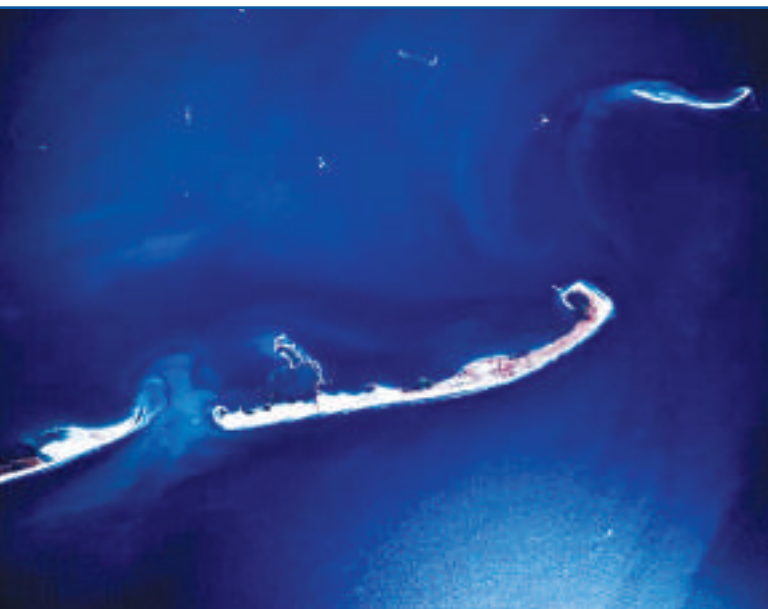


# Coastal Sediments



**INTERCONTINENTAL HOTEL  
NEW ORLEANS, LOUISIANA, USA  
MAY 13-17, 2007**



*Trinity Island, Isle Dernieres, Louisiana  
October 1990  
Courtesy USGS*

## **COASTAL ENGINEERING AND SCIENCE IN CASCADING SPATIAL AND TEMPORAL SCALES**

**Sponsor of Excellence**



**Gold Sponsor**



*Celebrating 30 years of the  
Coastal Sediments Conference Series*

## SUNDAY, MAY 13

**17:30** Opening Mixer

## MONDAY, MAY 14

**8:30** Opening Ceremony

**10:20** **A1** Sediment Transp. Fundamentals I

**B1** Louisiana Coast

**C1** Coastal Inlets I

**D1** Swash Zone

**13:30** **A2** Sediment Transp. Fundamentals II

**B2** Mississippi River Delta

**C2** Coastal Inlets II

**D2** Barrier Island Breaching

**15:40** **A3** Sediment Transp. Fundamentals III

**B3** Marshes and Wetlands

**C3** Mud Coasts I

**D3** Overwash and Washover

## TUESDAY, MAY 15

**8:10** **A4** Longshore Transport

**B4** Deltas and River Mouths

**C4** Texas Inlets

**D4** Sand Bars, Beach Cusps

**10:20** **A5** Sediment Transp. Fundamentals IV

**B5** Storms I

**C5** Coastal Inlets III

**D5** Sand Waves and Channels

**A6** Shoreline Change Modeling

**B6** Storms II

**C6** Estuaries

**D6** Beach Nourishment

**15:40** **A7** Observed Shoreline Change

**B7** Tsunami I

**C7** Mud Coasts II

**D7** Case Studies

## WEDNESDAY, MAY 16

**8:10** **A8** Gravel Coasts I

**B8** Tsunami II

**C8** Regional Processes I

**D8** Dredging

**10:20** **A9** Gravel Coasts II

**B9** Sea Level Rise I

**C9** Regional Processes II

**D9** Beach Nourishment & Structures

**13:30** **A10** Gravel Coasts III

**B10** Sea Level Rise II

**C10** LIDAR and ARGUS

**D10** Seafloor Mapping

**15:40** **A11** Dunes and Profiles

**B11** Wind-Blown Sand

**C11** Remote Sensing

**D11** Closing Mixer



## COOPERATING ORGANIZATIONS

American Shore and Beach Preservation Association  
Department of Oceanography & Coastal Sciences, LSU  
Geological Society of America  
International Association of Geomorphologists  
International Union of Geological Sciences

## CONFERENCE STEERING COMMITTEE

**Nicholas C. Kraus**, Ph.D., Co-Chair  
*U.S. Army Engineer Research & Development Center*

**William G. McDougal**, Ph.D., P.E., Co-Chair  
*University of Florida*

**Hans Hanson**, Ph.D., Coastal Dynamics Conference Liaison  
*University of Lund, Sweden*

**Julie Dean Rosati**, P.E., Short Course Coordinator  
*U.S. Army Engineer Research & Development Center*

**Luke Le Bas**, P.E., Technical Tour Coordinator  
*Louisiana Department of Natural Resources*

**Ping Wang**, Ph.D., Logistics Coordinator  
*University of South Florida*

**S. Jeffress Williams**, Exhibits and Sponsorships Coordinator  
*U.S. Geological Survey, Coastal and Marine Geology Program*

**Harley S. Winer**, Ph.D., P.E., Technical Tour Coordinator  
*U.S. Army Corps of Engineers, New Orleans District*



*Restoration of Chaland Headland, Louisiana  
Courtesy Louisiana Department of Natural Resources*

## CONFERENCE EXHIBITORS

Aanderra Instruments, Inc.  
American Vibracore Services, Inc.  
Aquatec Group LTD  
C.H. Fenstermaker & Associates  
Louisiana Department of Natural Resources  
Moffatt & Nichol  
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Taylor Engineering, Inc.  
Teledyne RD Instruments  
Tensar Earth Technologies, Inc.  
TerraSond  
U.S. Army Corps of Engineers  
    Coastal Inlets Research Program  
    Navigation Systems Program  
    Regional Sediment Management Program  
    System-Wide Water Resources Program  
U.S. Geological Survey  
    Coastal and Marine Geology Program  
University of New Orleans  
Weeks Marine, Inc.  
WL|Delft Hydraulics

Exhibits will be located in **Le Salon & the La Salle Foyer** throughout the conference, with coffee breaks and Monday luncheon served in this area.

## CONFERENCE SPONSORS

### Sponsorship of Excellence

Louisiana Department of Natural Resources  
Weeks Marine, Inc.

### Gold

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Baird and Associates  
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HDR/Shiner Moseley and Associates  
NortekUSA  
Olsen Associates, Inc.

### Bronze

Applied Coastal Research and Engineering, Inc.

We thank the exhibitors and sponsors for their gracious support of Coastal Sediments '07.



## WELCOME

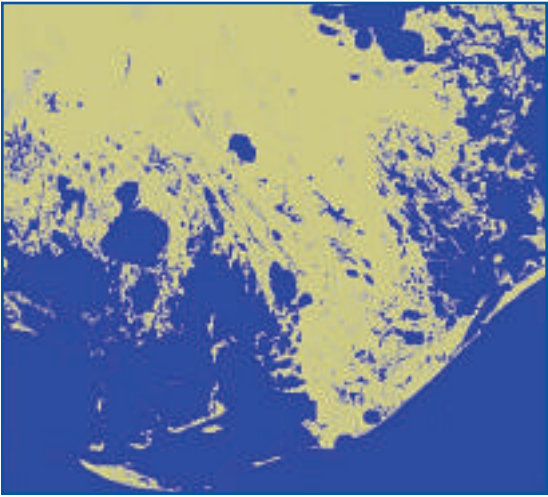
The conference Steering Committee and the Coasts, Oceans, Ports, and Rivers Institute (COPRI) of the American Society of Civil Engineers welcome you to the Sixth International Symposium on Coastal Engineering and Science of Coastal Sediment Processes—**Coastal Sediments '07**, covering all physical aspects of coastal sediment transport and morphology change. This year, we celebrate the rich heritage of the 30-year anniversary since the first conference in the series, held in 1977. The venue for the conference New Orleans, located on the Louisiana coast, serves as a field laboratory for both long-term and episodic change caused by nature and by society, and the engineering actions that may be taken to address these issues. But, also, New Orleans has a vibrant and colorful heritage to offer, and we invite you will enjoy this exciting venue personally and professionally.

