

The 14th International Symposium on **BIOGEOCHEMISTRY OF** WETLANDS & AQUATIC SYSTEMS

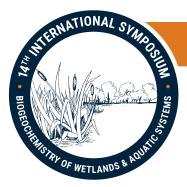
June 1-5, 2025

Baton Rouge, LA, USA

SYMPOSIUM PROGRAM BOOK







The 14th International Symposium on

BIOGEOCHEMISTRY OF WETLANDS & AQUATIC SYSTEMS

Hilton Baton Rouge Capitol Center

FIRST FLOOR MEETING SPACE LAYOUT

Floor Map Key

Registration Louisiana Room RIVER WAL 108' x 67 **Riverview A** General Session & Breakout **Riverview B** Posters and Sponsor Displays Governor Room Breakout Sessions 15' x 24 **Capitol Room** CADEMY RO Breakout Sessions 24' x 24' FOYER PARAMOUNT ROOM 24' x 20 UNIVERSITY ROOM A GALLERY 24' x 23' (EREEREE) LOUISIANA ROOM CLOSET MAGNOLIA ROOM MEN WOMEN 00000 GALLERY FOVER GOVERNOR ROOM : Miles 00000 36' x 28' BOARDROOM STAFF IR BOARD OYER CAP/KING/GOV Fover BELL CLOS TO FRONT DESK/LOBBY & GUEST ROOM ELEVATORS 36' x 24' 24' x 28' CAPITOL ROOM KING ROOM



14th International Symposium on Biogeochemistry of Wetlands & Aquatic Systems

June 1-5, 2025 Baton Rouge, LA, USA



WiFi: Hilton Honors Meeting | Password: Hiltonnet20

conference.ifas.ufl.edu/biogeo



Scan these QR codes for quick access to symposium documents:



All symposium documents are also available electronically at: conference.ifas.ufl.edu/biogeo/program-information.php

TABLE OF CONTENTS

8	
10	About the Symposium
11	Committee Recognition
12	Session Organizers & Moderators
14	Thank You to Our Sponsors
15	Sponsor Descriptions
18	Plenary Session Speakers
20	Optional Events
23	Agenda-at-a-Glance
24	Detailed Agenda
48	Poster Display Information
49	Poster Directory
51	Wi-Fi & Additional Information
53	Action Items

Name Badge

Your name badge is your entry pass to all networking events at BioGeo 2025, so please wear it throughout the symposium. If you are a commuter, remember to bring your tag each day for admission. Guests must also wear their name badges for event access. The guest fee permits individuals aged 18 and older to attend the Poster Session Receptions on Monday and Tuesday. Please ensure all guests are registered and that the appropriate fees are paid.

WELCOME TO BATON ROUGE!

14th International Symposium on Biogeochemistry of Wetlands & Aquatic Systems

The Louisiana State University, College of the Coast and Environment, is excited to host the 14th International Symposium on Biogeochemistry in Wetlands & Aquatic Systems, June 1-5, 2025.

My Colleague Dr. Todd Osborne and I welcome your participation in this very exciting symposium gathering. This international symposium provides a framework for scientists to share technical information on various topics related to coupled biogeochemical cycling of macro-elements and associated organic and inorganic contaminants. The goal is to improve our understanding of the role wetlands and aquatic systems perform in regulating and mitigating impacts of global climate change and sea level rise. This year's theme seeks to acknowledge the critical coastal zone where freshwaters from rivers and lakes discharge into estuaries and coastal ocean waters, and where changes in runoff timing and discharge volume can cause dramatic shifts in major drivers of biogeochemical cycling including temperature, salinity, nutrients, sediment, and contaminant loading.

Set against the backdrop of Baton Rouge, situated on the Mississippi River, the conference highlights Louisiana's Coastal Master Plan—a dynamic, science-based strategy updated every five years. Aimed at protecting coastal communities, sustaining ecosystems, and preserving economic and cultural assets, the plan outlines a \$50 billion investment over 50 years. This region stands at the forefront of pioneering nature-based and engineered solutions to sustain life in the delta and along the coast, even as it faces some of the highest rates of relative sea level rise in the world.

Members of the Conference Planning and Program Committees worked diligently to develop a wide-ranging and inclusive lineup of talks and posters focused on the biogeochemistry of wetlands and aquatic systems. We are especially pleased to present an exciting roster of esteemed plenary speakers for this year's symposium. Our lineup features leaders and innovators at the forefront of biogeochemistry of wetlands and aquatic systems, including Dr. Denise Reed, Dr. Lisa G. Chambers, Dr. Alan D. Steinman and Dr. Christopher Craft. Join us in thanking them for taking time to present at this prestigious symposium. While listening to the research being presented, remember this is an opportunity for all of us to meet new colleagues, reunite with old ones, and learn what research is ongoing around the globe.

"This year's theme seeks to acknowledge the critical coastal zone where freshwaters from rivers and lakes discharge into estuaries and coastal ocean waters, and where changes in runoff timing and discharge volume can cause dramatic shifts in major drivers of biogeochemical cycling including temperature, salinity, nutrients, sediment, and contaminant loading."

We would also like to take this opportunity to express a few words of appreciation starting with our generous sponsors listed on page 12. Their financial support is critical to making this conference a reality. We are also grateful to the many individuals who gave of their time and expertise to organize and moderate sessions, and to share their expertise with us. They are recognized on page 10 and 11. And of course, we would also like to thank those who submitted abstracts and are giving talks and presenting posters. Were it not for you and the work you do, we would not have had the privilege of organizing such a great symposium. Finally, we kindly acknowledge Dr. K. Ramesh Reddy, for having the vision and foresight to establish this symposium, and for his dedication and support over the last three decades to ensure it continues.

Have a great week, enjoy yourself, and when you leave, we know you will take away new information, new connections, new tools, and expanded knowledge you can use to advance wetland science in your respective areas around the globe.

Best regards,

phl.

John R. White Conference Chair

Oceanography & Coastal Sciences Dept. Louisiana State University



Todd Z. Osborne Conference Co-Chair

Whitney Laboratory for Marine Bioscience University of Florida



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ABOUT THE SYMPOSIUM



Overview

This symposium is designed to bring together those actively engaged in applying principles of biogeochemistry to solving environmental and social problems from a wide range of systems. Wetland biogeochemistry involves cycling or exchange of materials between living and non-living components of an ecosystem. Biogeochemistry is an interdisciplinary science which includes the interaction of biological, geological and chemical processes regulating the fate and transport of nutrients and contaminants in soil, water and atmospheric components of an ecosystem. This international symposium provides a framework for scientists to share technical information on various topics related to coupled biogeochemical cycling of macro-elements and associated organic and inorganic contaminants. The goal is to improve our understanding of the role wetlands and aquatic systems perform in regulating and mitigating impacts of global climate change and sea level rise.

Deltas and the Coast: A Biogeochemical Nexus with Global Consequences

This year's theme seeks to acknowledge the critical coastal zone where freshwaters from rivers and lakes discharge into estuaries and coastal ocean waters, and where changes in runoff timing and discharge volume can cause dramatic shifts in major drivers of biogeochemical cycling including temperature, salinity, nutrients, sediment, and contaminant loading.

Baton Rouge, located alongside the Mississippi River, is the backdrop for this year's exciting conference. The state of Louisiana's coastal Master Plan, an adaptive management tool updated every five years, uses the best available science and engineering to safeguard coastal populations, maintain coastal ecosystems and protect economic and cultural resources. With plans to spend 50 billion US dollars over 50 years, this coastal region is the epicenter for innovative nature-based and engineered projects to extend our presence in the delta and along the coast despite some of the highest relative sea level rise rates in the world.

COMMITTEE RECOGNITION

Executive Committee

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John R. White

Symposium Chair, Louisiana State University, Baton Rouge, LA

Jacob Berkowitz

Symposium Co-Chair, Louisiana State University & U.S. Army Corp of Engineers, Baton Rouge, LA

Todd Osborne

Symposium Co-Chair, UF/IFAS Department of Soil, Water & Ecosystem Sciences, Wetland Biogeochemistry Laboratory, Whitney Laboratory for Marine Bioscience, St. Augustine, FL

K. Ramesh Reddy

Honorary Co-Chair, UF/IFAS School of Natural Resources and Environment & UF/IFAS Department of Soil, Water and Ecosystem Sciences, Gainesville, FL

Beth Miller-Tipton

Symposium Coordinator, Office of Conferences & Institutes (OCI), Gainesville, FL

Scientific Program Committee

Lisa G. Chambers University of Central Florida, Orlando, FL

> Robinson "Wally" Fulweiler Boston University, Boston, MA

Gregory Noe U.S. Geological Survey, Reston, VA

James W. Pahl

Louisiana Coastal Protection & Restoration Authority, Baton Rouge, LA

Tracy Quirk Louisiana State University, Baton Rouge, LA

> **Durelle "Scotty" Scott** Virginia Tech, Blacksburg, VA

Havalend Steinmuller Louisiana Universities Marine Consortium, Chauvin, LA

Dongqi Wang East China Normal University, Shanghai, China

SESSION ORGANIZERS & MODERATORS

Please join us in thanking the following individuals for their efforts organizing and moderating sessions.

