

33RD National Conference on Beach Preservation Technology
February 5-7, 2020
Hyatt Regency Sarasota, Florida

as of 1-3-20

Wednesday, February 5, 2020

OPENING GENERAL SESSION

1:00 p.m. to 5:25 p.m.

1:00 p.m.

Welcome from Mayor Jen Ahearn-Koch, City of Sarasota

1:10 p.m.

Manasota Key Beach Restoration – A True Regional Perspective

Michael Poff, P.E., Coastal Engineering Consultants, Inc., Naples, FL

1:30 p.m.

Manasota Key Beach Project Design and Modeling

Vadim Alymov, Ph.D., Coastal Engineering Consultants, Inc., Naples, FL

1:50 p.m.

Regulatory and Programmatic Updates from Florida Department of Environmental Protection Beaches Program

Lainie Edwards, Ph.D., Florida Department of Environmental Protection, Tallahassee, FL

2:15 p.m.

Adaptive Environmental Monitoring and Management: An International Best Practice Narrative on Addressing Site Specific Dredge and Reclamation Turbidity in South Florida

Josh van Berkel, DHI Water & Environment, Inc., Canada

2:35 p.m.

North Atlantic Comprehensive Coastal Study - Outcomes and Next Steps

Amy Guise, P.M.P., U.S. Army Corps of Engineers, Baltimore District, MD

2:55 p.m.

South Atlantic Coastal Study - Progress to Date

Pam Castens, P.M.P., U.S. Army Corps of Engineers, Wilmington District, NC and Matt Schrader, P.E., U.S. Army Corps of Engineers, Jacksonville District, FL

3:15 p.m.

SAD-SAND Study Update

Angela Schedel, Ph.D., P.E. and Ken Craig, P.E., Taylor Engineering, and Clay McCoy, Ph.D., U.S. Army Corps of Engineers, Jacksonville District, FL

3:35 p.m.

Professional Exchange Break

4:05 p.m.

A New Test for Determining Beach Fill Sediment Quality

Krista Egan, P.E. and Kevin Bodge, Ph.D., P.E., Olsen Associates, Inc., Jacksonville, FL

4:25 p.m.

Concept to Construction

Will Reilly, P.E., Marty Durkin, and Kevin Hodgins, P.E., U.S. Army Corps of Engineers, Jacksonville District, FL

4:45 p.m.

Dynamic Modeling Approach for Mapping Coastal Flood Vulnerability in a Changing Climate: Town of Palm Beach, FL

Kirk Bosma, P.E. and Robert Hamilton, Jr., Woods Hole Group, Bourne, MA, and Robert Weber, Town of Palm Beach, FL

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OPENING GENERAL SESSION *continued*

5:05 p.m.

**Balancing Act - An Analysis of Historical Shoreline Recession and the Need to Equitably Consider
Impacts to the Coastal System in Palm Beach County**

**Andy Studt and Chris Carstens, Department of Environmental Resources Management, Palm Beach County, West
Palm Beach, FL**

5:25 p.m.

Adjourn

6:00 p.m.

Welcome Reception

33RD National Conference on Beach Preservation Technology
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Thursday, February 6, 2020

CONCURRENT SESSIONS

8:00 a.m. to 9:40 a.m.

SESSION A

8:00 a.m.

Quantifying Florida's Beach and Dune Resilience Using the Coastal Resilience Index

Quin Robertson, Ph.D., P.G., Coastal Protection Engineering, Boca Raton, FL, Zhifei Dong, Ph.D., APTIM, Boca Raton, FL, Nicole Elko, Ph.D., American Shore and Beach Preservation Association, Folly Beach, SC, and Julie Rosati, Ph.D., U.S. Army Corps of Engineers, Washington, DC

8:20 a.m.

Thinking Outside of the Box for Storm Repairs and Resilient Beach Designs

Tara Brenner, P.G., P.E. and Quin Robertson, Ph.D., P.G., Coastal Protection Engineering, Boca Raton, FL

8:40 a.m.

A Proposed Strategy for Implementing Coastal Resiliency

Jenna Phillips, Duncan Greer, P.E., and Angela Schedel, Ph.D., P.E., Taylor Engineering, Sarasota, Destin, and Jacksonville, FL

9:00 a.m.

Monitoring Benthic Communities to Fulfill Regulatory Requirements

Jennifer Peterson, Ph.D. and Brendan Biggs., Ph.D., Florida Department of Environmental Protection, Tallahassee, FL

9:20 a.m.