The Coastal Sediments '07 conference is organized to promote an exchange of information and views among specialists in the fields of coastal engineering, geology, and oceanography, and related disciplines. The conference was greeted with enormous enthusiasm, with 350 abstracts submitted, from which 197 papers were developed for presentation and publication in the *Conference Proceedings*.

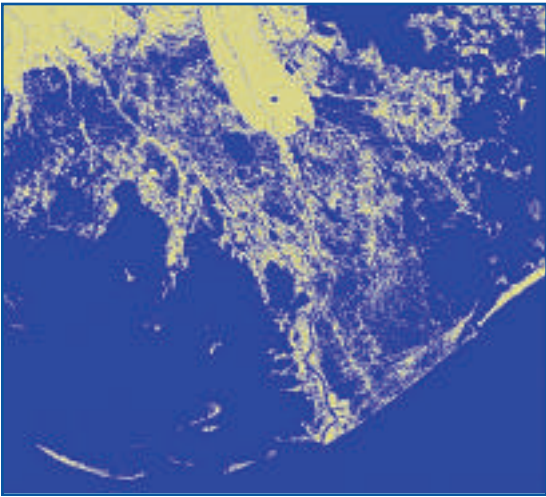
## CONFERENCE THEME

The theme of Coastal Sediments '07 is *Coastal Engineering and Science in Cascading Spatial and Temporal Scales*. This theme was chosen to stimulate research and papers devoted to the various scales of processes, and their interactions, at which coastal engineers and scientists must work in developing knowledge and capabilities to assist society in managing the coast. Emphasis is on papers that recognize and relate to coastal morphology change of long-term consequence.

The conference venue is the Louisiana coast, a stimulating site supporting the conference theme. This coast is experiencing rapid and differential subsidence, severe reduction in renewable sediment supply, deltaic adjustment of fine-grained material, oil and gas exploration, and remolding by hurricanes. The theme is intended to generate papers and discussion of coastal sediment processes from the micro-scale to the regional scale at which integrated coastal design and management must be accomplished. Both basic and applied papers will be presented.



*Barataria Bay, 1933*



*Barataria Bay, 2000*  
*Courtesy U.S. Army Corps of Engineers, New Orleans District*



## DESTINATION

New Orleans, Louisiana will host the Coastal Sediments '07: *Coastal Engineering and Science in Cascading Spatial and Temporal Scales* Conference May 13-17, 2007. What better city to help us celebrate 30 years of the Coastal Sediments Conference Series than one of the most beloved and celebrated cities in the world?

The historic and cultural experience that attracts more than 10 million people to New Orleans each year is as rich, charming and welcoming as ever. The historic core of the city – including the Faubourg Marigny, French Quarter, Central Business District, Warehouse and Arts District, Magazine Street, Garden District, Audubon Park and Zoo and St. Charles Avenue – not only remains intact, both physically and spiritually, but is thriving. The cultural riches, sensual indulgences and unparalleled service that define the New Orleans experience continue to flourish, as they have for centuries. New Orleans is open, fully prepared and eager to welcome our conference attendees.

This year's conference won't just be a celebration of 30 years of Coastal Sediments conferences. It will also mean that you are taking part in celebrating the rebirth of New Orleans!

## FACILITIES

The **InterContinental New Orleans** is centered at the core of the city, providing convenient access to the historic wonders of the French Quarter, major attractions of the Mississippi River and the Superdome, as well as the emergent style, contemporary arts, and eclectic shopping and dining of the Warehouse and Convention Center Districts. This AAA four-diamond award-winning hotel features 479 luxuriously appointed guest rooms that include 75 balcony rooms, 30 sites, and 31 Club level rooms. Guest room features include in room safes, coffee makers, hairdryers, mini-bars, high-speed Internet access, and DVD-quality movies. The hotel offers Room Service, a newly renovated 24-hour Fitness Center overlooking a rooftop swimming pool, Business Center, wireless Internet access in all public areas, and an Instant Service Center.

### INTERCONTINENTAL NEW ORLEANS

444 St. Charles Avenue  
New Orleans, LA 70130  
Main Ph: 504-525-5566  
Guest Fax: 504-523-7310  
E-mail: [new-orleans@interconti.com](mailto:new-orleans@interconti.com)

## SHORT COURSES

### **STORM PROCESSES:** [Pelican I](#)

Sunday, May 13, 8:00 AM – 5:00 PM

Organizers: Tom Campbell, Coastal Planning and Engineering;  
Luke Le Bas, Louisiana Department of Natural Resources

### **COASTAL INLETS AND ENTRANCES:** [Pelican II](#)

Sunday, May 13, 8:00 AM – 5:00 PM

Organizers: Duncan FitzGerald, Boston University; Nick Kraus, U.S. Army Corps of Engineers; William Seabergh, U.S. Army Corps of Engineers

## SPECIAL EVENTS

### **OPENING MIXER:** [Exhibit Area – Le Salon & La Salle Foyer](#)

Sunday, May 13, 5:30 PM – 7:00 PM

Network and greet colleagues from around the world. Enjoy hors d'oeuvres and beverages while you engage in conversation to set the pace for the in-depth discussions throughout the conference, and visit exhibits to see the latest technologies.

### **EXHIBIT HALL LUNCHEON:** [Exhibit Area – Le Salon & La Salle Foyer](#)

Monday, May 14, 12:00 PM – 1:30 PM

Enjoy a boxed lunch as you meander through the exhibition learning about new developments in the industry.

### **AWARDS LUNCH:** [La Salle Ballroom A](#)

Wednesday, May 16, 12:00 PM – 1:30 PM

The Organizing Committee of the Coastal Sediments '07 conference is pleased to announce that Professor Leo van Rijn has accepted the 2007 Coastal Award. The research and books of Professor van Rijn have greatly influenced engineers and geologists working in the areas of coastal sediment transport and morphology change. Starting in 2001, the Coastal Award has been presented at Coastal Dynamics and Coastal Sediments conferences through coordinating between the organizing committees of these two technical specialty conferences.

### **CLOSING MIXER:** [Exhibit Area - Le Salon & La Salle Foyer](#)

Wednesday, May 16, 5:30 PM – 7:00 PM

Celebrate the closing of another successful Coastal Sediments conference while you enjoy hors d'oeuvres and beverages at the Closing Mixer.





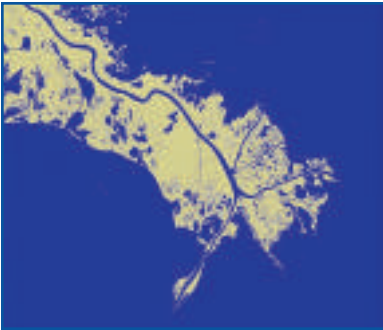
## REGISTRATION AND PRACTICAL DETAILS

The **Registration Desk** will be staffed throughout the conference. Please contact us if you have any questions or if you need assistance regarding the conference. Registration will be open from 7:00 a.m. until 8:00 a.m. on Sunday for Short Courses and then from 3:00 p.m. until 6:00 p.m. for exhibitors and conference registrants. On Monday, Tuesday, and Wednesday registration will be open from 7:00 a.m. until 5:00 p.m.

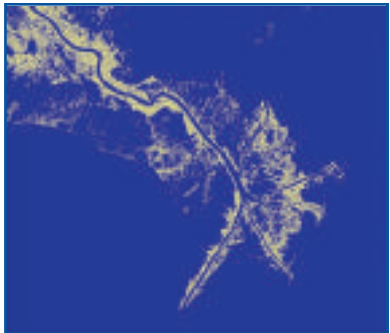
**Name badges** should be worn at all times. Replacement name badges may be requested from the Registration Desk.

**Messages** to conference participants will be posted on a Message Board. All participants are advised to check the board regularly.

**Program Changes** from the detailed technical program are expected to occur. Changes will be posted on the Message Board.



1933



2000

*Birds Foot Delta, Louisiana  
Courtesy U.S. Army Corps of Engineers, New Orleans District*

## INFORMATION FOR SPEAKERS

### Presentations

Each breakout session room is equipped with an LCD projector, control that can operate your PowerPoint presentation, laser pointer, and microphone. Presentations should be loaded one day before or, at the latest, the morning before your session. It is advised to check your presentation carefully in the Speakers' Preparation Room to assure that it has transferred correctly.

