

# 37<sup>th</sup> NATIONAL CONFERENCE ON BEACH PRESERVATION TECHNOLOGY

February 7-9, 2024 ♦ Embassy Suites by Hilton, St. Augustine Beach, Florida

**PROGRAM as of 2-2-24**

## Wednesday, February 7

### **OPENING GENERAL SESSION**

**1:00 p.m. to 5:10 p.m.**

**Moderator: Chris Creed, P.E., Olsen Associates, Inc.**

**1:00 p.m.**

**Welcome from Henry Dean, St. Johns County District 5, St. Augustine, FL**

**1:10 p.m.**

**Current State of the Beaches in St. Johns County**

**Stephen Hammond and Damon Douglas, St. Johns County Public Works Department, St. Augustine, FL**

**1:30 p.m.**

**Building Resilience: Federal Shore Protection Projects in St. Johns County**

**Rosemarie Pinto, P.E., U.S. Army Corps of Engineers, Jacksonville District, FL**

**1:50 p.m.**

**Embassy Suites, St. Augustine Beach, Florida Shoreline Protection and Seawall Replacement**

**Jonathan Brumfield, P.E., Taylor Engineering, Inc., Jacksonville, FL**

**2:10 p.m.**

**South Ponte Vedra Beach Dune Restoration Project 2022 Construction Phase**

**Riggs Brusnighan, Atkins NA, Inc., Jacksonville, FL**

**2:30 p.m.**

**Post-Storm North County Dune Restoration – Flagler County, FL**

**N. Zachary Bedell, P.E., Olsen Associates, Inc., Jacksonville, FL**

**2:50 p.m.**

**Professional Exchange Break (30 Minutes)**

**Moderator: Michael Poff, P.E., Coastal Engineering Consultants, Inc.**

**3:20 p.m.**

**Hurricane Idalia and the Florida Big Bend Coast**

**Ralph Clark, P.E. and Sarah Lindeman, Office of Resilience and Coastal Protection, Florida Department of Environmental Protection, Tallahassee, FL**

**3:40 p.m.**

**Lovers Key – Bonita Beach Nourishment Design**

**Vadim Alymov, Ph.D., Coastal Engineering Consultants, Inc., Bonita Springs, FL and Mike Campbell, Lee County Natural Resources Division, Fort Myers, FL**

**4:00 p.m.**

**Hurricane Ian Recovery on Lovers Key and Bonita Beach**

**Michael Poff, P.E., Coastal Engineering Consultants, Inc., Bonita Springs, FL and Steve Boutelle, Lee County Natural Resources Division, Fort Myers, FL**

**4:20 p.m.**

**Post-Storm Assessment Metrics from Anna Maria Island**

**Thomas Pierro, P.E., D.CE, Lindino Benedet, Ph.D., and Morjana Signorin, Coastal Protection Engineering, Boca Raton, FL and Charlie Hunsicker and Debra Woithe, Natural Resources Department, Manatee County, Bradenton, FL.**

**4:40 p.m.**

**The Value and Resilience of Beach Tourism During the COVID Pandemic**

**James Houston, Ph.D., U.S. Army Engineer Research and Development Center, Vicksburg, MS**

**5:00 p.m.**

**Adjourn**

**5:30 p.m. – 6:30 p.m.**

**Welcome Reception (Exhibit Hall)**

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## Thursday, February 8

### **CONCURRENT SESSION A1**

**8:05 a.m. to 9:45 a.m.**

**Moderator: James Houston, Ph.D., U.S. Army Engineer  
Research and Development Center**

**8:05 a.m.**

**Restoring Littoral Drift along a Jettied Shoreline  
Jenna Kooker, Edgewater Resources, LLC, Madison, WI**

**8:25 a.m.**

**The 2005 Bogue Inlet Relocation Project – A Retrospective  
James Willey, Geodynamics, Newport, NC**

**8:45 a.m.**

**Beach-Inlet Interaction and Regional Sediment  
Management at Pristine and Developed Barrier Islands  
Ping Wang, Ph.D., School of Geoscience, University of South  
Florida, Tampa, FL**

**9:05 a.m.**

**The Inlet Management Study of Passage Key Inlet and  
Adjacent Beaches  
Morjana Signorin, Coastal Protection Engineering, Boca  
Raton, FL**

**9:25 a.m.**

**Esteros Barriers Regional Inlet Management Study, Lee  
County, Florida – 3DCSTM Morphology Modeling  
Yong Chen, Ph.D., P.E., Moffatt and Nichol, Inc., Norfolk, VA**

