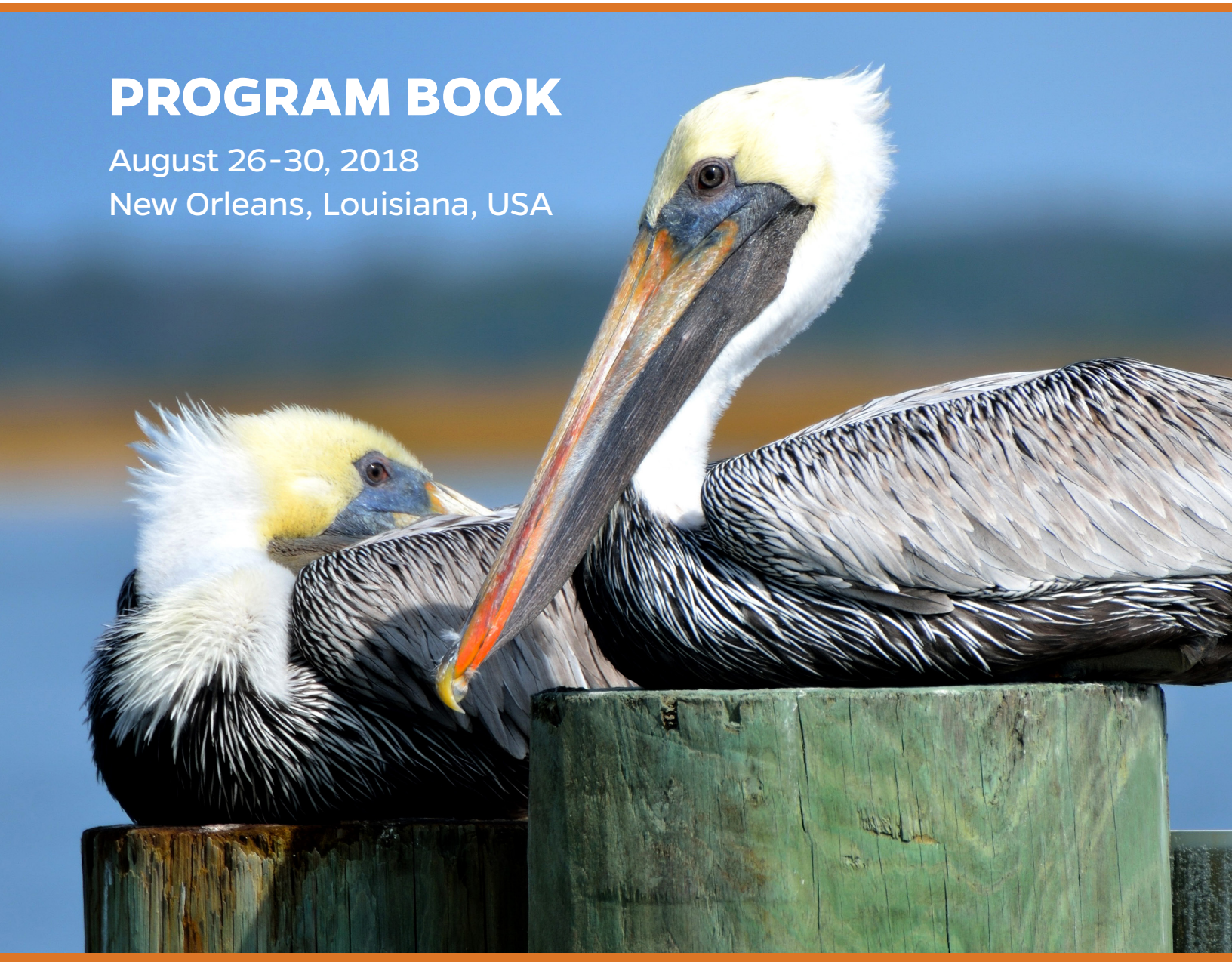
NCER 2018

National Conference on Ecosystem Restoration

Building connections from the local to the landscape scale



PROGRAM BOOK

August 26-30, 2018
New Orleans, Louisiana, USA

SER section SOCIETY FOR ECOLOGICAL RESTORATION
LARGE-SCALE ECOSYSTEM RESTORATION

WALTON FAMILY FOUNDATION

UF IFAS UNIVERSITY of FLORIDA

NCER 2018

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Hotel Floorplan

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New Orleans, Louisiana, USA

www.conference.ifas.ufl.edu/NCER2018

In Honor of

Paul Anthony Conrads

(1957 – 2017)

A celebration of the contributions of an inspiring member of the restoration community...

Paul Conrads, 60, passed away suddenly on December 2, 2017. For the past 30 years, Paul Conrads worked with the U.S. Geological Survey in the South Atlantic Water Science Center in a variety of activities. He served as the Surface-Water Specialist in South Carolina. Principally, he was responsible for data collection, data analysis, and hydrodynamic and water-quality model applications, and Total Maximum Daily Load (TMDL) development. He assisted many water utilities, state agencies, universities and non-profits in making science-based decisions in water-resource management. He was on the cutting edge of science with regard to "big data" and data mining. He was one of the pioneers of Artificial Neural Networks, a science that utilized the real-time data of the USGS with a means to understand the effects of drought, which are challenging to quantify adjacent to the ocean. His work in this field was recognized internationally.

Paul also developed models for the majority of the river systems in South Carolina, provided technical assistance to U.S. Environmental Protection Agency (USEPA) Region IV TMDL Program and was a member of the Federal Technical Review Team of the development of the hydrodynamic and water-quality models developed for the Savannah Harbor Expansion Project. For the past 11 years, he worked on various projects in the Florida Everglades. He studied coastal drought and the influence of increased salinity stress on the structure and function of ecological habitats, and had recently developed a unique coastal drought index using salinity data.

Paul grew up in suburban Washington, D.C. and received a degree in History and American Studies from Connecticut College. He attended Landon School, Connecticut College. He was a huge Gamecock supporter in all sports and an avid follower of the Baltimore Orioles and the Washington Redskins. He was also a Peace Corps volunteer and spent two years in West Africa building potable water supply and sanitation systems in the neighborhoods of the capitol city of Liberia. After returning to the US, he earned an undergraduate and Master's degrees in Civil Engineering at the University of South Carolina.

Paul loved his work but also his fishing, gardening, cooking and anything new he could conquer. As one colleague wrote, "Paul was truly special in a way that very few people are. It was easy to love him — his zest for life, his intelligence, his endless willingness to help, his love of good food and wine, his mischievous way and so much more. *I can honestly say that I know no one who compares to his integrity of spirit.*"

NCER and GEER conferences will not be the same without Paul being there. He will be sorely missed.

About NCER

NCER is an interdisciplinary conference on large-scale ecosystem restoration presenting state-of-the art science and engineering, planning and policy in a partnership environment. The first NCER, held in Orlando, FL (2004), lead to successful conferences in Kansas City, MO (2007), Los Angeles, CA (2009), Baltimore, MD (2011), and Chicago (2013). NCER brings together scientists, engineers, policy makers, planners and partners from across the country actively involved in large-scale ecosystem restoration. Since its inception, NCER has become the preeminent conference on ecosystem restoration in the US.

Today, we are in a new era, where resources are tight. Renewed vigilance on the use of public funding requires that we demonstrate progress in achieving restoration goals, clearly prove its value, efficiently and effectively share lessons learned and provide better coordination among all stakeholders ensuring the best use of future funding to achieve results.

Centuries of unsustainable activities have damaged and/or eliminated the freshwater, marine and terrestrial environments that provide vital services to our economies, societal values and support a diversity of wildlife and plants. This conference aims to provide a venue for ecosystem restoration professionals to convene over efforts to reverse environmental degradation by renewing and/or restoring degraded or destroyed ecosystems and habitats.

Progress in restoring various ecosystems and habitat types has been made around the nation in the 14 years since the first NCER conference was held. NCER 2018 is a forum to share results on what restoration fundamentals and practices have worked and bring new focus on those challenges that remain. It will also allow for collaboration across agencies, non-governmental organizations and the private sector, bringing together in one location the nation's leading experts in ecosystem restoration to ford new insights and advances to restore and protect ecosystems and habitats nationwide.

We are glad you could be a part of NCER 2018 and we encourage you to get involved in future NCER's by organizing a session and contributing to program development. **Thank you for joining us.**

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NCER 2018

National Conference on Ecosystem Restoration

Building connections from the local to the landscape scale

Welcome to the 7th National Conference on Ecosystem Restoration (NCER 2018)

NCER is an interdisciplinary conference on large-scale ecosystem restoration presenting state-of-the art science and engineering, planning, and policy in a partnership environment. The first NCER was held in 2004 in Orlando, FL. Since then, it has been held across the country, and we are happy to bring NCER to New Orleans in 2018. NCER brings together scientists, students, engineers, policy makers, planners and partners from across the country actively involved in large-scale ecosystem restoration.

The theme of NCER 2018 is "Building connections from the local to the landscape scale." Advancing restoration on the national scale and beyond requires connecting projects to restore ecosystem functions that ignore jurisdictional boundaries. "Small-scale" restoration projects can collectively become large-scale ecosystem restoration. Restoration downstream depends on improving conditions upstream. The theme resonates across the NCER 2018 program, with sessions ranging from technical aspects of restoration to stakeholder engagement and determining the collective impact of on-the-ground actions. These seemingly isolated components of restoration are increasingly being integrated, with exciting results.

Our location in New Orleans provides a perfect opportunity to explore critical issues surrounding restoration of the Mississippi River watershed and the Gulf of Mexico, arguably one of the greatest restoration challenges of our times. As one of the largest water bodies in the world, the Gulf provides habitat to a vast array of marine organisms. The Gulf Region contains half the coastal wetlands in the entire United States. Recent disasters in the Gulf region have driven home the link between ecosystem wellbeing and that of human communities, highlighting the critical need for ecological restoration. Now, more than ever, we see the value of healthy ecosystems, not only in terms of ecological and societal health, but also in terms of the nature-based defense they can provide from disasters. To that end, NCER 2018 aims to facilitate sharing of critical knowledge and tools to improve the success of restoration in the Gulf Region and beyond.

This starts with Monday's all-day plenary session on ecosystem restoration in the Gulf of Mexico. The special plenary session features four consecutive panel discussions with distinguished speakers capped off with an afternoon keynote by Susanne Torriente, Assistant City Manager and Chief Resiliency Officer for the City of Miami Beach, FL. Each panel in the series will focus on a different aspect or component of restoration, with panelists representing a diverse cross-section of disciplines including scientists, decision-makers, restoration planners, and funders, from the Gulf Region and across the nation. This series is designed to provoke new ideas by engaging audience participants and facilitating dialogue among panel experts, furthering our understanding of restoration challenges, lessons-learned, and future opportunities. In keeping with the broader conference theme, what successful ecosystem restoration looks like will be examined from the local to national level, with a focus on identifying, measuring, achieving, and communicating restoration goals. These discussions will also explore how restoration in the Gulf is influenced by work done elsewhere and how lessons learned in the Gulf might apply to other regions. Check out the detailed Gulf of Mexico Plenary Agenda on page 34.

We are pleased to introduce a special feature on this year's program - a two-part session (21 & 27) on using drones as an ecosystem restoration tool and how to analyze drone data. Moreover, we are sure you will agree there is no shortage of technical sessions and interactive panels to choose from throughout three days of concurrent sessions.

Advancing the practice of restoration requires building and improving connections between scientists and practitioners across landscapes. This is what NCER is all about. We encourage you to connect with conference attendees outside of your geography or area of expertise. The most valuable lessons learned are often those least expected.

We are grateful to those who gave of their time and expertise to organize and moderate sessions, and of course, those who submitted abstracts, are giving talks, presenting posters, and participating as panelists. Furthermore, we would be remiss without thanking the many individuals recognized on pages 10 and 11 who volunteered their personal time and energy to organize and plan this conference, and those who are serving as volunteers during sessions. A special shout out goes to Amber Inggs for overseeing the SER-LERS Student Competition and to the many attendees who volunteered their time to judge student presentations. This conference would not be possible without the dedication and efforts of a large number of people and we applaud each and every one of you.

Finally, we would like to thank the team at the University of Florida's IFAS Office of Conferences and Institutes (OCI). Their expert management of conference details throughout the planning process is what makes bringing us together at NCER possible.

We hope that you have a great week in New Orleans, renewing old connections and making new ones that will help our community grow as we advance the practice of ecosystem restoration.

Sincerely,

Matt Grabau

Conference Chair

Science Coordinator, Desert Landscape Conservation Cooperative, and

President, Large Scale Ecosystem Restoration Section (LERS) of the Society for Ecological Restoration

Tucson, AZ

Ryan Clark

Conference Co-Chair

Research Scientist, The Water Institute and

Immediate Past President, Large Scale Ecosystem Restoration Section (LERS) of the Society for Ecological Restoration

Baton Rouge, LA

Planning Committee & Organizers

Planning Committee

- **Nick Aumen**, *Regional Science Advisor*, South Florida, US Geological Survey, Davie, FL
- **Darcy Austin**, *Program Manager II*, Delta Science Program, Delta Stewardship Council, Sacramento, CA
- **Ryan Clark**, *Conference Co-Chair*, Research Scientist, The Water Institute, and Immediate Past President, and President, Large Scale Ecosystem Restoration Section (LERS) of the Society for Ecological Restoration, Baton Rouge, LA
- **Matt Grabau**, *Conference Co-Chair*, President, Large Scale Ecosystem Restoration Section (LERS) of the Society for Ecological Restoration, Tucson, AZ
- **Matthew Harwell**, *Chief*, Ecosystem Assessment Branch, Gulf Ecology Division, National Health and Environmental Effects Research Laboratory, US EPA, Office of Research and Development, Gulf Breeze, FL
- **Ann Hijuelos**, *Ecologist*, US Geological Survey, New Orleans, LA
- **Beth Miller-Tipton**, *Director*, UF/IFAS Office of Conferences and Institutes (OCI), Gainesville, FL

Gulf of Mexico Plenary Organizers

- **Brie Bernik**, *Gulf Research Program Science-Policy Fellow*, Gulf Coast Ecosystem Restoration Council, New Orleans, LA
- **Alyssa Dausman**, *Vice President for Science*, The Water Institute of the Gulf, Baton Rouge, LA
- **Debbie DeVore**, *Gulf Restoration Manager*, Department of the Interior, Fairhope, AL
- **Justin Ehrenwerth**, *President and CEO*, The Water Institute of the Gulf, Baton Rouge, LA
- **Jessica Henkel**, *Science Advisor and Coordinator*, Gulf Coast Ecosystem Restoration Council, New Orleans, LA
- **Brad Inman**, *Chief*, *Projects and Restoration Branch*, New Orleans District, U.S. Army Corps of Engineers (USACE), New Orleans, LA
- **Bethany Carl Kraft**, *Senior Program Manager*, Gulf Region, Volkert, Inc., Mobile, AL
- **Denise Reed**, *Professor Gratis*, University of New Orleans, New Orleans, LA
- **Gregory D. Steyer**, *Science Advisor*, Gulf of Mexico, USGS Southeast Region, Baton Rouge, LA

Gulf of Mexico Panel Organizers, Moderators & Panelists

- **Toby Baker**, *Commissioner*, Texas Commission on Environmental Quality (TCEQ), Austin, TX
- **Holly A. Bamford**, *Chief Conservation Officer*, National Fish and Wildlife Foundation (NFWF), Washington, DC
- **Don Boesch**, *Professor of Marine Science*, University of Maryland Center for Environmental Science, Annapolis, MD
- **John Callaway**, *Lead Scientist*, Delta Science Program, Delta Stewardship Council, Sacramento, CA
- **Bethany Carl Kraft**, *Senior Program Manager*, Gulf Region, Volkert, Inc., Mobile, AL
- **Mike Chotkowski**, *San Francisco Bay-Delta Science Coordinator*, U.S. Geological Survey (USGS), Sacramento, CA
- **Alyssa Dausman**, *Vice President for Science*, The Water Institute of the Gulf, Baton Rouge, LA
- **Debbie DeVore**, *Gulf Restoration Manager*, Department of the Interior, Fairhope, AL
- **Heida Diefenderfer**, *Team Leader*, Ecosystems Research, Pacific Northwest National Lab (DOE) Coastal Sciences Division, Sequim, WA
- **Justin Ehrenwerth**, *President and CEO*, The Water Institute of the Gulf, Baton Rouge, LA
- **Neil Ganju**, *Research Oceanographer*, Woods Hole Coastal and Marine Science Center (USGS), Woods Hole, MA
- **Barry Gold**, *Environment Program Director*, Walton Family Foundation, Washington, DC
- **Holly Greening**, *Executive Director*, Tampa Bay Estuary Program (TBEP), Parrish, FL
- **Bren Haase**, *Chief*, Engineering and Research Division, Lousiana Costal Protection and Restoration Authority (CPRA), Baton Rouge, LA
- **Matthew Harwell**, *Special Assistant*, Ecologist EPA, Gulf Ecology Division, Gulf Breeze, FL
- **Brad Inman**, *Chief*, Projects and Restoration Branch, New Orleans District, U.S. Army Corps of Engineers (USACE), New Orleans, LA
- **Tanner A. Johnson**, *Director*, Gulf Environmental Benefit Fund, National Fish and Wildlife Foundation (NFWF), Baton Rouge, LA
- **David Kidwell**, *Program Manager*, NOAA National Centers for Coastal Ocean Science (NCCOS), Silver Spring, MD
- **Ehab Meselhe**, *Vice President for Engineering and Professor at Tulane University*, The Water Institute of the Gulf, Baton Rouge, LA
- **Denise J. Reed**, *Professor Gratis*, University of New Orleans, New Orleans, LA
- **Fred H. Sklar**, *Director and Section Administrator*, Everglades Systems Assessment (ESA) Section, South Florida Water Management District, West Palm Beach, FL
- **Gregory D. Steyer**, *Science Advisor*, Gulf of Mexico USGS Southeast Region, Baton Rouge, LA
- **Susanne Torriente**, *Assistant City Manager and Chief Resiliency Officer*, City of Miami Beach FL, Miami Beach, FL
- **Mark R. Wingate**, *Deputy District Engineer for Programs and Project Management Executive Office*, New Orleans District, U.S. Army Corps of Engineers (USACE), New Orleans, LA

*see detailed Gulf of Mexico plenary agenda for more information, pages 34 - 37

Session Organizer Recognition

A large number of sessions were organized by individuals who shouldered the responsibility to confirm appropriate speakers and manage a session. Having such a diverse group of professionals representing multiple disciplines assist with this effort is what allows NCER to feature extensive content, and to capture emerging issues and new ideas. We would like to express a hearty thanks to those who dedicated their time and expertise in helping form the program agenda.

