

# 25<sup>th</sup> Annual National Conference on Beach Preservation Technology

**February 8-10, 2012**

**Hutchinson Island Marriott  
Stuart, Florida**



**“America’s Largest Annual Conference on Beach Preservation Technology”**

*Photo courtesy of Martin County*

# Conference Information

## CONFERENCE OBJECTIVES

- To present the latest in beach preservation technology, research, and real-world practice.
- To provide a technological transfer from the scientific and engineering community to government officials who make the decisions on coastal projects and policies.

## CONFERENCE HIGHLIGHTS

The Conference Planning Committee has once again received an exceptional group of abstracts for 2012 addressing a broad range of topics -- beach restoration projects, inlet management, coastal modeling, environmental issues, sea level rise, coastal data collection, and more.

Just a select sampling of presentations to look forward to:

- A sea level rise panel with Drs. Dean, Sallenger, and Houston
- The Realities of Future Sand Sources for Southeast Florida Beaches
- A session on marine turtle nesting and beach nourishment
- Regional Sediment Management at East Rockaway Inlet, New York
- Seawall Impacts on Beach Erosion at Nantasket Beach, MA
- A session on the application of LiDAR data collection on coastal projects
- Working Towards More Cost Effective Coastal Protection Projects

By the diversity of presentations above, it will be an information-packed program, so join us in February for our 25th Anniversary! The venue, the Hutchinson Island Marriott, is located in Stuart, Florida. Hutchinson Island is a barrier island, located off the coast of Martin and St. Lucie counties and bordered by the Atlantic Ocean on the east and the Indian River on the west. With easy access for our out-of-state attendees using the Palm Beach International Airport, we offer warm February days in South Florida with a very attractive hotel rate of \$115.

## WHO SHOULD ATTEND?

U.S. Army Corps of Engineers  
Natural Resource and Environmental Protection Agencies  
Coastal Engineers and Coastal Industry Interests  
City and County Elected and Administrative Officials  
City and County Environmental Resource Managers  
City and County Beach Management Coordinators  
Inlet Districts and other Special Interest Districts  
Academic Researchers  
Legislators and Legislative Staff  
Local and Regional Planners  
Tourist Development Councils  
Convention and Visitors Bureaus  
Hotel and Resort Interests  
Environmental Groups and Alliances  
General Government and Coastal/Ocean Associations  
Coastal Geologists and Biologists  
Coastal Residents and other Interested Citizens



Aerial view of St. Lucie Inlet  
Photo courtesy of the Martin County CVB



Historic House of Refuge  
Photo courtesy of Martin County CVB

# 2012 National Conference on Beach Preservation Technology February 8-10 ♦ Hutchinson Island Marriott ♦ Stuart, Florida

## Wednesday Afternoon, February 8

**St. Lucie Inlet Sediment Management: Sustaining the Beaches of Martin County** -- Don Donaldson, P.E., Martin County, FL and John Ramsey, P.E., Applied Coastal Research and Engineering, Inc., Mashpee, MA

**The Realities of Future Sand Sources for Southeast Florida Beaches** -- Christopher Creed, P.E., Olsen Associates, Inc., Jacksonville, FL

**Evaluation of Long-Term Project Alternatives: Boca Raton, FL** -- Michael Jenkins, Ph.D., P.E., Applied Technology and Management, Inc., West Palm Beach, FL and Jennifer Bistyga, City of Boca Raton, FL

**Beach to Beach Truck-Haul Sand Bypassing** -- Will Reilly, P.E. and Kevin Bodge, Ph.D., P.E., Olsen Associates, Inc., Jacksonville, FL

**Application of the Hypercube Method for the Efficient Simulation of Long-Term, Nearshore Wave Records: Case Study and Verification Using Observed Wave Data Near the Mississippi/Alabama Coast** -- Christopher Day, P.E., Coastal Planning & Engineering, Inc., Boca Raton, FL and Joao Dobrochinski, Coastal Planning & Engineering, Inc., Brasil

