saltwater Gradients
1:50pm	Ceyda Polatel Engineering for Climate Resilience: The BBSEER Approach	Alexandra Onisko Invasive Grass Challenges and Solutions for Kissimmee River Restoration	Carlos Coronado-Molina RECOVER Tree Island Performance Measure	Laura Vogel High-Resolution 2D HEC-RAS Modeling in Support of Region 2 Western Everglades Restoration Project	Carlos Pulido From Roots to Leaves: Understanding Multi-Scale Trait Variation in Freshwater Wetlands
2:05pm	Khandker Ishtiaq Lessons from BBSEER and Beyond: Modeling to Improve Wetland Resilience to Sea Level Rise	Sergio A. Balaguera-Reina Active eDNA Monitoring of the Invasive Asian Swamp Eel in South Florida: Assay Development and Application	Lisa Aley Incorporating Miccosukee Tribe of Florida Indigenous Knowledge in Everglades Restoration Operational Planning	Carol Ballard Section 203 Flood Risk Management Study Modeling Approach for Broward County	Himadri Biswas Spatially Explicit Change Patterns of <i>Rhizophora mangle</i> in the Southeast Saline Everglades
2:20pm	DISCUSSION	Jessica Skippy Martin Partnerships and Consistency, the Key to Managing Aquatic Invasive Plants on Lake Okeechobee for Over 100 Years	Christopher Altes Regional Simulation Model Tree Island Tool	Seyed "Haji" Hajimirzaie Eastern Palm Beach County Flood Protection Level of Service Assessment for Current and Future Conditions	Jessika Reyes Spatiotemporal Patterns of Tidal Creek Expansion and Riparian Mangroves in the Southern Everglades
2:35pm		Joshua Bauer Managing Invasive Animals in Comprehensive Everglades Restoration Plan Projects	Saira Haider Etree: Everglades Tree Island Indicator Web Application	Shimelis Dessu Mapping Surface Water Connectivity and Flow Direction Between Shark River Slough and Taylor Slough, Everglades National Park	Paige Kleindl Co-Variation of Macrophyte and Microbial Mat Standing Stocks Along Wetland Resource Gradients
2:50pm		DISCUSSION	DISCUSSION	DISCUSSION	DISCUSSION
3:00pm - 3:30pm	PM REFRESHMENT BREAK IN POSTER HALL				

Wednesday, April 23, 2025					
Concurrent Sessions [3:30pm - 5:00pm]					
	Great Cypress	Royal Poinciana	Ibis	Egret	Sandpiper
	Session 26	Session 27	Session 28	Session 29	Session 30
Session Title	Management Strategies for Mitigating HABs at the Complex Nexus of Eutrophication and Climate Change	Impacts of Hydro-climatic Variability in Florida Bay and Upstream Systems	Biscayne Bay Coastal Wetlands - Research to Inform Restoration	Integrating Watershed Modeling and Resiliency Strategies for Enhanced Flood Protection in South Florida Ecosystems: Part 2 of 2	Student Advancement of Everglades Research through Federally Funded Collaborations: Part 2 of 2
Moderator	Anna Wachnicka South Florida Water Management District	Jennifer Rehage Florida International University	Danielle Ogurcak Florida International University	Hongying Zhao South Florida Water Management District	Paige Kleindl Florida International University
3:30pm	Introduction & Overview	Introduction & Overview	Introduction & Overview	Introduction & Overview	Introduction & Overview
3:35pm	Anna Wachnicka A Comprehensive Overview of the Lake Okeechobee C-HAB Management Strategies and Selected Mitigation Projects	Alfredo Quezada Transport and Salinity Budget of Florida Bay	Bahram Charkhian Restoration Benefits Observed from the Biscayne Bay Coastal Wetlands Project	Katharine Mach Flood Modeling and Adaptation Innovations to Support Coordinated Flood Responses Across South Florida	Thomas Shannon Understanding and Managing Local-to-Landscape Resilience for Everglades Periphyton
