



SET CoP Workshop

July 16-17, 2026

Information Packet

Table of Contents:

Agenda.....	3
Day 1: Thursday, July 16, 2026.....	3
Day 1: Breakout Questions.....	5
Day 2: Friday, July 17, 2026.....	5
Speaker Profiles.....	6
Debra Hernandez, Executive Director, SECOORA.....	6
William R. "Will" Doar, III, Chief Geologist, South Carolina Geological Survey.....	7
Dr. Jim Morris, Distinguished Research Professor, The University of South Carolina.....	8
Dr. Josh Breithaupt, Assistant Research Faculty, Florida State University.....	9
Andy Nguy, Principal Software Engineer Tetra Tech.....	10
James Doyle, Project Manager - Software & Systems Engineering, Tetra Tech.....	10
Dr. Kathryn Smith, Research Ecologist, USGS.....	11
Katie Luciano, Coastal Geologist, SCGS.....	12
Lora Clarke, Senior Officer, U.S. Conservation, The Pew Charitable Trusts.....	13
Matthew Slagel, Coastal Resilience Program Manager, S.C. Sea Grant Consortium.....	14
Erin Rogers, Coastal Program Manager, Audubon South Carolina.....	15
Katie Finegan, Coastal Engineer, Project Manager, Weston & Sampson.....	16
Howard Schnabolk, Marine Restoration Specialist, NOAA Fisheries Habitat Restoration Center.....	17
Christina Thompson, Data and Engagement Specialist, SECOORA SET.....	18
Abstracts.....	19
Dr. Jim Morris, Baruch Institute, University of South Carolina.....	20
Dr. Josh Breithaupt, Assistant Research Faculty, Florida State University.....	21
Andy Nguy, Principal Software Engineer & James Doyle, Project Manager - Software & Systems Engineering, Tetra Tech.....	22
Dr. Kathryn Smith, Research Ecologist, USGS.....	22
Acknowledgments.....	23

Agenda

Day 1: Thursday, July 16, 2026

Time	Speakers	Details
8:15 - 9:00 AM	Registration/Check-In	Breakfast Provided in the Lobby
9:00 - 9:10 AM	- Debra Hernandez, Executive Director, SECOORA - Nisse Goldberg, SET Coordinator	Welcome Overview of the Day
9:10 - 9:45 AM	Nisse Goldberg, SET Coordinator	Updates from SET awardees - Intro from Nisse Goldberg, SET Coordinator - Will Doar, South Carolina Department of Natural Resources (SCDNR) & Katie Luciano, South Carolina Department of Natural Resources (SCDNR) - Scott Curtis, South Carolina - The Citadel - Courtney Kimmel, South Carolina - Port Royal Sound Foundation - Beth Darrow, North Carolina - Bald Head Island Conservancy - Lori Sutter, University of North Carolina Wilmington (UNCW)
9:45 - 10:45 AM	Dr. Jim Morris, Distinguished Research Professor, University of South Carolina	Keynote Speaker Presentation: What's to Gain from Comprehensive, Long-Term Data on Primary Production, Sea Level, and Surface Elevation: Deep Understanding That's What
10:45 - 11:00 AM		Coffee Break in Lobby
11:00 - 11:45 AM	Dr. Josh Breithaupt, Assistant Research Faculty, Florida State University	CoP Writers Group Presentation: End-of-Life Case Studies from SET Stations

11:45 - 12:45 PM		Lunch in Outdoor Classroom
12:45 - 1:15 PM	- James Doyle, Project Manager - Software & Systems Engineering, Tetra Tech - Andy Nguy, Principal Software Engineer, Tetra Tech	Presentation: Introduction to the SECOORA SET Data Visualization Platform (Virtual) A demonstration of the SET data visualization platform will be shared with time for discussion and Q&A.
1:20 - 1:50 PM	Dr. Kathryn Smith, Research Ecologist, USGS	Presentation: Marsh Sediment Delivery and Deposition: The Role of Net Sedimentation Tiles in Marsh Monitoring Frameworks
1:50 - 2:20 PM	Katie Luciano, Geologist III, SCDNR	Presentation: Data and Metadata
2:20 - 2:35 PM		Break and Transition
2:35 - 3:35 PM	Intro: Christina Thompson, Student Assistant, SET	Panel discussion and Q&A. Participants: - Moderator: Lora Clarke, Senior Officer, Pew Charitable Trusts & South Atlantic Salt Marsh Initiative, Leadership Team - Matt Slagel, Resilience Program Manager, South Carolina Sea Grant Consortium - Erin Rodgers, Coastal Program Manager, South Carolina Audubon - Katie Finegan, Coastal Engineer, Project Manager, Weston & Sampson - Howard Schnabolk, Marine Restoration Specialist, NOAA Fisheries Habitat Restoration Center
3:35 - 3:45 PM		Break and Transition
3:45 - 4:45 PM	- Nisse Goldberg, SET Coordinator - Christina Thompson, Student Assistant, SET	Breakout Groups for Stakeholder/Practitioner Format: - Stakeholders remain at stations while practitioners rotate among groups. Discussion questions highlighted below. - Discussion groups followed by a debrief.