**Comparison of Comprehensive Tide Gauge and Satellite Data Sets** -- Robert Dean, Ph.D., P.E., University of Florida, Gainesville, FL and James Houston, Ph.D., U.S. Army Engineer Research and Development Center, Vicksburg, MS

**Sea Level Rise Acceleration in the United States** -- Asbury Sallenger, Ph.D., U.S. Geological Survey, St. Petersburg, FL

**Guidance on Sea Level Rise by 2100, Ice Melt - the Big Unknown** -- James Houston, Ph.D., U.S. Army Engineer Research and Development Center, Vicksburg, MS and Robert Dean, Ph.D., P.E., University of Florida, Gainesville, FL

## Thursday Morning, February 9 ♦ CONCURRENT-SESSIONS

### SESSION A

**East Rockaway Inlet to Rockaway Inlet, NY, Collaboration Framework Development** -- Lynn Bocamazo and others, U.S. Army Corps of Engineers, New York District, NY

**Regional Sediment Management at East Rockaway Inlet, New York, Utilizing the USACE Coastal Modeling System** -- David Yang, U.S. Army Corps of Engineers, New York District, NY; and others

**Nantasket Beach, Hull, MA - Seawall Impacts on Beach Erosion** -- John Winkelman III, U.S. Army Corps of Engineers, New England District, Concord, MA

### SESSION C

**Mapping Benthic Habitats in Remote Areas Using Satellite Imagery: An Example from the Marquesas and Quicksands Region of the Florida Keys** -- Stacy Prekel and others, Coastal Planning & Engineering, Inc., Boca Raton, FL

**Hardbottom Impact Assessment for Beach Nourishment Projects in Florida: Previous Methods, Appropriate Standards** -- Tem Fontaine, P.E. and Kimberly Colstad, Coastal Technology Corp., Vero Beach, FL

**Coral Transplantation as a Planning and Cost Factor for Storm Damage Reduction Projects** -- Terri Jordan-Sellers, U.S. Army Corps of Engineers, Jacksonville District, FL; and others

**Challenges in Determining Impacts and Appropriate Mitigation from Beach Nourishment to Nearshore Hardbottom and Coral Reef Communities** -- Lindsay Aylesworth, Coastal Planning & Engineering, Inc., Boca Raton, FL

### SESSION B

**Evaluation of Erosion Control Measures Near Tidal Inlets in Southwest and Central Florida** -- Mohamed Dabees, Ph.D., P.E. and Brett Moore, P.E., Humiston & Moore Engineers, Naples, FL

**Longboat Pass Inlet Management Study Alternatives, Development and Delft3D Modeling Analysis** -- Thomas Pierro, P.E., Coastal Planning & Engineering, Inc., Boca Raton, FL; and others

**Modeling of South Marco Island Erosion Control Alternatives** -- Gary McAlpin, P.E., Collier County, FL; and others

### SESSION D

**Simulations of the Wave Field Around a Submerged Breakwater in a Numerical Tank** -- J. Mun and F.Y. Testik, Ph.D., Clemson University, Clemson, SC

**Oblique Detached Breakwaters for Shore Protection and Multipurpose Beach-Recreation** -- William Dally, Ph.D., P.E., Surfbreak Engineering Sciences, Inc., Orlando, FL and Atkins North America, Orlando, FL

**A Coastal Storm Surge Modeling Capability for the U.S. Mid-Atlantic Coast** -- Jeffrey Hanson, U.S. Army Corps of Engineers, Field Research Facility, Kitty Hawk, NC; and others

**Revised Coastal Inundation and Flooding for Georgia and Northeast Florida** -- Christopher Bender, Ph.D., P.E. Taylor Engineering, Inc., Jacksonville, FL; and others

**PROGRAM WITH SPECIFIC TIMES WILL BE AVAILABLE ONLINE AT [WWW.FSBPA.COM](http://WWW.FSBPA.COM)**

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## Thursday Afternoon, February 9 ♦ CONCURRENT-SESSIONS