Consideration of Natural Nearshore Hardbottom Variability for Beach Fill Design; Broward County, Florida

Chris Creed, P.E. and Zachary Bedell, Olsen Associates, Jacksonville, FL, Cheryl Miller, Coastal Eco-Group, Deerfield Beach, FL, and Nicole Sharp, P.E., Environmental Planning and Community Resilience Division, Broward County Environmental Protection and Growth Management Department, Fort Lauderdale, FL

9:40 a.m.

Professional Exchange Break (30 Minutes)

SESSION B

8:00 a.m.

Managing the Threat of Sea Level Rise at Historical Waterfront Park

Jannek Cederberg, P.E., Cummins Cederberg Coastal and Marine Engineering, Fort Lauderdale, FL

8:20 a.m.

Shoreline Management Challenges and Solutions in St. Johns County

Damon Douglas and Stephen Hammond, St. Johns County Public Works Department, St. Augustine, FL, and Rajesh Srinivas, Ph.D., P.E., Atkins, Jacksonville, FL

8:40 a.m.

St. Joseph Peninsula Beach Restoration Project: "They Said it Would Never Be Built and Almost Wasn't. Twice!"

Joseph Morrow, P.E., MRD Associates, Inc., Destin, FL

9:00 a.m.

Indian River County's Beach Preservation Plan Update and Beach Conditions Analysis

Matthew Starr, P.G. and Jeff Tabar, P.E., Stantec Consulting Services, Tampa, FL and Laurel, MD

9:20 a.m.

Indian River County Sector 5 Beach and Dune Restoration Project: Post-Dorian Update and Construction Progress

Thomas Pierro, P.E., Coastal Protection Engineering, Boca Raton, FL and Christopher Paul, P.E., APTIM, Baton Rouge, LA

9:40 a.m.

Professional Exchange Break (30 Minutes)

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CONCURRENT SESSIONS

10:10 a.m. to 12 noon

SESSION C

10:10 a.m.

Successful Sand Management at South Lake Worth Inlet (2002-2018)

Douglas Mann, P.E., APTIM, Boca Raton, FL

10:30 a.m.

Island-Wide Sediment Budget for Jupiter Island
David Kriebel, Ph.D., P.E., Coastal Analytics LLC,
Annapolis, MD

10:50 a.m.

Sediment Management Study of the Northern Shell Key (Pinellas County, FL)

Morjana Signorin and Zhifei Dong, Ph.D., APTIM,
Boca Raton, FL; Andrew Squires, Environmental
Management Division, Pinellas County, Clearwater,
FL, and Tara Brenner, P.G., P.E., Coastal Protection
Engineering, Boca Raton, FL

11:10 a.m.

Beneficial Use: Estuarine Island Creation with
Intracoastal Waterway Maintenance Dredged
Material in Lake Worth Lagoon; Palm Beach County,
Florida

Yehya Siddiqui, P.E., Taylor Engineering, Inc.,
Oakland Park, FL, Lori Brownell, P.E., Port of
Houston, Inc., Cypress, TX, Eric Anderson, Palm
Beach County Environmental Resources
Management, West Palm Beach, FL, John Vannoy,
P.M.P., Orion Marine Construction, Inc., Tampa, FL,
and Mark Crosley, Florida Inland Navigation
District, Jupiter, FL

11:30 a.m.

A Structured Decision-Making Approach to
Regional Sediment Management

P. Soupy Dalyander, Ph.D., The Water Institute of
the Gulf, New Orleans, LA

12:00 p.m.

Luncheon (1 Hour 15 Minutes)

SESSION D

10:10 a.m.

Toler Place Breakwater Modification – Norfolk, VA
Yong Chen, Ph.D., P.E., Brian Joyner, P.E. and Ira
Brotman, P.E., Moffatt & Nichol, Norfolk, VA

10:30 a.m.

Shoreline Management in Chesapeake Bay:
Headland Breakwaters to Headland Control
C. Scott Hardaway, Jr., Virginia Institute of Marine
Science, College of William and Mary, Gloucester
Point, VA and James Gunn, Coastal Design and
Construction, Inc., Gloucester, VA

10:50 a.m.

City of Naples, Florida Sustainable Stormwater
Infrastructure Improvements for Improved Coastal
Resiliency

Karyn Erickson, P.E. and Christin Perkinson, Ph.D.,
P.E., Erickson Consulting Engineers, Inc., Sarasota,
FL, and Gregg Strakaluse, P.E., Streets and
Stormwater Department, City of Naples, FL

11:10 a.m.

The Engineering of the Island Style Breakwater
System for the Ft. Pierce Marina

Jack Cox, P.E., Edgewater Resources, Madison, WI

11:30 a.m.

To be announced

12:00 p.m.

Luncheon (1 Hour 15 Minutes)

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CONCURRENT SESSIONS

1:15 p.m. to 3:15 p.m.

SESSION E

1:15 p.m.