Jacob Berkowitz

US Army Corps of Engineers, Vicksburg, MS, USA

Session 18 – Sulphur Cycling

Lisa G. Chambers

University of Central Florida, Department of Biology, Orlando, FL, USA

 Session 7 – A Deeper Look at "Blue Carbon": Factors, Forms, and Stability

Gail Chmura

McGill University, Geography, MONTRÉAL QC, Canada

 Sessions 11 – Created and Restored Wetlands as Nature Based Climate Solutions

Ryan Clark (Session 15 Moderator)

Halff, Inc., Baton Rouge, LA, USA

 Session 15 – Biogeochemical Outcomes of NRCS Wetland Conservation Practices at Multiple Scales

Rachel Collin

Smithsonian Tropical Research Institute, Panama City, Panama

 Session 16 – Belowground Carbon Dynamics in Forested Peatlands and Mangrove Systems

Ronald Corstanje (Session 3 Organizer)

Cranfield University, Cranfield, Bedfordshire, UK

Session 3 – Monitoring of Wetland Condition

Padmanava Dash (Session 17 Moderator)

Mississippi State University, Starkville, MS, USA

 Session 17 – Remote Sensing and Spatial Patterns to Understand Wetland Biogeochemistry

Angelina Freeman

Louisiana Coastal Protection and Restoration Authority, Baton Rouge, LA, USA

 Session 8 – Carbon and Nutrient Cycling in Wetlands and Open Water Receiving Flows from Sediment Diversions-River Reconnection

Kevin Grace

DB Environmental, Rockledge, FL, USA

• Session 5 – Constructed Wetlands (Part 2 of 2)

Songjie He

University of Southern Mississippi, Ocean Springs, Mississippi, USA

 Session 13 – Vertical and Lateral Carbon Fluxes in Marshes

Aixin Hou

Louisiana State University, Baton Rouge, LA, USA

 Session 6 – Microbial Processes in Wetlands: Responses to Environmental Changes and Impacts on Biogeochemical Cycles

Rachael Hunter

Comite Resources, Inc., Covington, LA, USA

 Session 20 – C Sequestration and GHG Fluxes in Coastal Systems

Mike Jerauld

DB Environmental, Rockledge, FL, USA

• Session 2 – Constructed Wetlands (Part 1 of 2)

John Andrew Nyman

Louisiana State University, Agricultural Center, Baton Rouge, LA, USA

 Session 9 – Coastal Biogeochemistry– Wetlands and Hypoxia

Todd Osborne

UF/IFAS Department of Soil, Water and Ecosystem Sciences, St. Augustine, FL, USA

 Session 14: Phosphorus Dynamics in Biosolids Impacted Watersheds

Christopher Potter (Session 17 Organizer)

NASA Ames Research Center (ARC), Earth Science Division

 Session 17: Remote Sensing of Wetlands to Inform Patterns of Biogeochemical Fluxes in Large River Deltas

Lee Potter

Louisiana State University, Baton Rouge, LA, USA

• Session 24: Nutrients, Water Quality, and Ecosystem Management (Part 2 of 2)

Joseph Prenger (Session 15 Organizer)

USDA Natural Resources Conservation Service, Beltsville, MD, USA

 Session 15: Biogeochemical Outcomes of NRCS Wetland Conservation Practices at Multiple Scales

Curtis Richardson

Duke University, Durham, NC, USA

• Session 4: C Sequestration and GHG Fluxes in Freshwater Systems

Jörg Rinklebe

University of Wuppertal, Institute of Soil Engineering, Waste, and Water Science, Wuppertal, Germany

· Session 1: Contaminants/Metals in Wetlands

Victor Rivera-Monroy

Louisiana State University, Baton Rouge, Louisiana, USA

Session 12: Plant Dynamics in Wetland & Aquatic Biogeochemistry

Loraé Simpson

St. Johns River Water Management District, Palatka, FL, USA

 Session 19: Mangrove Encroachment (Part 1 of 2)

Havalend Steinmuller

Louisiana Universities Marine Consortium (LUMCON), Chauvin, LA, USA

 Session 22: Mangrove Encroachment (Part 2 of 2)

Dongqi Wang

East China Normal University, Shanghai, China

• Session 21: Nutrients, Water Quality, and Ecosystem Management (Part 1 of 2)

John White (Session 3 Moderator)

Louisiana State University, Baton Rouge, LA, USA

Session 3: Monitoring of Wetland Condition

Yi-Jun Xu

Louisiana State University, Baton Rouge, LA, USA

 Session 23: Greenhouse Gas Emission from Inland Waters



THANK YOU TO OUR SPONSORS

Without their generous support, this symposium would not be possible.



SPONSOR DESCRIPTIONS

PLATINUM SPONSOR

Louisiana State University Office of Research & Economic Development Isu.edu/research/

The Office of Research & Economic Development (ORED) is responsible for supporting and promoting the research enterprise at LSU. We do this through strategic planning, support for pre-award grant services, workshops, public engagement, compliance oversight, and other research administration. Our vision is to enhance, expand, and positively impact the intellectual enterprise, cultural resources, and economic activities in the state of Louisiana, the nation, and the world. Our mission is to support a holistic, university-wide environment where advanced research, effective scholarship, creativity, and economic development can thrive.

GOLD SPONSORS

Louisiana State University College of the Coast and Environment

lsu.edu/cce/

The College of the Coast & Environment has a front-row seat to coastal and environmental changes impacting our state, nation, and world. We see firsthand the effects of stressors such as coastal land loss, pollution, and severe weather. CC&E's research advances knowledge about these stressors—and more—deepening understanding of the ever-changing natural world and its relationship with our lives, livelihoods, and recreation. This research provides sound science so stakeholders can make informed decisions. Every day, our students work alongside worldrenowned experts, acquiring the skills needed to tackle complex coastal environmental challenges.

Louisiana State University Wetland and Aquatic Biogeochemistry Laboratory (WABL) faculty.lsu.edu/whitelab/

Our research is focused on Wetland and Aquatic system function. We are housed within the Department of Oceanography & Coastal Sciences in the College of the Coast & Environment at Louisiana State University at an exciting and dynamic confluence of the Coastal Zone and the Mississippi River. We are always seeking motivated, inquisitive and focused students at the undergraduate and graduate levels to join our team on our journey of discovery! Our collective differences provide a great environment for creative and collaborative research. Whoever you are and wherever you are from, we at the WABL welcome and support everyone! Feel free to look at our publication list and if you see something that interests you, please feel free to contact us. We will be happy to send a PDF with more information.

Louisiana Sea Grant laseagrant.org

Louisiana Sea Grant, based at Louisiana State University, is part of the National Sea Grant Program, a network made up of 34 programs located in each of the coastal and Great Lakes states and Puerto Rico. Sea Grant Programs work individually and in partnership to address major marine and coastal challenges. Since its establishment in 1968, the Louisiana Sea Grant College Program has worked to promote stewardship of the state's coastal resources through a combination of research, education, and outreach. Its strategic initiatives address four issues identified as especially pertinent to state, regional and national needs, fostering innovation, supporting sustainable fisheries, enhancing community resilience, and advancing environmental literacy across diverse coastal populations and industries.

SILVER SPONSORS

UF/IFAS Department of Soil, Water, and Ecosystem Sciences soils.ifas.ufl.edu

Our Research, Teaching (BS, MS, and PhD), and Extension programs bring together knowledge and expertise from a wide range of disciplines. These programs focus on key areas such as water quality and watershed management, soil health and nutrient/agrochemical management, biogeochemistry, hydrology and critical zone science, ecosystem and community ecology, and integrative transdisciplinary modeling across ecosystems. Emphasizing the use of novel technologies and earth system sciences, we are committed to advancing understanding and solutions in these fields—and we actively welcome new collaborations and students.

UF/IFAS Estuarine Biogeochemistry Lab

Located at Whitney Laboratory for Marine Bioscience osbornelab.org

The Estuarine Biogeochemistry Laboratory (EBL), part of the University of Florida's Whitney Laboratory for Marine Bioscience, researches the cycling of ecologically important elementssuch as carbon, nitrogen, and phosphorus-in estuarine and nearshore marine ecosystems. These dynamic environments are vital for nutrient transformation, water quality, and biodiversity. EBL scientists use fieldwork, lab experiments, and advanced analytical tools to study how natural processes and human activities affect elemental fluxes and overall ecosystem health. Their work supports coastal conservation, climate resilience, and sustainable resource management. Through collaboration and public outreach, the EBL promotes environmental stewardship and broader public understanding of marine science.

UF/IFAS Wetland Biogeochemistry Laboratory (WBL) soils.ifas.ufl.edu/wetlandbiogeochemistry/

The Wetland Biogeochemistry Laboratory (WBL) is a research unit within the Soil and Water Sciences Department at the University of Florida. The mission of the (WBL) is: "To achieve excellence in teaching, research and extension/outreach activities on biogeochemical cycles in wetlands and aquatic ecosystems, and promote sciencebased decision-making in environmental policy development and natural resource regulation."