1..... **Darcy Austin**, Delta Stewardship Council, Sacramento, CA

3 ..... **John Tull**, Great Basin Landscape Conservation Cooperative/US FWS, Reno, NV

4 ..... **Shimrit Perkol-Finkel**, ECOncrete Tech Ltd, Tel Aviv, Israel

5 ..... **Todd Erickson**, University of Western Australia, Crawley, Australia

7, 13..... **John Nyman**, Louisiana State University, Baton Rouge, LA

8 ..... **Todd Caplan**, GeoSystems Analysis, Inc. Albuquerque, NM

9 ..... **Genevieve Johnson**, Desert Landscape Conservation Cooperative/US BOR, Boulder City, NV

11..... **Craig Fleming**, USACE, Yankton, SD

12 ..... **Jason Drake** and **Paul Medley**, USDA Forest Service, Tallahassee, FL

14 ..... **Rebecca Allee**, National Oceanic and Atmospheric Administration, Stennis Space Center, MS

15 ..... **Cary Ehrman**, Ramboll Environ, Dublin, OH

16 ..... **John Stille**, Toronto and Region Conservation, Toronto, Canada

17..... **Chris Warn**, Environmental Science Associates (ESA), Tampa, FL

18 ..... **Stuart Lowrie**, Long Island TNC, East Hampton, NY

19 ..... **Judith Schofield**, CSRA, Alexandria, VA

20..... **Heida Diefenderfer** and **Gary E. Johnson**, Pacific Northwest National Laboratory, Sequim, WA

21 ..... **Joe Baustian**, The Nature Conservancy, Baton Rouge, LA

25 ..... **Craig Palmer**, CSRA, Alexandria, VA

26 ..... **David Hanson**, HansonRM, Blaine, WA and **Alexis Baldera**, Ocean Conservancy, Austin, TX

27..... **Daniel Staley**, Arbor Drone, LLC, Aurora, CO

29 ..... **Matthew Harwell** and **Craig Beatty**, Gulf Ecology Division, Gulf Breeze, FL

31 ..... **Peter Skidmore**, Walton Family Foundation, Denver, CO

32 ..... **Brad Inman**, New Orleans District, US Army Corps of Engineers, New Orleans, LA

34..... **Michael Donahue**, AECOM, Traverse City, MI

36 ..... **Matthew Grabau**, Desert Landscape Conservation Cooperative/US FWS, Tucson, AZ

37 ..... **Justin Ehrenwerth**, the Water Institute, Baton Rouge, LA

38..... **Craig Goodwin**, USDA Natural Resources Conservation Service, Washington, DC

39 ..... **Bruce Vogt**, NOAA Chesapeake Bay Office, Annapolis, MD

40..... **Andrew LoSchiavo**, U.S. Army Corps of Engineers, Jacksonville, FL

41 ..... **Ryan Clark**, The Water Institute, Baton Rouge, LA

42, 47..... **Lynn Wingard**, USGS, Reston, VA and **Michael Savarese**, Florida Gulf Coast University, Fort Myers, FL

44..... **Elizabeth Murray**, USACE, San Francisco, CA

45..... **Lisa Wainger**, University of MD Center for Environmental Science, Solomons, MD

48..... **Kirsten Lackstrom**, Carolinas Integrated Sciences & Assessments (CISA), Columbia, SC

50..... **Ehab Meselhe**, The Water Institute of the Gulf, Baton Rouge, LA

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The Walton Family Foundation is, at its core, a family-led foundation. The children and grandchildren of our founders, Sam and Helen Walton, lead the foundation and create access to opportunity for people and communities. We believe the best ideas can come from anywhere, so we stay open to new thinking from all over. And we partner with those who are closest to the problem because they're usually closest to the solution. We are a family-led foundation that tackles tough social and environmental problems with urgency and a long-term approach to create access to opportunity for people and communities.

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AECOM's vision to build a better world includes our physical environment and earth's natural ecosystems. AECOM's worldwide Ecosystem Restoration Center of Excellence (ER-CoE) reflects our interdisciplinary, fully-integrated, comprehensive approach to assisting our diverse clients recover degraded ecosystems, creating sustainable habitats that reflect the landscape's nature, character and ecology.

Learn more at aecom.com, and contact Michael.Donahue@aecom.com or Cecilia.MeyerLovell@aecom.com.

Coastal Wetlands Planning, Protection, and Restoration Act (CWPPRA)

www.lacoast.gov

The Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA) is federal legislation enacted in 1990 that is designed to identify, prepare, and fund construction of coastal wetlands restoration projects. The CWPPRA Public Outreach team provides guidance, expertise, and support in communicating CWPPRA strategies and progress on Louisiana wetland restoration efforts with the public, including conducting educational workshops and developing curricula for teachers.

GeoSystems Analysis, Inc.

www.gsanalysis.com

GeoSystems Analysis provides a full range of habitat restoration support services, including characterizing site conditions, developing restoration plans, writing grants and developing project funding strategies, managing and overseeing project implementation, and performing effectiveness and validation monitoring to support both programmatic and project level adaptive management planning.

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Our aquatic and wildlife biologists, plant ecologists, engineers and other specialists aren't afraid to look outside the norm to address impairments in a way that builds on the strengths of the unique environment. Working with the public and private sectors, we seek to restore ecosystem functions in a sustainable way. Our leading experts in a variety ecosystem types, make it their mission to understand your purpose and to tailor our design to your needs.

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Coalition to Restore Coastal Louisiana

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Founded in 1988, The Coalition to Restore Coastal Louisiana is the longest standing statewide organization driving bold drive bold, science-based action to rebuild Coastal Louisiana through outreach, restoration and advocacy. With the support of members and volunteers, CRCL advocates for strong coastal policies and implements restoration projects across coastal Louisiana.

Coastal Protection and Restoration Authority

www.coastal.la.gov

Louisiana's Coastal Protection and Restoration Authority is the single state entity with authority to develop, articulate, implement, and enforce a comprehensive coastal restoration and protection Master Plan of unified vision to reduce hurricane storm surge flood impact, to restore our bountiful natural resources, to build land to protect our nation's critical energy infrastructure, and to secure Louisiana's coast now and for future generations.

DHI Water & Environment, Inc.

www.dhigroup.com

DHI is a software development and engineering consulting firm specializing in hydrological modeling software and represents 20 years of expertise from a multitude of urban, coastal, marine, mining, and water resources projects around the world.

Environmental Science Associates

www.esassoc.com

ESA is an employee-owned environmental consulting and planning firm committed to the principles of sustainability. We bring nearly 50 years of experience in all aspects of multi-objective project planning, environmental assessment, natural resource management, habitat restoration, and regulatory compliance. With multiple offices nationwide, and an array of technical specialties, clients look to ESA as a single source for well-reasoned, timely, and effective restoration solutions.

Silver Sponsors *(continued)*

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At GeoEngineers, people come first. Since its start in 1980, GeoEngineers has been an employee-owned company committed to both their clients and each other. Today, more than 200 of their 300 employees are shareholders – this wide ownership propels cross collaboration to solve the most complex earth science issues. From geotechnical exploration to natural resource management, wherever human development intersects with the environment, GeoEngineers is there.

GZA GeoEnvironmental, Inc.

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GZA is an employee-owned company with 700 scientists, engineers & technical staff providing ecological, water, environmental, geotechnical, & construction management services for a diverse group of public/private sector clients. With 29 offices, our primary base of operations is located within the Northeast, Mid-Atlantic & Mid-West U.S. We provide eco/water resource experts for ecological restoration projects, with a focus to create a sustainable future for our clients, employees & culture.

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Living Shoreline Solutions manufactures a patented product that stops erosion and naturally rebuilds the shoreline. LSS is looking to work with engineers, contractors and governmental entities wanting to design a system that will be most effective in protecting dredged channels, spoil islands, shorelines and infrastructure.

Mountain Pine Manufacturing, Inc.

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We are a manufacturer of Engineered Wood Strand Mulch, a weed free, state of the art erosion control mulch for permanent land reclamation.

National Wildlife Federation

www.nwf.org

The National Wildlife Federation is America's largest conservation organization, uniting all Americans to ensure wildlife thrive in a rapidly changing world. Find out about our efforts to increase the resiliency of the Gulf of Mexico and the Mississippi River Delta for future generations at gulfrestoration.nwf.org and mississippiriverdelta.org.

The Water Institute of the Gulf

www.thewaterinstitute.org

The Water Institute of the Gulf is the Center of Excellence and a not-for-profit, independent research and technical services resource for resilient coasts and sustainable water systems worldwide. With research interests including coastal ecology, integrated watershed management, sediment transport, community well-being, hydrology, policy analysis, geology, and morphodynamics, the Institute's dedicated staff is key in our ability to address water-related challenges in an integrated manner.

USDA-NRCS

www.nrcs.usda.gov/wps/portal/nrcs/site/national/home

USDA-NRCS works with farmers, ranchers and forest landowners across the country to help them boost agricultural productivity and protect our natural resources through conservation. NRCS' approach combines locally-led solutions with science and research; landowner stewardship; partnerships; and proven conservation practices to produce results for agriculture and the environment.

Volkert, Inc.

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For over 90 years, Volkert has proudly provided professional design, engineering, environmental and management services for clients across the Southeast. Volkert's coastal team of ecologists and engineers bring extensive experience to provide a comprehensive range of services including planning, permitting, design and monitoring for a variety of projects in coastal ecosystems.

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YSI's environmental products provide high quality, high resolution data to better understand and manage our water resources. Our instruments are used in a number of applications, including climate change and drought studies, flood monitoring, stormwater monitoring, & groundwater quantification and contamination. In addition to standard products, YSI's custom integrated systems help customers obtain critical data in most any application. Tell us what you need and let us design it!

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SouthWoods Ecosystem Design is a service provider in all sectors of ecological design; supplying data visualization, cartography, site assessment, and design strategy. SouthWoods collaborate with ecosystem researchers and designers to enhance communication during the design process and share complex concepts with stakeholders. Lead designer, Daniel Halsey has over 20 years' experience in the design process.

Plenary Presentation Descriptions

Monday, August 27, 2018 | 4:30pm – 5:00pm

Gulf Plenary Keynote Address

Susanne Torriente
Assistant City Manager/Chief Resiliency Officer
City of Miami Beach
Miami Beach, FL

Susanne Torriente will present the closing keynote address at the end of the Gulf of Mexico-themed plenary session - Gulf Ecosystem Restoration: What Does Success Look Like? As the Chief Resiliency Officer in a city tackling the challenges of sea level rise head on, Susanne will talk about the scale and complexity of scaling resilience planning and action at a city, county and regional level, as well as fully integrating resilience thinking into an organization's corporate culture and strategic budget process.

Tuesday, August 28, 2018 | 9:00am – 10:00am

Adaptive Management Planning and Implementation in Ecological Restoration: Opportunities & Challenges

Barry Gold
Director, Environment Program
Walton Family Foundation
Washington, D.C.

A changing climate is forcing individuals, communities, businesses and governments to adapt. More frequent and more severe storms, prolonged droughts, and rising seas are among the challenges we all must confront as a "new normal" where we are working. This new approach is certainly true for those of us involved in coastal restoration. Barry Gold will talk about how the Walton Family Foundation is adapting its strategies, approaches and measures of success in the face of a changing climate, and what this means for the larger issue of the restoration of coastal wetlands across the Gulf of Mexico.

Wednesday, August 29, 2018 | 9:00am – 10:00am

Integrating Science into Decision Making: Linking River Management and Coastal Restoration

Peter Goodwin
President
University of Maryland Center for Environmental Science
Cambridge, MD

Water quality and quantity have broad impacts including ecosystem health, agricultural and fishery resources, and quality of life. Environmental managers face challenges from estimating effectiveness of restoration practices, competing stakeholder requests, and potentially high financial and societal costs. Peter Goodwin will speak about his experiences applying ecohydraulic (linkages between physical processes, management actions, and ecological responses) principles while serving as the Lead Scientist for the California Delta Science Program as well as a former member of the CALFED Independent Science Board.

Thursday, August 30, 2018 | 9:00am – 10:00am

Bridging Upland and Coastal Restoration at the Watershed Scale

Garret Graves
Congressman
Louisiana's Sixth Congressional District
Baton Rouge, LA

Congressman Garret Graves is a Republican Member of Congress representing Louisiana's Sixth Congressional District. Graves previously served as Louisiana's Chairman of the Coastal Protection and Restoration Authority (CPRA) where he managed one of America's largest civil works programs in history. Under Graves' tenure, Louisiana constructed more flood protection infrastructure and restored more miles of coastline than at any other period of time in the State's history.

An expert on multiple topics relevant to NCER 2018, Congressman Graves will share an update about his work in congress, his experience going from State to Federal Government, and his work on subcommittees and the funding he has secured for ecosystem restoration and disaster recovery. His experience with multiple coastal and riverine disasters (hurricanes, oil spill, river floods of 2016, etc.), gives him an insider's view to how important the Mississippi River and its delta are to Louisiana and the nation as a whole. Rivers including the Mississippi, Amite/Comite and Bayou Lafourche, to name a few, can have multiple ecosystem benefits like flood risk reduction in the watersheds themselves, and at the coast where they deliver necessary freshwater, sediment, and nutrients to nourish coastal ecosystems, in addition to reducing nutrient overload to Louisiana's coastal "Dead Zone".

Thursday, August 30, 2018 | 5:00pm – 5:30pm

Wrapping-up with the Big Picture: Science Communications and Stakeholder Engagement – *The Future of Restoration*

Don Boesch
Professor of Marine Science
University of Maryland Center for Environmental Science
Annapolis, MD

Throughout this conference multiple presentations and plenary talks will have focused on restoring coastal ecosystems under multiple threats including continued growth and development pressures, pollution loading, a warming climate, and increasing rates of sea level rise. Don Boesch, relying on his vast scientific experience in the Chesapeake Bay and Gulf of Mexico, will summarize the important take-away messages from this conference in the context of federal and state environmental leadership (or lack thereof) while identifying important next steps for the scientific and management communities.

Plenary Speaker Biographies

Susanne Torriente

Assistant City Manager/Chief Resiliency Officer
City of Miami Beach, Miami Beach, FL
Gulf Plenary Keynote Address
Monday, August 27, 2018 | 4:30pm – 5:00pm

Susanne is the Assistant City Manager (ACM) and Chief Resiliency Officer (CRO) of Miami Beach, FL. Her sustainability and resiliency portfolio includes planning, building, code compliance, green space and environmental management. As CRO she will further develop an action-oriented citywide strategic resiliency plan for all city operations. While in Fort Lauderdale she was lead staff to the city's visioning process producing Fast Forward Fort Lauderdale: Our City, Our Vision 2015. She also co-chaired the Infrastructure & Growth Leadership Pillar for Broward's Six Pillars Planning process. Susanne was appointed Miami-Dade County's first Sustainability Director in July 2009. She spearheaded the planning effort to develop the County's first sustainability plan, GreenPrint, which includes the County's first climate action plan. Susanne has been a member of the Southeast Florida Regional Climate Compact staff steering committee since its inception in 2009. She is on the board of the Association of Climate Change Officers, a member of state's community resiliency focus group and ICLEI's Resilient Communities for America Advisory Committee.

Barry Gold

Director
Environment Program, Walton Family Foundation, Washington DC
Adaptive Management Planning and Implementation in Ecological Restoration: Opportunities and Challenges | Tuesday, August 28, 2018 | 9:00am – 10:00am

Barry leads the foundation's Environment Program to find lasting solutions that benefit the environment and strengthen local economies. Previously, Barry served as director of Marine Conservation at the Gordon and Betty Moore Foundation, where he led efforts to keep the world's oceans healthy through approaches that take both environmental and community needs into account. Prior to joining Moore, Barry managed the David & Lucile Packard Foundation's work on ecosystem-based management and linking science to policy. Barry has held senior positions with the U.S. Department of the Interior, the U.S. House of Representatives' Committee on Science, the U.S. National Academy of Sciences and the American Association for the Advancement of Science.

Peter Goodwin

President
University of Maryland Center for Environmental Science, Cambridge, MD
Integrating Science into Decision Making: Linking River Management and Coastal Restoration
Wednesday, August 29, 2018 | 9:00am – 10:00am

Peter Goodwin is the president of the University of Maryland Center for Environmental Science (UMCES), an independent institution within the University System of Maryland. UMCES is a leading research and educational institution focused on understanding the environment and developing the science to help inform policy and management actions for Chesapeake Bay and beyond. Goodwin is the founding director of the Center for Ecohydraulics Research at the University of Idaho, an interdisciplinary group working on the simulation of ecological response to management actions or changes in physical processes. His research interests are in modeling physical processes in natural and disturbed aquatic systems, and quantifying benefits of restoration activities. Goodwin has participated in river restoration, coastal wetland sustainability, flood risk reduction and sediment management projects throughout California and the Columbia River Basin. He also served on the Science Board for Coastal Louisiana. Goodwin currently serves as the president of the International Association for Hydro-environment Engineering and Research (www.iahr.org).

Garret Graves

Congressman
Louisiana's Sixth Congressional District, Baton Rouge, LA
Bridging Upland and Coastal Restoration at the Watershed Scale
Thursday, August 30, 2018 | 9:00am – 10:00am

Congressman Garret Graves is a Republican Member of Congress representing Louisiana's Sixth Congressional District – 13 parishes stretching north of Baton Rouge through the Capital Region down to Louisiana's Bayou country. Graves sits on the House Committees on Transportation and Infrastructure and Natural Resources.

