21st Biennial Conference of the Coastal and Estuarine Research Federation

PROGRAM BOOK

This program book is designed to assist you at the meeting. We encourage you to continue to check the conference Web site throughout the conference for up-to-date information and for schedule change notifications. Follow the conference throughout the week also on Facebook and the CERF 2011 Blog!

WWW.ERF.ORG

COASTAL AND ESTUARINE RESEARCH FEDERATION

CERF 2011

SOCIETIES, ESTUARIES AND COASTS: ADAPTING TO CHANGE

6-10 NOVEMBER 2011
OCEAN CENTER · DAYTONA BEACH, FLORIDA

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21ST BIENNIAL CONFERENCE OF THE COASTAL AND ESTUARINE RESEARCH FEDERATION

SOCIETIES, ESTUARIES AND COASTS: ADAPTING TO CHANGE

6-10 NOVEMBER 2011 · OCEAN CENTER · DAYTONA BEACH, FLORIDA

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Member at Large: (2009-2013)	Janet Nestlerode, Research Ecologist

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ACCESS:	Katherine M. Jones, Cape Breton University
AERS:	Peter F. Straub, Richard Stockton College
CAERS:	Peggy Fong, UCLA/EEB
GERS:	Edward J. Buskey, The University of Texas at Austin
NEERS:	Stephen Hale, US Environmental Protection Agency
PERS:	Steve Rumrill, South Slough National Estuarine Research Reserve
SEERS:	Denise M. Sanger, SC Sea Grant Consortium

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Member at Large: (2011-2015)	James Hagy, Research Ecologist
Int'l Member at: Large (2011-2015)	Alejandro Yáñez-Arancibia, Instituto de Ecología A. C. (CPI-CONACYT)

2011-2013 AFFILIATE SOCIETY PRESIDENTS

ACCESS:	Melisa Wong, Fisheries and Oceans Canada
AERS:	Mark J. Brush, Virginia Institute of Marine Science (VIMS)
CAERS:	Sharon Herzka, Centro de Investigación Científica y de Educación Superior de Ensenada (CICESE)
GERS:	Ruth H. Carmichael, University of South Alabama and Dauphin Island Sea Lab
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CESN

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CERF 2011 CONFERENCE OPENING SESSION

CELEBRATING 40 YEARS OF COASTAL AND ESTUARINE RESEARCH

SUNDAY, 6 NOVEMBER 2011, 6:00 - 7:30 PM
OCEAN CENTER BALLROOM

Welcome, introductions, President's Address:
Susan L. Williams, CERF President 2009-2011

Presentation of CERF Distinguished Service Award to Robert R. Christian, East Carolina University

CERF 2011 Conference Co-Chairs' Address:
Holly Greening, Tampa Bay Estuary Program, and
James Fourqurean, Florida International University

Keynote Address: Solutions for Sustainable Prosperity of Humans and the Rest of Nature in the Coastal Zone
Robert Costanza, Portland State University

CERF Awards:
Robert R. Christian, CERF President 2005-2007, Presiding

- *Pritchard Award for Geophysics Paper in Estuaries and Coasts:* Stephen G. Monismith, James L. Hench, Derek A. Fong, Nicholas J. Nidzieko, William E. Fleenor, Laura P. Doyle & S. Geoffrey Schladow
- *William A. Niering Educator Award:*
  Linda Walters, University of Central Florida
- *Cronin Award for Early Career Achievement:*
  Isaac R. Santos, Southern Cross University, Lismore, Australia
- *Odum Award for Lifetime Achievement:*
  Hans W. Paerl, University of North Carolina

Presentation of YSI Foundation's 2011 Minding the Planet Grants:
Rick Fielder, Director of Sales, YSI

Celebrating CERF's 40 Years:
Joy Bartholomew, CERF Executive Director, 1992-2011

After the Opening Plenary Session, all attendees are invited to CERF's 40th Anniversary Celebration in the Hilton Hotel, directly across the road from the Ocean Center.

CERF 2011 CONFERENCE KEYNOTE ADDRESS

SOLUTIONS FOR SUSTAINABLE PROSPERITY OF HUMANS AND THE REST OF NATURE IN THE COASTAL ZONE

Human societies are integral components of ecosystems. We need to better understand the integrated dynamics of humans and the rest of nature, including especially the contributions of coastal natural capital. The coasts are the focus of much human interaction with the rest of nature and are critical in creating a sustainable and desirable future.

ROBERT COSTANZA

University Professor of Sustainability, Director, Institute for Sustainable Solutions, Portland State University

Robert Costanza joined Portland State University in September 2010. He leads the Institute for Sustainable Solutions (ISS), the hub for interdisciplinary research, teaching, and engagement in sustainability at Portland State University. The Institute administers the ten-year, $25 million challenge grant for sustainability made by the James F. and Marion L. Miller Foundation to PSU in September 2008.

Costanza's research has focused on the interface between ecological and economic systems, particularly at larger temporal and spatial scales. This includes landscape-level spatial simulation modeling; analysis of energy and material flows through economic and ecological systems; valuation of ecosystem services, biodiversity, and natural capital; and the analysis and correction of dysfunctional incentive systems.

He is the author or co-author of over 400 scientific papers and 20 books; and his work has been cited in more than 5,000 scientific articles. Reports on his work have appeared in several outlets including *Newsweek, Time, The Economist, The New York Times, Science, Nature, National Geographic,* and *National Public Radio*. Costanza is editor-in-chief and co-founder (along with Paul Hawken, David Orr and John Todd) of the new journal *Solutions* (www.thesolutionsjournal.org).

Original source: http://www.pdx.edu/sustainability/robert-costanza

CARBON NEUTRAL FOOTPRINTS

CERF conference activities impact climate change by generating carbon emissions. Such activities include participants' air and ground transportation, plus electricity and natural gas usage at the convention center and other event facilities. If you have not done so when you registered for the conference, we invite you to donate to the 2011 CERF Conference Carbon Emissions Offset Fund during the meeting. Your contribution will support the Indian River's Community-based Oyster Reef Restoration and Living Shoreline Stabilization Program. (For more information on this worthwhile program, please see CERF Newsletter, June 2011, p26, available online at http://www.erf.org/newsletters.)

CERF CONFERENCE RECORDING POLICY

The preparation of tape recordings, audio visual tracks and the recording of images for subsequent sale, group presentations or individual use are strictly prohibited unless approved in advance through CERF headquarters in writing.

WIRELESS INTERNET ACCESS

Wireless Internet access will be available to conference attendees on an open network. To get on the Internet, simply open up your browser and click on the Ocean Center network.

BUSINESS CENTER

Both the Ocean Center and the Hilton have in-house business centers. IKON Business Center is located in the North Tower of the Hilton and is open from 7:00 am to 7:00 pm, Monday through Friday. They offer a range of printing services, shipping, electronic accessories, and office supplies. The Ocean Center's Business Center is located in the center of the West Connector Concourse.

RESTAURANTS & CONCESSIONS

Cafes and restaurants around the Ocean Center and the Hilton offer a wide variety of entrees, snacks and beverages for any time of day and for any type of appetite.

For quicker options, a concession stand will be in the West Concourse between the Arena and the Exhibit Hall. For breakfast, they will offer coffee, a variety of muffins and breakfast pastries, fruit, and yogurt. The lunch menu will include a variety of hot and cold sandwiches and salads.

Breakfast Hours: ..... Monday through Thursday, 7:00-10:00 am
Lunch Hours: ..... Monday through Thursday, 12:00-1:30 pm

In addition, a kiosk will be open Monday through Thursday in the South Concourse from 7:00 am until close to purchase coffee, soft drinks, and snack items throughout the day.

CONFERENCE PARKING

Daily rates offered by the Hilton are $10 for self-parking and $17 for valet services. The Ocean Center offers parking for $5 per conference day, including in-and-out privilege. If you will be parking your vehicle overnight, 24-hour parking is $10 and does not include in-and-out privileges. Other parking in the area is limited. Some small parking lots are within walking distance, as well as a few on-street meters for short-term use.