UF Research research.ufl.edu

The University of Florida is recognized by U.S. News & World Report as one of the Top 10 public research universities in the U.S. UF research advances our understanding of the world, drives innovation, fuels Florida's economy, and transforms lives through education. UF Research supports faculty and staff by identifying grant opportunities, managing proposals and awards, protecting intellectual property, engaging industry partners, showcasing achievements, and supporting this premier symposium.

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Xylem's environmental products provide highquality, high-resolution data to better understand and manage our water resources. They are used for wastewater process control, climate change and drought studies, flood monitoring and warning, stormwater runoff monitoring, groundwater quantification and contamination, aquaculture production and source water safety. In addition to standard products, our custom integrated systems help customers obtain critical data in most any application.

BRONZE SPONSORS

Aquatic Biogeochemistry Laboratory at University of Central Florida (UCF) sciences.ucf.edu/biology/abl/

The Aquatic Biogeochemistry Laboratory (ABL) is led by Lisa G. Chambers, PhD, and is housed in the Biology Department at the University of Central Florida. Part of the National Center for Integrated Coastal Research, the ABL is an interdisciplinary academic research team studying the impacts of disturbance (e.g., sea level rise, climate change, urbanization, and restoration) on wetland and coastal ecosystem function, nutrient cycling, greenhouse gas production, and soil carbon storage.

DB Environmental Laboratories, Inc. dbenv.com

DB Environmental, Inc. (DBE) is a research/ consulting firm with strong expertise in wetlands biogeochemistry, hydrology, advanced data analyses and modeling. For decades, DBE has been a key consultant on some of the world's largest and most prominent wetland treatment systems. DBE's problem-solving efforts for clients include optimization of wetland water treatment performance, vegetation communities and hydraulic characteristics, as well as development of sustainable soil management practices.

Royal royal.us

Royal is an engineering and consulting firm that specializes in coastal restoration and protection. At Royal, we bring unmatched energy to everything we do. Our relentless approach to today's infrastructure challenges is rooted in our commitment to our clients. Together, we develop innovative solutions that ENRICH our communities, the environment, and our world.

FRIEND OF THE SYMPOSIUM

Coalition to Restore Coastal Louisiana

(Organizer of State of the Coast) crcl.org | stateofthecoast.org

The Coalition to Restore Coastal Louisiana (CRCL) drives bold, science-based action to rebuild and protect coastal Louisiana through policy advocacy, hands-on restoration, and inclusive community engagement. Since 1988, CRCL has led marsh plantings, oyster reef restoration, and educational programs that empower communities to protect our coast. We collaborate with scientists, policymakers, and residents to advance sustainable solutions that safeguard Louisiana's environment, economy, and culture. Through innovation, resilience, and shared responsibility, CRCL inspires stewardship and ensures a resilient, thriving coastline for future generations.



PLENARY SPEAKERS



Dr. Denise Reed

"Coastal Louisiana: Challenges and Potential Solutions"

Monday, June 2, 2025 | 8:50am-9:40am

Professor Gratis University of New Orleans, Montegut, LA, USA

Denise J. Reed is an expert in coastal marsh sustainability and the role of human activities in modifying coastal systems with over 35 years of experience studying coastal issues in the United States and abroad. She has published extensively on the effects of sea-level rise on coastal marshes and has been involved in restoration and resilience planning in coastal Louisiana for over 3 decades, serving as a technical advisor to the Louisiana Coastal Master Plan since its initiation following Hurricanes Katrina and Rita in 2005. Dr. Reed has served as a Distinguished Research Professor at the University of New Orleans and spent five years as Chief Scientist at The Water Institute of the Gulf. She has served on numerous boards and panels addressing the effects of human alterations on coastal environments and the role of science in guiding restoration including the NOAA Science Advisory Board, the Chief of Engineers Environmental Advisory Board, and a number of National Academies' committees including USACE planning, Everglades restoration, and the protection of sheltered shorelines. Dr. Reed received her B.S. degree in Geography from Sidney Sussex College, Cambridge and her M.A. and Ph.D. degrees from University of Cambridge, UK.



Dr. Lisa G. Chambers

"Stability Matters: A New Perspective on Wetland Soil Carbon"

Tuesday, June 3, 2025 | 8:30am-9:10am

Associate Professor, University of Central Florida, Aquatic Biogeochemistry Lab (ABL) and Soil and Sediment Lab (SASL), Department of Biology and National Center for Integrated Coastal Research, Orlando, FL, USA

Lisa G. Chambers is an Associate Professor at the University of Central Florida within the Biology Department and National Center for Integrated Coastal Research; she also serves as the Principal Investigator of the Aquatic Biogeochemistry Lab and Soil and Sediment Lab. Her research focuses on the impacts of disturbance (such as sea level rise, climate change, urbanization, and restoration) on wetland and coastal ecosystem functions, including nutrient cycling, greenhouse gas production, and carbon storage. Recent work has focused on bridging the gap in understanding between upland and wetland soils regarding mechanisms of organic matter stabilization. She holds a Ph.D. in Soil and Water Science from the University of Florida, an M.S. in Oceanography and Coastal Sciences from Louisiana State University, and a B.S. in Natural Resources from Ohio State University.



Dr. Alan D. Steinman

"Understanding the Great Lakes: It is More than Just Phosphorus"

Tuesday, June 3, 2025 | 9:10am-9:50am

Allen and Helen Hunting Research Professor Annis Water Resources Institute, Grand Valley State University Muskegon, MI, USA

Alan (Al) Steinman is the Allen and Helen Hunting Research Professor of Grand Valley State University's Annis Water Resources Institute (AWRI). Previously, he was Director of AWRI for 22 years, and before that, Director of the Lake Okeechobee Restoration Program at the South Florida Water Management District. Steinman has published over 200 scientific articles, book chapters, and books and has testified before the U.S. Congress and the Michigan and Florida state legislatures. He holds a Postdoctoral Research Fellowship from Oak Ridge National Laboratory, a Ph.D. in Botany/Aquatic Ecology from Oregon State University. His research interests include aquatic ecosystem restoration, harmful algal blooms, phosphorus cycling, and water policy.



Dr. Christopher Craft

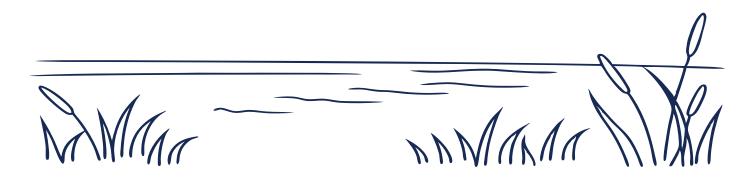
"Debilitating Effects of Sea Level Rise on Tidal Freshwater Wetlands"

Thursday, June 5, 2025 | 1:00pm-1:40pm*

Janet Duey Professor of Rural Land Policy Emeritus Indiana University, Paul H. O'Neill School of Public and Environmental Affairs Bloomington, IN, USA

Professor Craft is Professor Emeritus in the O'Neill School of Public and Environmental Affairs at Indiana University, Bloomington. His research interests include wetland restoration, eutrophication, carbon sequestration, and effects of climate change. From 2008 to 2009, he served as President of the Society of Wetland Scientists (SWS). In 2012, Professor Craft received the National Wetlands Award for Science Research sponsored by the Environmental Law Institute, Washington DC. Professor Craft is author of *Creating and Restoring Wetlands: From Theory to Practice, 2nd Edition* (2022), and co-editor of *Wetland Soils: Hydrology, Landscapes, and Classification* (2016) with Michael Vepraskas.

*Dr. Craft will speak during the Buffet Luncheon and Closing Plenary from 12:15pm-2:00pm in the Heidelberg Ballroom.



OPTIONAL EVENTS

Field Trip: Bonnet Carré Spillway & Davis Pond Freshwater Diversion

\$125/person (Check at the registration desk to see if any seats are still available.)

Wednesday, June 4, 2025

8:30am-3:30pm

This field trip includes visits to two significant water management sites in Louisiana. At the Bonnet Carré Spillway, participants will learn how this 8,000-acre structure, built in 1935 by the U.S. Army Corps of Engineers, helps protect New Orleans from flooding by diverting excess Mississippi River water into Lake Pontchartrain. The site also supports wildlife, recreation, and estuarine health. Attendees will observe the spillway up close and hear from Corps representatives about flood control strategies. The second stop is the Davis Pond Freshwater Diversion in St. Charles Parish, where an airboat tour will showcase how diverted river water helps restore the Barataria Basin by reducing saltwater intrusion, supporting marsh vegetation, and enhancing habitats for fish, shellfish, and migratory birds.

7:30am	Morning Refreshments for Tour Participants (Riverview B)	
8:30am Board Bus at Host Hotel Host Hotel Address: Hilton Baton Rouge Capitol Center, 201 Lafayette St., Baton Rouge, LA 70		
9:00am	Bus Departs from Host Hotel to St. Charles Parrish	
10:15am	Arrive at Bonnet Carré Spillway in St. Charles Parish	
10:30am Walking Tour: Bonnet Carré Spillway A member of the U.S. Army Corps of Engineers will greet you upon your arriva you the spillway, and explain how it works. Afterwards, the tour leader, John V will discuss the ecological impacts of the spillway opening on the estuaries.		
11:30am Board Bus & Depart to Davis Pond Freshwater Diversion		
12:00pm	Arrive at Davis Pond Freshwater Diversion	
12:15pm-1:45pm	Board Airboats and Tour Wetlands (Lunch Provided)	
1:45pm Board Bus		
2:00pm	Bus Departs to Host Hotel	
3:30pm	Arrive Back at Host Hotel	

Trip Itinerary

Roundtrip Bus Transportation to NOLA: Self-Guided Adventure in New Orleans

\$80/person (Tickets can be purchased at the registration desk.)