3:50pm	Hidetoshi Urakawa Lake Guard Oxy Treatments for Cyanobacterial Blooms at a Lake Okeechobee Outflow Structure	Ethiopia Zeleke Spatiotemporal Dynamics of Surface and Groundwater in South Florida: Long-term Trends and Implications for Water Management	Melaney Lara Determining Spatial and Temporal Sources of Water in a Coastal Wetland System Using Geochemical Tracers, Southeast Florida	Shimelis Setegn Integrated Modeling System for the Loxahatchee River and Estuary Watershed to Address Environmental Challenges	Ariana Jonas Documenting the Impacts of Sawgrass Encroachment in Sloughs of the Central Everglades
4:05pm	Cynthia Heil Use of Curcumin for Mitigation of the Toxic Dinoflagellates <i>Karenia brevis</i> and <i>Alexandrium monilatum</i>	Parker Denton Analyzing the Probability of Spoonbill Nest Production in Florida Bay Using Negative Binomial Regression	Samantha Hormiga Carbonate Sediment Production in Coastal Wetlands: Periphyton Contributions and Diatom Indicators	David Colangelo South Florida Water Management District Sea Level Rise and Flood Resiliency Plan, 2025	Jeremy Irsik Analysis of Benthic Environment Trends at Biscayne National Park
4:20pm	Kathryn Coyne Immobilization of Algicidal Bacteria for Management of Algal Blooms: A Case Study	Jennifer Rehage Linking the Movement and Trophic Ecology of Consumers to Enhance Our Understanding of How Fisheries Respond to Hydroclimatic Variation	Rosario Vidales Pre-Restoration Mangrove Cover Change in the Cutler Wetlands and Functional Trait Response	E. Timothy Gysan Integration of Resilience Efforts Through Federal, State, and Local Governments	Isabella Lopez South Florida Reef Fish Communities in Dry Tortugas and Biscayne National Park
4:35pm	Martin Page Physical and Economic Scalability Analysis of the Harmful Algal Bloom Interception, Treatment, and Transformation System (HABITATS)	DISCUSSION	Kevin Montenegro Quantifying Biomass Carbon Storage and Soil Elevation Dynamics in Mangrove Forests of Biscayne National Park	Francisco Pena FPLOS and Applications in Resilient Florida Flood Vulnerability, Adaptation Planning, and Federal Flood Risk Management	Christina Tilley Evaluating Population Dynamics of the Everglades Crayfish Within Marl Prairies of Big Cypress National Preserve
4:50pm	DISCUSSION		DISCUSSION	DISCUSSION	DISCUSSION
5:00pm - 7:00pm	Poster Session Two and Networking Reception				

Thursday, April 24, 2025					
7:30am-5:00pm	Conference Registration Open				
7:30am-8:30am	Morning Refreshments in Poster Hall				
Concurrent Sessions [8:30am - 10:00am]					
	Great Cypress	Royal Poinciana	Ibis	Egret	
	Session 31	Session 32	Session 33	Session 34	
Session Title	Lake Okeechobee Ecology: Looking Back and Looking Ahead, from LORS08 to LOSOM	Invasive Prioritization Tools and Invasive Species in the Everglades	Recovering the Florida Grasshopper Sparrow: Lessons Learned From The FGSP Working Group	Role of Hydrodynamic Modeling in Everglades Restoration	
Moderator	Jennifer E. Chastant South Florida Water Management District	Wesley Daniel U.S. Geological Survey	Elizabeth Abraham Archbold Biological Station	Seyed "Haji" Hajimirzaie South Florida Water Management District	
8:30am	Introduction & Overview	Introduction & Overview	Introduction & Overview	Introduction & Overview	
8:35am	Zach Welch On the Cusp of LOSOM – Considering Environmental Events and Ecological Changes Under LORS08	Adrian Figueroa Developing an Invasive Species Prioritization Tool for Everglades Restoration	Mary Marine The Florida Grasshopper Sparrow: Natural History, Decline, and Recovery of a Critically Endangered Songbird	Matahel Ansar Applications of 2D & 3D Hydrodynamic Models to Kissimmee River Restoration Project	