CONFERENCE REGISTRATION

Conference check-in for pre-registered and registration of on-site attendees will take place in the Ocean Center in the West Concourse Area near the exhibit hall. The registration desk will be opened during the following hours from Sunday, 6 November, through Thursday, 10 November:

Sunday, 6 November.....1:00 to 6:00 pm
Monday, 7 November .....7:00 am to 5:30 pm
Tuesday, 8 November .....7:00 am to 5:30 pm
Wednesday, 9 November .....7:30 am to 7:00 pm
Thursday, 10 November.....7:30 am to 5:30 pm

COMPUTER CENTRAL

Computer Central will be located at the Ocean Center in M02A. Hours of operation are as indicated:

Sunday, 6 November.....1:00 to 7:00 pm
Monday, 7 November.....7:00 am to 6:00 pm
Tuesday, 8 November.....7:00 am to 6:00 pm
Wednesday, 9 November.....7:00 am to 6:00 pm
Thursday, 10 November.....7:00 am to 5:30 pm

WORKSHOPS

SUNDAY, 6 NOVEMBER 2011, 1:30 - 3:00 PM

RAPID SPATIAL CHARACTERIZATION OF ESTUARINE AND COASTAL SYSTEMS IN REAL TIME (THIS IS A CONTINUATION FROM CERF 2007 AND 2009.)

Location: OC - Room 102 AB
Conveners: C. Madden (cmadden@sfwmd.gov), K. Moore (moore@vims.edu), and E. Koepfler (eric@coastal.edu)

This workshop builds on two previous CERF workshops that focused on multi-parameter spatial mapping of coastal waters with high-speed, in situ sampling systems (aka Dataflow). Participants will summarize insights gained on fundamentals of ecosystem pattern and functioning, watershed-estuary landscape interactions and application to system management. Outputs will be compiled in a special journal issue.

GEOSPATIAL TOOLS FOR ESTUARINE ANALYSIS AND COMPARISON

Location: OC - Room 102 C
Convener: N. Detenbeck (detenbeck.naomi@epa.gov)

This workshop provides an overview and demonstrations of geospatial tools for estuarine data visualization and retrieval (Estuary Data Mapper), information management (e-Estuary geodatabase, ACES), data analysis, and decision-making. Demonstrated tools for assessing estuaries will include 1) a TOC-Grain size diagnostic tool for estuarine eutrophication, 2) a tidal prism-based spreadsheet model to calculate time series of pollutant concentrations in estuaries, 3) a habitat suitability model for seagrass, and 4) decision analysis tools (DASEES).

SEAGRASS MONITORING AND ASSESSMENT: IDENTIFYING NEEDS AND SHARING BEST PRACTICES

Location: OC - Room 103A
Convener: M. Finkbeiner (mark.finkbeiner@noaa.gov)

This workshop will expand on the roundtable discussions at CERF 2009, including improved methods for assessing the accuracy of SAV maps, understanding sources of error within SAV map data, and ways to convey information to end users. Other topics include adapting new technologies, integrating new data into existing trend information, and developing standard methods.

SOCIETY AND THE COAST: ECONOMIC AND SOCIAL RELIANCE

Location: OC - Room 101 A-C
Convener: P. Wiley (peter.wiley@noaa.gov)

This workshop will explore the broad range of human dimensions associated with prioritizing coastal management issues. Participants will learn about the social and economic data, tools and analyses needed to understand relationships between society and natural resources. Topics of concern include the increased frequency and severity of storms, sea level rise, climate related hazards, and threats to ecosystem services, resilient communities, and sustainable development.

Continued on Page 8.

CERF 2011 CONFERENCE SCHEDULE-AT-A-GLANCE

SUNDAY

Field Trips	Various Times	Depart from Lobby of the North Tower of the Hilton
Student Worker Orientation and Training	11:00-12:30 pm	OC - Room 202 AB
Registration Opens	1:00 pm	OC - Exhibit Hall West Conncourse
Workshop: Rapid Spatial Characterization	1:30 - 3:00 pm	OC - Room 102 AB
Workshop: Geospatial Tools	1:30 - 3:00 pm	OC - Room 102 C
Workshop: Anti-Fouling Techniques	1:30 - 3:00 pm	OC - Room 103 BC
Workshop: Society and the Coast	1:30 - 3:00 pm	OC - Room 101 A-C
Workshop: Achieving Long-term Accuracy and Reduced Sensor Maintenance	1:30 - 3:00 pm	OC - Room 104 B
Workshop: Seagrass Monitoring and Assessment	1:30 - 3:00 pm	OC - Room 103 A
Workshop: Scientists as Communicators and Educators	1:30 - 5:00 pm	OC - Room 201 AB
Workshop: Numerical Modeling of Estuarine Systems	3:30 - 5:00 pm	OC - Room 102 C
Workshop: Coastal and Marine Ecological Classification Standard (CMECS)	3:30 - 5:00 pm	OC - Room 102 AB
Workshop: Restoring the Hudson	3:30 - 5:00 pm	OC - Room 103 A
Workshop: Living Shorelines	3:30 - 5:00 pm	OC - Room 101 A
Workshop: Data Collection from Moving Platforms	3:30 - 5:00 pm	OC - Room 104 AB
Student Orientation Meeting "Crash Course in CERFing"	4:30 - 5:30 pm	OC - Room 202 AB
Awardee & Sustaining Members Reception (By Invitation)	4:00 - 5:30 pm	OC - 2nd Floor Foyer
Keynote Address and Scientific Awards	6:00 - 7:30 pm	OC Ballroom
President's Welcome Reception	8:00 - 10:00 pm	Hilton - Coquina Ballroom

MONDAY

Early Morning Sessions	8:00 - 9:45 am	OC -Various Rooms
Break	9:45 - 10:15 am	OC - Exhibit Hall
Exhibits and Posters Open	9:45 am - 6:30 pm	OC - Exhibit Hall
Late Morning Sessions	10:15 - 12:00 pm	OC - Various Rooms
Lunch	12:00 - 1:30 pm	On Your Own
Early Afternoon Sessions	1:30 - 3:00 pm	OC - Various Rooms
Break	3:00 - 3:30 pm	OC - Exhibit Hall
Afternoon Oral Sessions	3:30 - 5:00 pm	OC - Various Rooms
Poster Sessions/Happy Hour	5:30 - 6:30 pm	OC - Exhibit Hall
Atlantic Canada Estuarine Science Society (ACCESS) Meeting	6:30 - 7:30 pm	OC - Room 101 A
Atlantic Estuarine Research Society (AERS) Meeting	6:30 - 7:30 pm	OC - Room 101 BC
California Estuarine Research Society (CAERS) Meeting	6:30 - 7:30 pm	OC - Room 102 AB
Gulf Estuarine Research Society (GERS) Meeting	6:30 - 7:30 pm	OC - Room 102 C
New England Estuarine Research Society (NEERS) Meeting	6:30 - 7:30 pm	OC - Room 103 BC
Pacific Estuarine Research Society (PERS) Meeting	6:30 - 7:30 pm	OC - Room 104 AB
Southeastern Estuarine Research Society (SEERS) Meeting	6:30 - 7:30 pm	OC - Room 201 C
Student Career Event	7:30 - 9:30 pm	OC - Ballroom

TUESDAY

Early Morning Sessions	8:00 - 9:45 am	OC -Various Rooms
Break	9:45 - 10:15 am	OC - Exhibit Hall
Exhibits and Posters Open	9:45 am - 7:00 pm	OC - Exhibit Hall
Late Morning Sessions	10:15 - 12:00 pm	OC - Various Rooms
Lunch	12:00 - 1:30 pm	On Your Own