Wednesday, June 4, 2025

8:00am-5:00pm

Discover the Charm of the New Orleans French Quarter!

A day trip from Baton Rouge to New Orleans offers a rich and memorable experience in the heart of the French Quarter. This historic neighborhood brims with charm, where cobblestone streets, wrought-iron balconies, and vibrant street performers create an unforgettable atmosphere. Visitors often begin their day in Jackson Square, surrounded by local artists and centuries-old architecture, before enjoying a classic New Orleans breakfast of beignets and café au lait at the iconic Café Du Monde. Named one of Travel + Leisure's "Best Places to Travel in August 2024," New Orleans is a city that blends culture, history, and celebration. A highlight of the trip is the National WWII Museum, ranked the city's top attraction by TripAdvisor. Its immersive exhibits and the 4D film Beyond All Boundaries, narrated by Tom Hanks, offer a powerful look at the global conflict. *Advance reservations are recommended*. Throughout the day, visitors can explore artisan markets, listen to live jazz echoing through the streets, and savor world-renowned Creole and Cajun cuisine. Whether drawn by its storied past, musical soul, or culinary delights, the Big Easy delivers a day full of discovery, flavor, and the unmistakable rhythm of New Orleans.

Trip Itinerary

7:30am	Morning Refreshments for Bus Passengers (Riverview B)	
8:00amBoard Bus for New Orleans at Host Hotel: Host Hotel Address: Hilton Baton Rouge Capitol Center, 201 Lafayette St., Baton Rouge, La		
8:30am	Bus Departs from Host Hotel to New Orleans	
10:00am Arrive at the Meeting Spot: Meeting Spot Address: Café du Monde, 800 Decatur Street, New Orleans, LA 70116		
10:00am-2:45pm Self-Guided Tour: Explore New Orleans at Your Own Pace!		
3:00pm Board Bus at the Meeting Spot		
3:30pm Bus Departs to Host Hotel: Alert: The bus will be departing, with or without you. If you miss the bus have to find and pay for alternate transportation back to the hotel.		
5:00pm Arrive Back at Host Hotel		



\$50/person (Tickets can be purchased onsite at the registration desk.)

Wednesday, June 4, 2025

5:30pm-8:00pm

Join us for a remarkable evening as we celebrate the 2025 Golden Cattail Award presentation and explore the Lower Mississippi River Physical Model at LSU's Center for River Studies!

Center for River Studies at LSU

Located at the Baton Rouge Water Campus near the Mississippi River, this facility features one of the world's largest movable bed physical models. The 10,000-square-foot Lower Mississippi River Physical Model replicates the Mississippi River Delta's topography and bathymetry, encompassing southeast Louisiana. Its state-of-the-art technology includes sediment and water flow control systems, acoustic sensors, and 20 high-definition projectors. This model compresses a year of the river's behavior into one hour, enabling groundbreaking research and insights for scientists, engineers, and students alike.

Golden Cattail Award

The Golden Cattail Award recognizes outstanding contributions to wetland biogeochemistry. Established in 2018, it has honored distinguished individuals such as Dr. K. Ramesh Reddy (2018) and Dr. Robert Twilley (2021) for their significant achievements in advancing the field. *Don't miss the unveiling of the next recipient!*

Event Itinerary

Bussing is provided between the Hilton Capitol Center in Baton Rouge and the LSU Center for River Studies.

5:30pm-6:20pm	0pm Continuous shuttle service between Hilton and LSU Center for River Studies	
6:10pm Last bus departs Hilton to the Center		
6:00pm-7:30pm Hors d'oeuvres, Libations, Networking and Guided Tours		
7:30pm Presentation of Golden Cattail Award		
8:00pm Event concludes. Take return shuttle service back to the Hilton.		

AGENDA-AT-A-GLANCE

	Sunday, June 1, 2025		
4:00pm-6:00pm	Poster Presenters and Sponsors Set Up Displays in Poster Hall		
4:00pm-6:00pm	Registration Open		
	Monday, June 2, 2025		
7:30am-5:00pm	Registration Open		
8:30am-9:50am	Opening Plenary Session		
12:00pm-1:15pm	Group Lunch Buffet		
10:30am-5:15pm	Concurrent Sessions		
5:15pm-7:30pm	Poster Session 1 and Welcome Reception		
	Tuesday, June 3, 2025		
7:30am-5:00pm	Registration Open		
8:30am-9:50am	50am Plenary Session		
12:00pm-1:15pm	Lunch on Own		
10:30am-5:30pm	Concurrent Sessions		
5:30pm-7:30pm	5:30pm-7:30pm Poster Session 2 and Networking Reception		
	Wednesday, June 4, 2025		
7:30am-5:00pm	Optional Event: Self-Guided Bus Adventure in New Orleans		
7:30am-3:30pm	am-3:30pm Optional Event: Group Field Trip to Bonnet Carré Spillway and Davis Pond Freshwater Diversion		
5:30pm-8:00pm	5:30pm-8:00pmOptional Event: Evening Reception and Golden Cattail Award Presentation Hosted by LSU College of the Coast and Environment		
	Thursday, June 5, 2025		
7:30am-2:00pm	Registration Open		
8:30am-12:15pm	Concurrent Sessions		
12:15pm-2:00pm	Buffet Luncheon and Closing Plenary Session		
2:00pm	Conference Concludes Poster Presenters and Sponsors Remove Displays		

DETAILED AGENDA

	Sunday, June 1, 2025			
4:00pm-	Symposium Registration Open			
6:00pm	[Louisiana Room - 1st Floor]			
4:00pm-	Session One Poster Presenters and Sponsors Install Displays			
6:00pm	[Riverview B - 1st Floor]			
	Monday, June 2, 2025			
7:30am-	Symposium Registration Open			
5:00pm	[Louisiana Room - 1st Floor]			
7:30am- 8:30am	Morning Refreshments Session One Presenters Install Posters [Riverview B - 1st Floor]			
8:30am-9:50am	Opening Plenary [Riverview A - 1st Floor] Moderator Dr. John White, Symposium Chair, Associate Dean of Research, College of Coast & Environment Department of Oceanography & Coastal Sciences Louisiana State University, Baton Rouge, Louisiana, USA Welcome Remarks on behalf of Louisiana State University Dr. Robert Twilley, Vice President for Research and Economic Development Opening Plenary Presentation "Coastal Louisiana: Challenges and Potential Solutions" Dr. Denise Reed, Professor Gratis, University of New Orleans, Montegut, Louisiana, USA Housekeeping Remarks by Dr. John White			
9:50am-	AM Refreshment Break			
10:20am	[Riverview B - 1st Floor]			

Session No.	Speaker Name / Notes

	Monday, June 2, 2025 (continued)		
	Concurrent Sessions – 10:20am-12:00pm		
	Session 1	Session 2	Session 3
	Riverview A	Governor Room	Capitol Room
am	Contaminants/Metals in Wetlands	Constructed Wetlands (Part 1 of 2)	Monitoring of Wetland Condition
10:20am	Jörg Rinklebe University of Wuppertal Wuppertal, Nordrhein-Westfalen, Germany	Mike Jerauld DB Environmental Rockledge, FL, USA	John White Louisiana State University Baton Rouge, LA, USA
	Anna Knox Removal and Retention of Copper and Zinc in a Constructed Wetland over 20 Years	Mike Jerauld Typha Seedling Growth Models Provide Improved Assessment of Treatment Wetland Performance Limitations	Kara Hall Assessing Aquatic Macroinvertebrate Communities in Wetland Reserve Easements in the Mississippi Alluvial Valley
10:40am	Jan Vymazal Distribution of Heavy Metals in Plants Growing in Constructed Treatment Wetlands	Zoe Spielman Linking Phosphorus Storage Mechanisms with Removal Performance in Everglades Stormwater Treatment Wetlands	Avery Wissmueller Assessing Water Quality of Wetland Reserve Easements in the Mississippi Alluvial Valley
11:00am	Jörg Rinklebe Pollution Control in Wetland Soil and Water Around the Globe	Julia Charest The Effect of Prescribed Burning on Nitrification-Coupled Denitrification in a Restored Chesapeake Bay Tidal Marsh	Jeffrey Hutchinson Water Chemistry in Isolated Pools Along an Urban Ephemeral Stream in South Central Texas
11:20am	Shengsen Wang Biochar Mitigated Zerovalent Iron- Induced Methane Emissions in an Arsenic-Contaminated Paddy Soil: The Mechanism	Adam Sochacki The Effect of Manganese Oxides and Ferric Hydroxides on the Treatment of Greywater in Unsaturated Constructed Wetlands	Nikolaos Toumasis Using Long-Term Monitoring Datasets to Determine Wetland Resilience
11:40am	Discussion	Natalie Donoso Reactive Materials for Enhanced Removal of Organic Micropollutants in Constructed Wetlands	Discussion
12:00pm 1:15pm	Group Luncheon Buffet [Riverview B - 1st Floor]		