At the start of the 115th Congress, Garret was named Chairman of the House Transportation and Infrastructure Subcommittee on Water Resources and Environment, which oversees water resources development and regulatory programs administered by the U.S. Army Corps of Engineers and the Environmental Protection Agency (EPA), along with other agencies and water-related programs. As Chairman, Graves will play an expanded role in shaping legislation to limit the scope and economic damages of agency regulations, shorten the time it takes for projects to be completed and bring efficiency to how the government works. In his position of leadership, Garret will play an important role translating the Trump Administration's proposed Infrastructure Package into legislation in the coming years, particularly with respect to bridges, flood protection, ports, waterways and coastal restoration.

Graves, who recently finished his second year serving in the House of Representatives, has more than 20 years of experience working on energy, infrastructure, fisheries, maritime and water resources issues. In addition to his policy expertise and years of private sector work, Graves served as Louisiana's Chairman of the Coastal Protection and Restoration Authority (CPRA) where he managed for the state one of America's largest civil works programs in history and successfully streamlined government while boosting its productivity. Under Graves' tenure, Louisiana constructed more flood protection infrastructure and restored more miles of coastline than at any other period of time in the State's history.

Garret is a native of Baton Rouge, Louisiana, where he still resides with his wife Carissa and their three children.

Don Boesch

Director
Professor of Marine Science, University of Maryland Center for Environmental Science, Annapolis, MD
Wrapping-up with the Big Picture: Science Communications and Stakeholder Engagement – The Future of Restoration | Thursday, August 30, 2018 | 5:00pm – 5:30pm

Donald F. Boesch is a Professor of Marine Science and President Emeritus of the University of Maryland Center for Environmental Science (UMCES). A native of New Orleans, Louisiana, Boesch grew up in the Ninth Ward and experienced the flooding resulting from Hurricane Betsy. He has published two books and 100 papers on estuarine and continental shelf ecology, wetlands, effects of offshore oil and gas development, nutrient over-enrichment, environmental assessment and science policy. He initiated the research that documented the Gulf of Mexico Dead Zone and identified its principal causes. More recently, he was a member of the Presidential Oil Spill Commission. His current research focuses on the use of science in ecosystem-based management and on assessments and adaptation strategies related to climate change. Don has 40 years of experience in the application of science in ecosystem restoration, including in the Chesapeake Bay, the Florida Everglades, Coastal Louisiana and the Baltic Sea. Boesch is one of the nation's most recognized and experienced experts in the application of science to policies for the protection, sustainable use, and restoration of coastal ecosystems and for adaptation to global climate change.

Session Descriptions

Tuesday, August 28, 2018 | 10:30am – 12:00pm

Session #1

Restoration of 30,000 Acres of Habitat: Science or Science Fiction?

Salon D

We will highlight science in support of California EcoRestore, an initiative to restore 30,000 acres of habitat in the Sacramento-San Joaquin Delta and Suisun Marsh. With a focus on adaptive management, we will present the adaptive management framework, lessons learned from a project implementing adaptive management, a monitoring framework to assess restoration effectiveness, and collaborative regional restoration planning. This session will be of interest to scientists and decision-makers alike, due to the foundations in science and multi-agency collaboration.

Session # 2

Current Challenges for Ecosystem Restoration in Today's Economic Political Landscape

Salon E

This session provides an overview of the state of practice in funding ecosystem restoration projects. Perspectives will be presented on different funding strategies, as well as a range of scales from local to national and international.

Session #3

Stakeholder Engagement Part 1: Collaboration to Achieve Landscape-Scale Objectives

Salon F & G

Achieving conservation and restoration goals often requires coordination beyond jurisdictional boundaries. Increasing the geographical scale of projects requires coordination between stakeholder groups, which can include federal and state agencies, private landowners non-profit organizations, tribes, and international governments, and often relies on additional expertise from scientists and academia. Presentations in this session will highlight diverse examples from across the US.

Session #4

Building Resilient Urban Coastal Environments and Communities through Science Based Eco-Engineering

Salon A & B

With nearly 50% of the human population concentrated around coastlines, alongside with threats from sea level rise and increased storminess, coastal development and changes to natural coastlines are inevitable. This session presents new eco-engineering approaches aimed at increasing coastal resiliency through green engineering. Takeaways include importance of multi-disciplinary science based approaches for helping researchers, designers, engineers, and managers build resilient coastlines.

Session #5

Emerging Eco-Engineering and Seed Enhancement Technologies to Combat Land Degradation

Salon H

Reduced plant establishment in rehabilitation is often attributable to poor seed handling practices. Knowledge of seed ecology, development of seed enhancement technologies, and adoption of agricultural-engineering practices for precision sowing all contribute to greater seed regeneration. This session showcases examples from a collaboration between Australia and the USA of innovative ecologically-guided seed enhancement technologies and engineering approaches for large-scale rehabilitation.

Session #6

Tools and Strategies for Informed Decision Making

Salon C

This session presents case studies of structured decision-making, decision tools, and science communication approaches used to inform management.

Tuesday, August 28, 2018 | 1:30pm – 3:00pm

Session #7

Maximizing Wetland Functions from Restoration Dollars When Constructing Wetlands From Dredged Material: Part 1

Salon D

Coastal wetland restoration in Louisiana 25 years ago rarely involved constructing new wetlands with dredged material but this technique has dominated restoration there for a decade and dominates future plans prepared throughout the Gulf Coast in response to the 2010 oil spill. This session will use case studies of recently created wetlands in Louisiana and Texas to identify ways to maximize wetland functions when using dredged material to create wetlands.

Session #8

Integrating Independent Science Review through the Adaptive Management Cycle

Salon E

Adaptive management (AM) requires resolving critical scientific uncertainties that influence resource management decisions. The purpose of this session is to learn about how large-scale riverine restoration programs across the United States are integrating independent science review as an integral component of their adaptive management programs. This session will benefit resource managers, decision makers, and scientists working to resolve complex science and resource management issues.

Session #9

Stakeholder Engagement Part 2: Development and Communication of Landscape-Scale Adaptation Strategies

Salon F & G

Effective implementation of landscape-scale environmental projects requires the development and effective communication of feasible strategies to a diverse audience that can include government, private, tribal, and non-governmental land managers. Attendees at this session will learn about co-development of conservation and restoration strategies and communication methods to turn strategies into on-the-ground projects across North America.

Session #10

Ecosystem Restoration as a Tool for Enhancing Resiliency

Salon A & B

This session talks about how resiliency should be a component of ecosystem restoration at all scales. This session presents interesting examples of restoration design features intended to make projects sustainable and long-lasting.

Session #11

Challenges and Changes in the Missouri River Recovery Program

Salon H

The purpose of this session is to provide an update to the community of practice, as well as insights gained, on developing and implementing an integrated Adaptive Management within the Missouri River Basin. Our efforts to address endangered species needs through Adaptive Management within the ESA consultation process can provide timely insights to others working within these environments. Key takeaways will include insights on development and set up of AM within the agencies; how to address uncertainty; insights on consultation and collaboration with stakeholders. Those who would benefit from these presentations are planners, managers, engineers, modelers, biologists and other scientists involved in developing and implementing under Biological Opinions, large-scale ecosystem restoration and other environmental projects.

Session #12

The Apalachicola Regional Restoration Initiative: Restoring the Apalachicola River and Bay

Salon C

The Apalachicola Regional Restoration Initiative (ARRI) is a long-term, collaborative project focused on restoring the ecology and hydrology of the Apalachicola region in the Florida Panhandle. This session will describe 1) the unique ecology and hydrology of the region, 2) field and remote sensing efforts to assess current ecological and hydrologic conditions, 3) current collaborative restoration efforts and new geospatial tools to strategically plan future restoration.

Tuesday, August 28, 2018 | 3:30pm – 5:00pm

Session #13

Maximizing Wetland functions from Restoration Dollars When Constructing Wetlands from Dredged Material: Part 2

Salon D

Coastal wetland restoration in Louisiana 25 years ago rarely involved constructing new wetlands with dredged material but this technique has dominated restoration there for a decade and dominates future plans prepared throughout the Gulf Coast in response to the 2010 oil spill. This session will use case studies of recently created wetlands in Louisiana and Texas to identify ways to maximize wetland functions when using dredged material to create wetlands.

Session #14

Use of Ecological Expertise for Communicating Sound Management Advice

Salon E

Ecosystem research and use of ecological standards support visualization of coastal conditions. Stakeholder engagement is essential to the flow of information between researchers and decision-makers. Regular communication with, and inclusion of, the management community in collaborative restoration projects helps ensure results are translated to application. This panel will discuss the transition of ecological knowledge to coastal managers to help identify suitable restoration sites and improve coastal resiliency.

Session #15

Stakeholder Engagement Part 3: Community Engagement to Inform Planning and Maintain Project Support

Salon F & G

Local support is critical for long-term sustainability of restoration and conservation projects; furthermore, integrating community perspectives in development planning can be used to minimize upfront impacts and reduce mitigation needs. Presenters in this session will discuss examples from across the globe, ranging from reconnecting local people with the environment through public education and restoration site visits to embedding community priorities into infrastructure planning.

Session #16

Integrated Restoration Prioritization, Implementation, and Monitoring – A Multi-Discipline and Multi-Benefit Approach in the Greater Toronto Area

Salon A & B

Ecosystem restoration planning requires an integrated approach considering many components of the natural system when prioritizing where and what to restore. This session will share how the Toronto and Region Conservation (TRCA) and partners developed a multi-discipline and multi-benefit approach to restoration planning that facilitates effective restoration works, which contribute to realizing regional watershed objectives.

Session #17

Gulf Coast Restoration Challenges and Opportunities

Salon H

This session will include restoration practitioners from across the Gulf Coast giving presentations on the challenges and opportunities that are unique to their respective coastlines. This region is confronted with numerous challenges from natural and man-made disasters to impacts from accelerated sea level rise. Attendees will gain a better understanding of restoration alternatives and this session will be of interest to scientists, engineers, and resource managers in coastal regions.

Session #18

Coastal Restoration on Long Island: Getting to Scale

Salon C

Over a period of six years, Long Island government, educational institutions and not-for-profits moved from an academic appreciation of the scope and impacts of nitrogen pollution and into restoration actions “at scale”. This session will share the success story of creating state, county and town septic system replacement programs to install new, lower-pollution innovative residential waste water disposal systems. In addition to generating billions of dollars in state and local funding to support these programs, and making the first significant changes in county health code since 1978, this process also helped build a regulatory framework to reduce nitrogen pollution.

Wednesday, August 29, 2018 | 10:30am – 12:00pm

Session #19

Data Management Best Practices for Ecological Restoration

Salon D

Effective ecological restoration depends on comprehensive planning for data management that addresses collection, processing, analysis, preservation, and sharing of information throughout the project. Data management is most effective when guided by informed policies and standard procedures that promote data quality, informed decision-making, and data reuse. In this session, speakers will present best practices for data management providing case studies to illustrate their approaches.

Session #20

Approaches to Demonstrating the Cumulative Effects of Large-Scale Ecosystem Restoration

Salon E

Evaluating the cumulative effects of restoration actions taken by a large-scale ecosystem restoration program informs adaptive management and ensures that interactions between parts of the program generate positive net ecosystem improvement. Panelists representing four programs will share emerging methods to evaluate cumulative effects of projects across coastal and fluvial landscapes, building on discussions by the plenary on measuring success. Pertinent to managers, modelers, and researchers.

Session #21

Drones 101: An Introduction to Drones as a Restoration Tool (Part 1)

Salon F & G

Unmanned aerial vehicles, or drones, are becoming increasingly popular tools in the research and restoration community, but how useful are they really? This session will give an overview of drone technology, operation principles, applicable laws, equipment costs, limitations, training and learning curves and usefulness of this technology for research and restoration professionals.

Session #22

Engaging Non-Traditional Partners in Restoration Projects

Salon A & B

This session will discuss how outreach to, and engagement with, non-traditional partners can be an innovative and effective tool. This session will explore several unique examples at various scales and will demonstrate the benefits.

Session #23

Chesapeake Bay Adaptive Management and Decision-making

Salon H

The Chesapeake Bay program is a large and long-term restoration effort that requires ongoing dialogue between scientists and stakeholders. This session presents innovative approaches including adaptive management and other collaborative processes that foster improved collaboration and restoration outcomes.

Session #24

Use of Models in Ecosystem Restoration

Salon C

This session talks about how hydrologic, ecologic, and habitat models are used in evaluating ecosystem restoration alternatives.

Wednesday, August 29, 2018 | 1:30pm – 3:00pm

Session #25

Approaches to Improve Quality and Reliability of Data Collected for Ecological Restoration Projects

Salon D

Reliable ecological data are needed to define pre-restoration conditions, ensure planned activities are implemented correctly, and assess post-restoration success. In this session, an overview will be provided for a recently developed guidance document and associated tools to assist with project planning and data collection, review and evaluation. Session speakers will use case studies to illustrate their approaches and innovations for improving data quality and reliability.

Session #26

Measuring Success of Multiple Gulf Coast Restoration Programs: Accountability for Long-term Success

Salon E

Monitoring programs for large-scale ecosystem restoration programs typically evaluate either (1) the success of individual restoration projects, or (2) changes in the overall health and condition of the system. The $17 billion in restoration based settlements associated with the Deepwater Horizon oil spill is unprecedented and represents the largest restoration effort implemented in the U.S. to date, however, the need for ecosystem restoration in the Gulf and its watershed will extend beyond oil spill settlement dollars. In order for future leaders to make the case for sufficient additional funding, they will need to demonstrate not only that individual projects implemented under DWH settlement-funding were successful, but also that the collective efforts of these projects made a measurable impact on the health and recovery of the Gulf ecosystem and human-derived benefits. This panel discussion brings together experts to discuss the future need to be able to evaluate the overall results of multiple on-going Gulf restoration programs and innovative approaches to meet that need. The panel will discuss how to think ahead regarding the challenges and opportunities associated with future meta-analysis of generated data as it may relate to evaluating overall effects of multiple restoration programs; and how advancements in technology can be incorporated in the effort to understand overall restoration success. The panel will address the potential to integrate alternative technologies along with meta-analysis to evaluate overall restoration efforts.

Session #27

Drones 201: A Primer on Analyzing Drone Data (Part 2)

Salon F & G

This session will detail what research and restoration professionals need to know when considering how to collect and analyze data with a drone. Sensors ranging from visual to multispectral, hyperspectral and LiDAR will be discussed. Data analysis ranging from laptop programs, cloud-based subscriptions, and data analysis companies will be discussed. Attendees will also learn the issues surrounding data collection in the field, costs of data analysis, and view equipment and data from several widely differing missions.

Session #28

Plant Materials: The Seeds of Restoration

Salon A & B

Effective restoration requires effectively planting the right materials in the right place. This session will cover emerging techniques including the use of seed collection zones, expanding plant palettes, and restoration of underlying soil conditions.

Session #29

Tools for Assessing Ecosystem Services in Restoration: Part 1

Salon H

This session presents advancements in the field of ecosystem services valuation, prioritization and optimization for restoration planning. A suite of tools will be showcased that can provide information on ecosystem services within restoration planning processes, including scoping, alternative identification, and tradeoff/optimization. This session serves as an important bridge between the National Conference on Ecosystem Restoration and the A Community on Ecosystem Services (ACES) conferences.

Session #30

Changing Hydrologic Conditions

Salon C

This session explores changing conditions of hydrology through various missions, where fresh and saltwater mix and restoration projects fix, habitats for crustaceans and fishes.

Wednesday, August 29, 2018 | 3:30pm – 5:00pm

Session #31

Colorado River Delta Restoration – Insights into Binational Cooperation and Sustainability

Salon F & G

This session will highlight the evolution of organizational, political, and scientific strategies necessary to implement ecosystem-scale restoration of interest to hydrologists, ecologists, funders, conservation organizations and agencies. Planning is conducted in the context of a binational system of shared and significantly diminished water resources. Scaling restoration to an ecosystem scale and ensuring sustainability will require continued innovations in funding and collaboration.

Session #32

Implementation of Large-Scale River Diversions: Stakeholders' Perspectives

Salon E

To combat coastal land loss, the State of Louisiana is advancing several large-scale sediment diversions on the Mississippi River, including the Mid-Barataria Sediment Diversion. The numerous impacted stakeholders, with competing interests, concerns and/or responsibilities, often envision success, both short and long-term, differently. This session includes the State's, the Corps', and NOAA's (Deep Water Horizon Trustee) visions of success, and the views of a contractor working on the project.

Session #33

Incorporation of Science, Monitoring, and Modeling in System Wide Restoration Planning

Salon A & B

This session will focus on restoration planning efforts that are incorporating science, monitoring, and modeling applications at system wide scales.

Session #34

Hurricanes and Other Extreme Weather Events: How they Impact Ecosystem Restoration Plans

Salon H

Recent extreme weather events (e.g., hurricanes, floods) have profoundly impacted the ecological and socio-economic fabric of our coasts. Three case studies (i.e., Hurricane Harvey-TX, Hurricane Sandy-New England, South Carolina coastal flooding) will explore how such events impact the direction of new/existing restoration plans. "Lessons learned" will be of interest to all (e.g., engineers, scientists, planners, policymakers) responsible for responding to/planning for extreme weather events.

Session #35

Tools for Assessing Ecosystem Services in Restoration: Part 2

Salon C

This session presents a diverse set of tools and case studies to highlight potential ecosystem services from natural infrastructure and restoration.

Thursday, August 30, 2018 | 10:30am – 12:00pm

Session #36

Hydrologic Restoration Part 1: Re-Establishing Ecological Processes in Freshwater Ecosystems

Salon F & G

The disruption of hydrologic drivers, including reduced overall flow volumes and changes in the timing and magnitude of flood flows, has degraded ecological conditions in aquatic and riparian ecosystems across the world. Large-scale restoration programs aim to revitalize habitat using diverse strategies to mitigate hydrologic constraints. This session will highlight common themes and unique challenges for restoration of freshwater systems across North America.

Session #37

Public-Private-NGO Partnerships for Enhancing Resilience of the Working Coast via Ecosystem Restoration

Salon E

This session will focus on how Public-Private-NGO Partnerships (P3+) were formed to combine the resources and expertise of public, private, and NGOs to enhance coastal habitat and provide protection to critical infrastructure and communities, using the dredged material created by port expansion. Advanced science and engineering are being used to optimize the protective and habitat services provided by the restored ecosystems. This approach can serve as a model for collaborative planning and shared funding to construct nature-based defenses for infrastructure and communities.