### SESSION E

Coastal 'Bathymetric' Surveys That Span the Water Line -- Todd Mitchell, Fugro Consultants, Inc., Ventura, CA

Analysis of Spatial and Temporal Variations in Beach and Near-shore Bathymetry Profiles and Sediment Grain Size Distribution of Selected Beaches in Brevard County After Beach Nourishment in 2010 -- John Hearin, Department of Marine and Environmental Systems, Florida Institute of Technology, Melbourne, FL

A Methodology for Statistical Estimation of Response to Risk of Sequential Threshold Systems -- Joseph Letter, Jr., Ph.D., P.E., U.S. Army Engineer Research and Development Center, Sebastian, FL

Application of Nearshore Synthetic Wave Records to Regional Sediment Management in Florida -- Muthu Narayanaswamy, Atkins North America, Houston, TX and William Dally, Ph.D., P.E., Surfbreak Engineering Sciences, Inc., Orlando, FL and Atkins North America, Orlando, FL

### SESSION G

Renourishment of the South Amelia Island Shore Stabilization Project, Nassau County, FL -- Albert Browder, Ph.D., P.E. and others, Olsen Associates, Inc., Jacksonville, FL

Lido Key Beach Renourishment Project: 2-Yr Post-Construction Monitoring Results and Comparison to Modeling Projections -- Michelle Rees and others, Coastal Planning & Engineering, Inc., Boca Raton, FL

Submerged Bar Beach Renourishment -- Kevin Bodge, Ph.D., P.E., Olsen Associates, Inc., Jacksonville, FL

Side-by-Side-by-Side Comparison of Beach Restoration, Dune Restoration, and Natural Beach Response to Hurricane Irene, Summer Haven, St. Johns County, Florida -- Michael Trudnak, P.E., Taylor Engineering, Inc., Jacksonville, FL and Andrew Ames, P.E., St. Johns County, FL

### SESSION F

Examining Different Beach Nourishment Designs to Understand Post-Restoration Changes in Marine Turtle Nesting Success -- Allison Hays and Llewellyn Ehrhart, Ph.D., University of Central Florida, Orlando, FL

Testing an Alternative Template to Improve the Performance of Built Beaches for Sea Turtles -- Robert Ernest, Ecological Associates, Inc., Jensen Beach, FL; and others

Engineered and Natural Dunes: A Comparison of Abiotic Characteristics and Hatching Success of Green Turtle (*Chelonia mydas*) Nests on an East-Central Florida Beach -- Martha Barton and Llewellyn Ehrhart, Ph.D., University of Central Florida, Orlando, FL

Beach Restoration and its Effects on Loggerhead Sea Turtle Hatchling Fitness -- Mario Mota, Ph.D., University of Central Florida, Orlando, FL

### SESSION H

USACE National Coastal Mapping Program -- Chris Macon and Jennifer Wozencraft, Joint Airborne Lidar Bathymetry Technical Center of Expertise, U.S. Army Engineer Research and Development Center, Kiln, MS

Assessment of Coastal Morphological Change -- Lauren Dunkin, Joint Airborne Lidar Bathymetry Technical Center of Expertise, U.S. Army Engineer Research and Development Center, Kiln, MS

Airborne Remote Sensing for Coastal Environmental Applications -- Molly Reif, Joint Airborne Lidar Bathymetry Technical Center of Expertise, U.S. Army Engineer Research and Development Center, Kiln, MS

USACE LiDAR-Derived Volume Change Maps for the State of Florida -- Quin Robertson, Ph.D., Coastal Planning & Engineering, Inc., Boca Raton, FL; and others

## Friday Morning, February 10

Coastal Processes Analysis Using Physical and Modeling Results for Panama City Beaches, Florida -- Stephen Keehn, P.E. and others, Coastal Planning & Engineering, Inc., Boca Raton, FL

U.S. Army Corps of Engineers Mississippi Coastal Improvements Program Comprehensive Barrier Island Restoration Plan -- Justin McDonald, P.E., U.S. Army Corps of Engineers, Mobile District, AL