8:50am	Paul Jones Lake Okeechobee Water Quality Trends and Lingering Impacts	Amanda M. Kissel Developing Early Detection Tools for Monitoring the Spread of Invasive Tegu Lizards in the Everglades	Andrew Schumann Development and Implementation of a Conservation Breeding Program: One of Many Tools in the Recovery Toolbelt	Jie Zeng Blue Shanty Flowway Restoration HEC-RAS Model Study	
9:05am	Matthew Stevens Largemouth Bass and Relationships with Submersed Aquatic Vegetation	Ian A. Pfingsten Sleeper Plant Species in South Florida: History and Patterns and Implications for Restoration	Jess Rodriguez Management Approaches and the Importance of Working with Land Managers to Recover Imperiled Species	Kelin Hu Biscayne Bay Water Quality Model Development and Applications	
9:20am	Michael Baranski Wading Bird Littoral Use Under Varying Hydrology	Cayla Morningstar Testing Low-Cost Control Methods Efficacy on Giant Applesnails (<i>Pomacea maculata</i>) Egg Masses	Adrienne Fitzwilliam From Release to Recruitment: Designing and Testing Release Protocols to Maximize Population Growth	Ehab Meselhe Hydrodynamic and Salinity Modeling in Florida Bay	
9:35am	Alyssa Jordan Adapting Lake Okeechobee Habitat Management to Changes in Lake Stages	DISCUSSION	Robert Aldredge Strong Partnerships Are Key to a Successful Conservation Breeding and Recovery Program	Jeong Park Application of CFD For the Design of A CEPP-N Restoration Project Flow Distribution Facility	
9:50am	DISCUSSION		DISCUSSION	DISCUSSION	
10:00am - 10:30am	AM REFRESHMENT BREAK IN POSTER HALL				

Thursday, April 24, 2025					
Concurrent Sessions [10:30am - 12:00pm]					
	Great Cypress	Royal Poinciana	Ibis	Egret	
	Session 36	Session 37	Session 38	Session 39	
Session Title	Florida’s Coral Reef Ecosystem – Status, Threats, and the State of Restoration Efforts	U.S. Geological Survey Greater Everglades Science Plan and Invasive Burmese Pythons	Leveraging Geospatial Technology to Support Restoration and Resilience Efforts	Harnessing Data to Enhance Everglades Restoration	
Moderator	James Erskine Florida Fish and Wildlife Conservation Commission	Amy A. Yackel Adams U.S. Geological Suvey	Lawrence Spencer South Florida Water Management District	Chad Smith Headwaters Corporation	
10:30am	Introduction & Overview	Introduction & Overview	Introduction & Overview	Introduction & Overview	
10:35am	Wes Brooks Interagency Efforts to Restore Florida’s Coral Reef	Ian Bartoszek Python Management Efforts Within the Picayune Strand State Forest	Christine L. Carlson ICEYE Flood Insights: Gaining A Regional Perspective On Flooding	Michael Breslin SFWMD DBHydro Database Access and Data Retrieval	
10:50am	Rob Ruzicka The Influence of Florida Bay in Structuring Nearshore Coral Reef Communities in the Florida Keys	Daniel Haro Estimating Burmese Python Abundance in Their Invasive Range in South Florida	Madelyn Rinka Using GIS To Enhance Efficacy and Efficiency of Drone Imagery Analysis	Darlene Marley Implementing DataOne, a Hosted Data Management Application, to Achieve Interagency Data Management Success	
11:05am	Stephanie Schopmeyer Building Capacity for Resilience on Florida’s Coral Reef Through Coral Rescue and Propagation	Wesley Daniel U.S. Geological Survey Greater Everglades Invasive Species Science Plan, 2025–2030	Halley Carruthers Examining Spatial And Temporal Changes To The Littoral Zone Of Lake Okeechobee Using Otsu’s Method	Gabriel Kamener A Unique History: Long-Term Ecological Data at the FCE LTER Program	