Women in Science Networking Event (Ticketed)	12:00 - 1:30 pm	OC - Ballroom
NOAA's Five-Year Research Plan	12:00 - 1:30 pm	OC - Room 101 A
Early Afternoon Sessions	1:30 - 3:00 pm	OC - Various Rooms
Break	3:00 - 3:30 pm	OC - Exhibit Hall
Integrated Ecosystem Assessment: the Present State-of-the-Art Synthesis Session	3:30 - 5:00 pm	OC - Ballroom
Workshop: NCCA 2010 Benthic Indicator Meeting	5:00 pm	OC - Room 102 AB
Town Hall Meeting: Forecasting Scenarios for Estuarine and Coastal Management	5:00 pm	OC - Room 101 A
Workshop: Ocean in Google Earth	5:00 - 7:00 pm	OC - Room 102 C
Poster Sessions/Happy Hour	5:00 - 7:00 pm	OC - Exhibit Hall
Annual CERF Business Meeting	6:30 - 8:00 pm	OC - Room 103 A
VIMS Reception	7:00 pm	Hilton
50th Anniversary of GSO - URI Reception	8:00 pm	Hilton

WEDNESDAY

President's Breakfast (By Invitation)	7:00 - 8:30 am	Hilton - Oceanview Room
5K Fun Run	7:00 am	Runners Meet at Hilton Clocktower on the Beach
Early Morning Sessions	8:00 - 9:45 am	OC -Various Rooms
Break	9:45 - 10:15 am	OC - Exhibit Hall
Exhibits and Posters Open	9:45 am - 7:00 pm	OC - Exhibit Hall
Late Morning Sessions	10:15 - 12:00 pm	OC - Various Rooms
Lunch	12:00 - 1:30 pm	On Your Own
Editorial Board Lunch (By Invitation)	12:15 - 1:45 pm	OC - M01B
Early Afternoon Sessions	1:30 - 3:00 pm	OC - Various Rooms
Break	3:00 - 3:30 pm	OC - Exhibit Hall
Afternoon Oral Sessions	3:30 - 5:00 pm	OC - Various Rooms
Poster Sessions/Happy Hour	5:00 - 7:00 pm	OC - Exhibit Hall
Science for Community Leaders	5:30 - 7:00 pm	OC - Exhibit Hall
LSU SC&E 10th Anniversary Reunion	7:00 pm	Hilton
Student Pub Crawl	9:00 pm	Mai Tai Bar on the Ocean Walk

THURSDAY

CESN Editorial Board Breakfast	7:00 - 8:30 am	Hilton - Oceanview
Early Morning Sessions	8:00 - 9:45 am	OC -Various Rooms
Break	9:45 - 10:15 am	OC - Exhibit Hall
Exhibits and Posters Open	9:45 am - 4:00 pm	OC - Exhibit Hall
Late Morning Sessions	10:15 - 12:00 pm	OC - Various Rooms
Lunch	12:00 - 1:30 pm	On Your Own
CERF 2013 Committee Lunch	12:30 - 2:00 pm	OC - M01B
Early Afternoon Sessions	1:30 - 3:00 pm	OC - Various Rooms
Break	3:00 - 3:30 pm	OC - Exhibit Hall
Integrated Ecosystem Assessment: Emerging Challenges Synthesis Session	3:30 - 5:00 pm	OC - Ballroom
Close Out Party and Student Awards Presentation	5:30 - 8:30 pm	OC - Ballroom

FRIDAY

Field Trips	Various Times	Depart from Lobby of the North Tower of the Hilton
CERF Governing Board Meeting (By Invitation)	9:00 am - 12:00 pm	Hilton - Oceanview Room

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ACHIEVING LONG-TERM ACCURACY AND REDUCED SENSOR MAINTENANCE FOR PRACTICAL COASTAL MOORED OBSERVATORIES

Location: OC - Room 104 B
Conveners: D. Murphy (dmurphy@seabird.com) and I. Walsh (ian@wetlabs.com)

This workshop will introduce Sea-Bird Electronic's Inductive Modem Telemetry, followed by discussions on coastal moored sampling considerations; how to minimize the effects of biofouling and best methods for assessing sensor performance. Emphasis will be on temperature, salinity, dissolved oxygen and optical measurements.

ANTI-FOULING TECHNIQUES IN WATER QUALITY SENSORS

Location: OC - Room 103 BC
Convener: J. Adams (jadams@campbellsci.com)

This workshop will review anti-fouling techniques employed by Campbell Scientific, including recent advances in the technology. A highlight will be demonstration of an optical back scatter turbidity sensor that incorporates new methods to improve measurement accuracy and reduce maintenance.

SUNDAY, 6 NOVEMBER 2011 3:30 - 5:00 PM

PRACTICAL APPLICATION AND CROSS-WALKING TO THE COASTAL AND MARINE ECOLOGICAL CLASSIFICATION STANDARD (CMECS)

Location: OC - Room 102 AB
Conveners: G. Mayer (Garry.Mayer@noaa.gov), M. Finkbeiner (mark.finkbeiner@noaa.gov), B. Allee (becky.allee@noaa.gov) and C. Madden (cmadden@sfwmd.gov)

This workshop brings together members of management, policy and science communities to discuss the applications of CMECS, links to other classifications, refinements and future development. CMECS is an emerging classification standard that is under review for anticipated endorsement as a national standard by the Federal Geographic Data Committee in 2011.

NUMERICAL MODELING OF ESTUARINE SYSTEMS

Location: OC - Room 102 C
Convener: J. Tate (jennifer.n.tate@usace.army.mil)

The Coastal and Hydraulics Laboratory (CHL) of the Engineer Research and Development Center (ERDC) will host a workshop that focuses on numerical modeling of estuarine systems, including the common questions and assumptions that are inherent to setting up a model. Participants will consider the best means of applying model outputs to real world problems and insights that non-modelers bring to the modeling process.

RESTORING THE HUDSON-RARITAN ESTUARY: THE PLANET'S MOST URBAN ECOSYSTEM

Location: OC - Room 103 A
Conveners B. Ravit (ravit@envsci.rutgers.edu)

The Hudson-Raritan Estuary has been affected by human impacts for over three centuries, and many of the region's fisheries are 'ecologically extinct.' A new Comprehensive Restoration Plan calls for restoration of historic resources, including the Eastern Oyster. This workshop addresses the challenges, opportunities, and baseline scientific research associated with restoration.

LIVING SHORELINES: ALIGNING NATURAL AND REGULATORY BARRIERS TO INNOVATIVE APPROACHES TO SEA LEVEL RISE

Location: OC - Room 101 A
Conveners: L. Craig (Leslie.Craig@noaa,gov), R. McLaughlin (richard.mclaughlin@tamucc.edu), and M. Goecker (Meg.Goecker@noaa.gov)

This workshop will provide useful information on the value of living shorelines, current obstacles to application of this approach, and next steps to align the science more closely to regulations. These topics are important because federal and state constitutional provisions and statutes protecting private property often impede innovative methods to manage sea level rise.

WHAT YOU SHOULD KNOW ABOUT DATA COLLECTION FROM MOVING PLATFORMS: BASIC SAMPLING THEORY, PROJECT CONSIDERATIONS, AND SOURCES OF ERROR

Location: OC - Room 104 AB
Convener: C. Janzen (cjanzen@seabird.com)

When making measurements in a variable marine environment from a moving platform, instrument limitations and sampling methodology need to be considered to ensure quality data. Participants will discuss spatial and temporal resolution capability instrument platform sampling frequency, vehicle speed, and sources of error (what can be fixed, prevented, or tolerated).

SUNDAY, 6 NOVEMBER 2011, 1:30 - 5:00 PM

SCIENTISTS AS COMMUNICATORS AND EDUCATORS

Location: OC - Room 201 AB
Conveners: J. Kastler (jessica.kastler@usm.edu) and R. Innes (richinnes@aol.com)

This workshop will focus on a variety of reasons for and approaches to successful scientific communication, with particular focus on public education and informing policy. This workshop is highlighted for students, early career scientists and anyone interested in enhancing scientific communication.