### Speakers' Preparation Room: Acadian II

Sunday, May 13, 12:00 PM - 4:00 PM

Monday, May 14 - Wednesday, May 16, 7:00 AM - 5:00 PM

Please come to the Speaker's Preparation Room to preview your presentation and submit it to the conference the day before you are scheduled to speak. An audio visual technician and/or student volunteer will be available to assist you.

### Speakers' Breakfasts: Poydras

Monday, May 14 - Wednesday, May 16, 7:00 AM - 8:00 AM

On the morning of their presentations, speakers are invited to meet with their moderators and other speakers in their session during a breakfast provided by the Conference Steering Committee. Besides promoting technical exchange, the breakfast meeting will allow speakers and moderators to coordinate and review the presentation format and session schedule.

## PRESENTATION FORMAT

Each speaker will have 20 minutes total, which includes the main presentation and discussion. To allow movement among the four concurrent sessions, moderators will maintain the schedule, without exception.

## CONFERENCE PROCEEDINGS

The conference *Proceedings* will be available in a printed version and on CD-ROM. One copy of both the printed copy and CD conference *Proceedings* will be included with each full registration fee. Student registrants will receive the CD only. To purchase the *Proceedings* following the conference, call ASCE at 1-800-548-2723; send a fax to 703/295-6211; or order online at [www.pubs.asce.org](http://www.pubs.asce.org).

## ATTIRE

The attire recommendation for Coastal Sediments '07 is academic or business casual (i.e., slacks, casual dresses). Don't bring a tie! Meeting room temperatures will vary, and we recommend wearing layered clothing to ensure comfort. We also recommend attendees wear comfortable shoes, although the breakout sessions are near to each other on the third (conference) floor in the InterContinental Hotel.



## PROFESSIONAL DEVELOPMENT HOURS (PDHs)

You may earn PDHs, which are nationally recognized units of record, by attending conference technical sessions. Please note that there are differences from state to state in continuing education requirements for professional engineering licensure. Each state licensing board has the final authority to approve course, credits, PDHs, and other methods of earning credits in that state. A PDH Form with instructions will be provided in your onsite registration packet.

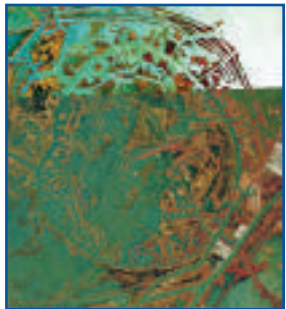
**Earn up to 26 Professional Development Hours at this conference**

## ACCOMPANYING PERSONS

Please check at the Registration Desk or hotel concierge for suggestions or directions.



1945



2006

*"Wagon Wheel," Birds Foot Delta*  
Courtesy U.S. Army Engineer District, New Orleans District

## TECHNICAL PROGRAM

The following pages contain the technical program for Monday through Wednesday. A total of 197 presentations will be given in four parallel sessions A through D. Concurrent sessions are listed on adjacent pages. Each presentation is allotted a duration of 20 minutes, including discussion. Session chairs and presenters are requested to follow the schedule strictly in order to allow participants to move between sessions.



*Belle Pass and Port Fourchon, Louisiana  
Courtesy USGS*

# Coastal Sediments '07

## MONDAY MAY 14

MONDAY, MAY 14 - Coastal Sediments



**7:00-8:00**

SPEAKER/MODERATOR BREAKFAST

POYDRAS

**8:30-9:50**

WELCOME AND KEYNOTE ADDRESS

Mr. Randy Hanchey, Deputy Secretary, Louisiana Department of Natural Resources  
*"Louisiana's Challenge: Formulating an Integrated Coastal Restoration and Hurricane Protection Strategy"*  
LA SALLE A

**9:50-10:20**

 BREAK - LE SALON & LA SALLE FOYER 

10:20-12:00

SEDIMENT TRANSPORT FUNDAMENTALS I — CHAIRS: BENOÎT CAMENEN, BILLY EDGE

PELICAN I A1

**Wave-related Transport and Nearshore Morphology**

Leo van Rijn, Gerben Ruessink, Bart Grasmeijer, Jebbe van der Werf, Jan Ribberink

**Closed Form Solution for Threshold Velocity for Initiation of Sediment Motion Under Waves**

Hans Hanson, Benoît Camenen

**Influence of Velocity Moments on Sand Bar Movement During CROSSTEX**

Gregory Guannel, H. Tuba Özkan-Haller, Merrick C. Haller, James T. Kirby

**Development of a New Practical Model for Sand Transport Induced by Non-Breaking Waves and Currents**

Jebbe J. van der Werf, Jan S. Ribberink, Tom O'Donoghue

**A Total Load Formula for the Nearshore**

Benoît Camenen, Magnus Larson

LOUISIANA COAST — CHAIRS: LUKE LE BAS, HARLEY WINER

LA SALLE B B1

**The Challenges of Restoring Louisiana Barrier Islands: From Design through Construction**

Gordon G. Thomson, Greg M. Grandy, Rachel Sweeney

**Field Observations of Wave-Current-Sediments Dynamics, Atchafalaya Shelf, Louisiana, USA**

Sergio Jaramillo, Alex Sheremet, Mead Allison

**Investigation of Morphosedimentary Processes on a Schematic Louisiana Barrier Island Using Process-Based Numerical Modeling**

T. Campbell, B. de Sonneville, L. Benedet, D.J.W. Walstra, C.W. Finkl

**Restoration-Quality Sand from Ship Shoal, Louisiana: Geotechnical Investigation of Sand Resources on a Drowned Barrier Island**

Syed M. Khalil, Charles W. Finkl, Jeff Andrews, Christopher P. Knotts

**Mississippi River Sand for Barrier Island Restoration in Louisiana: Geophysical & Geotechnical Investigations for Sand Mining**

Jeffrey L. Andrews, Syed M. Khalil, Charles W. Finkl, Lindino Benedet



LA SALLE C C1

COASTAL INLETS I — CHAIRS: HANY ELWANY, PING WANG

**Hydrodynamic and Morphologic Modeling at Sebastian Inlet, FL**

Gary A. Zarillo, Florian G. A. Brehin

**Erosion and Channel Migration at the Shoalwater Bay Reservation, Willapa Bay, Washington**

Andrew Morang, David J. Mark, Jane M. Smith

**Sediment Management Plan Development for the St. Lucie Inlet, Martin County, Florida**

John Ramsey, Trey Ruthven, Kevin Kremkau, Kathy Fitzpatrick

**Sand Bypassing Restores Natural Processes to Assateague Island, Maryland**

Courtney A. Schupp, Gregory P. Bass, William G. Grosskopf

**Morphological Responses to Jetty Construction at Tidal Inlet: Lake Saroma, Japan**

Kentarō Hayashi, Koji Hashimoto, Takayuki Sasaki, Akihiro Honma, Seizo Matsura

PELICAN II D1

SWASH ZONE — CHAIRS: WILLIAM MCDUGAL, PAUL WORK

**A Formula for Longshore Sediment Transport in the Swash**

Magnus Larson, Ty V. Wamsley

**Importance of the Swash Longshore Sediment Transport in Morphodynamic Models**

Yasuyuki Baba, Benoît Camenen

**Direct Bed Shear Stress Measurements in Bore-Driven Swash and Swash Interactions**

Matthew P. Barnes, Tom E. Baldock

**Limits of Beach and Dune Erosion in Response to Wave Runup Elucidated From SUPERTANK**

Tiffany M. Roberts, Ping Wang, Nicholas C. Kraus

**Interaction of Dune Face and Swash Zone**

Jaap S.M. van Thiel de Vries, Linden B. Clarke, Stefan G.J. Aarninkhof, E. Matrijn Coeveld, Rob A. Holman, Meg L. Palmsten, Ad J.H.M. Reniers, Marcel J.F. Stive, Wim S.J. Uijttewaal

🕒 LUNCH - LE SALON & LA SALLE FOYER 🕒

12:00-13:30

13:30-15:10

SEDIMENT TRANSPORT FUNDAMENTALS II — CHAIRS: MAGNUS LARSON, OLE MADSEN PELICAN I A2

**Longshore Sand Transport Rate Measurements Using Small-Scale Physical Models**

Roshan Suminda Ranasinghe, Shinji Sato

**Pressure-Induced Subsurface Sediment Transport in the Surf Zone**

Ole Secher Madsen, William McKinney Durham

**Tracking Sediment Particles Under Wave-Current Coexisting Field**

Yoshimitsu Tajima, Masayuki Kozuka, Masahito Tsuru, Toshimasa Ishii, Takeharu Sakagami,