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Session No.	Speaker Name / Notes

	Monday, June 2, 2025 (continued)			
	Concurrent Sessions – 1:20pm-3:00pm			
	Session 4	Session 5	Session 6	
	Riverview A	Governor Room	Capitol Room	
	C Sequestration and GHG Fluxes in Freshwater Systems	Constructed Wetlands (Part 2 of 2)	Microbial Processes in Wetlands: Responses to Environmental Changes and Impacts on Biogeochemical Cycles	
	Curtis Richardson Duke University Durham, NC, USA	Kevin Grace DB Environmental Rockledge, FL, USA	Aixin Hou Louisiana State University, Department of Environmental Sciences Baton Rouge, Louisiana, USA	
1:20pm	Curtis Richardson Pocosins: North America's Forgotten Peatlands for Climate Mitigation and Sea Level Protection	Scott Wallace Nutrient Uptake and Ecosystem Response for the Hammond Louisiana Assimilation Wetland	Grace Cagle A Little Goes a Long Way: 1 °C Warming Alters Microbial Metabolic Potential in a Permafrost Peatland	
1:40pm	William Crumpton Nitrous Oxide and Methane Production in Wetlands Receiving Elevated Agricultural Nitrate Loads	Olivia Lemieux Assessing Salt Marsh Greenhouse Gas Fluxes by Planting Treatment Across Salinity and Elevational Gradients	Mohd Manzar Abbas Machine Learning Analysis of Antibiotic Resistance Genes in Soil Microbial Communities Affected by the Deepwater Horizon Oil Spill	
2:00pm	Hojeong Kang Are Wetlands a Carbon Sink or Source? From Microbes to the Globe	Kevin Grace Dissolved Organic Matter Optical Properties in Treatment Wetlands: Associations with Plants, Soils, ad Treatment Performance	Walker Marechal Understanding the Bacterial Community, and their Response to Nutrients in Little Washita River Experimental Watershed Reservoirs, Oklahoma, USA	
2:20pm	Pascal Badiou Greenhouse Gas Emissions From Wetlands in the Canadian Prairies: Impacts of Land-Use Change and Environmental Drivers	Mohamed Gaballah Enhancing the Design of Constructed Wetlands along the Missouri River to Improve Nutrient Removal	Mikk Espenberg Below- and Aboveground Microbial Carbon and Nitrogen Cycles in the Congo Basin Peatland Forests and Grazed Savannas	
2:40pm	Craig Allan Tidal Freshwater Wetland Research on the Santee Experimental Forest - Hydrology and Carbon Dynamics	Shaelynn Kaufman Leveraging Watershed Wetlands to Optimize Phosphorus Management Strategies in Lake Erie Basin	Discussion	
3:00pm- 3:30pm		PM Refreshment Break [Riverview B - 1st Floor]		

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Session No.	Speaker Name / Notes

	Monday, June 2, 2025 (continued)			
	Concurrent Sessions – 3:30pm-5:10pm			
	Session 7	Session 8	Session 9	
	Riverview A	Governor Room	Capitol Room	
	A Deeper Look at "Blue Carbon": Factors, Forms, and Stability	Carbon and Nutrient Cycling in Wetlands and Open Water Receiving Flows from Sediment Diversions-River Reconnection	Coastal Biogeochemistry: Wetlands and Hypoxia	
	Lisa G. Chambers University of Central Florida Orlando, Florida, USA	Angelina Freeman Louisiana Coastal Protection and Restoration Authority (CPRA) Baton Rouge, Louisiana, USA	John Andrew Nyman Louisiana State University Agricultural Center Baton Rouge, LA, USA	
3:30pm	Marcelo Ardon Disentangling the Effects of Salinity on Coastal Forest Carbon Balance: From Genes to Landscapes	Angelina Freeman Coastal Louisiana System-Wide Water Quality Characterization	Andrew Balder Evaluating Woody Plant Species and Their Associations with Salinity and Hydrology in the Mobile-Tensaw Delta	
3:50pm	Josh Breithaupt New Ground: Evaluating Factors That Influence Creation of Blue Carbon Soils in Restored and Natural Mangroves in Southwest Florida	Sibel Bargu Examining Hydrological Changes, Nutrient Dynamics, and Cyanobacterial Blooms in Louisiana's Deltaic Estuaries Over a Decade	Christopher Anderson Evaluating Salinity Regimes and Material Exchange Across the Mobile- Tensaw River Delta	
4:10pm	Anthony Mirabito Blue Carbon Stability: Spanning Across Geographical Boundaries	John White Consequences of River Reconnection on Water Quality in Barataria Bay	Austin Fox Tracking Diurnal and Episodic Hypoxia and Impacts to Nutrient Cycling in a Shallow, Well-Mixed, Subtropical Estuary	
4:30pm	Scott Jones When and Where Can Coastal Wetland Restoration Increase Carbon Sequestration as a Natural Climate Solution?	Hongqing Wang Modeling Carbon Fluxes in Forested Wetlands in the Mississippi River Deltaic Plain Under Various Hydrologic Conditions	John Andy Nyman Tropical Storms, Sea-level Rise, and Drawdowns Affect Carbon Accumulation and Elevation Gain in Coastal Marshes	
4:50pm	Discussion	Nia Hurst Mississippi River Reintroduction into the Maurepas Swamp: Reunited after 100+ years	Lee Potter Implications of Phosphorus Loading Pathways on Harmful Algal Blooms in a Coastal Estuary	
5:15pm- 7:30pm	Poster Session One and Welcome Networking Reception (Session One presenters to remove posters upon conclusion.) [Riverview B - 1st Floor]			

Session No.	Speaker Name / Notes

	Tuesday, June 3, 2025		
7:30am- 5:00pm	Symposium Registration Open [Louisiana Room - 1st Floor]		
7:30am- 8:30am	Morning Refreshments Session Two Presenters Install Posters [Riverview B - 1st Floor]		
8:30am-9:50am	Plenary Session [Riverview A - 1st Floor] Moderator: Dr. Todd Osborne, Symposium Co-Chair, UF/IFAS Department of Soil, Water & Ecosystem Sciences, Wetland Biogeochemistry Laboratory, Whitney Laboratory for Marine Bioscience, St. Augustine, Florida, USA 8:30am-9:10am "Stability Matters: A New Perspective on Wetland Soil Carbon" Dr. Lisa G. Chambers, Associate Professor, University of Central Florida Aquatic Biogeochemistry Lab (ABL) and Soil and Sediment Lab (SASL) Department of Biology and National Center for Integrated Coastal Research Orlando, Florida, USA <u>9:10am-9:50am</u> "Understanding the Great Lakes: It is More than Just Phosphorus" Dr. Alan D. Steinman, Annis Water Resources Institute, Grand Valley State University Muskegon, Michigan, USA		
9:50am- 10:20am	AM Refreshment Break [Riverview B - 1st Floor]		

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Session No.	Speaker Name / Notes

	Tuesday, June 3, 2025 (continued)				
	Concurrent Sessions – 10:20am-12:00pm				
10:20am	Session 10	Session 11	Session 12		
	Riverview A	Governor Room	Capitol Room		
	Variability in C Fluxes	Created and Restored Wetlands as Nature Based Climate Solutions	Plant Dynamics in Wetland & Aquatic Biogeochemistry		
	Lena Champlin Boston University Boston, Massachusetts, USA	Gail Chmura McGill University Montreal, Quebec, Canada	Victor Rivera-Monroy Louisiana State University Baton Rouge, Louisiana, USA		
	Genevieve Noyce Drivers of Spatial and Temporal Patterns in Methane Emissions from a Brackish Coastal Wetlands	Gail Chmura Assessing the Value of Constructed Wetlands as Nature-Based Climate Solution: Insights from Southern Ontario	Tyler Provoncha Utilizing Biogeochemical Approaches to Aid in Pilot-Scale Seagrass Plantings in a Shallow, Well-Mixed Estuary		
10:40am	Emily Wilson Meta-analysis Describing How Plant Species Composition Drives Salt Marsh Greenhouse Gas Fluxes	Rachel Plant Ebullitive and Diffusive Greenhouse Gases from Flooded Impoundments of New Brunswick and Nova Scotia (Canada)	Mikk Espenberg Dynamics of N ₂ O Emissions from Amazonian Tropical Peat Forest and Partitioning N-Processes using ¹⁵ N Isotopes		
11:00am	Lena Champlin Seasonality and Marsh Zonation Drive Carbon Sequestration Patterns in New England Salt Marshes	Wendy Ampuero-Reyes Stocks and Rates of Organic Carbon Accumulation in Freshwater Impoundments of Eastern Canada	Loraé Simpson Seagrass Sediment Carbon in the Indian River Lagoon		
11:20am	Elizabeth Watson Investigation of Salt Marsh Platform Vegetation Stress Indicators to Reveal Potential Marsh Loss Mechanisms	Flavia Byekwaso Tropical Wetlands as Nature-Based Solutions to Remove Pollutants from Stormwater Discharge and Wastewaters Effluent in Urban Environments	Victor Rivera-Monroy Assessing Landscape Cumulative Impacts of Natural and Human Disturbances on Mangrove Carbon Storage in Puerto Rico (Jobos Bay)		
11:40am	John Rybczyk Carbon Sequestration in the Oldest Tidal Wetland Restoration Projects Along the West Coast, USA	Discussion	Discussion		
12noon- 1:15pm	Lunch on Own Explore and choose from a variety of local restaurants within walking distance of the hotel.				