POSTER PRESENTATIONS

Posters will be on display for the entire conference and will have both lunchtime and late afternoon viewing opportunities. The Poster and Exhibit Hall is located in the Ocean Convention Center on the first level. Posters are organized by theme, and each poster has been assigned a number and location that correspond to a map located in this conference program.

Poster set up is on Sunday, 6 November, from 3:00 to 6:00 pm and on Monday morning, 7 November, from 7:00 to 9:30. The posters will be available for viewing beginning at 9:45 each morning, Monday through Thursday. Coffee breaks, lunch breaks and happy hours are the designated poster presentation times.

A poster information table will be located near the main poster hall entrance. Please stop by to confirm your poster position, pick up pushpins and a poster hall guide, and ask questions. Each poster will be displayed on 8-foot wide by 4-foot high board that includes a 2-inch border. Push pins for mounting your poster will be available in the poster hall.

You must be available to take down your poster from 4:00 to 5:00 pm on Thursday, 10 November. If not removed by you, your poster will be removed by conference workers and recycled.

2011 SCIENTIFIC AWARDS PRESENTATIONS

The Federation is pleased to announce the recipients of the 2011 CERF scientific awards. Please plan to attend the CERF 2011 conference plenary on Sunday afternoon, 6 November, to congratulate them in person.

ODUM AWARD FOR LIFETIME ACHIEVEMENT

Hans W. Paerl
Distinguished Professor, Institute of Marine Sciences
UNC-Chapel Hill, Morehead City, North Carolina, USA

WILLIAM A. NIERING AWARD FOR OUTSTANDING EDUCATOR

Linda Walters
Professor of Biology and Director of Fellers House Field Station
University of Central Florida, Orlando, Florida, USA

CRONIN AWARD FOR EARLY CAREER ACHIEVEMENT

Isaac R. Santos
Senior Lecturer, Center for Coastal Biogeochemistry
Southern Cross University, Lismore, Australia

DONALD W. PRITCHARD AWARD FOR ESTUARIES AND COASTS GEOPHYSICS PAPER

"Thermal variability in a tidal river" by Stephen G. Monismith, James L. Hench, Derek A. Fong, Nicholas J. Nidzieko, William E. Fleenor, Laura P. Doyle & S. Geoffrey Schladow

ODUM AWARD FOR LIFETIME ACHIEVEMENT - HANS W. PAERL

The Odum Award is named for the three outstanding ecological scientists in the Odum family: Dr. Howard T. Odum; Dr. Eugene P. Odum; and Dr. William E. Odum, III. This award recognizes the lifetime achievements of an outstanding estuarine scientist whose sustained accomplishments have made important contributions to our understanding of estuaries and coastal ecosystems.

Dr. Hans W. Paerl is the 2011 winner of the Odum Lifetime Achievement Award for his four decades of work to clarify the causes, consequences, and mitigation of blooms in estuarine and coastal environments. Dr. Pearl is the William R. Kenan Distinguished Professor of Marine and Environmental Sciences, Institute of Marine Sciences, University of North Carolina-Chapel Hill. He obtained a Ph.D in 1973 in Ecology/Limnology, working under Professor C.R. Goldman, one of the pioneers of limnology. Dr. Paerl is a world-class leader in the ecology and physiology of harmful algal bloom species, and this information is being used by management agencies worldwide. He is a creator of FerryMon, a ferry-based water quality monitoring system, and recently his research has focused on global change. Hans has published over 250 peer-reviewed papers, with an impressive H factor of 53, and his papers have been cited over 9000 times in the literature. He has advised over 40 graduate students, 16 post-docs, 25 undergraduates, and 27 technicians. Those who have trained with Dr. Paerl have gone on to make significant contributions of their own. He has served on numerous committees, organizations, and expert panels; been on editorial boards of 6 journals; and has given a large number of keynote presentations at national and international venues. Most importantly Dr. Paerl is a long-time member and supporter of CERF and he exemplifies the enthusiasm and collegiality necessary to be an ambassador of the CERF community to the world of coastal and estuarine science and management.

WILLIAM A. NIERING AWARD FOR OUTSTANDING EDUCATOR - LINDA WALTERS

To recognize the central role that education plays in achieving the objectives of our society, the Federation's Governing Board established an award named for a leader in estuarine education, Dr. William A. Niering. The award is for an individual who has played a particularly important role in education at any level -- from primary school to the graduate level, inside or out of the classroom, or in the education of the general public through outreach activities.

Dr. Walters is a Professor of Biology at the University of Central Florida and the Director of the Fellers House Field Station at the Canaveral National Seashore. She received a PhD in Biology from the University of South Carolina (USC) in 1991, a MS in Biology from USC in 1986, and a BS in Biology from Bates College in 1983. Dr. Walters has been a member of the UCF faculty since 1997, and has come up the ranks from Assistant to Full Professor during her tenure. She is the first female to have accomplished this in the Department of Biology at UCF. At UCF, she has contributed her expertise in biology and ecology to undergraduate course offerings, her dedication to service, and her innovative educational approaches. She has twice been honored with a competitive Incentive Teaching award and with an Excellence in Undergraduate Teaching award from the UCF College of Sciences.

Although she carries a substantial teaching load, this has not stopped her from maintaining an active research program focused on oyster reef restoration in Mosquito Lagoon, FL, and ecosystem restoration at the Canaveral National Seashore. She uses these activities to make new discoveries, but also as a means to engage the public. Through her research she has mentored, engaged and energized scores of students from 5th graders to graduate students. Her outreach activities include organizing an Oyster Appreciation Day at the Brevard Zoo, a Girl Scout Women in Science Day, and various oyster focused programs at the Orlando Science Center. In addition, she is a model for volunteerism within the CERF community by taking on the role of Poster Chair for CERF 2011.

Dr. Walters' students and colleagues hold dear her infectious enthusiasm for science and learning. She is regarded as a dynamic force for quality, substance and creativity in her field, and a tireless advocate for meaningful and innovative educational experiences. Her focus on education throughout her career and her desire to continue to learn, through life, and through science, makes her an important resource for the coastal and estuarine community at large, because she uses her skills to teach students, and to teach other scientists and educators how to better reach students and the public. Such dedication to the science and art of education truly embodies the spirit of the William A. Niering educator award and makes Dr. Walters a leader in estuarine education.

CRONIN AWARD FOR EARLY CAREER ACHIEVEMENT - ISAAC R. SANTOS

The Cronin Award is named for Dr. L. Eugene Cronin, Sr., the first president of ERF and a significant contributor to estuarine science and our organization. This award recognizes the significant accomplishments of an estuarine scientist who is in the early stages of his/her career development. The recipient will have shown great promise with work carried out during the first six years past the PhD.

The Cronin Award recipient for 2011 is Isaac R. Santos, a senior lecturer at the Centre for Coastal Biogeochemistry, Southern Cross University, Lismore, Australia. Isaac completed his PhD in December 2008 at Florida State University under Prof. William Burnett's supervision before moving to Australia early in 2009 to take a postdoctoral position with Prof. Bradley Eyre at Southern Cross University. Isaac has 35 peer-reviewed publications (21 first-authored), many of which are in top journals. His H-index of 11 for someone less than 3 year post-PhD demonstrates the high impact of Isaac's research and his potential to be a leader in coastal and estuarine research.

Isaac's versatile research uses novel approaches to bridge different disciplines and gain insights into how coastal systems function. His PhD work provided new insights into the drivers and implications of submarine groundwater discharge into the coastal ocean. His more recent work has linked the hydrology and biogeochemistry of coral reefs and he is currently investigating how porewater flows may enhance carbonate sediment dissolution. Isaac is a well-deserved recipient of this year's Cronin Award.