Kazuo Momose, Nobuo Mimura, Ole S. Madsen

**Sediment Transport in Response to Wave Groups Generated by High-Speed Vessels**

Philip D. Osborne, Neil J. MacDonald, Shaun Parkinson

MISSISSIPPI RIVER DELTA — CHAIRS: RANDY MCBRIDE, GREGORY STONE LA SALLE B B2

**Engineering the Mississippi River as a Sediment Delivery System**

Harley S. Winer

**Sediment Flux and Fate in the Mississippi River Diversion at West Bay: Observation and Modelling Study**

T. Mitchell Andrus, Samuel J. Bentley

**Initial Morphologic and Stratigraphic Delta Evolution Related to Buoyant River Plumes**

Joep E.A. Storms, Marcel J.F. Stive, Dano (J.) A. Roelvink, Dirk Jan Walstra

**Physical and Numerical Modeling of River and Sediment Diversions in the Lower Mississippi River Delta**

Clinton S. Willson, Nathan Dill, William Barlett, Samantha Danchuk, Ryan Waldron

**A Geomorphic Process-Response Model for Chenier-Plain Evolution in Southwestern Louisiana, USA**

Randolph A. McBride, Matthew J. Taylor, Mark R. Byrnes





LA SALLE C C2

COASTAL INLETS II — CHAIRS: ANA VILA, LYNN BOCAMAZO - CONCEJO

**Morphodynamics of Texel Inlet, The Netherlands**

Edwin P.L. Elias, Marcel J.F. Stive

**Sedimentation Patterns in a Stabilized Migratory Inlet, Blind Pass, Florida**

Ping Wang, David K. Tidwell, Tanya M. Beck, Nicholas C. Kraus

**Approaches to Understanding Multiple-Inlet Stability**

William C. Seabergh

**Engineering Guidelines for the Siting of Sand Bypassing Discharges**

Douglas W. Mann

**Shoreline Implications of Flood-Tide Delta Morphodynamics. The Case of Port Stephens (SE Australia)**

Ana Vila-Concejo, Andrew D. Short, Michael G. Hughes, Roshanka Ranasinghe

BARRIER ISLAND BREACHING — CHAIRS: JOSE JIMENEZ, TY WAMSLEY

PELICAN II D2

**Critical Width of Barrier Islands and Implications for Engineering Design**

Julie Dean Rosati, Gregory W. Stone

**Barrier Island Vulnerability to Breaching: A Case Study on Dauphin Island, Alabama**

Mark Hansen, Asbury H. Sallenger

**Morphologic Modeling of Multiple Barrier Island Breaches for Regional Application**

Kenneth J. Connell, Magnus Larson, Nicholas C. Kraus

**Breach Stability and Growth Analysis Using a Morphological Model**

Santiago R. Alfageme, Masood Khondker, Rafael Canizares

**Spatial Distribution of Cross-Shore Sediment Transport Rate for Berm Formation and Erosion**

Takayuki Suzuki, Maiko Takeuchi, Naoki Tomoda, Satomi Yamaguchi, Yoshiaki Kuriyama

15:10-15:40

BREAK - LE SALON & LA SALLE FOYER

**15:40-17:00**

SEDIMENT TRANSPORT FUNDAMENTALS III — CHAIRS: ERNEST SMITH, LARRY WISE      PELICAN I      A3

**Flume Experiments Under Cat-Scan to Measure Internal Sedimentological Parameter During Sediment Transport**

Stéphane Montreuil, Bernard Long

**The Effects of Bed Slope and Wave Skewness on Sediment Transport and Morphology**

D.J.R. Walstra, L.C. van Rijn, M. van Ormondt, C. Brière, A.M. Talmon

**Sediment Transport Off Northeast Florida Outside the Surf Zone During Hurricanes**

Michael Krecic, Christopher Bender, Kristen Odroneic

MARSHES AND WETLANDS — CHAIRS: DENISE REED, LEE WEISHAR      LA SALLE B      B3

**Sediment Analysis for Habitat Restoration: Adaptation of Open-Coast Beach Nourishment Principles**

Daniel J. Heilman, Joel T. Darnell, M. Cameron Perry

**Subsurface Exploration and Containment Dike Design Criteria for Coastal Louisiana Marsh Restoration**

Russ Joffrion, Michael Poff, Mitch Andrus

**Ice Raft Formation, Dispersion and Sedimentation on New England Salt Marshes**

Brittina A. Argow, Zoe J. Hughes, Duncan M. FitzGerald

**Effects of Large Scale Morphological Changes to a Back-Bay System**

Lee L. Weishar, Theodore Keon, Donald K. Stauble



MUD COASTS I — CHAIRS: KEVIN HALL, TOMOYA SHIBAYAMA

LA SALLE C C3

**Using Simple Semi-Empirical Models for Integrated Assessment of Scenarios for a Navigation Channel. The Case of the Port of Ostend, Belgium**  
Toon Verwaest

**Sediment Processes and Mangrove-Habitat Expansion on a Rapidly-Progressing Muddy Coast, New Zealand**

Andrew Swales, Samuel J. Bentley, Catherine Lovelock, Robert G. Bell

**The Influence of Mud on the Inner Shelf, ShoreFace, Beach and Surf Zone Morphodynamics - Cassino, Southern Brazil**

Lauro J. Calliari, Todd Holland, Pedro S. Pereira, Rafael M.C. Guedes, Renato E. Santo

**The Hurricane Katrina Storm Surge in Mississippi**

Alan W. Niedoroda, Lyle Hatchett, Himangshu Das, Andrew Cox, Robert Weaver, Stephen Baig, Shabbar Saifee

OVERWASH AND WASHOVER — CHAIRS: OSCAR FERREIRA, TAKA AKI UDA

PELICAN II D3

**Sediment Transport Patterns During Overwash**

Ana Matias, Ana Vila-Concejo, Óscar Ferreira, Brad Morris, João A. Dias

**Characterisation and Modelling of Washover Fans**

Chantal Donnelly, Asbury H. Sallenger

**Experimental Study of Overwash**

Billy L. Edge, Young Hyun Park, Margery Overton

**Backbarrier Evolution and Complete Overwash Occurrence**

Ana R. Carrasco, Óscar Ferreira, Ana Matias, João A. Dias

7:00-8:00

SPEAKER/MODERATOR BREAKFAST

POYDRAS

8:10-9:50

LONGSHORE TRANSPORT — CHAIRS: DAVID KING, LEO VAN RIJN

PELICAN I A4

**Geomorphic and Sedimentologic Evidence for Net Littoral Drift - A Review**

Terry Healy

**Cross-shore Variation of Predominant Longshore Sediment Transport Rate**

Yoshiaki Kuriyama, Hikari Sakamoto

**Longshore Sediment Transport Calculated by Time-Dependent Shear Stress**

Ernest R. Smith, Nicholas C. Kraus

**Sediment Budget of the Danube Delta Coastal Zone**

Sebastian Dan, Marcel Stive, Dirk Jan Walstra, François Sabatier

**Field Measurement and Modelling of Longshore Sediment Transport**

J.J. Williams, L.S. Esteves, M.A. Lisniewski, H.L.S. Perotto

DELTA AND RIVER MOUTHS — CHAIRS: LIVIU GIOSAN, HARRY ROBERTS

LA SALLE B B4

**Morphodynamic Feedbacks on Deltaic Coasts: Lessons from the Wave-Dominated Danube Delta**

Liviu Giosan

**Coastal and River Mouth Morphology Change in Sri Lanka Due to 2004 Indian Ocean Tsunami**

Hitoshi Tanaka, Kazuo Ishino, Bandara Nawarathna, Hajime Nakagawa, Shinichiro Yano