Session #38

Ecological Site Descriptions (ESDs): Introduction to a Landscape Restoration Tool

Salon A & B

To improve landscape conservation and restoration, the USDA Natural Resources Conservation Service is developing Ecological Site Descriptions (ESDs) based on climatic, hydrologic, geomorphic, and edaphic landscape features. ESDs depict ecological site dynamics and predict management and disturbance effects on ecological functions and processes. This session introduces ESD concepts and their use in guiding restoration, with a focus upon ESD concepts for 'wet' (riparian, wetland) landscape areas.

Session #39

Ecosystem Scale Oyster Reef Restoration in the Chesapeake Bay: Lessons in Partnerships and Science to Achieve Results

Salon H

A broad constituency of state and federal partners established a goal to restore healthy oyster populations and habitat in 10 Chesapeake Bay tributaries by 2025. This session will cover how tributary scale how restoration is planned and implemented using science based tools, how the restoration is evaluated, how research is quantifying water quality and fish habitat services and how land based best practices are being used to reduce water quality threats to restored oysters.

Session #40

Determining Everglades Ecosystem Restoration Benefits for Projects

Salon C

Determination of restoration benefits is necessary to plan, design, and implement restoration projects. This session provides examples of evaluating potential restoration benefits from restoration projects and measuring actual restoration results. Examples outlining major elements of the REstoration COordination and VERification (RECOVER) applied science program are presented (conceptual ecological models and hypotheses; performance measures; monitoring and adaptive management).

Thursday, August 30, 2018 | 1:30pm – 3:00pm

Session #41

Hydrologic Restoration Part 2: Delivery of Water to the Coast and Managed through-estuary Flows

Salon F & G

Freshwater bodies and estuaries worldwide are undergoing drastic change due to alteration of freshwater flow that impacts their ecology. Freshwater input serves many essential ecological functions, including the regulation of salinity and delivery of nutrients and sediments from the watershed. This session will lay out recent advances in quantification of freshwater inflow needs, and project examples from various coastal/riverine ecosystems.

Session #42

Sea Level Rise: Overcoming the Problems of Connecting Science to Management Part 1 – Science

Salon E

The purpose of this session is to bring together scientists studying sea level rise in the Coastal Plain to determine the current state of knowledge about past rates, present-day observations, and future projections. Emphasis will be placed on the impacts of sea level rise to coastal ecosystems. By comparing results from different regions, this session will highlight challenges faced by decision-makers and the speakers will discuss connections between their research and planning.

Session #43

Local-scale Planning and Implementation of Restoration and Conservation

Salon A & B

This session discusses strategic planning efforts at the local scale including tool development and stakeholder engagement.

Session #44

Thin Layer Placement of Dredged Material to Maintain Elevation in Salt Marshes Facing Sea Level Rise

Salon H

This session will focus on how the ability of salt marshes to maintain elevation is compromised by systemic restrictions of sediment and nutrients supply, increased erosion, subsidence, and accelerating sea level rise. The resulting "relative sea level rise" can be much higher than predicted in global climate models, and vary locally. The placement of thin layers of dredged material to the marsh surface may restore elevation, but ongoing studies show the responses and effects on ecosystem functions are complex.

Session #45

Using Restorability and Resilience Concepts in Evaluating and Valuing Ecosystem Service Benefits of Restoration

Salon C

This session will explore approaches to evaluating ecological and nature-based restoration outcomes and social benefits by assessing their contribution to long-term resilience of ecological functions and ecosystem service benefits. Presenters will discuss recent approaches to measure benefits, assess the state of the science, and suggest research needed to improve benefit metrics. Studies will cover a range of restoration types with an emphasis on projects at the land-water interface.

Thursday, August 30, 2018 | 3:30pm – 5:00pm

Session #46

Hydrologic Restoration Part 3: Stream and Wetland restoration in an Urban Environment

Salon F & G

This session talks about how hydrologic restoration in urban environment comes with a unique set of challenges and opportunities. Environmental objectives must be balanced with flood protection and community engagement is critical. Benefits of restoration often include development of recreational opportunities.

Session #47

Sea Level Rise: Overcoming the Problems of Connecting Science to Management Part 2 – Strategies

Salon E

The purpose of this session is to discuss strategies for effectively connecting scientific information on sea level rise to planners and decision makers addressing the impacts of sea level rise on ecosystems and communities. Panel members will discuss tools and methods that have worked, identify information gaps, and areas for improvement. The session will present the perspectives of decision-makers and scientists and will encourage audience participation to identify a path forward.

Session #48

Drought and Coastal Ecosystems: Monitoring and Modeling Using the Coastal Salinity Index

Salon A & B

Drought uniquely affects coastal ecosystems due to changes in salinity conditions of estuarine creeks and rivers. A coastal salinity index (CSI) was developed that characterizes the onset and recovery of short- and long-term coastal drought. Topics covered in the session will be the uniqueness of coastal drought, the development of the CSI, the use of CSI in an ecological model, and the application of the CSI to sites in the Southeast.

Session #49

Multiple Benefits of Ecosystem Restoration via the Beneficial Use of Dredged Material

Salon H

This session examines recent case studies regarding ecological effects, ecosystems services, design, and funding of beneficial restoration projects.

Session #50

Using Ecosystem Models to Evaluate Restoration Projects and Nature Based Defenses

Salon C

Ecosystem models can be valuable tools to assess the sustainability of restoration projects and nature based defenses. This session presents examples of projects that have incorporated models to help assess how various restoration and nature based defense projects, such as creating wetlands, reefs, and providing sand nourishment to beaches and dunes. Engineers, modelers, agency managers, and research scientists would most benefit from discussions of these presentations.

Student Competition

Proudly Sponsored by the Large Scale Ecosystem Restoration Section (LERS) of the Society of Ecological Restoration (SER)

A Student Competition will be held in conjunction with NCER 2018. All students giving presentations are automatically enrolled. Winners will receive an Award Certificate and a $100 prize.

Awards Presentation & Networking Social on Thursday, August 30

Student Competition Categories

(A) Best Student Oral Presentation

Effective implementation of landscape-scale environmental projects requires the development and effective communication of feasible strategies to a diverse audience that can include government, private, tribal, and non-governmental land managers. Attendees at this session will learn about co-development of conservation and restoration strategies and communication methods to turn strategies into on-the-ground projects across North America.

(B) Best Student Poster Presentation

This award will honor the best poster presentation given by a student during the conference. Each student poster will be evaluated by two judges using standardized scoring criteria. The top ranked poster presenter will receive this award.

Scores will be compiled and ranked during a meeting of the Awards Committee at the end of the Poster Session during lunch on Thursday, August 30.

Presentation Judging Schedule

Oral Evaluations during Concurrent Sessions:	August 28-30, 2018
Poster Evaluations during Poster Session:	August 29, 2018
Awards Presentation at Conference:	Thursday, August 30, 2018 (5:30PM - 6:00PM)

About SER & LERS

About the Society for Ecological Restoration (SER)

SER is an international nonprofit organization that advances the science, practice and policy of ecological restoration to sustain biodiversity, improve resilience in a changing climate, and re-establish an ecologically healthy relationship between nature and culture.
SER has more than 2,700 members and partners in over 70 countries. Membership with SER includes membership with the Chapter of your choice. Chapters are another great way to get the most out of your membership. Led by dedicated volunteers, SER Chapters focus on local issues and give members the opportunity meet and work with other restoration professionals, attend workshops, events and engage with the local community. SER also has two thematic sections – Large-scale Ecosystem Restoration (LERS) and International Network for Seed-Based Restoration (INSR). Similar to chapters, sections are run by a volunteer board and provide SER members with the opportunity to engage and share knowledge on a specific topic related to the field of restoration ecology.

SER is positioned at the critical interface between restoration science and practice and actively promotes participatory, knowledge-based approaches to restoration. *SER serves its members, partners, and the field at large by:*

Advancing Policy

SER released its groundbreaking publication the International Standards for the Practice of Ecological Restoration in December 2016. These standards provide much-needed guidance for countries working to plan and implement restoration programs under a growing number of international commitments to restore degraded lands. In addition to producing technical guidance, SER helps guide and inform policy discussions through collaborations with the International Union for the Conservation of Nature (IUCN), the Convention on Biological Diversity (CBD), and the Global Partnership on Forest Landscape Restoration (GPFLR).

Facilitating Communication and Networking

SER's Chapters, Sections and Student Associations provide high-quality local and regional networking opportunities. SER also organizes biennial world conferences, regional chapter meetings and workshops where scientists, practitioners, community leaders, and students come together to exchange ideas, showcase their work and forge new alliances.

Sharing Information and Knowledge

SER maintains the Restoration Resource Center, which provides practitioners, researchers, educators, students, and the public with access to a wide variety of resources, publications, and project information from around the world. SER publishes the peer-reviewed journal Restoration Ecology, which highlights the results of restoration projects worldwide as well as conceptual advances and new perspectives in the field. SER also publishes the Science and Practice of Ecological Restoration book series in partnership with Island Press, which now includes 28 titles.

Certification

In January 2017, SER launched the world's first certification program for ecological restoration. This program will ensure people working in the field can be credentialed based on a combination of their academic and field experience. SER certification will also allow for the creation of sub-programs for people to receive credentials for understanding the foundations of restoration ecology, especially through workshops and trainings associated with the international extension program.

You can learn more about SER and join as a member at **www.ser.org/membership**

About the Society for Ecological Restoration (LERS)

Beginning in 2004, a group of large-scale ecosystem restoration practitioners from across the United States began holding the biennial National Conference on Ecosystem Restoration (NCER) under the leadership of the University of Florida, US Geological Survey, the Natural Resources Conservation Service and US Army Corps of Engineers. NCER arose out of the need to share state-of-the art science, best management practices, policy perspective, and innovative ideas related specifically to large-scale, federally funded ecosystem restoration projects. In October 2013, the NCER community of practice formally organized as the Large-scale Ecosystem Restoration Section (LERS) within the Society for Ecological Restoration. SER's first Thematic Section, LERS has over a decade of experience uniting and amplifying the many voices of the large-scale restoration community in order to more effectively influence policy, minimize duplication of efforts, and maximize financial resources for large-scale efforts. NCER will continue as a biennial conference of LERS.

LERS addresses ecosystem restoration themes ranging from defining and measuring success, adaptive management, adaptive governance, and linking science with management decision-making. Current issues include novel ecosystems, ecosystem goods and services, urban ecosystem restoration, and climate change and ecosystem resilience. The mission of the LERS community of practice is to:

- Advance public education and enlightenment concerning large-scale ecosystem resources;
- Provide a forum for an interchange of ideas, approaches, lessons learned, and data developed relevant to planning, policy, science, and engineering of large-scale ecosystem restoration;
- Develop and encourage large-scale ecosystem restoration as a discipline by supporting student education, curriculum development, and research; and
- Encourage and evaluate the educational, scientific, engineering, and technological development and advancement of all branches of large-scale ecosystem restoration and practice.

SER members can join LERS for just $10 per year. Learn more & affiliate: **chapter.ser.org/lers**

You're Invited – Join Us!

Certified Ecological Restoration Practitioner (CERP) Q&A Session

Tuesday August 28, 2018
5:00pm - 5:30pm | Salon D

All NCER attendees are invited to attend this meeting to learn more about SER's ecological restoration practitioner certification program that encourages a high professional standard for those who are designing, implementing, overseeing, and monitoring restoration projects throughout the world.

Annual Meeting of SER's Large-Scale Ecosystem Restoration Section (LERS)

Tuesday August 28, 2018
5:30pm - 6:00pm | Salon D

All NCER attendees involved in large scale restoration are invited to attend this session and learn how you can collaborate with the best and brightest from across the globe to advance ecosystem restoration. LERS provides a forum for exchanging ideas, approaches, lessons learned, and data relevant to the planning, policy, science, and engineering of large-scale ecosystem restoration programs.

Special Feature: Gulf of Mexico Plenary

Monday, August 27, 2018 [9:00am – 5:00pm] | Mardi Gras Ballroom (Salon D & E)	
7:30am – 5:00pm	Conference Registration Opens
7:30am – 8:30am	Early Morning Refreshments in Poster Hall
8:30am – 9:00am	NCER 2018 Welcome and Introductions
9:00am – 10:15am	Panel 1: Restoration Planning for Success
10:15am – 10:45am	Refreshment Break in the Exhibit Hall
10:45am – 12:00pm	Panel 2: How Do You Assess Cumulative Effects of Regional Restoration Efforts and Evaluate Success?
12:00pm–1:30pm	Lunch on Own
1:30pm–2:45pm	Panel 3: Integrating Restoration Science and Decision-Making
2:45pm–3:15pm	Refreshment Break in Exhibit Hall
3:15pm–4:30pm	Panel 4: The Future of Restoration
4:30pm–5:00pm	Closing Keynote
5:00pm–6:00pm	Welcome Social in the Exhibit Hall

Defining Restoration Success from the Local to National Level

NCER 2018 will feature a special Gulf of Mexico-themed plenary session on Monday August 27, 2018, consisting of all-day panel discussions with distinguished speakers capped off with an afternoon keynote by Susanne Torriente, Assistant City Manager and Chief Resiliency Officer for the City of Miami Beach, FL.

Each panel in the series will focus on a different aspect or component of restoration in order to address the following question from multiple angles: Gulf Ecosystem Restoration - What Does Success Look Like? Panelists represent a diverse cross-section of disciplines including scientists, decision-makers, restoration planners, and funders, from the Gulf Region and across the nation. This series is designed to provoke new ideas by engaging audience participants and facilitating dialogue among panel experts, furthering our understanding of restoration challenges, lessons-learned, and future opportunities.

In keeping with the broader conference theme, what successful ecosystem restoration looks like will be examined from the local to national level, with a focus on identifying, measuring, achieving and communicating restoration goals. These discussions will also explore how restoration in the Gulf is influenced by work done elsewhere and how lessons learned in the Gulf might apply to other regions.

You're sure to take away new ideas from this informative session and benefit by applying similar approaches and lessons learned in your future restoration efforts.

Gulf of Mexico Plenary Organizers

Brie Bernik, *Gulf Research Program Science-Policy Fellow*, Gulf Coast Ecosystem Restoration Council, New Orleans, LA
Alyssa Dausman, *Vice President for Science*, The Water Institute of the Gulf, Baton Rouge, LA
Debbie DeVore, *Gulf Restoration Manager*, Department of the Interior, Fairhope, AL
Justin Ehrenwerth, *President and CEO*, The Water Institute of the Gulf, Baton Rouge, LA
Jessica Henkel, *Science Advisor and Coordinator*, Gulf Coast Ecosystem Restoration Council, New Orleans, LA
Brad Inman, *Chief*, Projects and Restoration Branch, New Orleans District, US Army Corps of Engineers (USACE), New Orleans, LA
Bethany Carl Kraft, *Senior Program Manager*, Gulf Region, Volkert, Inc., Mobile, AL
Denise Reed, *Professor Gratis*, University of New Orleans, New Orleans, LA
Gregory D. Steyer, *Science Advisor*, Gulf of Mexico, USGS Southeast Region, Baton Rouge, LA

Monday, August 27, 2018 (Gulf Plenary continued)	
9:00am – 10:15am	Panel 1: Restoration Planning for Success
10:15am – 10:45am	Refreshment Break in the Exhibit Hall

Panel 1: Restoration Planning for Success

The first step in the restoration process is planning. Under ideal circumstances, restoration projects are planned and designed to achieve specific goals. However, establishing those goals and setting targets that define restoration success typically present a challenge. Projects that could strive to accomplish long-term outcomes are often under pressure to yield short-term achievements according to fluid socio-political attitudes. How do we set restoration goals, and plan for restoration success on the basis of those goals? And how much planning is enough? This panel will explore these questions and more through an in-depth and interactive conversation among panelists and the audience, diving into the diverse aspects of restoration planning, including setting priorities, the art of restoration planning, and finding the balance between planning and implementation.

Panel 1 Organizers

Debbie DeVore, *Gulf Restoration Manager*, Department of the Interior, Fairhope, AL
Brad L. Inman, *Chief*, Projects and Restoration Branch, New Orleans District, U.S. Army Corps of Engineers (USACE), New Orleans, LA

Moderator

Bren Haase, *Chief*, Engineering and Research Division, Louisiana Coastal Protection and Restoration Authority (CPRA), Baton Rouge, LA

Panelists

Mark R. Wingate, Deputy District Engineer for Programs and Project Management Executive Office, New Orleans District, U.S. Army Corps of Engineers (USACE), New Orleans, LA
David Kidwell, Program Manager, NOAA National Centers for Coastal Ocean Science (NCCOS), Silver Spring, MD
Don Boesch, Professor of Marine Science, University of Maryland Center for Environmental Science, Annapolis, MD
Holly A. Bamford, Chief Conservation Officer, National Fish and Wildlife Foundation (NFWF), Washington, DC

Monday, August 27, 2018 (continued)	
10:45am–12:00pm	Panel 2: How Do You Assess Cumulative Effects of Regional Restoration Efforts and Evaluate Success?
12:00pm–1:30pm	Lunch on Own

Panel 2: How Do You Assess Cumulative Effects of Regional Restoration Efforts and Evaluate Success?

Once we have decided on regional restoration priorities, how should we measure and reconcile results to determine whether we are successfully addressing those priorities? Can we effectively establish baselines and indicators upon which to evaluate restoration success and can this be done in a manner that allows for a cumulative assessment of the effects of restoration investments throughout the Gulf? Should cumulative effects assessment be used as a general approach to inform programmatic adaptive management? What are the benefits and barriers to this approach? Bringing together diverse experiences from across the U.S. and perspectives from different levels of government, this panel will address these questions and more through a guided discussion between researchers, resource managers, and the audience.