DONALD W. PRITCHARD AWARD FOR ESTUARIES AND COASTS GEOPHYSICS PAPER

"THERMAL VARIABILITY IN A TIDAL RIVER" BY STEPHEN G. MONISMITH, JAMES L. HENCH, DEREK A. FONG, NICHOLAS J. NIDZIEKO, WILLIAM E. FLEENOR, LAURA P. DOYLE & S. GEOFFREY SCHLADOW

This award was established to honor Dr. Donald W. Pritchard, whose insightful research on the physical dynamics of coastal systems set the stage for much of the research in physical oceanography that is being conducted today. The Pritchard Award recognizes the author(s) of the best physical oceanography paper published in Estuaries and Coasts within the two-year interval between CERF conferences.

The paper "Thermal variability in a tidal river" by S.G. Monismith, J.L. Hench, D.A. Fong, N.J. Nidzieko, W.E. Fleenor, L.P. Doyle, and S.G. Schladow (2009, Estuaries & Coasts 32:100-110) presents a case study of a critical, though understudied, estuarine variable: water temperature. In their novel analysis, the authors began with an extensive observational program of longitudinal temperature variations in the tidal San Joaquin River, a large, complex, branched-channel environment. They paired their measurements with a rigorous analysis of heat sources, losses, and transport, backing out remarkably large estimates for the longitudinal dispersion coefficient. This intense dispersion, which is significantly more rapid than would be expected based on classical estimates of shear flow dispersion, was attributed to the presence of numerous junctions of the main river stem with side channel branches. Tidal dispersive heat fluxes were shown to be comparable to surface heat exchanges. This rapid dispersion represents a mechanism relevant to the transport of biota, contaminants, and other variables, and provides an order of magnitude estimate of tidal dispersion that might be expected for other similarly complex environments.

With their observations in hand, the authors then derived a simple, general analytical model describing sub-tidal, along-channel variations in temperature as a function of river flow, dispersion coefficient, channel dimensions, and atmospheric heat flux, explaining how and why the shape of the longitudinal temperature profile changes with those factors. They completed their analysis by comparing their new, general theory to their observations, demonstrating that the theory works well when assumptions are roughly met.

Understanding of water temperature variability in tidal ecosystems is critically relevant to unraveling and predicting the dynamics in pelagic and benthic populations, and is expected to become increasingly relevant with climate change. This paper provides mechanistic insight and a general tool for describing, explaining, and predicting that variability.

CERF 2011 SYNTHESIS SESSION

Synthesis sessions at CERF 2011 will examine challenges to coastal and estuarine science helping societies, estuaries and coasts adapt to change. **Tuesday's session will** examine the IEA process, human dimensions of ecosystems, and lessons learned in management applications. **The session on Thursday will** examine emerging challenges related to baseline change, dynamic ecosystems, and problems facing managers applying an ecosystem approach in the real world.

INTEGRATED ECOSYSTEM ASSESSMENT: THE PRESENT STATE-OF-THE-ART

Date and Time: Tuesday, 8 November 2011, 3:30 – 5:00 pm
Location: OC - Ballroom

Moderator: Bob Costanza, University Professor of Sustainability and Director, Institute for Sustainable Solutions, Portland State University

Panel:
Topic 1 IEA defined - Mike Reiter, Associate Professor of Environmental Science at Bethune-Cookman University

Topic 2 Human dimensions – Dave Yoskowitz, Endowed Chair for Socio-Economics, Harte Research Institute for Gulf of Mexico Studies

Topic 3 Management applications (TBA)

INTEGRATED ECOSYSTEM ASSESSMENT: EMERGING CHALLENGES

Date and Time: Thursday, 10 November 2011, 3:30 – 5:00 pm
Location: OC - Ballroom

Moderator: Robert Twilley, Vice President of Research, University of Louisiana at Lafayette

Panel:
Topic 4 Baseline change (TBA)

Topic 5 Dynamic ecosystems – Denise Reed, Professor in Department of Earth and Environmental Sciences, University of New Orleans

Topic 6 Management challenges – Fred Sklar, Chief Scientist, Everglades Division, South Florida Water Management District

United States Environmental Protection Agency

Oceans and Coastal Protection Division

"Protecting and Restoring the Water Quality and Ecological Integrity of our Ocean and Coastal Ecosystems."

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MONDAY EARLY MORNING A

	101-A	101-BC	102-AB	102-C	103-A	103-BC
	OPEN	SCI-228 **Seagrass - Animal Interactions** Just Cebrian and Kenneth Dunton	SCI-021 **Drivers of Change in Shallow Coastal Photic Systems** Michael Kennish, Iris Anderson, Kenneth Moore and Mark Brush	SCI-226 **Wetland Structure and Function** Mark Hester	SCI-087 **Training a New Generation of Scientists in Oceans and Human Health** Tracy Collier and Stephanie Moore	SCI-204 **Corals in Florida and the Caribbean: Diversity, Success and Restoration** Billy Causey and Cliff Ross
8:00	OPEN	Trait variation of seagrass species in response to disturbance over a geographic scale. **Kathryn Tiling**, C. Edward Proffitt.	Human and climatic-driven ecological change in coastal North Carolina shallow water systems: what's manageable and what's not? **Hans Paerl**, Benjamin Peierls, Nathan Hall, Karen Rossignol, Alan Joyner.	Environmental determinants of emergent macrophyte vegetation in Pacific Northwest estuarine tidal wetlands. **Christine Weilhoefer**, Walt Nelson, Patrick Clinton.	Training the next generation of oceans and human health scientists. **Tracy Collier**, Stephanie Moore, Juli Trtanj.	Status and trends in the health of Florida's coral reefs. **Billy Causey**.
8:15		Impacts of reduced seagrass cover on the export of macroinvertebrate and finfish production to offshore habitats. **Rachel Gamble**, Just Cebrian, Ken Heck.	The role of natural and anthropogenic disturbances in regulating the benthic nutrient filter. **Iris Anderson**, Mark Brush, Carolyn Currin, Michael Piehler, Jennifer Stanhope.	Tidal channel morphology and inundation in freshwater and brackish marshes of the lower Columbia River and estuary. **Shon Zimmerman**, Heida Diefenderfer, Amy Borde, Ronald Kaufmann.	Georgia Oceans and Health Initiative: a graduate training consortium in oceans and human health. **Erin Lipp**, Marsha Black, Dana Cole, Monica Gaughan, James Hollibaugh, Patricia Yager.	Habitat mapping of Conch Reef, Florida: high-density, high-resolution geoacoustic and benthic photographic mapping from an AUV during a precursor mission to NEEMO XV. Alex Forrest, **Arthur Trembani**s, Doug Miller, Jonathan Gutsche et al.
8:30		A historical comparison of finfish abundance and community composition in Chesapeake Bay seagrass beds. **Kathryn Sobocinski**, Robert Latour.	Modeling response to climatic and anthropogenic stressors in a shallow, photic coastal system. **Mark Brush**, Iris Anderson, Michael Piehler, Carolyn Currin, Hans Paerl.	Quantifying land use change and drivers for the Lower Pascagoula River Basin. **Jennifer Frey**, Wei Wu.	Identifying potential routes of hemolymph infections in *Callinectes sapidus* through characterization of the microflora community of the carapace, gut, and hemolymph. **Carrie Givens**, Karen Burnett, Louis Burnett, James Hollibaugh.	Effects of oxidative stress and elevated temperature on coral larvae health and post-settlement survival. **Cliff Ross**, Raphael Ritson-Williams, Kevin Olsen, Valerie Paul.
8:45		Are bay clams going green? Eelgrass is the key habitat factor structuring tideflat bivalve populations in Tillamook Bay, Oregon, USA. **Anthony D'Andrea**, Stacy Galleher, Kelsey Adkisson, Jennifer Boyer, Amy Hutmacher.	Long-term changes in seagrass community structure in the western Gulf of Mexico: linkages to hydrography and regional climatic events. **Kenneth Dunton**, Travis Bartholomew, Chris Wilson, Susan Schonberg.	Seasonal variations in photosynthetic characteristics of three major emergent salt marsh plants in the Southwestern Gulf of Mexico. **Sang Rul Park**, Joseph Stachelek, Kenneth Dunton.	Marine sponges as potential reservoirs for enteric bacteria and implications to human and coral health. **Jessica Joyner**, Erin Lipp.	Acropora restoration in Fla. & the U.S. Virgin Islands. **Caitlin Lustic**, James Byrne, Meaghan Johnson, David Gilliam, Elizabeth Larson, Diego Lirman, Stephanie Schopmeyer, Ken Nedimyer, Kerry Maxwell, Erich Bartels, Kemit Amon-Lewis, Iliana Baums.
9:00		Are seagrass edges ecological traps for post-set bay scallops? Implications for restoration. **John Carroll**, Bradley Peterson.	Combined impacts of climate warming and ocean carbonation on eelgrass (*Zostera marina* L.). **Richard Zimmerman**.	Potential for humic acid amendment in facilitating plant establishment in coastal dune and swale environments. **Mark Hester**, Michael Dupuis, Christine Pickens, Jonathan Willis.	Learning science through research. **Laura Murray**.	Restoration techniques for threatened Acroporid corals in Florida and the Caribbean. **Katherine Grablow**, Ken Nedimyer, William Precht.
9:15		Interactions between eelgrass and burrowing shrimp: ecosystem engineers in an alternative state framework. **Max Castorani**, Kevin Hovel, Susan Williams, Marissa Baskett, Steven Morgan.	Climate as a driver of mangrove ecosystem change. **Daniel Alongi**.	Examining the response of nitrogen-fixation and denitrification to nutrient enrichment in salt marshes of Narragansett Bay, Rhode Island. **Leanna Heffner**, Scott Nixon.	Investigating microscopic life in the ocean: an example of Learning Science through Research. **Cassie Gurbisz**, Laura Murray.	The condition of scleractinian corals and associated reef fauna in La Parguera, Puerto Rico. **Leah Oliver**, William Fisher, Pamela Hallock, John Dittmar, Jed Campbell, Peggy Harris, Charles LoBue, Robert Quarles.
9:30		Bioturbation's green thumb: the role of infauna in *Z. marina* seed burial. **Natalia Blackburn**, Robert Orth.	Using remotely sensed data and hydrologic models to evaluate the effects of land use and climate change on hydrologic processes and shallow aquatic ecosystems. Maury Estes, **Mohammad Al-Hamda**n, Ron Thom, Chaeli Judd, Jean Ellis, Dana Woodruff et al.	OPEN	ESTUARIES Program: spring into action to educate tomorrow's leaders. **Charles Mulligan**, Darah Nason, Merci' Ovard.	Living on the ledge: assessment of coral stressors on St. Lucie Reef, Florida. **Jeff Beal**, Joshua Voss, Sara Edge, Lisa Cohen.
BREAK 9:45 AM – 10:15 AM						