**Holocene Evolution of the Merrimack Embayment, Northern Massachusetts, Inserted From Shallow Seismic Stratigraphy**

Christopher J. Hein, Duncan M. FitzGerald, Walter A. Barnhardt

**The Use of Historic Topography for the Characterization of Time-Dependent Geomorphic Change and Sediment Delivery**

David A. Jaffe

**Impact of Hurricanes Katrina and Lili on the Inner Shelf of the Mississippi-Atchafalaya Delta**

Mead A. Allison, Timothy M. Dellapenna, Miguel A. Goñi, Alex Sheremet



LA SALLE C C4

TEXAS INLETS — CHAIRS: DUNCAN FITZGERALD, JAMES GIBEAUT

**Coastal Inlets of Texas, USA**

Nicholas C. Kraus

**Cedar Bayou – Inlet Dynamics and Engineering**

Vladimir Shepsis, Joshua Carter

**Mouth of the Colorado River, Texas**

Ronnie Barcak, Nicholas C. Kraus, Lihwa Lin, Ernest R. Smith, Daniel J. Heilman  
Robert C. Thomas

**Long-Term Inlet Stability in a Multiple Inlet System, Pass Cavallo, Texas**

Brian K. Batten, Nicholas C. Kraus, Lihwa Lin

**Morphologic Response to a New Inlet, Packery Channel, Corpus Christi, Texas**

Deidre D. Williams, Nicholas C. Kraus, Carl M. Anderson

SAND BARS, BEACH CUSPS — CHAIRS: RANDALL PARKINSON, JOAN POPE

PELICAN II D4

**Geomorphic Features Shaped by Crossing Waves**

Robert B. Nairn, Mohammad Dibajnia

**Observation and Modeling of Crescentic Bars in Barcelona Embayed Beaches**

F. Ribas, R. Garnier, E Ojeda, A. FalqueDs, J. GuilleDn, D. Calvete

**Mesoscale Behaviour of Longshore Bars – Net Onshore or Net Offshore Migration**

Troels Aagaard, Aart Kroon

**Morphological Characteristics of Rip Current Embayments on the Oregon Coast**

Matthew M. Dalon, Merrick Haller, Jonathan Allan

**Geologic Framework of the Long Bay Inner Shelf: Implications for Coastal Evolution in South Carolina**

Walter Barnhardt, Jane Denny, Wayne Baldwin, William Schwab, Robert Morton,  
Paul Gayes, Neal Driscoll

9:50-10:20

BREAK - LE SALON & LA SALLE FOYER

10:20-12:00

SEDIMENT TRANSPORT FUNDAMENTALS IV — CHAIRS: ROBERT NAIRN, ROBERT WHALIN PELICAN I A5

**Infragravity Waves in Mobile-Bed Laboratory Experiments**

Florent Grasso, Hervé Michallet, Eric Barthelemy

**Large-Scale Laboratory Modeling of Suspended Sand Concentration Fluctuations Under Irregular Waves**Joachim Grüne, Ruben Kos'yan, Hocine Oumeraci, Igor Podymov,  
Reinold Schmidt-Koppenhagen, Chris E. Vincent**Change in Longitudinal Profile Using Sand of Mixed Grain Size in Large Wave Tank and its Numerical Simulation**

Massaya Fukuhama, Takaaki Uda, Masumi Serizawa, Toshinori Ishikawa

**Probabilistic-Deterministic Modelling of Swash Zone Morphology**

T.E. Baldock, P. Kim Son, P. Manoonvoravong, M.P. Barnes, J.M. Alsina

**Modelling Sheet Flow Sediment Transport Using Convolution Integrals**

P. Guard, I. Teakle, P. Nielsen, T. Baldock

STORMS I — CHAIRS: SHEA PENLAND, HILARY STOCKDON

**Coastal-Change Impacts during Hurricane Katrina: An Overview**

Asbury Sallenger, C. Wayne Wright, Jeff Lillycrop

**Modeling Dune Response Using Measured and Equilibrium Bathymetric Profiles**

Laura A. Fauver, David M. Thompson, Asbury H. Sallenger

**Sediment Transport Along the Southwestern Louisiana Shoreline: Impact from Hurricane Rita, 2005**

Walter S. Guidroz, Gregory W. Stone, Dane Dartez

**Heterogeneity and Dynamics on a Shoal during Spring-Winter Storm Season, South Central Louisiana, USA**

Daijiro Kobashi, Felix Jose, Gregory W. Stone

**Winter Storm and Tropical Cyclone Impacts on the Short-Term Evolution of Barriers Along the Northeastern Gulf of Mexico**

Gregory W. Stone, Baozhu Liu, Felix Jose

LA SALLE B B5



LA SALLE C C5

COASTAL INLETS III — CHAIRS: WILLIAM SEABERGH, MARCEL STIVE

**Evolution of a Relocated Tidal Inlet: Mason Inlet, NC**

John M. Welsh, William J. Cleary

**Present Hydrodynamics of Ancão Inlet, 10 Years After its Relocation**

André Pacheco, Ana Vila-Concejo, Oscar Ferreira, Alveirinho Dias

**The Influence of Tidal Prism and Vegetation on Tidal Channel Morphology: Implications for Marsh Stability**

Matthew L. Kirwan, A. Brad Murray

**Natural and Anthropogenic Influences on the Morphodynamics of Big Sarasota Pass, Florida**

Richard A. Davis, Ping Wang, Tanya Beck

**Morphological Behavior of Seasonal Closure of Tidal Inlets**

Tran Thanh Tung, Marcel J.F. Stive, Jan van de Graaff, Dirk-Jan R. Walstra

PELICAN II D5

SAND WAVES AND CHANNELS — CHAIRS: TROELS AAGAARD, MOHAMMAD DIBAJNIA

**A Relic Sand Wave Field in a Tidal Channel**

Shelley J. Whitmeyer, Duncan FitzGerald

**Geometric and Statistical Characteristics of Bed Forms in the Lower Mississippi River**

K. Kheirashy, J. McCorquodale, I. Georgiou, E. Mesele

**Bathymetric Evolution of a Sandy Bed Under Transient Progressive Waves**

Blake J. Landry, Marcelo H. García

**Analysis of Sebastian Inlet, FL, Morphologic Changes Using Complex Empirical Orthogonal Functions (CEOF)**

Florian G.A. Brehin, Jo-Ann Rosario-Llantin, Gary A. Zarillo

**Investigating Ship Induced Scour in a Confined Shipping Channel**

David Taylor, Kevin Hall, Neil MacDonald

LUNCH ON YOUR OWN

12:00-13:30

13:30-15:10

SHORELINE CHANGE MODELING — CHAIRS: HANS HANSON, SOLEDAD REQUEJO

PELICAN I

A6

**A Middle-Term Evolution Model for Beaches**

Soledad Requejo, Raul Medina, Mauricio Gonzalez

**Model for Predicting Beach Changes on Coast with Sand of Mixed Grain Size Based on Bagnold's Concept**

Masumi Serizawa, Takaaki Uda, Toshiro San-nami, Kou Furuike, Toshinori Ishikawa, Takayuki Kumada

**A Circulation Modeling Approach for Evaluating the Conditions for Shoreline Instabilities**

Jeffrey H. List, Andrew D. Ashton

**An Alternative Explanation for the Shape of 'Log-Spiral' Bays**

Ryan Littlewood, A. Brad Murray, Andrew D. Ashton

**The Response of Spit Shapes to Wave-Angle Climates**

Andrew D. Ashton, A. Brad Murray, Ryan Littlewood

**STORMS II — CHAIRS: AART KROON, ABBY SALLENGER**

LA SALLE B B6

**Impact of a Major Storm on Sediment Exchanges Between the Dunes, Beach, and Nearshore**

Aart Kroon, Susanne Quaratel, Troels Agaard

**Storm Patterns and Climactic Trends Based on Water Level Fluctuations: Duck, North Carolina, USA**

Joan Pope

**Hindcasting Potential Hurricane Impacts on Rapidly Changing Barrier Islands**

Hilary F. Stockdon, David M. Thompson, Asbury H. Sallenger, Jr.