11:20am	David Kochan The Florida’s Coral Reef Unified Water Quality Monitoring Dataset Aggregation and Analysis	Jacquelyn Guzy Variation in Adult Burmese Python (<i>Python molurus bivittatus</i>) Survival in Southern Florida	Camille Carroll Patterns in Vegetation on Lake Kissimmee: Using Google Earth Engine to Develop a Long-term Dataset	Danielle Morancy iModel Application in Central Everglades Planning Project 1.0	
11:35am	William Sharp Development of a Sponge Restoration Strategy for Florida Bay	Mark Sandfoss Invasive Burmese Python Movement and Management Implications	Lawrence Spencer Mapping Kissimmee River Floodplain Vegetation: An Approach Using Machine Learning In Small Plots	Bradley Harken Everglades Depth Estimation Network: Data, Maps, and More	
11:50am	DISCUSSION	DISCUSSION	DISCUSSION	DISCUSSION	
12noon - 1:30pm	LUNCH BUFFET				

Thursday, April 24, 2025					
Concurrent Sessions [1:30pm - 3:00pm]					
	Great Cypress	Royal Poinciana	Ibis	Egret	Sandpiper
	Session 41	Session 42	Session 43	Session 44	Session 45
Session Title	Present & Future of Everglades Southern Estuaries-Implications for Management & Restoration: Part 1	Special Delivery: New Boundaries and Implications of Invasive Species in the Everglades	Application of Advanced Computational Techniques for Everglades Restoration	Water, Energy, and Carbon Cycling in the Everglades - Insights for Restoration and Climate Adaptation	Economic Analyses in Greater Everglades Ecosystem and Implications for Restoration
Moderator	Theresa Strazisar South Florida Water Management District	Paul Evans Invasion Science Research Institute (ISRI)	Rajendra Paudel South Florida Natural Resources Center, National Park Service	W. Barclay Shoemaker U.S. Geological Survey	Paul Hindsley The Everglades Foundation
1:30pm	Introduction & Overview	Introduction & Overview	Introduction & Overview	Introduction & Overview	Introduction & Overview
1:35pm	Marianna Coppola Seagrass Seascape Responses to Water Quality Across Spatial Scales in Biscayne Bay	Kate Davis Determining the Origin of Migratory Birds Consumed by Burmese Pythons in Florida	Joseph Park Statistical and State Space Methods Unravel Marsh Stage Response to Rainfall and Water Management	Amartya Saha Water, Carbon, and Nutrient Balance on Ranchlands in the Everglades Headwaters	Paul Hindsley Economics in the Greater Everglades System
1:50pm	Jerry Lorenz Investigating Spatial and Temporal Scales of Ecological Recovery Dynamics in the Southern Mangrove Zone	Brandon Welty Linking Burmese Python Ecology with Removal Efforts in the Everglades	Alaa Ali Poisson Point Process for Lake Okeechobee Minimum Flow and Level Exceedance and Violation Events	Xavier Comas Non-invasive Investigation of Methane Gas Fluxes in Subtropical Peat Soils in the Everglades using Efficient Airborne Ground-penetrating Radar (GPR)	Laila Racevskis Valuing Nature for Decision-Making and Policy
2:05pm	Cody Eggenberger Linking Movement Strategy Selection to the Trophic Dynamics of an Estuarine Predator	Jenna Palmisano Snake Lungworm Alliance and Monitoring (SLAM): Opportunistic Surveillance and Resource Allocation	Courtney Forde Forecasting Water Levels Using Machine (Deep) Learning to Complement Numerical Modeling in the Southern Everglades	Eric Ward Improving Wetland Methane Flux Estimates to Meet User Needs	Sergio Alvarez Social Amplification of Risk in Coastal Tourism Destinations with Harmful Algae Blooms
2:20pm	Lukas Lamb-Wotton Landscape-scale Evaluation of Vegetation Cover and Hydrologic Conditions Along the Southwest Coast of Everglades National Park	Yunpeng Liu A Comprehensive Assessment of the Non-native and Invasive Species in Florida, USA	Yogesh Khare Near-Real Time Runoff Estimation for Operations and Emergency Modeling	Abdullah Al Fazari Integrating Multi-Source Data with Machine Learning Techniques to Upscale Wetland Carbon Dioxide Fluxes	Chloe Vorseth Drops for Dollars: Estimating the Economic Value of Recreational Fishing and Water Management in Lake Okeechobee, Florida