MONDAY EARLY MORNING B

104-AB	201-AB	202-AB	203-BC	204-AB	
SCI-065 **Numeric Nutrient Criteria for Estuaries and Their Watersheds** James Hagy and Joel Steward	SCI-091 **Zooplankton Dynamics in a Changing World: From Individual to Population** David Kimmel and James Pierson	SCI-035 **Hypoxia Effects on Aquatic Living Resources** Aaron Adamack, Stephen Brandt, Sarah Kolesar and Mike Roman	SCI-024 **Ecosystem Services and Human Well-being of Coastal Communities** James Summers and Rick Linthurst	SCI-027 **Estuarine Sediment Dynamics** Carl Friedrichs, Tim Dellapenna and Robert Chant	
Numeric nutrient criteria for estuaries and their watersheds. **James Hagy**.	Climate-driven patterns, mechanisms, and possible consequences of long-term changes in zooplankton assemblages in a Southeast U.S. estuary. **Dennis Allen**, Ginger Ogburn-Matthews.	Fish, food webs and disease: predicting effects of hypoxia and co-occurring stressors. **Denise Breitburg**.	The role of ecosystem services in human well-being. **Kevin Summers,** L.M. Smith, R.A. Linthurst.	Erosional sorting and resuspension dynamics of sand-mud mixtures. **Brent Law**, Timothy Milligan, Paul Hill.	**8:00**
Some lessons learned in setting estuarine nutrient criteria. **Anthony Janicki**, Holly Greening, Mark Alderson, Lisa Beever.	Complex interactions and inter-decadal changes in the pelagic foodweb of the upper San Francisco Estuary. **Wim Kimmerer**, Alison Gould, Valerie Greene, Toni Ignoffo, George McManus, Alex Parker, Anne Slaughter, Jan Thompson, Joanna York.		The utility of well-being metrics for evaluating ecosystem services. **Linda Harwell**, Lisa Smith, Jason Case, Heather Smith, J. Kevin Summers, Marc Russell.	Spatial and temporal variations of sea bed sediment erodibility on the Texas-Louisiana shelf and their implications to the formation of hypoxic water. **Kehui Xu**, Kevin Briggs, Grace Cartwright, Carl Friedrichs, Courtney Harris.	**8:15**
Developing nutrient criteria for California estuaries: process, concepts and data gaps. **Martha Sutula**.	Plankton dynamics and seasonal hypoxia: tracing cause and effect in complex interacting systems. **James Pierson**, David Elliott, Michael Roman, Peter Lavrentyev.	Microphytobenthos and their potential role in the northern Gulf of Mexico hypoxic zone. **Melissa Baustian**, Nancy Rabalais, Wendy Morrison, Gene Turner.	Nutrient filtration effectiveness of two salt marsh restoration designs. **Eric Sparks**, Craig Tobias, Just Cebrian.	Erodibility and sediment trapping in a partially mixed estuary: a modeling study of the York River. **Courtney Harris**, Jeffrey Rinehimer, Christopher Sherwood.	**8:30**
Developing numeric nutrient criteria for streams in a Chesapeake Bay river basin. **Lindsay Tempinson**, Tom Fisher.	Effects of hypoxia on predation of copepods by gelatinous zooplankton in Chesapeake Bay. **Wen-Cheng Liu**, Mary Beth Decker, James Pierson.	Hypoxia effects on the composition of bottom fauna communities (hyperbenthos and infauna) in fjords on the Norwegian Skagerrak coast. **Lene Buhl-Mortensen**, Eivind Oug, Jan Aure.	First and second order conflicts: measuring the lived experience of interactions between fishers and green turtles in the Lakshadweep seagrass lagoon. **Rohan Arthur**, Nachiket Kelkar, Teresa Alcoverro, Madhusudan Mysore D.	The assessment of sediment bed properties within the York River Estuary as a function of spring and neap tidal cycles. **Lindsey Kraatz**, Carl Friedrichs.	**8:45**
Development of nitrogen criteria for Maine's coastal waters. **Angela Dubois**.	Feeding efficiency of the larval ctenophore *Mnemiopsis leidyi* A. Agassiz (Ctenophora, Lobata): the transition from cydippid to lobate body. **Rebecca Waggett**, Lindsay Sullivan.	Evaluating macrobenthic indicators within the coastal Mississippi hypoxic zone. **Chet Rakocinski**, Daneen Menke.	Linking ecosystem services with health and well-being in the wake of the Deep Water Horizon industrial disaster. **Susan Lovelace**, Theresa Goedeke, Maria Dillard.	In situ characterization of estuarine suspended sediment in the presence of muddy flocs and pellets. **Grace Cartwright**, Carl Friedrichs, Lawrence Sanford.	**9:00**
Derivation of protective numeric nutrient criteria for South Florida estuaries and coastal waters. **Henry Briceño**, Joffre Castro, Joseph Boyer, Peter Harlem.	Panel Discussion Led by **Gesche Winkler**, **David Kimmel** and **James Pierso**n	Resilience and community change: tracking hypoxia and rocky reef community structure on the Oregon shelf. **Michael Donnellan**, Erin Cooper, Francis Chan, William Miller.	Remembering our water heritage. **John Ryan**, Erin Dean, Jodi Pracht, Amanda Dominguez, James Griffin.	Use of the variational adjoint method in estuarine fine sediment transport modeling. **Kelsey Fall**, Carl Friedrichs, Marjorie Friedrichs.	**9:15**
Use of SeaWiFS, MODIS, and MERIS in developing water quality numeric criteria for Florida's coastal waters. **Blake Schaeffer**, James Hagy.		Stressed out oysters: measuring sublethal responses using stable isotopes and protein regulation. **Heather Patterson**, Ruth Carmichael, Anne Boettcher.	Discussion	Estuarine flocculation - modelling the fates of suspended particles. **David Todd**, Alejandro Souza, Colin Jago.	**9:30**
BREAK 9:45 AM – 10:15 AM					