Moderator & Organizer

Gregory D. Steyer, *Science Advisor*, Gulf of Mexico, USGS Southeast Region, Baton Rouge, LA

Panelists

Heida Diefenderfer, *Team Leader,* Ecosystems Research, Pacific Northwest National Lab (DOE) Coastal Sciences Division, Sequim, WA
Matt Harwell, *Special Assistant*, Ecologist, Everglades System Assessment Section, EPA, Gulf Ecology Division, Gulf Breeze, FL
Neil Ganju, *Research Oceanographer*, Woods Hole Coastal and Marine Science Center (USGS), Woods Hole, MA
John Callaway, *Lead Scientist*, Delta Science Program, Delta Stewardship Council, Sacramento, CA

Monday, August 27, 2018 (Gulf Plenary continued)	
1:30pm – 2:45pm	Panel 3: Integrating Restoration Science and Decision-Making
2:45pm – 3:15pm	Refreshment Break in Exhibit Hall

Panel 3: Integrating Restoration Science and Decision-Making

In order to truly integrate restoration science into sound decision-making, the needs and expectations of decision-makers must be understood by scientists. Conversely, the constraints and uncertainties associated with restoration science and project implementation must be understood by decision-makers. Restoration science and analysis can then be developed to answer questions that address those needs to the extent practicable. Dialog between scientists and decision-makers can help ensure expectations are reasonable and that goals are met. This panel will consist of experienced decision-makers and scientists who will discuss how we can better link these arenas. Through guided dialogue among themselves and the audience, panelists will share success stories for integrating restoration science with policy, as well as challenges and barriers in the Gulf and how these might be addressed.

Panel 3 Organizers

Bethany Carl Kraft, *Senior Program Manager*, Gulf Region, Volkert, Inc., Mobile, AL
Denise Reed, *Professor Gratis*, University of New Orleans, New Orleans, LA

Moderator

Fred H. Sklar, *Director and Section Administrator*, Everglades Systems Assessment (ESA) Section, South Florida Water Management District, West Palm Beach, FL

Panelists

Holly Greening, *Executive Director*, Tampa Bay Estuary Program (TBEP), Parrish, FL
Toby Baker, *Commissioner*, Texas Commission on Environmental Quality (TCEQ), Austin, TX
Denise Reed, *Professor Gratis*, University of New Orleans, New Orleans, LA

Monday, August 27, 2018 (Gulf Plenary continued)	
3:15pm – 4:30pm	Panel 4: The Future of Restoration

Panel 4: The Future of Restoration

Assuming that every dollar resulting from oil spill fines and claims is invested wisely, and that projects are generally successful, we will have barely scratched the surface of restoration needs in the Gulf region. Given the enormous ecosystem challenges in the Gulf and the region's extreme vulnerability to the impacts of relative sea level rise and other uncertainties such as climate change, coupled with declining state and federal spending levels for restoration and the science that supports it, how should we be thinking about positioning ourselves for the future 20-50 years from now while we make investments today? This panel will bring together restoration funding experts from across governmental and non-governmental organizations, as well as scientific expertise in predicting future scenarios, for a guided conversation exploring two topics that could influence the long-term success and sustainability of restoration activities: funding availability and scientific uncertainties including climate change. Panelists will engage in an audience question-and-answer session to stimulate dialog considering strategic investment, creative financing, and incorporating the best science to ensure sustainable long-term restoration investments.

Panel 4 Organizers

Bethany Carl Kraft, *Senior Program Manager*, Gulf Region, Volkert, Inc., Mobile, AL
Alyssa Dausman, *Vice President for Science*, The Water Institute of the Gulf, Baton Rouge, LA
Justin Ehrenwerth, *President and CEO*, The Water Institute of the Gulf, Baton Rouge, LA

Moderator

Bethany Carl Kraft, *Senior Program Manager*, Gulf Region, Volkert, Inc., Mobile, AL

Panelists

Tanner A. Johnson, *Director*, Gulf Environmental Benefit Fund, National Fish and Wildlife Foundation (NFWF), Baton Rouge, LA
Barry Gold, *Environment Program Director*, Walton Family Foundation, Washington, DC
Ehab Meselhe, *Professor at Tulane University & Vice President for Engineering*, The Water Institute of the Gulf, Baton Rouge, LA
Mike Chotkowski, *San Francisco Bay-Delta Science Coordinator*, U.S. Geological Survey (USGS), Sacramento, CA

Monday, August 27, 2018 (Gulf Plenary continued)	
4:30pm – 5:00pm	**Keynote Speaker:** **Susanne M. Torriente** *Assistant City Manager & Chief Resiliency Officer*, City of Miami Beach Susanne Torriente will present the closing keynote address at the end of the Gulf of Mexico-themed plenary session - Gulf Ecosystem Restoration: What Does Success Look Like? As the Chief Resiliency Officer in a city tackling the challenges of sea level rise head on, Susanne will talk about the scale and complexity of streamlining city services, initiating strategic management practices and performance measurement systems and integrating sustainability into city operations as coastal cities strive to be resilient and to adapt across the economic, human and natural environments in a changing climate.
5:00pm – 6:00pm	Welcome Social in the Exhibit Hall

Agenda-at-a-Glance

Monday, August 27, 2018	
7:30am - 5:30pm	Conference Registration Open
7:30am - 8:30am	Early Morning Refreshments in Poster & Sponsor Display Area
8:30am - 5:00pm	**Plenary Session:** Gulf of Mexico - Defining Restoration Success from the Local to National Level
12:00pm - 1:30pm	Lunch On Own
5:00pm - 6:00pm	**Welcome Social**
Tuesday, August 28, 2018	
8:00am - 5:30pm	Conference Registration Open
8:00am - 9:00am	Early Morning Refreshments in Poster & Sponsor Display Area
9:00am - 10:00am	**Plenary Session:** Adaptive Management Planning and Implementation in Ecological Restoration
10:30am - 5:00pm	Concurrent Sessions
12:00pm - 1:30pm	Lunch On Own
5:00pm - 5:30pm	**Plenary Session:** Information on SER Certified Ecological Restoration Practitioner Program (CERP)
5:30pm - 6:00pm	**Annual Meeting:** SER's Large-Scale Ecosystem Restoration Section (LERS)
6:00pm	Evening On Own
Wednesday, August 29, 2018	
8:00am - 5:30pm	Conference Registration Open
8:00am - 9:00am	Early Morning Refreshments in Poster & Sponsor Display Area
9:00am - 10:00am	**Plenary Session:** Integrating Science into Decision Making: Linking River Management and Coastal Restoration
10:30am - 5:00pm	Concurrent Sessions
12:00pm - 1:30pm	Lunch On Own
5:00pm - 8:00pm	**Poster Session and Networking Reception**
Thursday, August 30, 2018	
8:00am - 5:30pm	Conference Registration Open
8:00am - 9:00am	Early Morning Refreshments in Poster & Sponsor Display Area
9:00am - 10:00am	**Plenary Session:** Bridging Upland and Coastal Restoration at the Watershed Scale
10:30am - 5:00pm	Concurrent Sessions
12:00pm - 1:30pm	Lunch On Own
5:00pm - 5:30pm	**Closing Plenary:** Wrapping-up with the Big Picture: Science Communications and Stakeholder Engagement – The Future of Restoration
5:30pm - 6:30pm	Awards Presentation & Networking Social
6:30pm - 7:30pm	Poster and Sponsor Display Removal

Detailed Agenda

Sunday, August 26, 2018

3:00pm-7:00pm

Conference Registration Opens and Poster Presenters and Sponsors Move-In Displays
[Acadia Ballroom - Level 3]

Monday, August 27, 2018

7:30am-5:30pm

Conference Registration Open
[Acadia Ballroom Foyer -Level 3]

7:30am-8:30am

Early Morning Refreshments in Poster & Sponsor Display Area
[Acadia Ballroom - Level 3]

8:30am-5:00pm

Opening Plenary Session
[Mardi Gras Ballroom - Salons D & E - Level 3]

8:30am Welcome & Introductions
Matt Grabau, Conference Co-Chair, US Fish & Wildlife Service, Tucson, AZ, and, President, Large Scale Ecosystem Restoration Section (LERS) of the Society for Ecological Restoration,
Ryan Clark, Conference Co-Chair, Research Scientist, The Water Institute, and Immediate Past President, Large Scale Ecosystem Restoration Section (LERS) of the Society for Ecological Restoration, Baton Rouge, LA

8:45am Gulf of Mexico Plenary Session Introduction and Overview
Nicholas G. Aumen, Regional Science Advisor - South Florida, Center for Collaborative Research, US Geological Survey, Davie, FL
Brittany M. Bernik, Science Policy Fellow - NASEM Gulf Research Program, Gulf Coast Ecosystem Restoration Council, New Orleans, LA

Plenary Session: Gulf of Mexico - Defining Restoration Success from the Local to National Level

A series of four panels will focus on a different aspect or component of restoration in order to address the following question from multiple angles: Gulf Ecosystem Restoration - What Does Success Look Like? Panelists represent a diverse cross-section of disciplines including scientists, decision-makers, restoration planners, and funders, from the Gulf Region and across the nation. This series is designed to provoke new ideas by engaging audience participants and facilitating dialogue among panel experts, furthering our understanding of restoration challenges, lessons-learned, and future opportunities. In keeping with the broader conference theme, what successful ecosystem restoration looks like will be examined from the local to national level, with a focus on identifying, measuring, achieving and communicating restoration goals. These discussions will also explore how restoration in the Gulf is influenced by work done elsewhere and how lessons learned in the Gulf might apply to other regions.

Panel Session Agenda:

9:00am - 10:15am	Panel 1: Restoration Planning for Success
10:15am - 10:45am	REFRESHMENT BREAK
10:45am - 12:00pm	Panel 2: How Do You Assess Cumulative Effects of Regional Restoration Efforts and Evaluate Success?
12:00pm - 1:30pm	Lunch on Own
1:30pm - 2:45pm	Panel 3: Integrating Restoration Science and Decision-Making
2:45pm - 3:15pm	REFRESHMENT BREAK
3:15pm - 4:30pm	Panel 4: The Future of Restoration
4:30pm - 5:00pm	Keynote: ***Susanne M. Torriente,*** Assistant City Manager and Chief Resiliency Officer, City of Miami Beach, FL

Susanne Torriente will present the closing keynote address at the end of the Gulf of Mexico-themed plenary session - Gulf Ecosystem Restoration: What Does Success Look Like? As the Chief Resiliency Officer in a city tackling the challenges of sea level rise head on, Susanne will talk about the scale and complexity of scaling resilience planning and action at a city, county and regional level; as well as fully integrating resilience thinking into an organizations corporate culture and strategic budget process.

5:00pm-6:00pm

Welcome Networking Social
[Poster & Sponsor Display Area - Acadia Ballroom - Level 3]

Tuesday, August 28, 2018	
8:00am-5:30pm	**Conference Registration Open** [Acadia Ballroom Foyer - Level 3]
8:00am-9:00am	**Early Morning Refreshments in Poster & Sponsor Display Area** [Acadia Ballroom - Level 3]
9:00am-10:00am	**Plenary Session** [Mardi Gras Ballroom - Salons D & E - Level 3] **Moderator:** ***Matthew C. Harwell,*** Special Assistant to the Immediate Office, Gulf Ecology Division , National Health and Environmental Effects Research Laboratory, US EPA, Office of Research and Development , Gulf Breeze FL **Presentation:** ***Barry Gold,*** Environment Program Director, Walton Family Foundation **Adaptive Management Planning and Implementation in Ecological Restoration: Opportunities & Challenges** A changing climate is forcing individuals, communities, businesses and governments to adapt. More frequent and more severe storms, prolonged droughts, and rising seas are among the challenges we all must confront as a "new normal" where we are working. This new approach is certainly true for those of us involved in coastal restoration. Barry Gold will talk about how the Walton Family Foundation is adapting its strategies, approaches and measures of success in the face of a changing climate, and what this means for the larger issue of the restoration of coastal wetlands across the Gulf of Mexico.
10:00am-10:30am	**Morning Break in Poster & Sponsor Display Area** [Acadia Ballroom - Level 3]

	Tuesday, August 28, 2018					
	Concurrent Sessions — 10:30am - 12:00pm [Mardi Gras Ballroom - Level 3]					
	Salon D	Salon E	Salon F&G	Salon A&B	Salon H	Salon C
	Session 1	Session 2	Session 3	Session 4	Session 5	Session 6
	Restoration of 30,000 Acres of Habitat: Science or Science Fiction?	**Current Challenges for Ecosystem Restoration in Today's Economic and Political Landscape**	**Stakeholder Engagement Part 1: Collaboration to Achieve Landscape-Scale Objectives**	**Building Resilient Urban Coastal Environments and Communities through Science Based Eco-engineering**	**Emerging Eco-engineering and Seed Enhancement Technologies to Combat Land Degradation**	**Tools and Strategies for Informed Decision Making**
	Darcy Austin Delta Stewardship Council Sacramento, CA	**Natalie Peyronnin** Environmental Defense Fund, Washington, DC	**John Tull** U.S. Fish and Wildlife Service Reno, NV	**Shimrit Perkol-Finkel** ECOncrete Tech Ltd Tel Aviv, Israel	**Todd Erickson** Univ. of Western Australia|Kings Park Science, Perth, Western Australia	**Jeff Trulick** US Army Corps of Engineers Washington, DC
10:30am	Introduction	Introduction	Introduction	Introduction	Introduction	Introduction
10:40am	**Darcy Austin** Delta Stewardship Council Developing an Adaptive Management Program for California EcoRestore	**Brett Berkley** GreenVest, LLC Developing and Leveraging a Public-Private Partnership for A Large-Scale Stream and Wetland Restoration on Federal Property	**Bethany Carl Kraft** Volkert, Inc. Can Every Stakeholder Feel Heard in Large-Scale, Multi-Resource Programs? Lessons From the Gulf of Mexico	**Shimrit Perkol-Finkel** ECOncrete Tech Ltd Bringing Concrete to Life: Harnessing Biological Processes for Building Resilient Coastal Infrastructure	**David Merritt** Department of Biodiversity, Conservation and Attractions Addressing Limitations to Seed Recruitment in Large Scale Restoration	**Maggie Christman** Delta Stewardship Council Linking Science to Decision-Making Through Synthesis and Communication in California's Sacramento-San Joaquin Delta
11:00am	**Campbell Ingram** Sacramento-San Joaquin Delta Conservancy Regional Restoration Planning: a Case Study in Collaborative Restoration Science and Planning	**Mindy Simmons** US Army Corps of Engineers Ecosystem Restoration for the US Army Corps of Engineers in a Changing "Climate"- a National Perspective	**Rob Campellone** U.S. Fish and Wildlife Service The ICASS Platform: Nine Principles for Landscape Conservation Design	**Mart Black** Terrebonne Parish Consolidated Government Promoting Resiliency through Science-Based Eco-Engineering in a Coastal Louisiana Parish	**Matthew Madsen** Brigham Young University Use of Seed Enhancement Technologies for Overcoming Abiotic and Biotic Limitations to Native Plant Establishment	**Douglas Norton** EPA Informing Gulf Coast (DWH-NRDA) Ecological Restoration Options with the Recovery Potential Screening Tool
11:20am	**Rosemary Hartman** California Department of Fish and Wildlife Evaluating Restoration Effectiveness: a Tidal Wetland Monitoring Framework for California's Sacramento-San Joaquin Delta	**Simone Maloz** Restore or Retreat Financing Louisiana's Coast	**Aimee Roberson** American Bird Observatory Dos Ríos Conservation Collaborative: A Stakeholder-Driven Approach to Achieving Landscape-Scale Objectives	**Tyler Ortego** ORA Technologies Let the Oysters Do the Work: A Proposal for Creating Truly Biogenic Structures for Resilience and Restoration	**Travis Sowards** Brigham Young University Efficacy of Abscisic Acid (ABA) in Delaying Germination of *Pseudoroegneria spicata* to Reduce Seeding Failure in Sagebrush-steppe Restoration Efforts	**Kate Buenau** Pacific Northwest National Laboratory Missouri River Restoration: Science and Decision Strategies for Long-Term Recovery
11:40am	**Ramona Swenson** Environmental Science Associates (ESA) Early Implementation: Lessons Learned from the Tule Red Restoration Project)	**Kathleen Sullivan Sealey** University of Miami Hurricanes, Coastal Restoration and Climate Finance for Small Island Developing States: Study of the Bahamas	**John Tull** U.S. Fish and Wildlife Service Results-Oriented Grazing for Ecological Resilience: A Case Example of Co-Producing Conservation-Based Outcomes on Working Lands in the Great Basin	**Leslie Suazo** Ducks Unlimited, Inc. Powerful Partnerships Promote Community Resilience – The Role of NGOs in Coastal Louisiana	**Todd Erickson** Uni. of Western Australia / Kings Park Science Recent Advancements in Restoration-engineering and Seed Enhancement Technologies for Use in Mine Rehabilitation	**Auriel Fournier** Mississippi State University Guiding Coordinated Bird Monitoring Decisions Through Structured Decision Making
12:00pm-1:30pm	**Lunch on Own**					