2:35pm	Kira Allen Understanding Sea Level Rise Impacts in Florida Bay: Spatial Dynamics of Water Levels and Salinity	Margaret Hunter Detecting Reptiles with eDNA Metabarcoding	Rahuul Rangaraj Investigating Deep Learning Models for Water Level Prediction in the Everglades National Park	Cheryl Doughty The BlueFlux Campaign: Daily Blue Carbon Flux Upscaling from Tower and Airborne Sources Reveals 20-Year History of CO ₂ and CH ₄ Ecosystem Fluxes in the Everglades	Cody Kiefer Estimating the Economic Impacts of Greenhouse Gas Emissions in the Everglades Agricultural Area
2:50pm	DISCUSSION	DISCUSSION	DISCUSSION	DISCUSSION	DISCUSSION
3:00pm - 3:30pm	PM Refreshment Break				

Thursday, April 24, 2025					
Concurrent Sessions [3:30pm - 5:00pm]					
	Great Cypress	Royal Poinciana	Ibis	Egret	
	Session 46	Session 47	Session 48	Session 49	
Session Title	Present & Future of Everglades Southern Estuaries-Implications for Management & Restoration: Part 2	Eat or Be Eaten: Mammals in the Everglades	A Glimpse into the Anticipated Future with the Comprehensive Everglades Restoration Plan	Predicting and Evaluating Changes in the Everglades Coastal Transition Area	
Moderator	Christopher Madden South Florida Water Management District	Stephanie Romañach U.S. Geological Survey	Zulamet Vega-Liriano U. S. Army Corps of Engineers	Xavier Comas Florida Atlantic University	
3:30pm	Introduction & Overview	Introduction & Overview	Introduction & Overview	Introduction & Overview	
3:35pm	Marguerite Koch Perspective of Scale in Estuarine Management: Climate Change Makes it Imperative	Marcel Bozas Ecological Drivers of Mammalian Tree Island Use	Amanda Kahn Vision in Fruition: Envisioning and Evaluating the Future with CERP	Lauren DeVito Aquatic Carbon Fluxes from a Marsh Ecosystem within the Florida Everglades	
3:50pm	Theresa Strazisar Spatial and Temporal Patterns in Ecosystem Responses to Management, Restoration, and Disturbance in Florida Bay	Elina Garrison South Florida Deer Study	Zulamet Vega-Liriano Assumptions for a Projected CERP in the Second Periodic CERP Update	Omar Alawneh Assessing Biomechanical Properties of Mangrove Roots Across a Salinity Gradient in the Florida Coastal Everglades	
4:05pm	Jonathan Rodemann Identifying Nutrient Sources Driving Algal Blooms in Florida Bay: A Causal Modelling and Stable Isotope Analysis Approach	Carol Rizkalla Over the River and Through the Woods: Next Steps in Florida Panther Recovery	Pierre Massena Second Periodic CERP Update (SPCU) Modeling Results	Caiyun Zhang Applying Remote Sensing to Map Subsurface Electrical Conductivity in the Everglades	
4:20pm	Mingshun Jiang Modeling Seagrass Distributions in the Greater Florida Bay and Impacts of Climate Change	Laura D'Acunto Bobcats in the Everglades	Gina Paduano Ralph RECOVER's Scientific and Technical Evaluation of the Second Periodic CERP Update	Ahmed Khalifa Development of a Tool to Evaluate Impacts of Constructed Features on the Hydrology of the Southern Everglades	
4:35pm	Joshua Linenfelser Waterscapes and Wading Birds: Unraveling the Hydrology Behind Nesting Shifts in Everglades National Park	DISCUSSION	Amanda Kahn SPCU Reporting and the Programmatic Application of Information in CERP	Khandker Ishtiaq Evaluating Future Trajectories of Florida Everglades Scrub Mangroves Under Sea Level Rise	
4:50pm	DISCUSSION		DISCUSSION	DISCUSSION	
5:00pm-6:00pm	Exhibitors and Poster Session Two Presenters Remove Displays – Conference Concludes				