**EOF Analysis of Morphological Response to Hurricane Ivan**

Chris Houser, Stuart Hamilton, Klaus Meyers-Arendt, Jonathan Oravetz

**Storm Surge and Sediment Process Owing to Hurricane Isidore in Terminos Lagoon, Campeche**

Juan C. Espinal, Paulo Salles. A de A, Diana K. Moran





ESTUARIES — CHAIRS: ALAN NIEDORODA, VLADIMIR SHEPDIS

LA SALLE C C6

**The National Academies Report on Mitigating Shore Erosion Along Sheltered Coasts**

Jeff Benoit, Susan Roberts

**Field Measurement and Modelling of Scour Pit Dynamics in a Sandy Estuary**

A.G. Davies, J.M. Brown

**Projection of Topographic Change of an Estuary Terrace by Horizontal 2-D Simulation Model, Considering Grain Size**

Toshimitsu Takagi, Go Asano, Takashi Inukai, Masaya Fukuhama

**Examining the Contribution of Sediment Stratification to the Evolution of Seabed Morphology**

S. Falchetti, D.C. Conley, M. Brocchini

**From River Basin to Barrier Reef: Pathways of Coastal Sediments**

Piet Hoekstra, Ton Hoitink, Frans Buschman, Ayi Tarya, Gert van den Bergh

BEACH NOURISHMENT — CHAIRS: TIMOTHY KANA, RAUL MEDINA

PELICAN II D6

**Evolution of Grain-Size Distribution on Bogue Banks: Implications for Selection of Borrow Material**

Timothy W. Kana

**New Findings in Equilibrium Grain Size Distribution**

Jordi Galofre, Raúl Medina, Gabriela Medellin, César Vidal

**Determination of Overfill Factor for Offshore Sand in Barrier Island Restoration on the Louisiana Coast**

Daniel L. Bolinger, Dominic Izzo, Edward J. Schmeltz

**Broward County Beach Demonstration Project: From Beers to Beaches**

Christopher Makowski, Gordon Thomson, Peter Foye, Stephen Higgins

**Beach Nourishment Evolution in the Cancún Beach, Quintana Roo, México**

Diana K. Morán, Paulo Salles. A de A, José C. Sánchez, Juan C. Espinal

15:10-15:40

|| BREAK - LE SALON & LA SALLE FOYER ||

15:40-17:00

OBSERVED SHORELINE CHANGE — CHAIRS: PETER RUGGIERO, JAMES SELEGEAN

PELICAN I

A7

**Historical Shoreline Changes and Morphodynamics of Parramore Island, Virginia (1852-2006)**

Trent M. Richardson, Randolph A. McBride

**Temporal and Spatial Scales of Profile and Planform Adjustment on a Nourished Beach**

Nicole A. Elko, Ping Wang

**Shoreline Response to Dike Failure at Grand Marais Harbor, Lake Superior, Michigan**

Rachel R. Roblin, Mohammad Dibajnia, Robert B. Nairn, James P. Selegean

**Successful Beach Modelling, Monitoring and Management for a Large LNG Facility**

Jonathan A. Kemp, Tom C. Coates, Richard Head, Jenny S. Harcourt

TSUNAMI I — CHAIRS: SHINJI SATO, RICHARD SOULSBY

LA SALLE B

B7

**Tsunami Damage Estimation in Consideration of Beach Transformation and Dike Failure**

Fuminori Kato, Masaya Fukuhama, Hiroyuki Fujii, Toshimitsu Takagi

**Beach Morphology at Banda Aceh, Indonesia in Response to the Tsunami on 26 December 2004**

Ella Meilianda, C. Marjolein Dohmen-Janssen, Ben H.P. Maathuis,

Suzanne J.M.H. Hulscher, Jan P.M. Mulder

**Dune Morphology as an Indicator of Paleotsunamis**

James R. Goff

**Sedimentological Characteristics of Regional-Scale Washover Deposits Caused by Hurricane Ivan**

Mark H. Horwitz, Ping Wang



LA SALLE C C7

MUD COASTS II — CHAIRS: DANO ROELVINK, ALEXANDRU SHEREMET

### **Wave Evolution on Fluid Mud Bottom**

Kevin Hall, Ali Oveisly

### **A Fine Sediment Transport Modeling Framework and its Application to Fluid Mud Processes**

Tian-Jian Hsu, Minwoo Son

### **Field Measurement of Fine Sediment Transport Process Around Navigation Channel**

Yasuyuki Nakagawa, Hideo Matsumoto

### **Time Dependent Mud Fluidization and Irregular Wave Transformation on Muddy Profiles**

Mohsen Soltanpour, S. Abbas Haghshenas, Tomoya Shibayama

PELICAN II D7

CASE STUDIES — CHAIRS: MEAD ALLISON, THOMAS CAMPBELL

### **Geomorphic Response and Elements of Sediment Budget at St. Joseph Harbor, Southeast Lake Michigan**

Mohammad Dibajnia, Robert B. Nairn, James P. Selegean

### **Chesapeake Bay: Headland Control Systems Performance Including Hurricane Isabel**

C. Scott Hardaway, Jr., James R. Gunn

### **Coastal Protection Against Wind-Wave Induced Erosion Using Soft and Porous Structures: A Case Study at Lake Biel, Switzerland**

Selim M. Sayah, Stephan Mai

### **Physical Processes Study of Goldsmith Inlet, New York**

Michael J. Morgan, Nicholas C. Kraus

7:00-8:00

SPEAKER/MODERATOR BREAKFAST

POYDRAS

8:10-9:50

GRAVEL COASTS I — CHAIRS: PAUL KOMAR, JULIAN ORFORD

PELICAN I A8

**The Design of Stable and Aesthetic Beach Fills: Learning from Nature**  
Paul D. Komar

**Variation in the Organisation of Gravel-Dominated Coastal Systems: Evidence from Nova Scotia and Southern England**

Julian D. Orford, Simon C. Jennings

**Profile Dynamics and Particle Tracer Mobility of a Cobble Berm Constructed on the Oregon Coast**

Jonathan C. Allan, Roger Hart

**Mixed Sediment Beach Processes: Kachemak Bay, Alaska**

Peter Ruggiero, Peter N. Adams, Jonathan A. Warrick

**Mixed Sand and Gravel Beach Design and Construction for Habitat Restoration**

David Simpson, Michael Wray, John Houghton, John Klekotka

TSUNAMI II — CHAIRS: GUY GELFENBAUM, BRUCE JAFFE

LA SALLE B B8

**Impacts of the 2004 Indian Ocean Tsunami on the Southwest Coasts of Sri Lanka**

Robert A. Morton, James R. Goff, Scott L. Nichol

**Reconstructing Tsunami Run-Up from Sedimentary Characteristics - A Simple Mathematical Model**

Richard L. Soulsby, David E. Smith, Alan Ruffman

**Numerical Study of Tsunami Run-Up Over Eroding Sand Dunes**

Takenori Shimozone, Shinji Sato, Yoshimitsu Tajima

**Predicted Sedimentary Record of Reflected Bores**

Bretwood Hignan, Guy Gelfenbaum, Patrick Lynett, Andrew Moore, Bruce Jaffe

**Tsunami Inundation and Sediment Transport in Vicinity of Coastal Mangrove Forest**

Guy Gelfenbaum, Deepak Vatvani, Bruce Jaffe, Frank Dekker



LA SALLE C C8

REGIONAL PROCESSES I — CHAIRS: MARK BYRNES, GEORGE KAMINSKY

**Regional Beach/Cliff System Dynamics Along the California Coast**

Cheryl J. Hapke, Dave Reid

**Factors Influencing the Long-Term Stability of the Carbonate Sand Beaches of Mauritius**

Michael J. Risk, Robert B. Nairn, Mark O. Kolberg

**Evolution of Erosion Hot Spots on a Barrier Island: Fire Island, New York**

Kathryn Seaver, Frank Buonaiuto, Henry Bokuniewicz

**Tropical Mixed Wave/Tide Dominated Barrier-Spit System: A Case Study from NE Brazil**

Helenice Vital, Francisco Santos Neto, Jose S. Placido, Venerando Eustáquio Amaro

**Regional Shoreline and Beach Changes in the Santa Barbara Sandshed**

David L. Revell, Gary B. Griggs

**DREDGING — CHAIRS: TERRY HEALY, BARRY HOLLIDAY**

PELICAN II D8

**Design of Navigation Channel Deepening Works Using a Morphological Model in Barranquilla, Columbia**

Rafael Canizares, Santiago Alfageme, Tucker Mahoney

**Beach Renourishment Through Spoil Disposal Downturn of a Dredged Entrance Channel**

Kyle C. Spiers, Terry R. Healy

**Desktop Methodology for Estimating Maintenance Dredging Requirements for Widened and Deepened Navigation Channels**

Larry A. Wise, Oleg Mouraenko

**A Mass-Balance, Control-Volume Approach for Estimating Vertical Sediment Flux and Settling Velocity Within Dredge Plumes**