MONDAY MID-MORNING A

	101-A	101-BC	102-AB	102-C	103-A	103-BC
	OPEN	SCI-228 **Seagrass - Animal Interactions** *cont'd*	SCI-021 **Drivers of Change in Shallow Coastal Photic Systems** *cont'd*	SCI-226 **Wetland Structure and Function** *cont'd*	SCI-086 **Towards a National Standard for Classifying Marine Habitats** Rebecca Allee, Christopher Madden, Giancarlo Cicchetti and Lawrence Handley	SCI-014 **Coastal Lagoons and Estuaries in Mexico: Processes and Vulnerability** Victor Camacho-Ibar, Arnoldo Valle-Levinson, Victor Rivera-Monroy and Ismael Mariño Tapia
10:15	OPEN	Floral depredation by fish. **Brigitta van Tussenbroek**, Manuela Muhlia Montero.	The interactive effects of natural and anthropogenic stressors on eelgrass persistence. **Kenneth Moore**, Erin Shields, David Parrish.	Exploring the role of silica limitation in nutrient-enriched marshes. **Joanna Carey**, Robinson Fulweiler.	Overview of the Coastal and Marine Ecological Classification Standard (CMECS). **Garry Mayer**, Rebecca Allee, Giancarlo Cicchetti, Mark Finkbeiner, Kathleen Goodin, Lawrence Handley, Christopher Madden.	Hydrodynamics and residence times in Mexican lagoons and estuaries. **John Largier**.
10:30		Evidence for turtlegrass seed consumption by blue crabs. **Kelly Darnell**, Kenneth Dunton.	Modeling loss and recovery of *Zostera marina* beds in the Chesapeake Bay following repeated disturbance events. **Jessie Jarvis**, Mark Brush, Kenneth Moore.	Nutrient enrichment and detritivores increase *Spartina patens* litter decomposition. **David Johnson**, Meghan Short, Ashley Mui, Linda Deegan.	Habitat classification and mapping of Grand Bay NERR, Mississippi: a crosswalk from the NERRS classification scheme to CMECS. **Kate Rose**.	Water level and hydrographic behavior on shallow and groundwater influenced coastal lagoons. **Ismael Mariño-Tapi**a, Cecilia Enriquez, Jorge Herrera-Silveira.
10:45		Through the belly of a beast: will seagrass seeds survive? **Sarah Sumoski**, Robert Orth.	Implications of long term trends in the Kd-Secchi depth relationship for ecological processes in shallow, photic systems. **Charles Gallegos**.	Shoreline loss induces changes in salt-marsh floral communities. **Ryan Moody**, Sara Kerner, Just Cebrian, Kenneth Heck, Sean Powers.	Application of the Coastal and Marine Ecological Classification Standard (CMECS) Surface Geology Component (SGC) to Chesapeake Bay seabed mapping activities. **David Bruce**, John Lazar, Steven Giordano, Robert Conkwright.	Eco-hydrological assessment of a shallow tropical ecosystem in the Western Caribbean. **Israel Medina**, Ismael Marino, Cecilia Enriquez, Jorge Herrera.
11:00		Interactive effects of grazing and nutrient enrichment on seagrass (*Thalassia testudinum*) condition. Rachel MacTavish, Viet Nguyen, Morgan Stockard, **Troy Mutchler**.	Differential importance of water quality parameters and temporal patterns of submerged aquatic vegetation (SAV) cover in adjacent sub-estuaries distinguished by alternate regimes of phytoplankton and SAV dominance. **Thomas Frankovich**, Jordan Barr et al.	Nekton density patterns and hurricane recovery in submerged aquatic vegetation, and along non-vegetated natural and created edge habitats. **Megan La Peyre**, John Gordon.	Coastal and marine ecological classification for the Madison-Swanson and Pulley Ridge areas of the Gulf of Mexico. **Rebecca Allee**, Andrew David, David Narr.	Tidal asymmetries in velocities and stratification over a hollow of a tropical inlet. **Amy Waterhouse**, Arnoldo Valle-Levinson, Ruben Morales.
11:15		Amphipod control on epiphyte load and the concomitant effects on shoalgrass *Halodule wrightii* biomass. **Joseph Myers**, Ken Heck.	Water quality, phytoplankton biomass, and primary productivity in the Caloosahatchee Estuary, Florida. **Loren Mathews**, Edward Phlips.	Success of a *Spartina alterniflora* marsh in a large-scale Chesapeake Bay restoration project. **Lorie Staver**, J. Court Stevenson, Jeffrey Cornwell, Michael Owens.	The application of CMECS for categorizing estuarine waters. **Sandra Upchurch**.	Tide and wave-induced variations in turbulent kinetic energy at a buoyant jet discharge. **Sabrina Parra**, Ismael Mariño, Cecilia Enriquez, Arnoldo Valle-Levinson.
11:30		Effects of epifaunal grazer species on eelgrass (*Zostera marina*) in San Francisco Bay. **Jeffrey Lewis**, Katharyn Boyer.	Microphytobenthos modeling in shallow estuaries: importance for nutrient dynamics and mass balance. Y. Li, H. Wang, **Kevin Sellne**r.	Multiple stress gradient effects on the interaction of salt marsh species on mangrove species. **Glenn Coldren**, C. Edward Proffitt.	Applying the Coastal and Marine Ecological Classification Standard (CMECS) to sub-tropical shallow water marine ecosystems: contrasting habitat mapping for Biscayne National Park to community ecology. **Kathleen Sullivan Sealey**.	Tidal and non-tidal oscillations in a shallow coastal lagoon in the Yucatán Peninsula. **Paulo Salles**, Gilberto Jerónimo, Wilmer Rey, Isabel Bello.
11:45		Differential herbivore grazing impacts on ecosystem structure within a eutrophic, tropical seagrass bed. **Elizabeth Lacey**, James Fourqurean, Brigit van Tussenbroek, Ligia Collado-Vides.	Effects of combined warming-nutrient enrichment in a shallow-water sediment system. **Christian Alsterberg**, Kristina Sundbäck, Stefan Hulth.	The hunt for pink September - population distribution and diversity of the potential biofuel halophyte, seashore mallow. **Denise Seliskar**, Donna Hamilton, Nicole Voutsina, Laura Betts, John Gallagher.	CMECS: a tool for unifying habitat classifications for a Gulf of Mexico trophic database. **May Yuan**, James Simons, Lesley Williams, Sara Gonzalez-Perez, Derek Morris.	Tidal advection-diffusion as a transport mechanism for biogeochemical processes in a semi-arid lagoon. **Alejandro Souza**, Leslie Aveytua-Alcazar, Victor Camacho-Ibar.
POSTER SESSIONS and LUNCH 12:00 PM – 1:30 PM						