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Session No.	Speaker Name / Notes

	Tuesday, June 3, 2025 (continued)				
	Concurrent Sessions – 1:20pm-3:00pm				
	Session 13	Session 14	Session 15		
	Riverview A	Governor Room	Capitol Room		
	Vertical and Lateral Carbon Fluxes in Marshes	Phosphorus Dynamics in Biosolids Impacted Watersheds	Biogeochemical Outcomes of NRCS Wetland Conservation Practices at Multiple Scales		
	Songjie He University of Southern Mississippi Ocean Springs, Mississippi, USA	Todd Osborne UF/IFAS Department Soil, Water and Ecosystem Sciences St. Augustine, Florida, USA	Ryan Clark Halff, Inc. Baton Rouge, Louisiana, USA		
1:20pm	Jiaze Wang Methane Escape from the Deteriorating Mississippi River Delta	Andy Canion Biosolids Derived P in the St. Johns River Watershed: Implications for Legacy P Impacts	Eric Roy Phosphorus Retention in Riparian Wetlands Restored on Formerly Farmed Land: Key Drivers and Lessons for Future Restoration		
1:40pm	Songjie He Lateral Carbon Flux from a Saltmarsh: Implications for Coastal Acidification and Carbon Budget	Todd Osborne Storage and Release of Biosolids P on Poorly Drained Sandy Florida Rangelands Receiving Biosolids Application	Justin Murdock Tradeoffs in Nutrient Retention and Greenhouse Gas Fluxes in Restored Agricultural Wetlands		
2:00pm	Meagan Eagle Hydrologic Control of Carbon Fluxes: Field Observations Across an Elevation Gradient in New England Marshes	Jonathan Judy Soil Amendments to Reduce Phosphorus Leaching from Biosolids- impacted Soils in the St. Johns River Basin	Kim Van Meter Wetland Signatures: Use of MESA as a Tracer for Agricultural Nitrate Runoff in US Wetlands		
2:20pm	Camille Stagg Modeling Climate and Land Use Change Impacts on Net Ecosystem Carbon Balance in Coastal Wetlands	Tracey Schafer Does Benthic Biogeochemistry Drive Algal Blooms in Shallow, Subtropical Florida Lakes?	Discussion		
2:40pm	Kanchan Maiti Seasonal Variabilities in Sources and Transport of Dissolved Organic Carbon from a Rapidly Eroding Coastal Estuary in Mississippi River Delta Plain	Discussion			
3:00pm- 3:30pm		PM Refreshment Break in Poster Hall [Riverview B - 1st Floor]			

Session No.	Speaker Name / Notes

	Tuesday, June 3, 2025 (continued)		
	Concurrent Sessions – 3:30pm-5:10pm		
	Session 16	Session 17	Session 18
	Riverview A	Governor Room	Capitol Room
	Belowground Carbon Dynamics in Forested Peatlands and Mangrove Systems	Remote Sensing and Spatial Patterns to Understand Wetland Biogeochemistry	Sulfur Cycling
	Rachel Collin Smithsonian Tropical Research Institute Panama City, Panama	Padmanava Dash Mississippi State University Starkville, MS, USA	Jacob Berkowitz US Army Engineer Research and Development Center Vicksburg, MS, USA
3:30pm	Pradipta Biswas NUMAR 2.0: Advancing Soil Formation Modeling to Embrace Uncertainty in Marsh Environments	Anthony Campbell Global Review of Salt Marsh Change and Carbon Emissions	Jeffrey Cornwell Pyrite Oxidation and Formation During Dredged Material Wetland Creation: Poplar Island, Maryland, USA
3:50pm	Biomass and Sediment Accretion Mississippi Sound: Insights from Improves Hydric Soil		Documentation of Iron Monosulfide
4:10pm	Alexandra Hedgpeth Surface DOC Fuels Belowground Respiration in a Neotropical Peatland	Yang Wang Eutrophication and Dissolved Organic Matter Exacerbates the Diel Discrepancy of CO ₂ Emissions in China's Largest Urban Lake	Benjamin Sulman Modeling Wetland Redox Biogeochemistry and Vegetation Function at Site to Continental Scales
4:30pm	Emilio Payo Monitoring Contrasting Belowground and Aboveground Processes as Drivers of Methane Dynamics in Dominant Tropical Peatland Vegetation Communities	Hafez Ahmad Long-term Water Quality Trends and Seasonal Drivers in the Western Mississippi Sound: A Remote Sensing and Machine Learning Approach	Yadav Sapkota Formation and Fate of Iron Sulfide Compounds Following Simulated Dredged Sediment Placement in Coastal Wetlands
4:50pm	Discussion	Christopher Potter Aerial Image Analysis of Changes in Wetlands between 2019 and 2023 in the Barataria and Breton Sound Basins of Coastal Louisiana	Jacob Berkowitz Practitioner Guidance for Managing Iron Sulfur Compounds During Wetland Restoration
5:10pm		Discussion	Discussion
5:30pm- 7:30pm	Poster Session Two and Networking Reception (Session Two presenters to remove posters upon conclusion.) [Riverview B - 1st Floor]		

Session No.	Speaker Name / Notes

	Wednesday, June 4, 2025
	Symposium Registration Office Closed Attendees not signed up for an optional event are on their own to explore the area and take in the sites.
	Bus Transportation to New Orleans:
8:00am - 5:00pm	Enjoy a Self-Guided Adventure in New Orleans \$80/person (Tickets can be purchased onsite at the registration desk.) Fee covers round-trip bus transportation only. Visit New Orleans on your own schedule.
	 7:30am-8:00am Refreshments available for transportation recipients only (Riverview B)
	Monde. For a deep dive into history, visit the world-renowned National WWII Museum, the above ground cemeteries or take a trolley and visit the Garden District. With endless possibilities, the day is yours to explore at your own pace. Whether you choose to dive into the rich history, immerse yourself in the sounds of local music, admire the handmade crafts, or simply indulge in the vibrant flavors, one thing is certain: in the Big Easy, the good times are always rolling! Be sure to book advance tickets to any museums or locations you wish to visit at: https://www.neworleans.com
	Optional Field Trip:
mq	Tour the Bonnet Carré Spillway and Davis Pond Freshwater Diversion \$125/person (Check at the registration desk to see if any seats are still available.)
8:30am - 3:30pm	7:30am-8:30am Refreshments available for tour participants only 8:30am Board bus at Host Hotel 9:00am Bus departs from Host Hotel to St. Charles Parrish 9:00am-3:00pm Tour in Progress 3:30pm Bus arrives back at Host Hotel (Consult tour information on page 18 for more detail.)
	Optional Evening Event:
5:30pm - 8:00pm	Evening Social and Golden Cattail Presentation at LSU Center for River Studies Hosted by Louisiana State University \$50/person (Tickets can be purchased onsite at the registration desk.) Bus transportation provided between Hilton Capitol Center and the LSU Center for River Studies. 5:30pm-6:20pm Continuous shuttle service between Hilton and Center 6:10pm Last bus departs Hilton to the Center 6:00pm-7:30pm Hors d'oeuvres, Libations, Networking and Guided Tours 7:30pm Presentation of Golden Cattail Award 8:00pm Event concludes. Take return shuttle service back to the Hilton. <i>(Consult page 20 for more detail.)</i>

Session No.	Speaker Name / Notes

	Thursday, June 5, 2025		
7:30am- 2:00pm	Symposium Registration Open [Louisiana Room - 1st Floor]		
7:30am- 8:30am	Morning Refreshments [Riverview B - 1st Floor]		
		Concurrent Sessions - 8:30am-10:10am	
	Session 19	Session 20	Session 21
	Riverview A	Governor Room	Capitol Room
	Mangrove Encroachment (Part 1 of 2)	C Sequestration and GHG Fluxes in Coastal Systems	Nutrients, Water Quality, and Ecosystem Management (Part 1 of 2)
	Loraé Simpson St. Johns River Water Management District, Palatka, FL, USA	Rachael Hunter Comite Resources, Inc. Covington, LA, USA	Dongqi Wang East China Normal University Shanghai, China
8:30am	Michael Osland Tropicalization of Temperate Wetlands: Projections of Mangrove Range Expansion	Sophia Lingo Greenhouse Gas Fluxes in an Active Delta Across a Sediment Organic Matter Gradient	Craig Allan The Hydrology and Water Quality Dynamics Associated with an Urban Beaver Pond Complex
8:50am	Mangrove Range Shifts Alter Primary Production, Canopy Biodiversity and Food Web Structure, Albeit A BitQuantifying Spatial and Temporal Uncertainty in Coastal CarbonPoDynamics in LouisianaSiz		Lucy Ngatia Post Hurricane Wood Debris Management Practices: Soil Particle Size Influences Carbon Thermal Stability
9:10am	Samantha Chapman Nitrogen Limitation of Mangroves Encroaching into Marshes Depends on Hydrological PositioningRachael Hunter Measurement of Greenhouse Gas Flux Across a Hydrologic Gradient in Louisiana Coastal Freshwater ForestedAdam Siders Assessing the Influence of Breakwaters on Salt Marsh Denitrification Ecosystem Ser		Assessing the Influence of
9:30am	Corianne Tatariw Does Mangrove Encroachment Enhance Biogeochemical Resilience to Sea Level Rise?	Discussion	Yongjie Wang Mercury Properties and Transformations in Wetland Sediments of the Changjiang Estuary
9:50am	Mercedes Pinzon-Delgado Tracing Nitrogen Pathways in Coastal Wetlands: The Role of MAOM in a Changing Landscape	1960391011	Discussion
10:10am- 10:30am	AM Refreshment Break in Poster Hall [Riverview B - 1st Floor]		