4:45 - 4:55 PM	Nisse Goldberg, SET Coordinator	Wrap Up
5:30 - 6:45 PM	<i>Optional</i>	Social at California Dreaming

Day 1: Breakout Questions

- Can you describe a time when available SET data did not meet your needs?
 - Did data literacy (e.g., understanding or interpreting the data), data accessibility, missing information, or differences in language, terminology, or concepts create barriers to using or communicating the data?
 - How could these barriers be reduced? Please explain.
- If you could change one thing about how practitioners and stakeholders work together around data, what would it be and how could it be changed?
- Come up with one new initiative to increase the use of SET data by stakeholders. Please describe the initiative, who would benefit, and what challenge it would address.

Day 2: Friday, July 17, 2026

Time	Speakers	Details
8:15 - 9:00 AM	Nisse Goldberg, SET Coordinator	Breakfast Provided in the Lobby
9:00 - 9:45 AM	Katie Luciano, Geologist III, SCDNR	Presentation: Data and Metadata (Extended)
10:00 - 11:30 AM	<i>Optional</i>	Field Trip: SCDNR's Marine Education Vessel The Discovery, 50 foot-long steel platform catamaran
11:30 AM		Lunch - On Your Own

Speaker Profiles

Debra Hernandez, Executive Director, SECOORA



Debra Hernandez currently serves as Executive Director of the Southeast Coastal Ocean Observing Regional Association (SECOORA), one of eleven regional partners in the U.S. Integrated Ocean Observing System. SECOORA is a nonprofit operating in the states of NC, SC, GA and FL to coalesce the efforts of multiple observing interests and deliver user defined products that save lives, conserve the coastal and marine environment, and support the economic vitality of our coastal regions. Since joining SECOORA she has been lead PI on several multi-year regional observing projects, and has served on related marine policy and science programs. Her experience includes coastal and ocean engineering, management, and policy. Prior to joining SECOORA, Ms. Hernandez led her own consulting firm and worked in state coastal management as an environmental engineer and coastal policy expert. Her professional interests include improving the linkages between scientists and decision-makers and facilitating discussions of public policy issues related to the coast and environment. She was also a licensed professional engineer for many years, and is a life-long resident of Charleston, SC.

William R. "Will" Doar, III, Chief Geologist, South Carolina Geological Survey



William R. "Will" Doar, III currently serves as the Chief Geologist for the South Carolina Geological Survey (SCGS), where he has worked since 1995, transitioning from a field and regional geologist to his current leadership role. Over his career, he has produced 100 1:24,000-scale geological maps and logged approximately 2,000 supporting boreholes across South Carolina. His mapping expertise has evolved from Piedmont crystalline rocks and coastal plain deposits to his current focus on offshore coastal plain sediments. In 1998, Will took the helm of the SCGS Surface Elevation Table (SET) project and jokes that if there is a wrong way to install, maintain, or measure a SET, he has done it. He holds a B.S. in Geology and an M.S. in Metamorphic and Structural Geology from East Carolina University, and earned his Ph.D. in Stratigraphy from the University of South Carolina in 2014.

Dr. Jim Morris, Distinguished Research Professor, The University of South Carolina



James T. Morris is a respected figure in the fields of wetland ecology and environmental science. With a career spanning four decades, Morris has made significant contributions to research, education, and leadership. He holds PhD and BA degrees from Yale University and the University of Virginia. He has authored >150 peer-reviewed publications. Morris began his academic career as a Postdoctoral Fellow at the Ecosystems Center, Marine Biological Laboratory, Woods Hole, in 1979. Over the years, he progressed through various academic roles and is currently a Distinguished Research Professor at the University of South Carolina. He held the position of Distinguished Professor of Biological and Marine Sciences from 1992 to 2017 at the University of South Carolina.