Historical Analysis of the Change in Percent Fines during Beach Nourishment

Jennifer Coor, Ph.D., P.G., U.S. Army Corps of Engineers, Jacksonville District, FL and Jase Ousley, U.S. Army Corps of Engineers, Headquarters, Washington, D.C.

1:35 p.m.

Time and Cost-Efficient Post-Hurricane Emergency Sand Search for Mexico Beach

Beau Suthard, P.G. and Patrick Bryce, P.G., APTIM, Tampa, FL, Jeff Andrews, P.S.M., APTIM, Boca Raton, FL, and Tara Brenner, P.G., P.E., Coastal Protection Engineering, Boca Raton, FL

1:55 p.m.

The Marine Minerals Program: Informing Long-Term Restoration Planning Through Resource Management and Innovative Science

Jessica Mallindine, Bureau of Ocean Energy Management, New Orleans, LA

2:15 p.m.

Identifying and Managing Archaeological Resources in Sand Source Areas on the Outer Continental Shelf

Doug Jones, M.A., Bureau of Ocean Energy Management, New Orleans, LA

2:35 p.m.

Behavior, Seasonality, and Habitat Preferences of Fishes Within a Large Sand Shoal Complex

Jennifer Bucatari, Ph.D., Bureau of Ocean Energy Management, Sterling, VA

2:55 p.m.

Purchasing the Future, a Custom-Built Water Injection Dredge for the North Carolina State Ports Authority, Wilmington & Morehead City, North Carolina

Joe Wagner, P.E. and Leah DeLeon, P.E., Wood Environment and Infrastructure Solutions, Jacksonville, FL

3:15 p.m.

Professional Exchange Break (30 Minutes)

SESSION F

1:15 p.m.

Hydrodynamic Modeling for Living Shoreline Design - Queens, NY

Todd DeMunda, P.E. and Jeff Tabar, P.E., Stantec Consulting Services, Melbourne, FL and Laurel, MD

1:35 p.m.

Storm-Driven Morphodynamics of a Sandy Beach in Florida

Frank Carlin and Felix Jose, Ph.D., Department of Marine & Earth Sciences, Florida Gulf Coast University, Fort Myers, FL

1:55 p.m.

Wave Analysis for Broward County Convention Center Expansion

Aaron Chen, P.E., and Jeff Tabar, P.E., Stantec Consulting Services, Laurel MD

2:15 p.m.

Future Coastal Resiliency Planning for a Rapidly Evolving Barrier Beach/Tidal Inlet System: Use of Numerical Modeling in the Planning Process

John Ramsey, P.E. and Morgan Simms, P.G., Applied Coastal Research and Engineering, Inc., Mashpee, MA, and Theodore Keon, Town of Chatham Coastal Resources, Chatham, MA

2:35 p.m.

Indian River County Beach Template Design and Vulnerability Analysis Using SBEACH

Paul Carroll, P.E. and Jeff Tabar, P.E., Stantec Consulting Services, Laurel, MD

2:55 p.m.

Defining Practical Limits for Borrow Area Effects on Wave Propagation, Currents and Potential Sediment Transport - Mexico Beach Study Case

Morjana Signorin, João Dobrochinski, and Kristina McCoy, P.G., APTIM, Boca Raton, FL, and Tara Brenner, P.G., P.E., Coastal Protection Engineering, Boca Raton, FL

3:15 p.m.

Professional Exchange Break (30 Minutes)

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CONCURRENT SESSIONS

3:45 p.m. to 5:25 p.m.

SESSION G

3:45 p.m.

Point and Shoot: Enhancing Coastal Lighting Evaluations with the Use of Laser Sighted GPS

Joseph Scarola, Ecological Associates, Inc., Jensen Beach, FL

4:05 p.m.

Turtle Friendly Lighting: Beneficial Technology for Coastal Communities and Wildlife

Stacey Gallagher, Sea Turtle Conservancy, Gainesville, FL

4:25 p.m.

Manatee County and Anna Maria Island Turtle Watch & Shorebird Monitoring: A Successful Partnership for Sea Turtle Protection and Public Outreach

Charlie Hunsicker, Parks and Natural Resources Department, Manatee County, Bradenton, FL and Suzi Fox, Anna Maria Island Turtle Watch & Shorebird Monitoring, Bradenton Beach, FL

4:45 p.m.

Let There Be (Turtle-Friendly) Light! An Overview of Broward County's Beachfront Lighting Strategy

Stephanie Kedzuf, Environmental Planning and Community Resilience Division, Broward County Environmental Protection and Growth Management Department, Fort Lauderdale, FL

5:05 p.m.