Session No.	Speaker Name / Notes

	Thursday, June 5, 2025 (continued)			
	Concurrent Sessions – 10:30am-12:10pm			
	Session 22	Session 23	Session 24	
	Riverview A	Governor Room	Capitol Room	
	Mangrove Encroachment (Part 2 of 2)	Greenhouse Gas Emissions from Inland Waters	Nutrients, Water Quality, and Ecosystem Management (Part 2 of 2)	
	Havalend Steinmuller Louisiana Universities Marine Consortium, Chauvin, LA, USA	Yi-Jun Xu Louisiana State University Baton Rouge, Louisiana, USA	Lee Potter Louisiana State University Baton Rouge, LA, USA	
10:30am	André S. Rovai Belowground Bio- and Necromass Allocation and Soil Shear Strength across Northern Gulf of Mexico Mangroves	Anamika Dristi A Decade-Long Trend in Dissolved Carbon Dynamics and CO2 Fluxes in the Lower Mississippi River	Mumtahina Riza How to Increase Mineral-Associated Organic Matter Formation in Organic- Rich Soils	
10:50am	E Significant Contribution of Wastewater a Historic Snow Event on a Coastal Louisiana Barrier IslandSignificant Contribution of Wastewater Treatment Plants to Dissolved Carbon Loading in China's Major RiverValui Service Mark		Glen Delaney Valuing Forested Wetland Ecosystem Services in the Voluntary Carbon Market - The Avahoula Climate Mitigation Project	
11:10am			Floating Treatment Wetlands with Biochar to Treat Nutrients in a	
11:30am	Rachel Weisend Microbe Mischief: How Microbes Drive Cryptic Cycling in Mangrove Wetlands	Fanyan Yang Effects of Chlorinated Disinfectants on Greenhouse Gas Emissions from Urban Inland Waters	Taryn Chaya Can Mosquito Impoundments Be Leveraged to Treat Eutrophic Waters?	
11:50am	Rachel CollinDongqi WangA Seasonal Comparison ofUnraveling the Drivers of BubbleDecomposition Rates Across 5 Semi-Methane Emissions in Urban Rivers:Urban Mangrove Sites Spanning aThe Roles of Organic CarbonRange of Soil Types and Tidal RegimesTemperature and Water Depth		Discussion	
12:10pm		Concurrent Sessions Conclude		

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Session No.	Speaker Name / Notes

	Thursday, June 5, 2025 (continued)
	Buffet Luncheon and Closing Plenary Session – 12:15pm-2:00pm Heidelberg Ballroom [10th Floor]
	Moderator
	Dr. Jacob Berkowitz , <i>Symposium Co-Chair</i> , Louisiana State University and U.S. Army Corp of Engineers Engineer Research and Development Center, Baton Rouge, Louisiana, USA
_	Closing Plenary Presentation
2:00pm	Heidelberg Ballroom [10th Floor]
12:15pm-2:00pm	" Debilitating Effects of Sea Level Rise on Tidal Freshwater Wetlands" Dr. Christopher Craft , Janet Duey Professor of Rural Land Policy Emeritus Indiana University, Paul H. O'Neill School of Public and Environmental Affairs Bloomington, Indiana, USA
	Closing Remarks
	Dr. John White , <i>Symposium Chair</i> , Associate Dean of Research, College of Coast & Environment Department of Oceanography & Coastal Sciences Louisiana State University, Baton Rouge, Louisiana, USA
2:00pm	Symposium Concludes

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Session No.	Speaker Name / Notes

POSTER DISPLAY INFORMATION

Poster presentations play a key role in the exchange of information and considerable time is dedicated to viewing them. Posters are located in the Poster Hall, the primary gathering spot for morning, mid-day, and afternoon refreshments, as well as during two formal poster sessions and networking receptions.

Please take time to explore posters, review displays, and visit with posters presenters during the early morning, mid-day and afternoon and especially during each poster session.

- Posters will be presented during two different sessions.
- Session One is on Monday.
- Session Two is on Tuesday.
- Refer to the schedule below for installation and removal dates and times for each session.
- Consult the poster directory on page 47 to view poster numbers and individual session assignments.

Poster Installation & Removal		
Session 1 Posters		
Installation:	Sunday, June 1, 4:00pm–6:00pm (or first thing Monday morning)	
Removal:	Monday, June 2, 8:00pm (Immediately following poster Session 1)	
Session 2 Posters		
Installation:	Tuesday, June 3, 7:30am–8:30am	
Removal:	Tuesday, June 3, 8:00pm (Immediately following poster Session 2)	

Formal Poster Session Reception and Presentation of Posters					
Poster Session 1 and Welcome Reception					
Monday, June 2, 5:15pm-7:30pm					
5:15pm-5:45pm	Presenters to enjoy hors d'oeuvres, beverages and mingling				
5:45pm-6:15pm	Presenters at ODD numbered boards to stand at their posters				
6:15pm-6:30pm	BREAK BETWEEN PRESENTATIONS*				
6:30pm-7:00pm	Presenters at EVEN numbered boards to stand at their posters				
Poster Session 2 and Networking Reception					
Tuesday, June 3, 5:30pm–7:30pm					
5:30pm-6:00pm	Presenters to enjoy hors d'oeuvres, beverages and mingling				
6:00pm-6:30pm	Presenters at ODD numbered boards to stand at their posters				
6:30pm-6:45pm	BREAK BETWEEN PRESENTATIONS*				
6:45pm-7:15pm	Presenters at EVEN numbered boards to stand at their posters				
7:30pm	Session Two presenters remove posters from boards upon conclusion				

*As a courtesy to other presenters and to avoid crowding during the formal poster session receptions, please only stand at your poster during your assigned session.

POSTER DIRECTORY

(In alphabetical order by presenter last name)

#	First Name	Last Name	Organization	Cty	ST	Country	Abstract Title	Sess. #
2	Eloho	Aghworo	Louisiana State University	Baton Rouge	LA	United States	Does Climate-Induced Black Mangrove Replacement of Spartina Change Wetland Soil Carbon Dynamics?	Session 1 Monday, June 2
19	Mysha	Ahmed	Louisiana State University Agricultural Center	Baton Rouge	LA	United States	Evaluating the Impact of Urban and Agricultural Runoff Mitigation Utilizing Waste Valorization for Nutrient Absorption	Session 2 Tuesday, June 3
27	Cadie	Barnes	University of Central Florida	Orlando	FL	United States	Biogeochemical Impacts of Basalt Fiber Bags on Estuarine Sediment Microbial Activity	Session 2 Tuesday, June 3
4	Sydney	Bufkin	ERDC- USACE	Vicksburg	MS	United States	Carbon Sequestration in Wetlands on Military Installations: Assessing Soil Carbon Storage Potential	Session 1 Monday, June 2
23	Frank	Driscoll	University of Southern Mississippi	Ocean Springs	MS	United States	Porewater Salinity Response to Acute and Chronic Climate Disturbances Across Six Basins in Coastal Louisiana	Session 2 Tuesday, June 3
17	Noah	Flaherty	Louisiana State University	Rome	GA	United States	Marsh Salinity and Water Level Dynamics Between the Mississippi River Levee System and Adjacent Coastal Marshes	Session 2 Tuesday, June 3
6	Kayla	Garcia	Marine Biological Laboratory	Woods Hole	MA	United States	Sea Level Rise Alters Salt Marshes' Carbon Storage Capacity	Session 1 Monday, June 2
9	Elizabeth	Herndon	Oak Ridge National Laboratory	Oak Ridge	TN	United States	Redox Biogeochemistry at High Temporal Resolution in a Freshwater Delta	Session 1 Monday, June 2
8	Jing	Hu	University of Central Florida	Orlando	FL	United States	An Analysis of Long-Term Everglades Stormwater Treatment Areas Performance Using Structural Equation Models	Session 1 Monday, June 2
7	Riley	Jenkins	Louisiana State University	Baton Rouge	LA	United States	Denitrification and Microbial Processes in Dredge Material Created Wetlands	Session 1 Monday, June 2
25	Mason	Marcantel	Louisiana State University Agricultural Center	Baton Rouge	LA	United States	Developing a Framework for Remote Water Quality Sensing of Nutrients from Urban Wastewater Effluent	Session 2 Tuesday, June 3
18	Jason	Martina	Texas State University	San Marcos	ТΧ	United States	Extreme Changes in Water Level and Nutrient Loading Can Shift Freshwater Coastal Wetlands from Nutrient Sinks to Sources	Session 2 Tuesday, June 3
14	Lidia	Molina Serpas	University of Alabama	Tuscaloosa	AL	United States	Nitrogen Mineralization Rates Vary Along a Hydrologic Connectivity Gradient	Session 1 Monday, June 2