	Tuesday, August 28, 2018					
	Concurrent Sessions — 1:30pm - 3:00pm [Mardi Gras Ballroom - Level 3]					
	Salon D	Salon E	Salon F&G	Salon A&B	Salon H	Salon C
	Session 7	Session 8	Session 9	Session 10	Session 11	Session 12
	Maximizing Wetland functions from Restoration Dollars when Constructing Wetlands from Dredged Material: Part 1	**Integrating Independent Science Review through the Adaptive Management Cycle**	**Stakeholder Engagement Part 2: Development and Communication of Landscape-Scale Adaptation Strategies**	**Ecosystem Restoration as a Tool for Enhancing Resiliency**	**Challenges and Changes in the Missouri River Recovery Program**	**The Apalachicola Regional Restoration Initiative: Restoring the Apalachicola River and Bay**
	John Andrew Nyman Louisiana State University Agricultural Center, Baton Rouge, LA	**Todd Caplan** GeoSystems Analysis, Inc Albuquerque, NM	**Genevieve Johnson** Bureau of Reclamation Boulder City, NV	**Eric Sparks** Mississippi State University Biloxi, MS	**Mark Harberg** USACE, Missouri River Recovery Program Senior Program Manager Omaha, NE	**Jason Drake** *and* **Paul Medley** National Forests in Florida Tallahassee, FL
1:30pm	Introduction	Introduction	Introduction	Introduction	Introduction	Introduction
1:40pm	**Gregg Fell** Natural Resource Professionals, LLC Privately Funded Marsh Creation Utilizing Dredge Material from the Mississippi River	**Tiffany Vanosdall** USACE, Omaha District Use of Independent Science Review to Improve Science and Collaboration During Development and Implementation of Adaptive Management on the Missouri River	**Rebekah Gibble** US Fish and Wildlife Service Using Stakeholder Engagement, Translational Science and Decision Support Tools for Ecosystem Based Management in the Florida Everglades	**Michael Burton** Stantec Consulting Services Planning and Designing Resilient Shoreline Stabilization Solutions – Case Study: Three Sisters Springs	**Craig Fleming** USACE, Integrated Science Program Evolution of Adaptive Management for the Missouri River Recovery Program	**Brian Pelc** The Nature Conservancy The Apalachicola Regional Restoration Initiative: Principles of Partnership
2:00pm	**Leigh Anne Sharp** Coastal Protection and Restoration Authority (CPRA) Louisiana State University Lessons Learned from Marsh Creation Vegetation Monitoring – Assessing the Need For Plantings and Regional Variation in Vegetation Establishment	**Steve Bosquin** South Florida Water Management District The Role of Independent Science Review in Restoration Evaluation, Planning, Implementation, and Adaptive Management for the Kissimmee River Restoration Project	**Scott Hemmerling** The Water Institute of the Gulf Incorporating Local Knowledge into Ecological Restoration Assessments – Case Studies in Coastal Louisiana	**Cathleen Wigand** US EPA Salt Marsh Sustainability in New England: Progress and Remaining Challenges	**Eric Laux** USACE, Omaha District How to Deal with Uncertainty and Objectives: Pallid Sturgeon Case Study	**Amy Jenkins** Florida Natural Areas Inventory Historic Natural Community Mapping and Rare Plant Surveys in the Apalachicola Region
2:20pm	**Paul Leberg** University of Louisiana at Lafayette Influences of Coastal Island Restoration on Seabird Populations and Their Nest Predators	**Edmund Yu** Delta Science Program, Delta Stewardship Council Adaptively Managing the California Delta: The Use of Independent Review	**Kristen Bouska** U.S. Geological Survey A Resilience Assessment of the Upper Mississippi River System	**Thomas Ries** Environmental Science Associates An Assessment of Living Shorelines/Natural Infrastructure Solutions - Towards Improving Ecosystem Resiliency	**Mike Snyder** USACE, Kansas City District Walking the Tightrope: Balancing Certainty of Action for ESA Compliance and Scientific Uncertainty through Adaptive Management on the Missouri River	**John Hogland** USFS Rocky Mountain Research Station Estimating Characteristics of Forests in the Apalachicola Region Using Remotely Sensed Imagery and Field Samples
2:40pm	**Haoran Liu** Louisiana State University Sediment Transport and Infilling Processes of Dredge Pits on the Louisiana Shelf	**Scott VanderKooi** US Geological Survey The Role of Independent Science Review in Adaptive Management of the Colorado River in Grand Canyon	**Genevieve Johnson** Bureau of Reclamation A Lessons-Learned Toolbox for Collaborative Conservation and Adaptation Strategies	**Matthew Starr** Stantec Consulting Services Keys to Planning, Designing and Permitting Resilient Coastal Restoration Projects	**Mary Roth** USACE, Northwest Division Missouri River Recovery Program Adaptive Management Governance and the Collaborative Process	**Colin Stief** Chesapeake Conservancy, Conservation Innovation Center Collaborative Planning for Apalachicola Restoration in High Resolution
3:00pm-3:30pm	**Afternoon Break in Poster & Sponsor Display Area** [Acadia Ballroom - Level 3]					

	Tuesday, August 28, 2018					
	Concurrent Sessions — 3:30pm - 5:00pm [Mardi Gras Ballroom - Level 3]					
	Salon D	Salon E	Salon F&G	Salon A&B	Salon H	Salon C
	Session 13	Session 14	Session 15	Session 16	Session 17	Session 18
	Maximizing Wetland functions from Restoration Dollars When Constructing Wetlands from Dredged Material: Part 2	**Use of Ecological Expertise for Communicating Sound Management Advice**	**Stakeholder Engagement Part 3: Community Engagement to Inform Planning and Maintain Project Support**	**A Multi-Discipline and Multi-Benefit Approach for Improving Natural Systems in the Greater Toronto Area**	**Gulf Coast Restoration Challenges and Opportunities**	**Coastal Restoration on Long Island: Getting to Scale**
	Leigh Anne Sharp Coastal Protection and Restoration Authority Lafayette, LA	**Rebecca Allee** National Oceanic and Atmospheric Administration Stennis Space Center, MS	**Cary Ehrman** Ramboll Columbus, OH	**John Stille** Toronto and Region Conservation Toronto, Ontario	**Chris Warn** Environmental Science Associates (ESA) Sarasota, FL	**Stuart Lowrie** The Nature Conservancy on Long Island East Hampton, NY
3:30pm	Introduction	Introduction	Introduction	Introduction	Introduction	Introduction
3:40pm	**Mike Carloss** Ducks Unlimited Beneficial Use of Dredged Material – A Texas Project Case Study with Public/ Private Partnership Benefits and Future Plans	**Panelists:** **Ruth Carmichael** Dauphin Island Sea Lab **Renee Collini** Northern Gulf of Mexico Sentinel Site Cooperative **Kelly Darnell** Gulf Coast Research Laboratory, University of Southern Mississippi **Kathy Goodin** NatureServe The purpose of this panel is to open a dialogue about communicating ecosystem science to natural resource managers and other decision-makers. Panelist will discuss the inclusion of stakeholders throughout project conception and implementation and the transition of ecological knowledge to coastal managers to help identify suitable restoration sites and improve coastal resiliency. Panelists will discuss how data and new science can be integrated into daily decision-making processes at the local and regional levels.	**Gabriela González-Olimón** Sonoran Institute A Community Meets a River: the Colorado River Delta Restoration Project	**John Stille** Toronto and Region Conservation Authority Integrated Restoration Prioritization: A Strategic Tool for Improving Natural Systems in the Greater Toronto Area	**Doug Robison** Environmental Science Associates (ESA) Overview of the RESTORE Act State Expenditure Plan for the State of Florida	**Stuart Lowrie** The Nature Conservancy on Long Island, East Hampton, NY The Critical Path to Achieve Coastal Restoration on Long Island
4:00pm	**Irving Mendelssohn** Louisiana State University Controls on Successful Marsh Restoration with Dredged Sediment-Slurries		**Daniel Halsey** SouthWoods Ecosystems Visualizing Strategy for Stakeholder Engagement and Buy-In	**Ralph Toninger** Toronto and Region Conservation Utilizing Collaborative Regional Based Prioritization to Garner Support and Funding for Restoration Implementation Programming	**Roberta Swann** Mobile Bay National Estuary Program Using Science to Engage Communities in Restoring Alabama's Coast	**Mary Anne Taylor** CDMSmith Coastal Restoration On Long Island: Assessing The Nitrogen Problem
4:20pm	**Thomas McGinnis** Coastal Protection and Restoration Authority Dredged Material Settlement from Marsh Creation Projects Conducted in Coastal Louisiana		**Matthew Harwell** US EPA Decision Support Tools as Opportunities for Engagement and Communication	**John DiRocco** Toronto and Region Conservation Reach Based Restoration Construction Practices: Successes and Lessons Learned from Decades of Implementation	**Brett Geesey** HDR Engineering, Inc. Keeping up with the Tide - Restoration Design Considerations in the Soft Soils of Coastal Louisiana	**Chris Clapp** The Nature Conservancy on Long Island Implementation: Technology and Funding
4:40pm	**John Andrew Nyman** Louisiana State University Agricultural Center Created Marshes Could Support More Fish and Crustaceans If They Were Designed with Lower Elevation and More Edges		**Cary Ehrman** Ramboll US Corporation Case Study: Consulting Local Communities to Assess Impacts and Promote Awareness and Participation, Port of Port Moresby Relocation, Port Moresby, Papua New Guinea	**Patrick Esson** Toronto and Region Conservation Determining Practical Key Performance Measures for Ecological Restoration Practitioners: Challenges and Considerations	**Juan Moya** Freese and Nichols Recent Coastal Geomorphological Changes of the Old Brazos River Delta: Morphodynamic Processes Affecting Habitat Adaptations	**Holly Drinkuth** The Nature Conservancy in Connecticut Replicating for Greater Impact: Adapting for Success in Long Island Sound
5:00pm-6:00pm	**Special Plenary Session:** **Join us for Two Meetings of the Society for Ecological Restoration** [Mardi Gras Ballroom - Salon D - Level 3] (see page 44 for meeting information)					

Tuesday, August 28, 2018	
5:00pm-6:00pm	**Special Plenary Session:** **Join us for Two Meetings of the Society for Ecological Restoration** [Mardi Gras Ballroom - Salon D - Level 3]
5:00pm - 5:30pm	**Certified Ecological Restoration Practitioner (CERP) Q&A Session** **Moderator:** ***Jennifer Lyndall,*** SER Certification Program Coordinator All NCER attendees are invited to attend this meeting to learn more about SER's ecological restoration practitioner certification program that encourages a high professional standard for those who are designing, implementing, overseeing, and monitoring restoration projects throughout the world.
5:30pm - 6:00pm	**Annual Meeting of SER's Large-Scale Ecosystem Restoration Section (LERS)** **Moderator:** ***Matt Grabau,*** LERS President All NCER attendees involved in large scale restoration are invited to attend this session and learn how you can collaborate with the best and brightest from across the globe to advance ecosystem restoration. LERS provides a forum for exchanging ideas, approaches, lessons learned, and data relevant to the planning, policy, science, and engineering of large-scale ecosystem restoration programs. ***Be sure to join us!***
6:00pm	**Evening on Own**

Wednesday, August 29, 2018	
8:00am-5:30pm	**Conference Registration Open** [Acadia Ballroom Foyer - Level 3]
8:00am-9:00am	**Early Morning Refreshments in Poster & Sponsor Display Area** [Acadia Ballroom - Level 3]
9:00am-10:00am	**Plenary Session** [Mardi Gras Ballroom - Salons D & E - Level 3] **Moderator:** ***Darcy Austin****,* Program Manager II, Delta Science Program, Delta Stewardship Council, Sacramento, CA **Presentation:** ***Peter Goodwin,*** President, UMCES **Integrating Science into Decision Making: Linking River Management and Coastal Restoration** Water quality and quantity have broad impacts including ecosystem health, agricultural and fishery resources, and quality of life. Environmental managers face challenges from estimating effectiveness of restoration practices, competing stakeholder requests, and potentially high financial and societal costs. Peter Goodwin will speak about his experiences applying ecohydraulic (linkages between physical processes, management actions, and ecological responses) principles while serving as the Lead Scientist for the California Delta Science Program as well as a former member of the CALFED Independent Science Board.
10:00am-10:30am	**Morning Break in Poster & Sponsor Display Area** [Acadia Ballroom - Level 3]

	Wednesday, August 29, 2018					
	Concurrent Sessions — 10:30am - 12:00pm [Mardi Gras Ballroom - Level 3]					
	Salon D	Salon E	Salon F&G	Salon A&B	Salon H	Salon C
	Session 19	Session 20	Session 21	Session 22	Session 23	Session 24
	Data Management Best Practices for Ecological Restoration	**Approaches to Demonstrating the Cumulative Effects of Large-Scale Ecosystem Restoration**	**Drones 101: An Introduction to Drones as a Restoration Tool**	**Engaging Non-traditional Partners in Restoration Projects**	**Chesapeake Bay Adaptive Management and Decision-making**	**Use of Models in Ecosystem Restoration**
	Judith Schofield GDIT, Alexandria, VA *and* **Louis Blume,** USEPA, Chicago, IL	**Heida Diefenderfer** *and* **Gary Johnson** Pacific Northwest National Laboratory Sequim, WA	**Joe Baustian** The Nature Conservancy Baton Rouge, LA	**Kim Reyher** Coalition to Restore Coastal Louisiana Baton Rouge, LA	**Mike Chotkowski** US Geological Survey Sacramento, CA	**Mike Burton** Stantec Sarasota, FL
10:30am	Introduction	Introduction	Introduction	Introduction	Introduction	Introduction
10:40am	**Robert Sutte**r GDIT A Future For Data: An Overview of Data Management for Analysis, Decision-making and Reuse	**Panelists:** **Kate E. Buenau** Pacific Northwest National Laboratory **Andrew J. Loschiavo** U.S. Army Corps of Engineers-Jacksonville District **Gregory D. Steyer** U.S. Geological Survey **Elene Trujillo** Puget Sound Partnership Panelists representing the Florida Everglades, Gulf Coast, Missouri River and Puget Sound will discuss emerging methods that large-scale ecosystem restoration programs nationwide are developing to evaluate cumulative effects of multiple restoration actions at ecosystem and landscape scales.	**Session Description:** Unmanned aerial vehicles, or drones, are becoming increasingly popular tools in the research and restoration community, but how useful are they really? This session gives an overview of drone technology, operation principles, applicable laws, equipment costs, limitations, training and learning curves and usefulness of this technology for research and restoration professionals.	**Helen Rose Patterson** National Wildlife Federation A Rabbi, A Priest and An Imam Get on Boat: Engaging the Faith Community in Louisiana's Land Loss Crisis	**Mike Chotkowski** US Geological Survey Using Decision Support Relationships to Improve Ecosystem Management	**Leonard Pearlstine** Everglades National Park Probabilistic Simulation of Vegetation Dynamics in the Everglades Vegetation Succession Model (ELVES)
11:00am	**Craig Palmer** GDIT The Role of Data Management in Quality Assurance of Ecological Restoration Data			**Samantha Carter** National Wildlife Federation Cooking Up the Coast: How Chefs Can Help Restoration Efforts	**David Goshorn** Maryland Department of Natural Resources The Chesapeake Bay Partnership's Strategy Review System: Developing an Adaptive Management System for Restoring the Chesapeake Bay	**Zhonglong Zhang** LimnoTech, ERDC Environmental Laboratory An Integrated HEC-RAS and Riparian Vegetation Simulation Module System and Its Application to the Sacramento River
11:20am	**Brick Fevold** GDIT A Data Management Plan Template for Ecological Restoration and Monitoring			**John O'Donnell** Lake Pontchartrain Basin Foundation Improving Water Quality through Intensive Community Engagement	**Laura Drescher** US EPA Is It Working? Evaluating Successes and Challenges in Implementing Adaptive Management in the Chesapeake Bay Program Partnership	**Andrew Guzzomi** University of Western Australia Restoration-Engineering – A Blended Science-Engineering Model
11:40am	**Todd Redder** LimnoTech Application of Data Management and Decision Support Tools to Support Coastal Wetland Management in the Laurentian Great Lakes		**Whitney Broussard** JESCO, Inc. Mapping Coastal Land Use, Elevation, and Wetland Vegetation with UAS (Drone) Imagery	**Corey Miller** Coalition to Restore Coastal Louisiana Managing Natural Resource Conflicts while Implementing Large-Scale Ecosystem Restoration	**Lucinda Power** US EPA A Changing Chesapeake Bay: A New Paradigm for Stakeholder Engagement	**Kevin McIntyre** Jones Research Center Using Wildlife Habitat Models to Evaluate Management Endpoints for Open Pine Woodland and Savanna
12:00pm-1:30pm	**Lunch on Own**					

	Wednesday, August 29, 2018					
	Concurrent Sessions — 1:30pm - 3:00pm [Mardi Gras Ballroom - Level 3]					
	Salon D	**Salon E**	**Salon F&G**	**Salon A&B**	**Salon H**	**Salon C**
	Session 25	**Session 26**	**Session 27**	**Session 28**	**Session 29**	**Session 30**
	Approaches to Improve Quality and Reliability of Data Collected for Ecological Restoration Projects	**Measuring Success of Multiple Gulf Coast Restoration Programs: Accountability for Long-Term Success**	**Drones 201: A Primer on Analyzing Drone Data**	**Plant Materials: The Seeds of Restoration**	**Tools for Assessing Ecosystem Services in Restoration: Part 1**	**Changing Hydrologic Conditions**
	Craig Palmer GDIT Alexandria, VA	**David Hanson** HansonRM Blaine, WA	**Dan Staley** Arbor Drone, LLC Aurora, CO	**Matthew Grabau** US Fish and Wildlife Service, Tucson, AZ	**Matt Harwell** USEPA, Gulf Breeze, FL	**Carol Parsons Richards** CPRA Baton Rouge, LA
1:30pm	Introduction	Introduction	Introduction	Introduction	Introduction	Introduction
1:40pm	**Louis Blume** USEPA Guidance for the Application of Quality Assurance and Quality Control Principles to Ecological Restoration Project Monitoring	**Panelists:** **Lt. Gen. Jeffrey Talley (ret)** **Rost Parsons** NOAA National Centers for Environmental Information **Robert Moorhead** Northern Gulf Institute, Mississippi State University **Buck Sutter** RESTORE Council Expert panelists will discuss innovative approaches to measuring the cumulative success and benefits from multiple restoration programs while focusing on (1) the challenges and opportunities associated with meta-analysis of the massive amount of data generated from DWH settlement activities; and (2) how advancements in technology can be incorporated in the effort to understand overall restoration success when the focus on funding monitoring activities is on project performance.	**Session Description:** This session details what research and restoration professionals need to know when considering how to collect and analyze data with a drone. We'll cover sensors ranging from visual to multispectral, hyperspectral and LiDAR; and, data analysis ranging from laptop programs, cloud-based subscriptions, and data analysis companies. Attendees will also learn issues surrounding data collection in the field, costs of data analysis, and view equipment and data from several widely differing missions.	**Joan Walker** US Forest Service, Southern Research Station Are Seed Collection Zones Needed for Sourcing Plant Materials in Longleaf Pine Ecosystem Restoration?	**Leah Sharpe** US Environmental Protection Agency A Tool for Assessing Ecosystem Goods and Services in Ecosystem Restoration - The Final Ecosystem Goods and Services Scoping Tool	**Jennifer Mouton** CPRA Lowermost Mississippi River Management Program
2:00pm	**Justin Telech** GDIT Project Planning Tools to Improve Data Quality			**R. Alan Shadow** USDA NRCS Longleaf Pine Understory Native Plant Development at The USDA NRCS East Texas Plant Materials Center	**Marc Russell** US Environmental Protection Agency Assessing Ecosystem Services Supply for Restoration Scenarios	**David Tomasko** Environmental Science Associates Ecosystem Restoration Via Reestablishing Historical Tidal Patterns
2:20pm	**Raymond D'Hollander** Parsons Integration of Design Factors into Post-Construction Ecological Restoration QA/QC			**Justin Blake Taylor** Brigham Young University Seed Coating Technologies that Reduce Rodent Granivory during Rangeland Reseeding	**Justin Bousquin** US Environmental Protection Agency Benefit Indicator Tools for Assessing Restoration Projects Based on Who Benefits From Restored Ecosystem Services	**Honora Buras** CPRA Evaluating Future Success of a Freshwater River Re-Introduction to the Floodplain Forests of Maurepas Swamp, Louisiana
2:40pm	**Edward Roseman** USGS Great Lakes Science Center Developing a Science and Monitoring Strategy to Assess Recovery of Fisheries Habitats and Populations in the St. Clair-Detroit River System			**Miriam Muñoz-Rojas** The University of Western Australia Innovative Strategies for Restoring Functionality of Reconstructed Soils in Dry Land	**Kamran Abdollahi** Southern University Agricultural Research and Extension Center Monitoring Urban Forest Structure and Function after Hurricane and Assessing Ecosystem Services for Louisiana Cities	**Fred Sklar** South Florida Water Management District The Everglades: At the Forefront of Transition
3:00pm-3:30pm	**Afternoon Break in Poster & Sponsor Display Area** [Acadia Ballroom - Level 3]					