High Resolution Underwater Mapping of the Osborne Tire Reef, Fort Lauderdale, Florida

Mark Schroeder, Keith Spring and Chip Bamberger, CSA Ocean Sciences Inc., Stuart, FL, John Morgan, P.L.S., Morgan & Eklund, Inc., Vero Beach, FL and Chris Creed, P.E., Olsen Associates, Jacksonville, FL

5:25 p.m.

Adjourn

SESSION H

3:45 p.m.

Re-imagining a Resort Shoreline: Half Moon, Jamaica

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

4:05 p.m.

Hurricane Irma Impacts to Barbuda

Mike Jenkins, Ph.D., P.E., Applied Technology and Management, Inc., West Palm Beach, FL

4:25 p.m.

Bogue Banks Master Beach Nourishment Plan, NC - A Case Study in Coastal Resiliency

Johnny Martin, P.E., Moffatt & Nichol, Raleigh, NC

4:45 p.m.

Performance Metrics: Pinellas County's Beach Performance Index

John Bishop, Ph.D. and Andrew Squires, Environmental Management Division, Pinellas County, Clearwater, FL

5:05 p.m.

Updated FEMA Guidance and Methodology Impacts to Coastal LOMRs and CLOMRs

Adam Clinch, P.E. and Erin Benford, AECOM, North Charleston, SC

5:25 p.m.

Adjourn

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Friday, February 7, 2020

CLOSING GENERAL SESSION

8:00 a.m. to 12:20 p.m.

8:00 a.m.

On the Recurrent Sargassum Blooms in the Intra-Americas Sea and Atlantic Ocean

Mengqiu Wang, Ph.D., Chuanmin Hu, Ph.D., and Brian Barnes, Ph.D., College of Marine Science, University of South Florida, St. Petersburg, FL

8:20 a.m.

On-the-Ground Challenges and Practicalities of Sargassum Management

Margarita Kruff, Environment & Sustainability Department, City of Miami Beach, FL and Mark Richard, Miami-Dade County Parks, Recreation, and Open Spaces, Key Biscayne, FL

8:40 a.m.

Florida Red Tide Panel – Impact, Response, and Lessons Learned from Four Coastal Counties

Kelli Levy, Public Works Department, Pinellas County, Clearwater, FL, Charlie Hunsicker, Parks and Natural Resources Department, Manatee County, Bradenton, FL, Steve Boutelle, Lee County Natural Resources Division, Ft. Myers, FL, and Nicole Sharp, P.E., Environmental Planning and Community Resilience Division, Broward County Environmental Protection and Growth Management Department, Fort Lauderdale, FL

9:10 a.m.

Manatee County, Nearshore Hardbottom and Artificial Reef Red Tide Impact and Recovery

Katy Brown, APTIM, Boca Raton, FL, Lauren Floyd, Coastal Protection Engineering, Boca Raton, FL, and Charlie Hunsicker, Parks and Natural Resources Department, Manatee County, Bradenton, FL

9:30 a.m.

The Florida Red Tide Mitigation & Technology Development Initiative

Kevin Claridge, Mote Marine Laboratory & Aquarium, Sarasota, FL

9:50 a.m.

Professional Exchange Break (30 Minutes)

10:20 a.m.

The Florida Coastal Mapping Program: Coordinating High-Resolution Mapping of the State's Coastal Waters

Cheryl Hapke, Ph.D., College of Marine Science, University of South Florida, St. Petersburg, FL; Rene Baumstark and Ryan Druyor, Florida Fish and Wildlife Conservation Commission, Fish and Wildlife Research Institute, St. Petersburg, FL, Xan Fredericks, USGS St. Petersburg Coastal and Marine Science Center, St. Petersburg, FL, and Kim Jackson, Florida Department of Environmental Protection, Tallahassee, FL

10:40 a.m.

Update on the Revised SARBO

Dylan Davis, U.S. Army Corps of Engineers, South Atlantic Division, Atlanta, GA

11:00 a.m.

Beach Nourishment Versus Sea Level Rise on Florida Coasts

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

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CLOSING GENERAL SESSION *continued*

11:20 a.m.

Future 100 Year Flood Map for Coastal Resiliency in Broward County

Mark Ellard, P.E., Geosyntec Consultants Inc., Winter Springs, FL and Carolina Maran, Ph.D., P.E., Environmental Planning and Community Resilience Division, Broward County Environmental Protection and Growth Management Department, Fort Lauderdale, FL

11:40 a.m.

Resilience in Action: Connecting Engineers, Nature, and Communities

Dani Boudreau and Brian Leslie, GHD Inc., San Diego, CA

12:00 p.m.

Coastal Outreach Importance on Shore Protection, Navigation and Resiliency Projects

Doris Otero, APTIM, Boca Raton, FL

12:20 p.m.

Conference Adjourns