#	First Name	Last Name	Organization	Cty	ST	Country	Abstract Title	Sess. #
12	Rica	Monis	University of Washington	Seattle	WA	United States	Assessing the Seaweed Ulva's Carbon, Nutrient, and Contaminant Profiles as a Potential Agricultural Soil Amendment	Session 1 Monday, June 2
20	Grace	Orjinwoke	Florida Agricultural and Mechanical University	Tallahassee	FL	United States	Long Leaf Pine Needle Decomposition: Carbon Composition, Thermal Stability and Nutrient Release Post Hurricane	Session 2 Tuesday, June 3
21	Avalon	Ramsey	University of Central Florida	Orlando	FL	United States	Factors Influencing Microplastic Abundance in Stormwater Basins	Session 2 Tuesday, June 3
15	Elaine	Rice	University of Alabama	Northport	AL	United States	Inundation Regimes Impact on Leaf Litter Decay Rate in Forested, Freshwater Wetlands	Session 1 Monday, June 2
10	Holly	Roth	Oak Ridge National Laboratory	Oak Ridge	TN	United States	Influence of Redox Processes on Phosphorus Storage, Transformation, and Mobilization	Session 1 Monday, June 2
22	Rosanyely	Santana	Seminole Tribe of Florida	Hollywood	FL	United States	Algal Bloom Events and Environmental Drivers in Big Cypress and Brighton Seminole Reservations in Florida	Session 2 Tuesday, June 3
24	Simone	Schuster	Florida State University	Tallahassee	FL	United States	Comparison of Soil Total Nitrogen Stocks and Burial Rates in Natural and Restored Mangrove Forests of Southwest Florida	Session 2 Tuesday, June 3
3	Havalend	Steinmuller	Louisiana Universities Marine Consortium	Chauvin	LA	United States	"Going Local": Addressing Heterogeneity in Biogeochemical Cycling in Mangrove Systems through Sedimentary Setting and Geomorphology	Session 1 Monday, June 2
5	Jose	Tercero	Louisiana State University	Baton Rouge	LA	United States	Assessment of Soil Greenhouse Gas Fluxes Along a Salinity Gradient in Coastal Deltaic Floodplain of Louisiana	Session 1 Monday, June 2
13	John	Тгасу	Louisiana State University	Baton Rouge	LA	United States	Soil and Groundwater Dynamics Within Varying Land Classes of a Proposed Forested Wetland Mitigation Bank	Session 1 Monday, June 2
1	S.M. Mahatab	Uddin	DOCS-LSU	Baton Rouge	LA	United States	Mangrove Wetlands Leaf Productivity and Expansion are Controlled by Air Temperature, Phosphorus Availability, and Salinity in Port Fourchon, Louisiana, USA	Session 1 Monday, June 2
26	Shristi	Upadhyaya	Louisiana State University Agricultural Center	Baton Rouge	LA	United States	Investigating the Cycling of Nutrients from Seafood Processors' Waste in Organic Fertilizer	Session 2 Tuesday, June 3
11	George	Vetushko	University of California, Los Angeles	Los Angeles	CA	United States	Does Agricultural Runoff Influence Anaerobic Methanotrophy in a Southern Californian Wetland?	Session 1 Monday, June 2
16	Nicholas	Wagner	Louisiana State University Agricultural Center	Baton Rouge	LA	United States	Spatial Evaluation of Water Quality Parameters to Optimize Nutrients and Dissolved Oxygen for Crawfish Ponds	Session 2 Tuesday, June 3

ADDITIONAL INFORMATION

Complimentary Internet Access

A limited amount of free Wi-Fi is available in the meeting space. Follow these instructions on your device:

- 1. Search for a Wi-Fi network on your device.
- 2. Depending which device you have, select the appropriate option: +Add Network or Hidden Network.
- 3. When asked for a network name, type in: Hilton Honors Meeting
 - a. If you see a Guest Sign-in, click "I have a promotional code"
- 4. Enter the password: Hiltonnet20

At this point you should see your device connect and you should be good to go.

Note: The passcode is different for internet access in your guest room. Be sure to obtain the most current complimentary access code from the front desk when you check in.

Hilton Honors members get free Wi-Fi access in their guest rooms. Additional benefits are posted here: https://www.hilton.com/en/hilton-honors/member-benefits/

Not a member? Visit their enrollment web site at: https://www.hilton.com/en/hilton-honors/member-benefits/

Name Badge

Your name badge is your entry pass to all networking events at the symposium, so please wear it throughout the conference. Guests must also wear their name badges for event access. Guests may only attend the Poster Session Reception on Monday and Tuesday and any other optional event they signed up for. Please ensure all guests are registered and that the appropriate fees are paid.

Morning Refreshments, Breaks & Lunches

Networking events will take place in the Sponsor & Poster Display Area.

- 1. Light morning refreshments, including coffee, tea, decaf, fruit, yogurt, and assorted pastries, will be available Monday, Tuesday and Thursday mornings from 7:30am to 8:30am.
- 2. Breaks: Complimentary beverages, such as regular and decaf coffee and assorted teas and soft drinks, will be provided during mid-day and afternoon breaks during session days.
- 3. A lunch buffet will be served on Monday and Thursday. You will find two lunch tickets in the back of your name badge. Please present one at each meal.
 - Monday's lunch is in the Riverview B Ballroom where Poster & Sponsor Displays are located.
 - Thursday's lunch is in the beautiful Heidelberg Ballroom on the 10th Floor.
- 4. Poster Session & Networking Receptions will be held on Monday and Tuesday evenings, featuring ample delicious hors d'oeuvres. Each attendee receives two complimentary drink tickets per reception, located in the back of their name badge. Simply present these tickets to the bartender to enjoy a free beer, wine, or soft drink during the event. Poster display hours for both sessions are on page 46.
- 5. Please be sure to visit with poster presenters and sponsors throughout the week.

Conference Message Board

The first poster board on your left when you enter the POSTER HALL serves as a Message Board. You are welcome to post job opportunities, internships, grants, workshops, and other resources to help connect students and postdocs with opportunities.

Cell Phones, Mobile Devices, Tablet Devices

Kindly silence your cell phones, tablets, and other mobile devices while in meeting rooms. If using a keyboard, please type quietly to avoid disturbing others, and ensure your laptop sound is muted. Additionally, please respect presenters' requests by refraining from photographing or sharing certain sensitive information on social media.

Lost & Found

If you find a lost item, please bring it to the registration staff. If you lose something, start by checking with the conference registration staff. If it has not been turned in, you can also inquire at the hotel front desk.

Code of Conduct

We are dedicated to providing a harassment-free experience for everyone, regardless of gender, gender identity and expression, age, sexual orientation, disability, physical appearance, body size, race, ethnicity, religion (or lack thereof), or technology choices. We do not tolerate harassment of participants in any form. Suggestive statements, sexual innuendo, or offensive remarks are not appropriate during any activity, including during talks, poster sessions, workshops, social functions, after hours parties, via Zoom chat or on Twitter or other online media. Participants asked to stop any harassing behavior are expected to comply immediately. Those violating these rules may be sanctioned or expelled without a refund at the discretion of the organizers. If you are being harassed, notice that someone else is being harassed, or have any other concerns about participant behavior, please notify the organizers immediately.

Continuing Education (CEUs & PDHs)

While we are not an official CEU provider, your state may recognize this event as a qualified program, and you may be eligible to earn Continuing Education Units (CEUs) or Professional Development Hours (PDHs) for participation in this conference.

- If you are a licensed engineer or maintain a professional license issued by a society, an association, an
 occupational licensing board or a department of professional regulation within your state, you may be
 eligible to earn CEUs or PDHs.
- You will be required to sign in and out each day in the attendance logbook at the conference registration desk to verify daily attendance.
- If you fail to log in and log out daily, you will not receive a certificate.
- We will email you a certificate of attendance as a PDF within 30 days after the conference. concludes. The certificate will state the total number of hours you were in sessions, based on the time logged.
- It is your responsibility to compile all necessary paperwork and provide it to the appropriate licensing board or professional organization with whom you are certified, and to confirm the program content is acceptable based on their individual standards.

Important Note

In general, one Continuing Education Unit (CEU) is defined as 10 hours of instruction. One hour is calculated as 50 minutes of face-to-face instruction. If you have any questions regarding CEU requirements as they pertain to your professional certification or license, please directly contact the appropriate licensing board within your state.

ACTION ITEMS

Use this page to record new ideas and names of people you would like to follow up with for future collaborations.

 53

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Use this page to record new ideas and names of people you would like to follow up with for future collaborations.

 54

THANK YOU TO OUR SPONSORS

Without their generous support, this symposium would not be possible.



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