**9:45 a.m.**

**Professional Exchange Break (30 Minutes)**

### **CONCURRENT SESSION B1**

**8:05 a.m. to 9:45 a.m.**

**Moderator: Angela Schedel, Ph.D., P.E., HDR**

**8:05 a.m.**

**Southeast Florida Sediment Morphodynamics Study – Miami  
Dade County & Port Everglades Metocean, Sediment Tracer  
and Resource Atlas Study  
Jon Marsh, Ph.D., Environmental Tracing LLC, St. Augustine,  
FL, and Laurel Reichold and Kelly Legault, Ph.D., U.S. Army  
Corps of Engineers, Jacksonville District, FL**

**8:25 a.m.**

**Jupiter Inlet Longshore Transport Modeling  
Ashley Kauppila, P.E., Taylor Engineering, Inc., Jacksonville,  
FL**

**8:45 a.m.**

**“What If....” A Scenario-Based GIS and Hydrodynamic  
Modeling Approach to Improve Our Understanding of Sea  
Level Rise and Incremental Adaptation  
Brett Vivyan, P.E., GHD, Eureka, CA**

**9:05 a.m.**

**Numerical Modeling of Nearshore Hydrodynamics with  
Erosion Mitigation Structure at the West Galveston Seawall  
Jacob Garrett and Himangshu Das, Ph.D., P.E., U.S. Army  
Corps of Engineers, Galveston District, TX**

**9:25 a.m.**

**Are Numerical Models Useful? Lessons Learned from Twenty  
Years of Modeling Coastal Morphology Change in the State  
of Florida  
Lindino Benedet, Ph.D., Coastal Protection Engineering,  
Boca Raton, FL**

**9:45 a.m.**

**Professional Exchange Break (30 Minutes)**

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## Thursday, February 8

### **CONCURRENT SESSION A2**

**10:15 a.m. to 12:00 p.m.**

**Moderator: Michael Dombrowski, P.E., Coastal Protection Engineering**

**10:15 a.m.**

**Leveling the Playing Field: Taking Social Equity into Account**  
Angela Schedel, Ph.D., P.E., HDR Engineering, Jacksonville, FL

**10:35 a.m.**

**Martin County Four Mile Beach Resilience: Optimization of the Beach Template**  
Nicole McClain, Taylor Engineering, Inc., Jacksonville, FL

**10:55 a.m.**

**Applying “Depth of Closure” to Determine Sand Loss for FEMA Engineered Beach Projects**  
Robert (Bob) Glassen, FEMA Headquarters, Washington, DC

**11:15 a.m.**

**Evaluating the Equilibrated Toe of Fill at Key Biscayne Beach, Florida**  
Jackie Brower, Moffatt & Nichol, Fort Lauderdale, FL

**11:35 a.m.**

**Can the Performance Beach Nourishment be Enhanced Through Shoreface Sand Placement?**  
David Kriebel, Ph.D., P.E., Coastal Analytics, LLC, Indialantic, FL

**12:00 p.m.**

**Lunch (1 Hour)**

### **CONCURRENT SESSION B2**

**10:15 a.m. to 12:00 p.m.**

**Moderator: John Ramsey, P.E., Sustainable Coastal Solutions, Inc.**

**10:15 a.m.**

**Reef Relocation Technologies for Impact Mitigation**  
Michael Jenkins, Ph.D., P.E., ATM a Geosyntec Company and Charles Calloway, P.E., Calloway Marine Technologies, Inc., West Palm, FL

**10:35 a.m.**

**A Multi-Benefit, Landscape Scale Restoration in the Eel River Estuary Humboldt County, CA**  
Pete Duin, GHD, Eureka, CA

**10:55 a.m.**

**Curry Hammock State Park Tidal Restoration Project**  
Nicholas Bragaia, P.E., GHD, Wellington, FL

**11:15 a.m.**

**How the Post-Construction Shape of Nourished Beaches in Southeast Florida affects Sea Turtle Nesting Behavior: Recommendations for Future Construction Templates**  
Niki Desjardin, Ecological Associates, Inc., Jensen Beach, FL

**11:35 a.m.**

**Geotechnical Properties and Processes of Sandy Beaches and Their Impact on Beach Erosion**  
Nina Stark, Ph.D., Engineering School of Sustainable Infrastructure and Environment, University of Florida, Gainesville, FL

**12:00 p.m.**

**Lunch (1 Hour)**

**Thursday, February 8**

**CONCURRENT SESSION A3**

**1:00 p.m. to 3:00 p.m.**

**Moderator: Lauren Floyd, Coastal Protection Engineering**

**1:00 p.m.**

**Strategic Planting and Nutrient Amendments to Accelerate the Revegetation of Rapidly Retreating Coastal Dunes**  
**Joseph Morton, Ph.D., Department of Environmental Engineering Sciences, Center for Coastal Solutions, University of Florida, Gainesville, FL**