S. Jarrell Smith, Carl T. Friedrichs

**What Does “Physical Regeneration” of Marine Aggregate Dredging Sites Mean?**

Markus Diesing

9:50-10:20

BREAK - LE SALON & LA SALLE FOYER

10:20-12:00

GRAVEL COASTS II — CHAIRS: JONATHON ALLAN, PHILIP OSBORNE

PELICAN I A9

**Influence of Changing Management Regimes on the Morphodynamic Response, of a Mixed Gravel and Sand Barrier Beach**

Andrew P. Bradbury, Julian D. Orford

**The Influence of Groundwater on Profile Evolution of Fine and Coarse Sand Beaches**

Diane P. Horn, Tom E. Baldock, Ling Li

**Effects of Permeability on the Performance of Mixed Sand-Gravel Beaches**

Kaiming She, Louise Trim, Diane Horn, Paul Canning

**Cross-shore and Longshore Transport of Tracer Pebbles on a Macrotidal Mixed Sediment Beach, Somme Estuary, France**

J. Curoy, U. Dornbusch, C.A. Moses, D.A. Robinson, R.B.G. Williams

**Why Are Shingle Beaches Replacing Sandy Beaches? (Coastal Zone of NW Portugal)**

Helena Granja, Eduardo Loureiro

SEA LEVEL RISE I — CHAIRS: LAURA MOORE, S. JEFFRESS WILLIAMS

LA SALLE B B9

**From Transgression to a Producing Coast; Large-scale Evolution of the Coast near The Hague, The Netherlands, Around 500 Years BP**

Ad J.F. van der Spek, Jelmer Cleveringa, Sytze van Heteren

**Changing Orientation of Ocean-Facing Bluffs on a Transgressive Coast, Cape Cod, Massachusetts**

Graham S. Giese, Mark B. Adams

**Modeling Barrier Island Response to Sea-Level Rise in the Outer Banks, North Carolina**

Laura J. Moore, Jeffrey H. List, S. Jeffress Williams, David Stolper

**1880 to 2005 Morphological Evolution of a Transgressive Tidal Inlet, Little Pass Timbalier, Louisiana**

Michael D. Miner, Duncan M. FitzGerald, Mark A. Kulp



LA SALLE C C9

REGIONAL PROCESSES II — CHAIRS: JEFFREY LIST, ROBERT MORTON

**Engineering Activities Influencing Historical Sediment Transport Pathways at the Mouth of the Columbia River, WA/OR,**

Mark R. Byrnes, Sarah F. Griffee, Hans R. Moritz

**Implementing Regional Sediment Management to Sustain Navigation at an Energetic Tidal Inlet**

Hans R. Moritz, Guy R. Gelfenbaum, George M. Kaminsky, Peter Ruggiero,  
Joan Oltman-Shay, Doris J. McKillip

**Decadal Evolution of Shoreface Geometry in South Carolina, USA**

B.M. Reynolds, P.A. Wren, P.T. Gayes

**Improving Statistical Validity in Calculating Erosion Hazards from Historical Shorelines**

Ayesha S. Genz, L. Neil Frazer, Charles H. Fletcher

**Linking Coastal Evolution and Super Storm Dune Erosion Forecasts**

L.M. van der Burgh, K.M. Wijnberg, S.J.M.H. Hulscher, J.P.M. Mulder,  
M. van Koningsveld

BEACH NOURISHMENT AND STRUCTURES — CHAIRS: ROBERT DEAN, JOHN HEADLAND PELICAN II D9

**Performance of Beach Fill and Nearshore Breakwaters at East Ocean View Beach, Norfolk, VA**

Peter Elkan, Laura Krynock, Nicole Vanderbeke, James White, Lee Rosenberg

**Assessing Fill Compatibility Through Project Performance Evaluation**

Donald K. Stauble

**Coastal Structure Design for Shore Protection & Sand Retention: Practical Aspects**

John R. Headland, Santiago Alfageme, Eric Smith, Peter Kotulak

**Quantitative Evaluation of Controlling Effect of Headland on Longshore Sand Transport Using Model for Predicting Changes in Contour Lines and Grain Size**

Takayuki Kumada, Takaaki Uda, Masumi Serizawa

**Evaluation of Controlling Effect of Sand Transport by Detached Breakwaters Built on Dynamically Stable Beach**

Takaaki Uda, Masumi Serizawa, Toshinori Ishikawa

12:00-13:30

AWARDS LUNCH - LA SALLE A

13:30-15:10

GRAVEL COASTS III — CHAIRS: DIANE HORN, SUSAN TONKIN

PELICAN I A10

**Field Measurements of Shore Conditions to Assess Bulkhead Effects in Thurston County, South Puget Sound**

Susan P. Tonkin, Tim Abbe, José Carrasquero, Steve Morrison

**Coral-Gravel Storm Ridges: Examples from the Tropical Pacific and Caribbean**

Bruce M. Richmond, Robert A. Morton

**Field Observations of Step Dynamics on a Macrotidal Gravel Beach**

Daniel Buscombe, Martin J. Austin, Gerhard Masselink

**Large-Scale Scour of the Sea Floor and the Effect of Natural Armouring Processes, Land Reclamation Maasvlakte 2, Port of Rotterdam**

Sander Boer, Edwin Elias, Stefan Aarminkhof, Dano Roelvink, Tiedo Vellinga

SEA LEVEL RISE II — CHAIRS: MARK KULP, A. BRAD MURRAY

LA SALLE B B10

**Impacts of Rising Sea Level to Backbarrier Wetlands, Tidal Inlets, and Barrier Islands: Barataria Coast, Louisiana**

Duncan FitzGerald, Mark Kulp, Zoe Hughes, Ioannis Georgiou, Michael Miner, Shea Penland, Nick Howes

**Modeling Future Coastal Wetland Transition Induced by Relative Sea-Level Rise**

James C. Gibeaut

**Morphological Interactions Within UK Estuaries: A Preliminary Analysis of Critical Rates of Sea Level Rise**

Kate Rossington, Robert J. Nicholls, Michiel A.F. Knaapen

**Variable Shoreline Responses to Sea Level Rise and Climate Change**

A. Brad Murray, Lisa Valvo, Jordan Slott, Andrew Ashton, Tom Crowley

**Model Scenarios of Shoreline Change at Kaanapali Beach, Maui, Hawaii: Seasonal and Extreme Events**

Sean Vitousek, Charles H. Fletcher, Mark A. Merrifield, Geno Pawlak, Curt D. Storlazzi





LA SALLE C C10

LIDAR AND ARGUS -- CHAIRS: ROBERT HOLMAN, JEFF LILLYCROP

**CHARTS-Enabled Data Fusion for Coastal Zone Characterization**

Jennifer M. Wozencraft, Christopher L. Macon, W. Jeff Lillycrop

**Using Topographic LIDAR Data to Delineate the North Carolina Shoreline**

Patrick W. Limber, Jeffrey H. List, Jeffrey D. Warren, Amy S. Farris, Kathryn M. Weber

**Exploring Rippled Scour Depressions Offshore Huntington Beach, CA**

Elyne L. Phillips, Curt D. Storlazzi, Peter Dartnell, Brian D. Edwards

**A Study of Intertidal Bar Dynamics Using the Argus Video System**

Amalia Ruiz de Alegria Arzaburu, Suzana Ilic, Yohama Gunawardena

**Depth of Closure Derived from Airborne Laser Bathymetry**

William Robertson V, Keqi Zhang, Dean Whitman

SEAFLOOR MAPPING -- CHAIRS: MARK HANSEN, CURT STORLAZZI

PELICAN II D10

**Geologic Characterization of Offshore of Shelf Areas Using uSEABED for GIS Mapping, Modeling Processes and Assessing Marine Sand and Gravel Resource**

S. Jeffress Williams, James D. Bliss, Matthew A. Arsenault, Chris J. Jenkins, John A. Goff

**USGS Advances in Integrated, High-Resolution Sea-Floor Mapping: Inner Continental Shelf to Estuaries**

Jane F. Denny, William C. Schwab, David C. Twichell, Thomas F. O'Brien, William W. Danforth, David S. Foster, Emile Bergeron, Charles W. Worley, Barry J. Irwin, Bradford Butman, Page C. Valentine, Wayne E. Baldwin, Robert A. Morton, E. Robert Thielert, David R. Nichols, Brian D. Andrews