During his tenure as Director at the Belle W Baruch Institute from 2006 to 2016, Morris oversaw impactful research initiatives. He also served as Program Director in the Division of Environmental Biology at the National Science Foundation from 2003 to 2005, influencing national scientific priorities. Morris's commitment to international collaboration is evident through his engagements as a Visiting Professor at Aarhus University, Denmark, and Xiamen University, China. In recognition of his contributions, Morris has received prestigious honors, including being appointed as a Fellow of the American Association for the Advancement of Science (AAAS) in 2009 and receiving the Merit Award from the Society of Wetland Scientists in 2012. One of Morris's most impactful publications is "Responses of Coastal Wetlands to Rising Sea Level," published in *Ecology* in 2002 and cited >2300 times. Additionally, he has made significant contributions to wetland science through inventions such as the marsh organ and methods for marsh restoration, for which he holds a patent.

For further information on Morris's contributions and key metrics, his Google Scholar profile provides comprehensive insights. Morris's career exemplifies a dedication to advancing scientific understanding and environmental stewardship, leaving a lasting impact on the fields he has touched.

Sources

[Google Scholar Profile](#)

[Wikipedia - Marsh Organ](#)

Dr. Josh Breithaupt, Assistant Research Faculty, Florida State University



Dr. Josh Breithaupt is an Assistant Research Faculty Member of the Coastal and Marine Laboratory with Florida State University. He received his B.A. from Wheaton College and M.Sc. and Ph.D. from University of South Florida. Dr. Breithaupt's areas of research focus on biogeochemistry, geomorphology, ecology, and sediment dynamics. He is a valued and active member of the SECOORA SET CoP, presenting a webinar on the wetlands in Apalachicola Bay and leading a writer's group on submerged and buried SET stations.

Andy Nguy, Principal Software Engineer Tetra Tech



Andy Nguy is a Principal Software Engineer at Tetra Tech, specializing in data visualization and reporting. His work focuses on ensuring reliable data delivery, system performance, and effective visualization tools for ocean observation data and networks.

James Doyle, Project Manager - Software & Systems Engineering, Tetra Tech



Mr. Doyle is a project manager at Tetra Tech with 12 years of experience delivering essential software and marine engineering solutions. He leverages his technical background in engineering and software development with his experience leading teams of remote, cross-functional engineers to consistently accomplish delivery within the timeframe, costs and quality standards established while developing exceptional relationships with clients, suppliers, and senior management."

Dr. Kathryn Smith, Research Ecologist, USGS



Kathryn Smith is a Research Ecologist at the St. Petersburg Coastal and Marine Science Center. Her research focuses on the impact of coastal erosion hazards on wetland and estuarine ecosystems.

Dr. Kathryn Smith's research focuses on linking geospatial and geophysical data to assess environmental change in coastal wetlands, estuaries, and barrier islands. Kathryn is responsible for leading efforts in geospatial data analysis procedures, examining the complex dynamics of coastal sedimentary processes, paired field and spatial modeling studies which assess the vulnerability of coastal ecosystems to storms and sea-level rise, and enhancing capabilities for paleoecological assessment of coastal habitats. In addition, Kathryn has maintained a teaching and graduate student advising role at the University of South Florida.

Katie Luciano, Coastal Geologist, SCGS



Katie Luciano is a coastal geologist with the South Carolina Geological Survey (SCGS) and a licensed professional geologist in the state of South Carolina. Katie has an undergraduate degree in Geology from the College of William and Mary and a master's from the College of Charleston. She has worked for the SCGS since 2014. Her research interests include coastal geomorphology, barrier island and shallow marine stratigraphy in the US Southeast, geoarchaeology, and geochronology.

Lora Clarke, Senior Officer, U.S. Conservation, The Pew Charitable Trusts



Lora Clarke supports Pew's efforts to improve the adaptation and resilience of coastal ecosystems and human communities in the Southeast United States. In leading Pew's work on the South Atlantic Salt Marsh Initiative, Clarke focuses on conserving 1 million acres of the important habitat stretching from North Carolina to east central Florida. Previously, Clarke worked to advance sustainable fishing policies in the U.S. south Atlantic.