**1:20 p.m.**

**Perico Preserve Restoration – Farmland Conversion for Seagrass Habitat Creation**  
**Lauren Floyd, Coastal Protection Engineering, Boca Raton, FL**

**1:40 p.m.**

**Marsh Terracing: One of the Multiple Lines of Defense to Benefit the Barataria Land Bridge – Jefferson Parish, Louisiana**  
**Matt Salmon, P.E. and Nina Reins, P.E., Freese and Nichols, New Orleans, LA**

**2:00 p.m.**

**Using a Towed ROV System to Map Submerged Aquatic Vegetation in the Sunken Island Beneficial Placement Area, Hillsborough Bay, Tampa Harbor**  
**Anne Shoffner, Cummins Cederberg, Inc., Jupiter, FL**

**2:20 p.m.**

**Relative Seagrass Burial Tolerance of Shoal Grass (*Halodule wrightii*) in Aragonite Silts during Hurricane Irma (2017) Turks & Caicos Islands, BWI**  
**Leaf Erickson, Ph.D., Erickson Consulting Engineers a Graef Company, Sarasota, FL and William Precht, Ph.D., Dial Cordy Associates, Miami, FL**

**2:40 p.m. - cancelled**

~~**Wave-Driven Oyster Mortality: Assessing the Impact of Boat Wakes and Wind Waves on GTM Estuary Oyster Reefs**~~  
~~**Daniele Pinton, Ph.D., Department of Civil and Coastal Engineering, University of Florida, Gainesville, FL**~~

**3:00 p.m.**

**Professional Exchange Break (30 Minutes)**

**CONCURRENT SESSION B3**

**1:00 p.m. to 3:00 p.m.**

**Moderator: Bob Glassen, Federal Emergency Management Agency**

**1:00 p.m.**

**Rock Groin Performance – Longboat Key, FL**  
**Krista Egan, P.E., Olsen Associates, Inc., Jacksonville, FL**

**1:20 p.m.**

**Post-Storm Emergency Coastal Armoring Case Study in Volusia County**  
**Katie Britt Williams, CFM, WEDG and Geoff Parker, P.E., Cummins Cederberg, Inc., Tallahassee and St. Petersburg, FL**

**1:40 p.m.**

**Low Impact Secant-Pile Seawall for Protecting SR-A1A along Lower Flagler & Upper Volusia Counties**  
**Steven Nolan, P.E., State Structures Design Office, Florida Department of Transportation, Tallahassee, FL and Mohammadamin Mirdarsoltany, Ph.D. Candidate, Department of Civil & Architectural Engineering, University of Miami, Coral Gables, FL**

**2:00 p.m.**

**Volusia County Rapid Hurricane Response and the Successful Use of Trap Bags**  
**Wendy Laurent, P.E., Taylor Engineering, Inc., Philadelphia, PA and Jessica Fentress, P.E., Volusia County, FL**

**2:20 p.m.**

**Vulnerability Assessments and Infrastructure Resilience – Case Study Daytona Beach**  
**Kiara Horton and Craig Wells, Freese and Nichols, Inc., New Orleans, LA and Tampa, FL**

**2:40 p.m.**

**Stirred, Not Shaken! Beach Renourishment Vibration Control and Documentation in Staging Areas**  
**Eric Rehwoldt, P.E., P.G., Seismic Surveys, LLC**

**3:00 p.m.**

**Professional Exchange Break (30 Minutes)**

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## Thursday, February 8

### **CONCURRENT SESSION A4**

**3:30 p.m. to 5:10 p.m.**

**Moderator: Nicole Sharp, P.E., APTIM**

**3:30 p.m.**

**Collier County Emergency Berm Project: 2023 Project and Post-Ian Update**

**Nicole Sharp, P.E., APTIM, Boca Raton, FL**

**3:50 p.m.**

**Emergency Beach Response to Hurricane Ian at Big Hickory Island, Florida**

**Douglas Mann, P.E., D.CE, APTIM, Boca Raton, FL and Jamie Boesé, Pelican Landing Community Association, Bonita Springs, FL**

**4:10 p.m.**

**South Siesta Key Beach Repair – The Strength of Effective Communication**

**Robert Neal, P.E., ATM a Geosyntec Company, Wilmington, NC**

**4:30 p.m.**

**Do you Believe in Miracles, Part Deux?**

**Chadd Chustz, Town of Ft. Myers Beach, FL and Michael Poff, P.E., Coastal Engineering Consultants, Inc., Bonita Springs, FL**