**A Rapid Compatibility Analysis of Potential Offshore Sand Sources for Beaches of the Santa Barbara Littoral Cell**

Neomi Mustain, Gary Griggs, Patrick L. Barnard

**Presence of Beach-Compatible Sediments in Offshore Borrowers: New Challenges and Trade Offs in Developing Codifications**

Charles W. Finkl, Jeffrey L. Andrews, Lindino Benedet

15:10-15:40

BREAK - LE SALON & LA SALLE FOYER

15:40-17:00

DUNES AND PROFILES — CHAIRS: ROD MORITZ, JULIE ROSATI

PELICAN I A11

**Dune Erosion Prediction Methods Incorporating Effects of Wave Periods**

Marcel R.A. van Gent, E. Martijn Coeveld, Hans de Vroeg, Jan van de Graaff

**Reevaluation of Equilibrium Beach Profile Scale Parameter**

Zhanxian Wang, Robert G. Dean

**Shoreface Response to Sediment Deficit**

G.M. Kaminsky, M.A. Ferland, P.J. Cowell, H.R. Mortiz, P. Ruggiero

WIND-BLOWN SAND — CHAIRS: SHINTARO HOTTA, DOUGLAS SHERMAN

LA SALLE B B11

**Aeolian Processes, Coastal Dunes, and the Coastal Engineering Manual, Part III, Chapter 4 - "Wind-Blown Sediment Transport"**

Frank Hopf, Douglas J. Sherman

**Distribution of Horizontal Distance Traveled by Saltating Sand Grains in Air**

Shintaro Hotta, Susumu Kubota, Nagatomo Nakamura

**Beach Stabilization Works Against Wind Blown Sand on Beaches: Experiences from Japan**

Susumu Kubota, Souichi Harikai, Shintaro Hotta

**Coastal Dune Field Evolution in Conditions of Limited Sediment Availability: Natural and Anthropogenic Controls on the Corralejo Dunes**

Hermínia I. Valdemoro, José A. Jiménez, Ignacia Alonso, Paloma Lorente,

Manuel Rodríguez-Herrerías



REMOTE SENSING — CHAIRS: PATRICK LIMBER, GARY ZARILLO

LA SALLE C C11

**Assessing Nearshore Bar Movements During Storms Using Time Averaged X-Band Radar Images**

Luciana S. Esteves, Jon J. Williams, Paul S. Bell

**Longshore Migration of Coastal Features Observed with X-Band Radar**

Satoshi Takewaka, El Sayed Galal, Ryosuke Matsumoto, Shinya Sasakura

**Detailed 3-D Models of New Zealand Barrier Stratigraphy Provide Insight Into Coastal Evolution in Various Spatial and Temporal Settings**

Amy J. Dougherty, Scott L. Nichol

17:30-19:00

Y CLOSING MIXER - LE SALON & LA SALLE FOYER Y

## TECHNICAL TOURS

### Geology of the Louisiana Coastal Zone: Implications for Coastal Management and Restoration

Departs and Returns from Intercontinental Hotel New Orleans

**Thursday May 17th, 2007**

**6:00 am to 8:00 pm**

**Leaders:** Dr. Mark Kulp, Dr. Mike Miner, Dr. Duncan FitzGerald, and Dr. Ioannis Georgiou.

**Cost:** \$125 (includes transportation, bag lunch, and drinks).  
25 person limit

**Description:** The Louisiana Coastal Zone is one of America's most extensively studied and important coastal ecosystems in terms of natural resources, human infrastructure, and cultural heritage. It also has the highest rates of coastal erosion and wetland loss in the nation due to a complex combination of natural land loss processes as well as alteration to the coastal zone by human activities. This land loss has prompted the development of regional coastal ecosystem restoration plans that are funded and guided by federal and state agencies. A fundamental requirement for the most cost-effective design and completion of restoration projects is a solid understanding of the regional geologic framework and the processes operating along the barrier shorelines and within the interior wetlands.

Participants of the this field trip will gain first-hand experience of the Louisiana Coastal Zone by traveling from New Orleans to Fourchon Louisiana by vans, then by boats to the Timbalier Islands barrier island system. Stops along the way will focus on the modern coastal zone geomorphology, shallow and deep stratigraphy, and shallow and deep processes of the coastal zone with regard to Louisiana coastal zone restoration plans. Proposed restoration plans, socio-economic importance of coastal restoration, and the politics of coastal restoration will also be discussed.

**What to Bring:** The temperature during this time of year can easily reach 90 degrees Fahrenheit. Participants should wear hats, sunglasses, light-weight clothing and closed-toe, rubber-sole shoes that can get wet. Plenty of drinks (water, Gatorade, and soda) will be available.

#### Tentative Schedule:

6:00 am	Promptly leave NOLA for Fourchon Louisiana
9:00 am	Arrive Fourchon, brief introduction to Fourchon, LUMCON facilities and central coastal zone
10:00 am	Board boats and leave LUMCON dock
11:00	Arrive Timbalier Islands, discussion about coastal zone, barrier systems, tidal inlets, storm impacts
12:45	Bag lunch
12:30	Continued discussion of coastal geomorphology, restoration projects, regional geology
1:00	Depart Timbalier Island
1:45	Arrive Raccoon Pass, discussion
2:30	Arrive LUMCON
3:00	Discuss Wisner Restoration
4:00	Gumbo Dinner with bread and salad at LUMCON camp
5:00	Depart for NOLA
8:00	Arrive NOLA

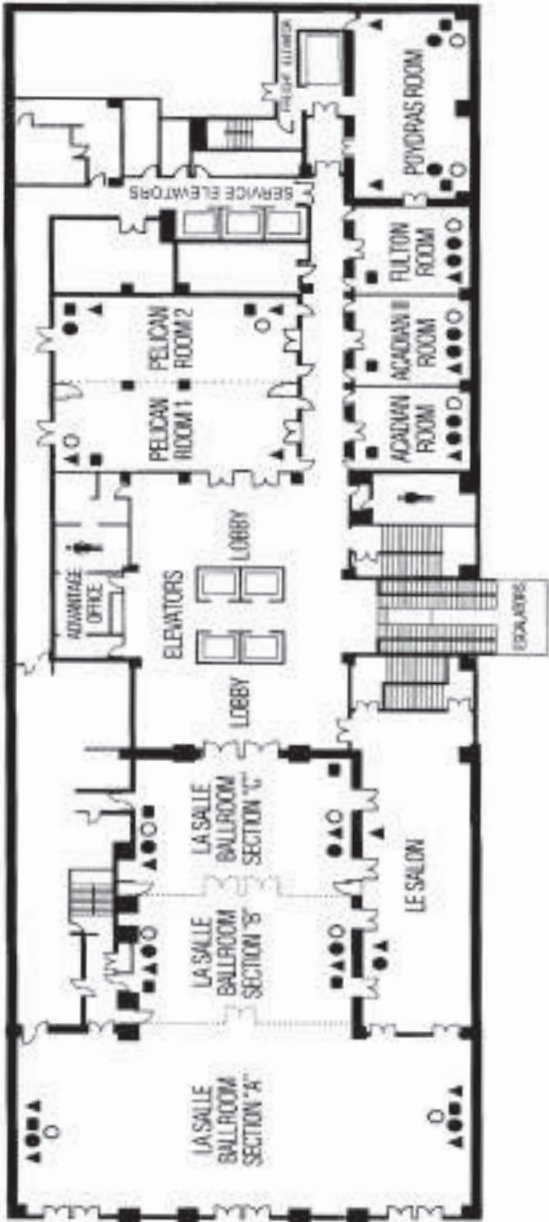


*Trinity Island, Isle Dernieres, Louisiana  
January 2004  
Courtesy USGS*

## CONFERENCE FACILITIES PLAN

La Salle A – Opening Ceremony  
Pelican I – Sessions A  
La Salle B – Sessions B  
La Salle C – Sessions C  
Pelican II – Sessions D

Acadian II – Speakers Preparation and Presentation Loading  
Poydras Room – Speaker and Moderator Breakfast







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