Wednesday, August 29, 2018

Concurrent Sessions — 3:30pm - 5:00pm [Mardi Gras Ballroom - Level 3]

	Salon F&G	Salon E	Salon A&B	Salon H	Salon C
	Session 31	**Session 32**	**Session 33**	**Session 34**	**Session 35**
	Colorado River Delta Restoration – Insights into Binational Cooperation and Sustainability	**Implementation of Large-Scale River Diversions: Stakeholders' Perspectives**	**Incorporation of Science, Monitoring, and Modeling in System Wide Restoration Planning**	**Hurricanes and Other Extreme Weather Events: How they Impact Ecosystem Restoration Plans**	**Tools for Assessing Ecosystem Services in Restoration: Part 2**
	Peter Skidmore Walton Family Foundation, Denver, CO	**Brad Inman** US Army Corps of Engineers, New Orleans District, LA	**Ann Hijuelos** US Geological Survey New Orleans, LA	**Mike Donahue** AECOM Traverse City, MI	**Deborah January-Bevers** Houston Wilderness Houston, TX
3:30pm	**Introduction**	**Introduction**	**Introduction**	**Introduction**	**Introduction**
3:40pm	**Osvel Hinojosa** Pronatura Noroeste Binational Cooperation in Restoring the Colorado River Delta - Stakeholder and Government Engagement Across Borders	**Panelists:** **Bradley Barth** CPRA *An Applicant's Perspective* **Eddy Carter** G.E.C., Inc. *A Contractor's Perspective* **Jeff Varisco** US Army Corps of Engineers, New Orleans District *A Regulatory Agency's Perspective* **Mel Landry** NOAA Restoration Center *A Natural Resource Damage Assessment (NRDA) Trustee's Perspective* To combat coastal land loss, the State of Louisiana is advancing several large-scale sediment diversions on the Mississippi River, including the Mid-Barataria Sediment Diversion. Numerous impacted stakeholders, with competing interests, concerns and/or responsibilities, often envision success, both short and long-term, differently. This session includes the State's, the Corps', and NOAA's (Deep Water Horizon Trustee) visions of success, and the views of a contractor working on the project.	**Julien Lartigue** NOAA RESTORE Science Program Actionable Science in The Gulf of Mexico: Connecting Researchers and Resource Managers	**Tony Williams** Texas General Land Office Coastal Planning in Texas	**Gary Palmer** Griffith University Turning Over a New Leaf: Long-Term Monitoring for Improved Ecological Restoration
4:00pm	**Karen Schlatter** Sonoran Institute Progress and Trends in Restoration Planning and Implementation in the Colorado River Delta		**George Ramseur Jr.** State of Mississippi The LA, MS, AL Coastal System (LMACS) Comprehensive Estuarine Assessment & Restoration Implementation Plan	**Chris Mack** AECOM The South Carolina Floods: Enhancing Community Resiliency with Adaptive Risk Management Strategies	**Eldon Blancher** Moffat & Nichol Calculating Net Ecosystem Service Benefits for the Lightning Point Living Shoreline, Bayou La Batre, Alabama
4:20pm	**Edgar Carrera** The Nature Conservancy Restoration Monitoring - A Spectrum of Questions, Interests, and Audiences		**Ann Hijuelos** US Geological Survey Monitoring and Adaptive Management Manual to Support Integrated Ecosystem Restoration for The Deepwater Horizon Oil Spill	**Christopher Benosky** AECOM Resiliency in Design: the RBD Meadowlands Project	**Matt Gorstein** NOAA Storm Damage Reduction Benefits Of Natural Infrastructure In The Jacques Cousteau Nerr
4:40pm	**Peter Skidmore** Walton Family Foundation Looking Forward: Scale, Sustainability, and Governance Opportunities and Challenges in the Colorado River Delta		**Michelle Meyers** US Geological Survey A Network of Networks: Building Out the Restore Council's Monitoring and Assessment Program	**Denise Reed** University of New Orleans Extreme Events: Obstacles and Opportunities for Large Scale Ecosystem Restoration	**Deborah January-Bevers** Houston Wilderness Connecting Ecosystem Services to Human & Wildlife Resiliency - Case Studies in the Greater Houston, Texas Region
5:00pm-8:00pm	**Poster Session and Networking Reception** [Acadia Ballroom - Level 3]				

Thursday, August 30, 2018	
8:00am-5:30pm	**Conference Registration Open** [Acadia Ballroom Foyer - Level 3]
8:00am-9:00am	**Early Morning Refreshments in Poster & Sponsor Display Area** [Acadia Ballroom - Level 3]
9:00am-10:00am	**Plenary Session** [Mardi Gras Ballroom - Salons D & E - Level 3] **Moderator:** ***Ryan Clark****,* Conference Co-Chair, Research Scientist, The Water Institute, and Immediate Past President, and President, Large Scale Ecosystem Restoration Section (LERS) of the Society for Ecological Restoration, Baton Rouge, LA **Presentation:** ***Garret Graves,*** Congressman, Louisiana's Sixth Congressional District, Baton Rouge, LA Congressman Garret Graves is a Republican Member of Congress representing Louisiana's Sixth Congressional District. Graves previously served as Louisiana's Chairman of the Coastal Protection and Restoration Authority (CPRA) where he managed one of America's largest civil works programs in history. Under Graves' tenure, Louisiana constructed more flood protection infrastructure and restored more miles of coastline than at any other period of time in the State's history. An expert on multiple topics relevant to NCER 2018, Congressman Graves will share an update about his work in congress, his experience going from State to Federal Government, and his work on subcommittees and the funding he has secured for ecosystem restoration and disaster recovery. His experience with multiple coastal and riverine disasters (hurricanes, oil spill, river floods of 2016, etc.), gives him an insider's view to how important the Mississippi River and its delta are to Louisiana and the nation as a whole. Rivers including the Mississippi, Amite/Comite and Bayou Lafourche, to name a few, can have multiple ecosystem benefits like flood risk reduction in the watersheds themselves, and at the coast where they deliver necessary freshwater, sediment, and nutrients to nourish coastal ecosystems, in addition to reducing nutrient overload to Louisiana's coastal "Dead Zone".
10:00am-10:30am	**Morning Break in Poster & Sponsor Display Area** [Acadia Ballroom - Level 3]

Thursday, August 30, 2018

Concurrent Sessions — 10:30am - 12:00pm [Mardi Gras Ballroom - Level 3]

	Salon F&G	Salon E	Salon A&B	Salon H	Salon C
	Session 36	**Session 37**	**Session 38**	**Session 39**	**Session 40**
	Hydrologic Restoration Part 1: Re-Establishing Ecological Processes in Freshwater Ecosystems	**Public-Private-NGO Partnerships for Enhancing Resilience of the Working Coast via Ecosystem Restoration**	**Ecological Site Descriptions (ESDs): Introduction to a Landscape Restoration Tool**	**Ecosystem Scale Oyster Reef Restoration in the Chesapeake Bay: Lessons in Partnerships and Science to Achieve Results**	**Determining Everglades Ecosystem Restoration Benefits for Projects**
	Matthew Grabau US Fish and Wildlife Service, Tucson, AZ	**Justin Ehrenwerth** The Water Institute of the Gulf, Baton Rouge, LA	**Terrell Erickson** USDA Natural Resources Conservation Service, Washington, D.C.	**Bruce Vogt** NOAA, Annapolis, MD	**Andrew LoSchiavo** U.S. Army Corps of Engineers, Jacksonville, FL
10:30am	Introduction	Introduction	Introduction	Introduction	Introduction
10:40am	**Nicholas Nelson** Inter-Fluve, Inc. The Ecology of Dam Removal - A National Look at Ecosystem Restoration Challenges and Opportunities for Removal of River Barriers	**Panelists:** **Ian Voparil** Shell **Joni Tuck** Greater Lafourche Port Commission **Simone Maloz** Restore or Retreat **Mead Allison** Tulane University **Leah Brown** Chevron Public-Private-NGO Partnerships (P3+) were formed to combine the resources and expertise of public, private, and NGOs to enhance coastal habitat and provide protection to critical infrastructure and communities, using the dredged material created by port expansion. Advanced science and engineering are being used to optimize the protective and habitat services provided by the restored ecosystems. This approach can serve as a model for collaborative planning and shared funding to construct nature-based defenses for infrastructure and communities.	**Jamin Johanson** USDA Natural Resources Conservation Service Introduction and Overview of Ecological Site Descriptions and their History	**Susan Conner** U.S. Army Corps of Engineers Tributary Scale Oyster Restoration in the Chesapeake Bay: Setting Goals to Drive Partnerships and Collaboration	**Jenna May** U.S. Army Corps of Engineers RECOVER Applied Science Framework Supporting Everglades Restoration Implementation
11:00am	**Lisa Hollingsworth-Segedy** American Rivers Sediment Management for Dam Removal: A Review of Regulations, Guidance, and Best Practices		**Sarah Quistberg** USDA Natural Resources Conservation Service Ecological Site Concepts for Wet Areas	**Andrew McGowan** NOAA Chesapeake Bay Office - ERT Location Matters: Habitat Mapping and GIS Tools Improve Oyster Restoration Siting And Survival	**Michael Simmons** U.S. Army Corps of Engineers RECOVER Evaluation of Restoration Outcomes
11:20am	**Dave Buzan** Freese and Nichols Environmental Flows in Texas: Successes and Lessons Learned		**Stacey Clark** USDA Natural Resources Conservation Service Use of Ecological Site Descriptions for Restoration and Conservation Planning	**David Bruce** NOAA Fisheries Quantifying Ecosystem Services of Restored Oyster Reefs	**Gretchen Ehlinger** U.S. Army Corps of Engineers Assessment of Actual Restoration Benefits
11:40am	**G. Lynn Wingard** US Geological Survey Estimating Pre-20th Century Hydrologic Conditions for Restoration of the Greater Everglades Ecosystem		**Skye Wills** USDA Natural Resources Conservation Service Dynamic Soil Properties in Organic Soils of Southeast Michigan: Case Study in Use of Ecological Site Concepts	**Lauren Taneyhill** ERT, Inc. / NOAA Sustaining Restored Oyster Reefs through Cross-Sector Partnerships	**Howard Gonzales, Jr.** U.S. Army Corps of Engineers Adaptive Management Actions to Improve Restoration Outcomes
12:00pm-1:30pm	**Lunch on Own**				

Thursday, August 30, 2018

Concurrent Sessions — 1:30pm - 3:00pm [Mardi Gras Ballroom - Level 3]

	Salon F&G	Salon E	Salon A&B	Salon H	Salon C
	Session 41	**Session 42**	**Session 43**	**Session 44**	**Session 45**
	Hydrologic Restoration Part 2: Delivery of Water to the Coast and Managed through-estuary Flows	**Sea Level Rise: Overcoming the Problems of Connecting Science to Management Part 1: Science**	**Local-scale Planning and Implementation of Restoration and Conservation**	**Thin Layer Placement of Dredged Material to Maintain Elevation in Salt Marshes Facing Sea Level Rise**	**Using Restorability and Resilience Concepts in Evaluating and Valuing Ecosystem Service Benefits of Restoration**
	Ryan Clark The Water Institute of the Gulf, Baton Rouge, LA	**Lynn Wingard** U.S. Geological Survey, Reston, VA *and* **Michael Savarese,** Florida Gulf Coast University, Fort Myers, FL	**Alice Bailey** Environmental Consulting and Technology, Inc Ann Arbor , MI	**Damarys Acevedo-Mackey** US Army Engineer Research and Development Center Vicksburg, MS	**Lisa Wainger** Univ of Maryland Ctr Environmental Science Solomons, MD
1:30pm	Introduction	Introduction	Introduction	Introduction	Introduction
1:40pm	**John Callaway** Delta Stewardship Council Advances in Establishing Science-Based Inflow and Outflow Goals in the Sacramento-San Joaquin River Delta	**Donald Cahoon** U.S. Geological Survey Factors to Consider in Developing a Strategic Monitoring Network of Set-Mh Stations in the Northeast United States	**Thomas Ankersen** University of Florida College of Law From Shoreline to State Line: Integrating Marine Resource Restoration, Enhancement and Protection into Local Government Planning Processes	**Elizabeth Murray** US Army Engineer Research and Development Center Maintaining Salt Marshes in the Face of Sea Level Rise: Thin Layer Placement Opportunities, Practice and Challenges	**Kristen Hychka** Univ of Maryland Ctr for Environmental Science Measuring Resilience Derived from Habitat Connectivity to Improve Estimates of Restoration Benefits
2:00pm	**Karen Schlatter** Sonoran Institute Developing a Strategy for Reconnecting the Colorado River with the Sea	**Michael Savarese** Florida Gulf Coast University Sea-Level Rise Rates, Projections, and Effects in Southern Florida: Connecting Science to Natural and Urban Resource Management	**Savanna Barry** UF/IFAS Nature Coast Biological Station Building Consensus, Building A Shoreline: A Stakeholder-Driven Process to Address Erosion Along Cedar Key's Daughtry Bayou	**Christine VanZomeren** US Army Engineer Research and Development Center Soil Biogeochemistry Response Following Thin Layer Placement in a New Jersey Salt Marsh	**Solange Filoso** Univ of Maryland Ctr for Environmental Science Opportunities and Limits for Stream Restoration to Improve Watershed Functions and Increase Resilience
2:20pm	**Sharlene Leurig** Meadows Center for Water and the Environment Market-based Strategies for Ensuring Freshwater Inflows in Texas	**Krista Jankowski** Louisiana Coastal Protection and Restoration Authority and Tulane University Ecosystem Vulnerability in a Changing World: The Case of Coastal Louisiana	**Peter Sheng** University of Florida Adaptation of Coastal Natural and Urban Ecosystems (ACUNE) in SW Florida	**Richard Ambrose** University of California, Los Angeles Soils and Marsh Creek Evolution at a Marsh Augmentation Project in Seal Beach, Ca	**Carolyn Currin** NOAA National Centers for Coastal Ocean Science Measuring the Resilience of Salt Marshes Integrated into Living Shoreline and Other Nature-Based Efforts to Protect Coastal Infrastructure
2:40pm	**Eric White** The Water Institute of the Gulf Ecological Flow Modeling in Louisiana & Texas Estuaries	**Q&A Discussion**	**Shaddi Kamel** Louis Berger Higbee Beach Restoration Project – Restoration Built on the Shoulders of Collaboration	**Susan Bailey** US Army Engineer Research and Development Center Adapting a Model of Sediment Consolidation for Use in Marsh Thin Layer Projects	**Susan Taylor** Abt Associates Building Ecological and Community Resilience and Measuring Success of the Department of Interior Sandy Resilience and Monitoring Projects
3:00pm-3:30pm	**Afternoon Break in Poster & Sponsor Display Area** [Acadia Ballroom - Level 3]				

Thursday, August 30, 2018

Concurrent Sessions — 3:30pm - 5:00pm [Mardi Gras Ballroom - Level 3]