Before joining Pew, Clarke worked at the National Oceanic and Atmospheric Administration, where she advised the administrator on climate issues and was involved with the Comparative Analysis of Marine Ecosystem Organization grant program and the National Ocean Policy.

Clarke holds a bachelor's degree in biology from Christopher Newport University, a master's in wildlife and fisheries conservation from the University of Massachusetts, Amherst, and a doctorate in marine and atmospheric sciences from Stony Brook University. She is based in Charleston, South Carolina.

Matthew Slagel, Coastal Resilience Program Manager, S.C. Sea Grant Consortium



As the Coastal Resilience Program Manager, Matt leads a team of resilience extension specialists and graduate students working on projects and programs to strengthen the resilience of South Carolina's coastal communities. The team accomplishes this by extending science-based information and technical support related to such issues as flooding, erosion, sea level rise, shoreline management, land use, and extreme heat. He also contributes to research driven by community needs regarding coastal hazards and extreme weather.

Matt earned a B.S. in Environmental Sciences from the University of Virginia and a M.S. in Ocean Sciences from the University of California, Santa Cruz. His thesis work evaluated the extent to which California's coastal dams have reduced fluvial sediment transport to the coast and the resulting beach management challenges. Prior to joining the Consortium, Matt worked for North Carolina's and South Carolina's coastal management programs in both planning and regulatory roles.

Erin Rogers, Coastal Program Manager, Audubon South Carolina



Erin Rogers is the Coastal Program Manager for Audubon South Carolina, working on a variety of coastal projects involving coastal habitat resilience and priority bird species conservation. She has a Bachelor's degree in Biology from SUNY Geneseo, a Master's degree in Biological Sciences from Illinois State University, and 10 years of professional experience in wetland and coastal bird ecology and conservation. Before coming to South Carolina, Erin spent 7 years working for Delaware's Department of Natural Resources and Environmental Control as a Wetland Biologist and Marsh Bird Biologist, conducting work such as wetland condition assessments, wetland restoration and living shoreline monitoring, and marsh bird surveys and nest monitoring.

Katie Finegan, Coastal Engineer, Project Manager, Weston & Sampson



Katie is a project manager for Weston & Sampson's Ecological Design Team and a licensed professional engineer specializing in coastal and environmental engineering. She has expertise in shoreline restoration, dredging, stormwater modeling, coastal resiliency planning, and has led field investigations, grant-funded research, and project permitting. Katie is proficient in a range of coastal, stormwater, and GIS modeling tools, bringing a technical and applied approach to her work. She is from Asheville, NC and earned her master's in environmental engineering from NC State University.

Howard Schnabolk, Marine Restoration Specialist, NOAA Fisheries Habitat Restoration Center



Howard Schnabolk has served the past 20 years as a Habitat Restoration Specialist for the National Oceanic and Atmospheric Administration's Fisheries Restoration Center (RC). He currently serves as the South Atlantic Team Leader for the RC and is based at NOAA's Charleston, SC office. Howard works on developing marine restoration projects in coordination with Trustee agencies through the Natural Resources Damage Assessment process, and with partners through NOAA's Community-based Restoration Program grants. Howard has a B.S in Natural Resources Planning from Humboldt State University and an M.P.A in Earth Systems Sciences from Columbia University.

Christina Thompson, Data and Engagement Specialist, SECOORA SET



Christina is a second-year graduate student in the Marine Science program at Jacksonville University. She earned a bachelor's degree in Earth and Environmental Sciences from California State University, Fresno and currently serves as a Data and Engagement Specialist with SECOORA SET, supporting coordination and engagement efforts related to coastal monitoring initiatives in salt marsh ecosystems. Her academic interests include coastal ecosystem health, marine mammals, and the application of GIS in marine science and conservation.



SET CoP Workshop

July 16-17, 2026

Abstracts

Dr. Jim Morris, Baruch Institute, University of South Carolina

Title: What's to Gain from Comprehensive, Long-Term Data on Primary Production, Sea Level, and Surface Elevation: Deep Understanding That's What

Abstract: For about 36 years, marsh surface elevation at North Inlet, South Carolina, has been monitored with Sedimentation-Erosion Tables (SETs). These records include sites measured monthly and others measured annually, as well as plots that have received seasonal nitrogen and phosphorus fertilization. Together, the data provide a rare long-term view of how salt marsh elevation changes in response to sea-level rise, plant production, decomposition, sediment dynamics, and disturbance.