**4:50 p.m.**

**Delray Beach Coastal Impacts from Hurricane Nicole**

**Doris Otero, Ph.D., CFM, APTIM, Boca Raton, FL**

**5:10 p.m.**

**Adjourn**

### **CONCURRENT SESSION B4**

**3:30 p.m. to 5:10 p.m.**

**Moderator: Michael Jenkins, Ph.D., P.E., ATM a Geosyntec Company**

**3:30 p.m.**

**Are DMMA's Really the End for Dredged Material? Examples of Beneficial Use at the Jacksonville District**

**Jennifer Coor, Ph.D., P.G. and Barbara Nist, P.G., U.S. Army Corps of Engineers, Jacksonville District, FL**

**3:50 p.m.**

**Building Coastal Resilience Through Dredge Management**

**Quin Robertson, Ph.D., P.G., Woolpert, Beaver Creek, OH**

**4:10 p.m.**

**Engineering Distinctions between Living Shorelines & Shoreline Stabilization for Backbay Areas**

**Jenna Phillips, Cummins Cederberg, Inc., Sarasota, FL and Jannek Cederberg, P.E., Cummins Cederberg, Inc., Coral Gables, FL**

**4:30 p.m.**

**Citywide Living Shoreline Viability Assessment & Grant Funding Opportunities, Challenges, and Lessons Learned**

**Leonard Barrera Allen, P.E., CFM, WEDG, Cummins Cederberg, Inc., Coral Gables, FL and Teresa Kaimrajh, P.E., City of Miami Beach, FL**

**4:50 p.m.**

**Management of Natural and Nature Based Features, Case Studies in Southwest Florida Post Hurricanes Ian and Idalia**

**Mohamed Dabees, Ph.D., P.E., BC. CE, Humiston & Moore Engineers, Naples, FL**

**5:10 p.m.**

**Adjourn**

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## Friday, February 9

### **CLOSING GENERAL SESSION**

**8:05 a.m. to 12:00 p.m.**

**Moderator: Ken Craig, P.E., Taylor Engineering, Inc.**

**8:05 a.m.**

**National Investment in Coastal Research and Beach Nourishment in Florida**

**Nicole Elko, Ph.D., American Shore and Beach Preservation Association, Folly Beach, SC**

**8:25 a.m.**

**Ft. Pierce Inlet Sediment Trap Using New- and Low-Tech Tools to Inform Coastal Processes**

**Joshua Revord, P.E., St. Lucie County, FL and Kevin Bodge, Ph.D., P.E., Olsen Associates, Inc., Jacksonville, FL**

**8:45 a.m.**

**Truck Hauling Millions of Cubic Yards of Sand to Southeast Florida Beaches**

**Will Reilly, P.E., U.S. Army Corps of Engineers, Jacksonville District, FL**

**9:05 a.m.**

**Volatile Times: The Effects of Munitions and Explosives of Concern on Florida Dredging Projects**

**Patrick Snyder, P.E., U.S. Army Corps of Engineers, Jacksonville District, FL**

**9:25 a.m.**

**Low-Profile Short Groins along a Mostly Low-Energy Coastline**

**Kevin Bodge, Ph.D., P.E., Olsen Associates, Inc., Jacksonville, FL**

**9:45 a.m.**

**Professional Exchange Break (30 Minutes)**

**Moderator: Will Reilly, P.E., U.S. Army Corps of Engineers, Jacksonville District**

**10:15 a.m.**

**Year 1 Overview of the St. Augustine, Florida Back Bay Coastal Storm Risk Management (CSR) Feasibility Study**

**Martin Durkin, U.S. Army Corps of Engineers, Jacksonville District, FL**

**10:35 a.m.**

**Response of Engineered Berms and Natural Shell Hash Fronting-Features to Hurricane Nicole, St. Johns County, Florida**

**Zachary Scott, University of North Florida, Jacksonville, FL**

**10:55 a.m.**

**Decadal Variability of Beach-Dune Geomorphic Resilience and Cross-Shore Aeolian Fetch in NE Florida – Applications of the USACE Coastal Engineering Resiliency Toolbox**

**Copeland Cromwell, Department of Geological Sciences, University of Florida, Gainesville, FL**

**11:15 a.m.**

**Geological and Geotechnical Characteristics of Restored and Natural Dunes in Northeast Florida**

**Justin Shawler, Ph.D., U.S. Army Engineer Research and Development Center, Vicksburg, MS**

**11:35 a.m.**

**St. Johns County/GTM Beachfront Data Collection Facility Goes Online**

**William Dally, Ph.D., P.E., Surfbreak Engineering Sciences, Ponte Vedra Beach, FL and University of North Florida, Jacksonville, FL**

**12:00 p.m.**

**Adjourn**