	Salon F&G	Salon E	Salon A&B	Salon H	Salon C
	Session 46	**Session 47**	**Session 48**	**Session 49**	**Session 50**
	Hydrologic Restoration Part 3: Stream and Wetland Restoration in an Urban Environment	**Sea Level Rise: Overcoming the Problems of Connecting Science to Management Part 2: Strategies**	**Drought and Coastal Ecosystems: Monitoring and Modeling Using the Coastal Salinity Index**	**Multiple Benefits of Ecosystem Restoration Via the Beneficial Use of Dredged Material**	**Using Ecosystem Models to Evaluate Restoration Projects and Nature Based Defenses**
	Sharlene Leurig Meadow Center for Water and the Environment at Texas State University, San Marcos, TX	**Lynn Wingard** U.S. Geological Survey, Reston, VA and **Michael Savarese,** Florida Gulf Coast University, Fort Myers, FL	**Kirsten Lackstrom** Carolinas Integrated Sciences & Assessments Columbia, SC	**Mark R. Wingate** US Army Corps of Engineers, New Orleans District, New Orleans, LA	**Ehab Meselhe** *and* **Melissa Baustian** The Water Institute of the Gulf, Baton Rouge, LA
3:30pm	Introduction	Introduction	Introduction	Introduction	Introduction
3:40pm	**Lynde Dodd** US Army Research and Development Center Flood Protection and Ecosystem Restoration in an Urban Environment: The Dallas Floodway Extension, Dallas, Texas	**Jennifer Jurado** Natural Resources and Management Division, Broward County, FL **John Tirpak** U.S. Fish & Wildlife Service **Denise Reed** University of New Orleans **David Kidwell** NOAA The purpose of this session is to discuss strategies for effectively connecting scientific information on sea level rise to planners and decision makers addressing the impacts of sea level rise on ecosystems and communities. Panel members will discuss tools and methods that have worked, identify information gaps, and areas for improvement. The session will present the perspectives of decision-makers and scientists and will encourage audience participation to identify a path forward.	**Kirsten Lackstrom** Carolinas Integrated Sciences & Assessments Coastal Drought and Need for a Coastal Salinity Index	**Burton Suedel** US Army Engineer Research and Development Center Restoring River Island Habitat in the Atchafalaya River, LA, Using Engineering with Nature Principles	**Dubravko Justic** Louisiana State University Forecasting Gulf of Mexico Hypoxia under Scenarios of Watershed and River Management
4:00pm	**Isaac Hinson** City of Charlotte Storm Water Services Division Consideration of Small-scale Stream and Wetland Restoration Efforts in an Urban Environment		**Matthew Petkewich** USGS Monitoring Drought Along the Gulf of Mexico and the Southeastern Atlantic Ocean Using the Coastal Salinity Index	**Joseph Berlin** AECOM Evaluation of a Beneficial Use Bank to Promote the Beneficial Use of Federal Dredged Material	**Hongqing Wang** USGS WARC Monitoring and Modeling of Wave and Current Energy Reduction by Living Shoreline Structures in Gandy's Beach, New Jersey
4:20pm	**Sachin Apte** Louis Berger Group New York City Overcomes Ecosystem Restoration Challenges in Current Economic Landscape by Constructing Its First Mitigation Bank as A Means to Restore Degraded Urban Wetlands		**Christopher Swarzenski** USGS Linking the Coastal Salinity Index with Freshwater Inflows to Characterize Salinity Variability in Gulf of Mexico Estuaries	**Jamil Ibrahim** Stantec Consulting Services Strategic Placement of Dredged Sediment to Naturally Accrete in Salt Marsh Systems	**Ehab Meselhe** The Water Institute of the Gulf Working with Local Communities to Develop a Nature-Based Defense Assessment and Solution Tool
4:40pm	**John O'Meara** Environmental Consulting & Technology, Inc. Implementation of Coastal Habitat in The Detroit Area of Concern - Stony and Celeron Islands		**Simeon Yurek** USGS Predicting Long Term Performance and Risk of Oyster Reef Restorations Under Deep Uncertainty in Climate and Management Policy	**Tim Carruthers** The Water Institute Potential Benefits to Wave Attenuation, Sediment Processes, and SAV Habitat from Terrace Restoration (SREDS)	**Gary Brown** US Army Corps of Engineers Hydrodynamic, Salinity, And Morphologic Modeling of Basin-Side Effects Associated with Proposed Mississippi River Sediment Diversions using the Adaptive Hydraulics Model Coupled with the SEDLIB Sediment Transport Library
5:00pm-5:30pm	**Closing Plenary Session** [Mardi Gras Ballroom - Salon D - Level 3]				

Thursday, August 30, 2018	
5:00pm-5:30pm	**Closing Plenary** [Mardi Gras Ballroom - Salon D - Level 3] **Moderator:** ***Nicholas G. Aumen,*** Regional Science Advisor - South Florida, Center for Collaborative Research, US Geological Survey, Davie, FL **Presentation:** ***Don Boesch,*** Professor of Marine Science, University of Maryland Center for Environmental Science, Annapolis, MD **Wrapping-up with the Big Picture: Science Communications and Stakeholder Engagement –** ***The Future of Restoration*** Throughout this conference multiple presentations and plenary talks will have focused on restoring coastal ecosystems under multiple threats including continued growth and development pressures, pollution loading, a warming climate, and increasing rates of sea level rise. Don Boesch, relying on his vast scientific experience in the Chesapeake Bay and Gulf of Mexico, will summarize the important take-away messages from this conference in the context of federal and state environmental leadership (or lack thereof) while identifying important next steps for the scientific and management communities.
5:30pm-6:30pm	**Closing Networking Social and Announcement of SER-LERS Student Competition Award Recipients** [Acadia Ballroom - Poster & Sponsor Display Area] ***Matt Grabau,*** Conference Co-Chair, President, Large Scale Ecosystem Restoration Section (LERS) of the Society for Ecological Restoration, US Fish & Wildlife Service, Tucson, AZ ***Ryan Clark,*** Conference Co-Chair, Research Scientist, The Water Institute, and Immediate Past President, and President, Large Scale Ecosystem Restoration Section (LERS) of the Society for Ecological Restoration, Baton Rouge, LA The Large Scale Ecosystem Restoration Section (LERS) of the Society of Ecological Restoration (SER) is sponsoring a Student Competition that will be held in conjunction with NCER 2018. All students giving presentations are automatically enrolled. Winners will be announced during this closing session, and will receive an Award Certificate and a $100 prize during the social. ***[Attention Sponsors and Poster Presenters: Please remove display materials from poster hall immediately following the social.]***
6:30pm	**NCER 2018 Concludes** [Poster Presenter & Sponsor Display Move-Out]

Poster Display Information

Poster presentations play a key role in the success of NCER 2018. Much time will be dedicated for viewing posters, allowing scientists, policy makers, planners, practitioners and managers to interact and use these opportunities to share details of their work, successes and lessons learned.

Early morning, mid-day and afternoon refreshments will be served in the poster session room each day. In addition, a formal reception for each poster session will take place in the poster room. (See detailed schedule below. Please be present at your poster during the appointed time.)

Poster Set Up Begins:	**Sunday August 26 | 3:00pm – 7:00pm** Posters may also be set-up during the morning refreshment period from 7:30am – 9:00am on Tuesday. All posters are on display throughout the conference.
Poster Session & Happy Hour	**Wednesday, August 29 | 5:00pm – 8:00pm**
Poster Session One:	**Wednesday, August 29 | 5:30pm – 6:15pm** (Presenters at ODD NUMBERED BOARDS to stand at their posters.)
Poster Session Two:	**Wednesday, August 29 | 6:15pm – 7:00pm** (Presenters at EVEN NUMBERED BOARDS to stand at their posters.)
Poster Removal:	**Thursday, August 30 | 6:30pm – 7:00pm** (Immediately following the networking social.)

** Organizers are not responsible for posters that are not removed from the boards and get discarded by the board vendor.*

Important details to note:

- Please be available during the formal poster session. This is the primary opportunity for attendees to meet with you personally and ask questions about your work, so stand at your poster during the appointed time.
- Poster display boards will be dismantled and removed by the vendor on Thursday evening at the end of the social. Please remove your poster when leaving the social.

Poster Directory

No.	First Name	Last Name	Organization	City	ST	Country	Abstract Title
23	George	Athanasakes	Stantec Consulting Services Inc.	Louisville	KY	United States	Katy Prairie Stream Restoration: An Illustrative Use of Stream Restoration to Create Resilient Ecosystems
24	Alice	Bailey	Environmental Consulting & Technology, Inc.	Ann Arbor	MI	United States	Oxbow Restoration: Re-establishment of Habitat and Recreation on the Rouge River
16	Larry	Beggs	Reef Ball Foundation	Gainesville	FL	United States	Best Practices Using Reef Balls for Living Shorelines
57	Sinéad	Borchert	Coastal Wetlands Planning, Protection, and Restoration Act (CWPPRA)	Lafayette	LA	United States	Coastal Wetland Migration with Sea-Level Rise: Quantifying the Potential for Landward Movement and Coastal Squeeze in Northern Gulf of Mexico Estuaries
58	Sinéad	Borchert	Coastal Wetlands Planning, Protection, and Restoration Act (CWPPRA)	Lafayette	LA	United States	CRMS in the Classroom: Ecosystem Monitoring Data in Phenomenon-Based Inquiry
9	Mark	Brown	USDA Forest Service	Knoxville	TN	United States	Florida's Longleaf Pine Ecosystem, Evaluating a Half Century of Change and Its Recovery Status
25	Joe	Callaghan	GeoEngineers, Inc.	Tacoma	WA	United States	Upper Clear Creek Wetland Mitigation and Fish Conservation Bank Development
10	Katherine	Carbajal	Texas A&M University	College Station	TX	United States	Simulated Population Trends of Florida Manatee Under Anthropogenic and Catastrophic Events
26	Brandon	Carr	USDA	Knox City	TX	United States	The Role of the USDA-NRCS Plant Materials Program in Ecosystem Restoration
42	Andre	Daniels	USGS	Davie	FL	United States	Faunal Monitoring in Response to Harbor Dredging in the Port of Miami and North Biscayne Bay
4	Abram	DaSilva	NOAA - National Weather Service	Wilmington	OH	United States	National Weather Service Support for Ecological Restoration in the Ohio Valley and Lake Erie Drainage Basin

No.	First Name	Last Name	Organization	City	ST	Country	Abstract Title
11	Theodore	DeWitt	US EPA	Newport	OR	United States	Using Geospatial Habitat Suitability Models to Prioritize Estuarine Areas for Conservation or Restoration of Bivalve Shellfish Beds
44	Michael	Eggleston	USGS	Ann Arbor	MI	United States	Phosphorus Retention Varies with Seiche Activity Among Great Lakes Coastal Wetlands
45	Rebekah	Gibble	USFWS	Boyton Beach	FL	United States	Lygodium Microphyllum in the Northern Everglades: Expansion, Control, And Impacts
27	Alonso	Gonzalez Cabello	AECOM	San Diego	CA	United States	Power Line Habitat Restoration Program – A Success Story
28	Hunter	Guidry	Coastal Environments, Inc.	Baton Rouge	LA	United States	Reefblk Tm – Oyster Reef Bioengineering, Mad Island Preserve, Texas: A Case Study
46	Todd	Guidry	The Dow Chemical Company	Houston	TX	United States	Innovative Water Restoration Improvement Opportunities Through Engagement with the Public, Private, And Non-Profit Sectors
1	Brittany	Hall-Scharf	University of Florida	Brooksville	FL	United States	Changing the Local Scenery by Restoring Hernando's Coast
33	Christopher	Hathcock	U.S. Fish and Wildlife Service	San Marcos	TX	United States	Effect of Water Depth on Germination and Growth of Federally Endangered Texas Wild Rice
47	Samantha	Heldman	Texas A&M University	College Station	TX	United States	Plant Invasion Across Space And Time: Chinese Tallow Range Expansion In Southeast United States
29	Raymond	Hinkle	AECOM	Clifton	NJ	United States	Assessment of Treatments and Long Term Success In Restoring Common Reed (Phragmites Australis) Dominated Marshes On Delaware Bay, 1996-2017
30	Raymond	Hinkle	AECOM	Clifton	NJ	United States	Combining Cultural/Recreational Benefits with Ecosystem Restoration – The Delaware Branch Canal Trail Project
5	Tonya	Howington	Everglades National Park	Homestead	FL	United States	Everglades Restoration and The South Florida Natural Resource Center: The Science Division of Everglades National Park
2	Madeline	Jones	Texas A&M University	College Station	TX	United States	A Stage-Structured Population Model for Deepwater Horizon Oil Spill: Potential Impacts Of Deepwater Horizon Oil Spill Event

No.	First Name	Last Name	Organization	City	ST	Country	Abstract Title
48	Colleen	Kroe	King County	Snoqualmie	WA	United States	Decreases of Carbon and Nitrogen in the Soils of a 20-Year Chronosequence of Restored Wetlands, Washington State, USA
12	Kristopher	Kusnerik	Florida Museum of Natural History	Gainesville	FL	United States	Tracking Changes in the Historical Ecology of Florida's Freshwater Springs and Rivers Using Recent and Fossil Mollusks
54	Kirsten	Lackstrom	Carolinas Integrated Sciences & Assessments (CISA)	Columbia	SC	United States	Climate-Smart Conservation: An Assessment of State Wildlife Action Plans from the Southeastern United States
49	Bryan	Locher	University of Central Florida	Orlando	FL	United States	The Recovery of Sediment Nutrients in Restored Oyster Reefs in the Indian River Lagoon, FL
6	Jen	Lyndall	Society for Ecological Restoration	Washington	DC	United States	SER Certification Program for Ecological Restoration Practitioners
34	Mickey	Marcus	SWCA Environmental Consultants	Amherst	MA	United States	Riverbank Stabilization on the Connecticut River: Lessons Learned From 25 Years Of Restoration
13	Agnes	McLean	National Park Service	Homestead	FL	United States	Informing Water Management Decisions In Large Scale Restoration Programs: The Use of Ecological Models in the Evaluation Of Project Plans
14	Anny Katherinne	Meneses Mosquera	Universidad Nacional Autónoma de México	Mexico City		Mexico	Ecological Restoration In Yucatán: A Strategy for Implementation, Development and Monitoring of Restoration Process in a Network of Priority Sites
50	Annie	Montgomery	Texas A&M University	College Station	TX	United States	Potential Effect of Morbillivirus Exposure Following the Deepwater Horizon Oil Spill on Bottlenose Dolphin Population
15	Peter	Murdoch	USGS	Troy	NY	United States	Defining Natural Infrastructure Performance and Tracking Resilience Change Over Time in Coastal Environments
35	John	Nyman	LSU Agricultural Center	Baton Rouge	LA	United States	How to Construct Estuarine Wetlands High Enough to Remain Vegetated for Decades Without Delaying Fish and Wildlife Functions
17	Aviva	Patel	Credit Valley Conservation	Mississauga	ON	Canada	Linking Landscape Scale Conservation Planning to Effective Ecological Restoration

No.	First Name	Last Name	Organization	City	ST	Country	Abstract Title
31	Jacob	Patus	University of Miami	Coral Gables	FL	United States	Land Use Change And Restoration Efforts to Minimize Coastal Pollution in Great Exuma, The Bahamas
18	Leonard	Pearlstine	Everglades National Park	Homestead	FL	United States	Gam Modeling of Alligator Nest Sighting as Affected by Hydrologic, Habitat, Meteorological and Anthropogenic (Canals And Roads) Variables
55	Miranda	Peterson	Texas A&M University	College Station	TX	United States	Plants On the Move: The Trend of Japanese Honeysuckle Invasion in Southeast United States
51	Patrick	Phillips	GreenVest, LLC	Annapolis	MD	United States	Innovative Design to Develop a Novel Ecosystem
19	Bill	Precht	Dial Cordy and Associates	Miami	FL	United States	Julia Tuttle Mitigation Site: If We Plant Them Will They Grow?
20	Shauna-kay	Rainford	The Pennsylvania State University	University Park	PA	United States	Paleoecological Assessment of the Origin and Development of Vernal Pools in Central Pennsylvania
7	Alisha	Renfro	National Wildlife Federation	New Orleans	LA	United States	Examination of Alternative Operation Regimes for Existing Freshwater Diversion and Siphon Structures in Louisiana, USA
36	Curt	Riche'	USDA-NRCS	Galliano	LA	United States	Evaluation of Louisiana Ecotypes of Saltgrass for Selection and Use in Salt Marshes of the Coastal Zone of Louisiana
32	Dianne	Rosensweig	ESA	Sarasota	FL	United States	Cortez Commercial Fishing Village Uses Grassroot Efforts to Fund Large Scale Habitat Restoration
8	Timothy	Schauwecker	Mississippi State University	Mississippi State	MS	United States	Hydraulic and Vegetative Modeling for the Restoration Design of the Upper Reach of Catalpa Creek, an Impaired Stream in Northeast Mississippi
56	Shelby	Servais	Florida International University	Miami	FL	United States	Effects of Increased Salinity on Microbial Processing of Carbon and Nutrients in Brackish and Freshwater Wetland Soils
37	Doug	Shields	cbec eco engineering	University	MS	United States	A Tool for Beaver Dam Analogue Design
3	Eric	Sparks	Mississippi State University	Biloxi	MS	United States	Impacts of Large-Scale Breakwaters on Shoreline Vegetation in High Wave Energy Environments

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43	Rachael	Stevenson	Nova Southeastern University	Dania Beach	FL	United States	Faunal Monitoring in Response to Harbor Dredging
21	Eric	Swain	USGS	Davie	FL	United States	Using Water-Temperature Data to Determine Groundwater Seepage to the Indian River Lagoon, Florida
52	Sabrina	Tabassum-Tackett	University of Louisiana at Lafayette	Lafayette	LA	United States	Comparing Cadmium Tolerance in Unialgal and Assemblage Exposures to Assess Whether Single-Species Exposures Can Predict if Cadmium Contamination Favors Harmful Algal Blooms
22	Heather	Theel	US Army Engineer Research and Development Center (ERDC)	Vicksburg	MS	United States	Decision Framework for Upland Hardwood and Grassland Restoration Monitoring: Integrating Innovative Spatial Technologies
38	Garret	Thomassie	USDA-NRCS	Galliano	LA	United States	Native Plant Solutions for Coastal Restoration Along the Gulf Coast
39	Phillip	Todd	North State Environmental	Winston Salem	NC	United States	Brunswick Town/ Fort Anderson – A Living Shoreline Alternative
59	Jeffrey	Trulick	US Army Corps of Engineers	Washington	DC	United States	Risk Informed Decision Making in Aquatic Ecosystem Restoration Project Planning for the US Army Corps of Engineers
40	G. Lynn	Wingard	USGS	Reston	VA	United States	Impacts of Hurricane Irma on Florida Bay Islands – Clues to Future Responses to Storms and Sea Level
41	Von	Winkel	Southern Nevada Water Authority	Las Vegas	NV	United States	Ecological Restoration at the Warm Springs Natural Area in Moapa, Nevada
53	Robert	Ziehr	USDA	Temple	TX	United States	Ecosystem Restoration Tools

Additional Information

Meeting Space for Impromptu Meetings

The Audubon Room (level 5) has been reserved for those who wish to organize impromptu meetings with colleagues while you are gathered here at NCER. Availability is on a first-come, first-served basis. There is a sign-up sheet on the conference message board in the Registration Foyer near the registration desk. Be sure to indicate the group contact name and cell number when you reserve space so we can reach you if we need to.

Note: The room will remain set for 18 people u-shape style. No Audio Visual (AV) equipment is provided.

Name Badge

Your name badge serves as your admission to all networking functions while attending NCER 2018, so be sure to wear it throughout the conference. Guests must also wear their name badges for entry into functions. The guest fee allows guests 18 years of age and older to attend the Welcome Social Monday, a Poster Session Networking Social Wednesday and a Closing Awards Ceremony Social on Thursday. Please be sure to register all guests and pay the applicable registration fees.

Lost & Found

If you find a lost article, bring it to the staff at registration. If you lose an article, first check with conference registration staff. If the lost article(s) has not been turned in, check with the hotel front desk staff.

Notes

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