The results show that most North Inlet marshes are not keeping pace with local sea-level rise of 0.34 cm/year. Among 73 elevation time series from control plots, only 12 matched or exceeded that rate. In contrast, plots fertilized for 10 years gained elevation at 0.47 cm/year, compared with 0.1 cm/year in nearby unfertilized controls over 26 years. These patterns and ancillary data show that belowground production by *Spartina* plays a major role in building marsh elevation via swelling of sediment volume, while decomposition can offset that gain.

SET data are also a reminder that what is being measured depends on where the instrument is placed. Some plots that were once near creek banks are now underwater because of bank erosion, showing that elevation change is influenced by more than vertical accretion alone. This talk will use these long-term data to discuss how SETs can be used to interpret marsh elevation change, what the results imply for marsh equilibrium, sedimentation, and how bioturbation can influence the results (the prairie dog/conveyor belt model).

Dr. Josh Breithaupt, Assistant Research Faculty, Florida State University

Title: End-of-Life Case Studies from SET Stations

Abstract: Surface elevation tables and surface marker horizons (SET-MH) have proven to be an effective means of monitoring changes in coastal wetland surface elevation and surface accretion and for making comparisons with local rates of sea-level change. Many SET-MH stations have the implicit mission of monitoring wetlands to assess their vulnerability to loss and for much of the literature loss is a somewhat ambiguous event that may occur at some undetermined point in the future.

Our overall purpose is to describe changes in ecosystem state where end-of-life of SET-MH station has occurred, and catalogue lessons learned to inform research and management planning for use of SET-MH stations. Our objective for this project was to compile case studies of stations . We present data from case studies in the southeast US where an installation's ability to continue collecting data was compromised by destruction (total loss), submergence, and burial to such an extent that an adaptive response has been required for continued monitoring.

Several lessons learned from these case studies include 1) evidence that identifying a "time of death" is not always clear, 2) evidence of persistence and reversibility after submergence or burial, and 3) an appreciation for installation of SETs in locations where "harm" is expected rather than only monitoring locations that may be safe and stable for a long time.

Andy Nguy, Principal Software Engineer & James Doyle, Project Manager - Software & Systems Engineering, Tetra Tech

Title: Introduction to the SECOORA SET Data Visualization Platform

Abstract: A demonstration of the SET data visualization platform will be shared with time for discussion and Q&A.

Dr. Kathryn Smith, Research Ecologist, USGS

Title: Marsh Sediment Delivery and Deposition: The Role of Net Sedimentation Tiles in Marsh Monitoring Frameworks

Abstract: Understanding coastal marsh vertical accretion requires both sediment delivery measurements and elevation change data. Net sedimentation tiles (NST) provide direct, mass-based measurements of short-term sediment deposition that complement marsh monitoring programs, including long-term elevation data from Surface Elevation Tables (SETs) and feldspar horizon markers. By capturing recently delivered material, NST helps clarify the link between sediment transport processes and vertical accretion. I present two case studies demonstrating the utility of NST: one examining sediment deposition and delivery along eroding marsh shorelines, and another evaluating sediment dynamics in a coastal marsh inshore of a constructed subtidal reef. Together, these examples illustrate how NST can complement marsh habitat monitoring systems to provide a more complete understanding of marsh surface processes.



SET CoP Workshop

July 16-17, 2026

Acknowledgments

The SET Community of Practice Workshop would not be possible without the generous support of those who believe in the power of regional collaboration and knowledge exchange. We extend our deepest gratitude to the Southeastern Coastal Ocean Observing Regional Association (SECOORA) for their continued commitment to advancing coastal science and for making this workshop possible through their leadership and support.

We also wish to thank our hosts, William R. "Will" Doar, III, Chief Geologist of the South Carolina Geological Survey, and Katie Luciano, Geologist III at the South Carolina Department of Natural Resources (SCDNR), for their time, expertise, and dedication in bringing this community together. A special thank you to SCDNR for graciously providing the venue and making Charleston such a welcoming home for this gathering. It is through partnerships like these that the Surface Elevation Table Community of Practice continues to grow and thrive.