Design Premises for the Charlotte County Erosion Control Project -- Joanne Vernon, P.E., Charlotte County, FL; and others

Working Towards More Cost Effective Florida Coastal Protection Projects -- Bill Hanson, Great Lakes Dredge and Dock Co., Oak Brook, IL

Florida Upland Sand Resources for Broward County Beaches -- Tara Devine, Coastal Planning & Engineering, Inc., Boca Raton, FL; and others

Using MoDaC® (Mobile Data Collection) to Collect Finished Floor Elevation Data -- Tim Cawood, P.L.S., McKim & Creed, Wilmington, NC

Louisiana Surficial Sediment Distribution Mapping -- Melany Larenas, P.G., Coastal Planning & Engineering, Inc., Boca Raton, FL; and others

Bio-Engineered Oyster Reef Demonstration Project, Cameron Parish, LA -- Scott Hicks, P.E., Coast & Harbor Engineering, Inc., North Palm Beach, FL; and others

# Conference Registration and Hotel Information

## CONFERENCE REGISTRATION

### Early Registration

*through January 13, 2012*

Member Registration	\$325
Non-Member Registration	\$375
Student Registration	\$125*

### Regular Registration

*after January 13, 2012*

Member Registration	\$375
Non-Member Registration	\$425
Student Registration	\$125*

\* must provide valid student ID with registration

### HOW TO REGISTER

To register, please go to [www.fsbpa.com/techregistration.htm](http://www.fsbpa.com/techregistration.htm)  
You can register online or print out a registration form and e-mail, fax, or mail to us at the address below.

### Cancellations

*Cancellation requests must be made in writing and received on or before January 31, 2012. A \$50 processing fee will be assessed. Send requests to [mail@fsbpa.com](mailto:mail@fsbpa.com).*

For more information on the conference and sponsorship/exhibit opportunities, please contact:

Teri Besse

Conference Manager

FSBPA

PO Box 13146

Tallahassee, FL 32317

Phone: (850) 906-9227 Fax (850) 201-6782

[mail@fsbpa.com](mailto:mail@fsbpa.com) | [www.fsbpa.com](http://www.fsbpa.com)

Florida Engineers who attend and sign in at the registration desk are eligible to receive CEU's. FSBPA's exempt provider number is EXP 0003914.

## HOTEL RESERVATIONS

*Make your reservation directly with the hotel*

### Hutchinson Island Marriott

225 East Coastline Drive  
Stuart, Florida

**Standard Room \$115 single/double, plus taxes**

**Reservations: (800)-775-5936**

**Group Code: ncbncba**

Or

Make your reservation online at [www.fsbpa.com/techhotel.htm](http://www.fsbpa.com/techhotel.htm)

To ensure that a room is available, reservations **MUST** be made by **January 13, 2012**.

After this date, rooms **MAY NOT** be available.

*The \$10.00 per day parking fee is waived for overnight guests.  
Complimentary internet access in guest rooms.*



Florida Shore & Beach Preservation Association  
2012 NATIONAL CONFERENCE ON BEACH PRESERVATION TECHNOLOGY  
PO Box 13146  
Tallahassee, Florida 32317-3146

Nonprofit Organization  
U.S. Postage  
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## CONFERENCE ORGANIZER

Florida Shore & Beach Preservation Association

With the valuable assistance of the 2012 Conference Planning Committee and Lisa Armbruster, FSBPA

## PLANNING COMMITTEE - EXECUTIVE MEMBERS

Michael Barnett, P.E., Tetra Tech  
Kevin Bodge, Ph.D., P.E., Olsen Associates  
Douglas Mann, P.E., Coastal Planning & Engineering

## PLANNING COMMITTEE

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Bill Curtis, USACE Research and Development Center  
John Ramsey, P.E., Applied Coastal Research & Engineering  
Kenneth Banks, Ph.D., P.E., Broward County, Florida  
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*Bob Graham Beach, Hutchinson Island  
Photo courtesy of Martin County*