MONDAY MID-MORNING B

104-AB	201-AB	202-AB	203-BC	204-AB	
SCI-065 **Numeric Nutrient Criteria for Estuaries and Their Watersheds** *cont'd*	SCI-056 **Microbes: Diversity, Gene Expression and Ecological Function** Byron Crump, Jennifer Bowen and Jude Apple	SCI-035 **Hypoxia Effects on Aquatic Living Resources** *cont'd*	SCI-028 **Evaluating Ecosystem Services of Estuaries and Coasts: Quantifying the Human Dimension** Carol Mitchell, Stephen Davis and David Yoskowitz	SCI-027 **Estuarine Sediment Dynamics** *cont'd*	
Successful development/ application of nutrient/ sediment enrichment criteria driving Chesapeake Bay restoration - 25 years of experiences. **Rich Batiuk**.	Seasonal and spatial patterns of bacterioplankton community composition across environmental gradients in Chesapeake Bay. **Byron Crump**, Kristi Shaw, Mary Doherty, Caroline Fortunato, Andrew Leight, Matthew Rhodes, John Jacobs.	The influence of dissolved oxygen concentration on the vertical distribution of life stages of the copepod, *Acartia tonsa*, in Chesapeake Bay. **Michael Roman**, David Elliott, Jamie Pierson.	SERES: Synthesizing Everglades natural resources research and ecosystem services for decision-makers. **Stephen Davis**, Carol Mitchell.	Fluid mud mobility by tidal pumping. **Johan Winterwerp**	**10:15**
Temporal patterns in water quality along Florida's Gulf coast: input to the development of numeric nutrient criteria. **Thomas Frazer**, Charles Jacoby, Darlene Saindon, Sky Notestein.	Linking structure and function of anammox bacterial communities in a temperate eutrophic estuary. **Jessica Lisa**, Craig Tobias, Kimberly Duernberger, Bongkeun Song.	Zooplankton composition across environmental gradients in the Northern Gulf of Mexico. **David Elliott**, James Pierson, Michael Roman.	Evaluating ecosystem services provided by the Albemarle-Pamlico (NC) Estuary System in response to watershed nitrogen management. **Darryl Keith**, Brenda Rashleigh.	The influence of turbidity currents and geometry on the trapping of sediment in an estuary. **Henk Schuttelaars**, Alexander Chernetsky.	**10:30**
Use of the USEPA Estuary Nitrogen Model to estimate concentrations of total nitrogen in estuaries using loads calculated by watershed models and monitoring data. **Edward Dettmann**, Joel Steward, Henry Walker.	Anammox in coastal sediments: linking microbial activity and abundance. **Amber Hardison**, Jane Tucker, Ellen Hopmans, Jaap Sinninghe Damste, Anne Giblin, Jeremy Rich.	Modeling potential habitat for Chesapeake Bay living resources. **Adam Schlenger**, Elizabeth North, Zachary Schlag.	Sea level rise and changing ecosystem services provided by marsh in Galveston Bay. **David Yoskowitz**, Cristina Carollo, Jennifer Pollack, Kathleen Welder.	Modelling lateral distribution of flow and bedload sediment transport in a tidal inlet. **Huib de Swart**, Amy Waterhouse, Arnoldo Valle-Levinson.	**10:45**
Establishing numeric nutrient criteria in Sarasota Bay, Florida. **Jay Leverone**, Keith Hackett, Tony Janicki.	Elucidating the impacts of hypoxia on the active microbes that drive nitrogen fixation and denitrification in estuarine sediments. **Shelley Brown**, Annaliesa Jones, Christopher Deacutis, Rodrigue Spinette, Bethany Jenkins.	Random walks in the dead zone: coupling 3-D hypoxia models with individual based fish models. **Dubravko Justic**, Kenneth Rose, Lixia Wang, Haosheng Huang.	"Things people care about": ecosystem services of the South Florida coastal marine ecosystem (SFCME). **Joseph Boyer**, William Nuttle, Peter Ortner, Carol Mitchell, Chris Kelble, David Loomis, Grace Johns, Bob Leeworthy, Donna Lee, Chris Bergh, Jerry Lorenz, John Hunt.	Sediment flux and lateral exchange in an estuarine turbidity maximum. **David Ralston**, Rocky Geyer, John Warner.	**11:00**
Utilizing depth of colonization of seagrasses to develop numeric water quality criteria for Florida estuaries. **James Hagy**, Jeff Jackson.	Location- and seagrass-specific assemblages of bacteria in seagrass epiphyte biofilms along the South Texas coast. Valerie Chilton, **Kirk Cammarat**a.	Predicting the population-level effects of hypoxia on Atlantic croaker (*Micropogonias undulatus*) in the northern Gulf of Mexico. **Sean Creekmore**, Kenneth Rose, Rachael Miller Neilan, James Craig, Peter Thomas, Md. Rahman.	Improved communication through mapping: using ArcGIS to iteratively communicate spatial information and model results. **Gregg Verutes**, Gregory Guannel, Joey Bernhardt.	Advective suspended sediment transport modes in a fast-flushing estuary, Itajaí-Açu, Brazil. **Carlos Schettini**, Eliane Truccolo.	**11:15**
Technical issuues affecting the development of numeric nutrient concentration criteria in Florida estuaries. **David Tomasko**.	The effects of heavy metal contamination on biofilm community composition in San Francisco Bay. **Stephanie Molloy**, Sirma Mihaltcheva.	Are population-level effects of hypoxia on fish truly small or large but elusive? **Kenneth Rose**.	Bio-energetic model of an oyster reef used to delineate the provision of ecosystem services. **Jeffrey Francis**, David Yoskowitz, Joe Fox, James Gibeaut, Gregory Stunz.	Radioiodine as a particle tracer in the upper Delaware Estuary. **Christopher Sommerfield**, Daniel Duval.	**11:30**
Calculating watershed nitrogen loading reductions needed to comply with numeric nutrient criteria for the Great Bay Estuary, New Hampshire and Maine, USA. **Philip Trowbridge**.	Investigation of fish intestine and sediment as potential reservoirs of *Vibrio vulnificus* and *Vibrio parahaemolyticus*. **Carrie Givens**, Jessica Jones, Angelo DePaola, James Hollibaugh.		Applying normative theory to inform management indicators and standards for snorkeling and SCUBA diving in the Florida Keys. **Sarah Young**, Shona Paterson, David Loomis.	Currents and bathymetry at the fluvial-tidal transition. **Raymond Torres**, Alexander Yankovsky, Jason Walker, Scott White, Lew Lapine.	**11:45**
POSTER SESSIONS and LUNCH 12:00 PM – 1:30 PM					

MONDAY EARLY-AFTERNOON A

	101-A	101-BC	102-AB	102-C	103-A	103-BC
	OPEN	SCI-082 **Sea-Level Change: Patterns, Processes and Impacts** Thomas Cronin and Torbjörn Törnqvist	SCI-021 **Drivers of Change in Shallow Coastal Photic Systems** *cont'd*	SCI-022 **Dynamic Feedbacks between Marsh Sedimentation and Vegetation** Cindy Palinkas, Andrew Elmore and Katharina Engelhardt	SCI-054 **Marine Habitat Mapping** Kathryn Ford and John King	SCI-014 **Coastal Lagoons and Estuaries in Mexico: Processes and Vulnerability** *cont'd*
1:30	OPEN	Sea-level change: patterns, processes and impacts. **Thomas Cronin**, Torbjörn Törnqvist.	Eutrophication as a driver of ecosystem change in the coastal bays of New Jersey. **Michael Kennish**, Benjamin Fertig, Gregg Sakowicz.	Sea level change, vertical accretion, and soil strength in Louisiana coastal marshes. **John Nyman**.	Comparing seafloor geology and biology in Massachusetts. **Kathryn Ford**, Todd Callaghan, Dan Sampson, Mark Rousseau.	Hydrodynamics and coastal inundation in a tropical coastal lagoon surrounded by vast mangrove regions. **Cecilia Enriquez**, Ismael Marino-Tapia, Jorge Herrera-Silveira.
1:45		Steric contributions to sea level rise: a global perspective. **Josh Willis**.	Chronic coastal nutrient enrichment causes saltmarsh loss by vegetated creek-bank failure. **Linda Deegan**, Bruce Peterson, David Johnson, R. Scott Warren, John Fleeger, Sergio Fagherazzi.	Elevated CO_2, sea-level rise and sedimentation interact to regulate biological contributions to soil elevation dynamics in coastal wetlands. **Julia Cherry**, Karen McKee, Joshua Jones.	A benthic habitat heterogeneity map for Narragansett Bay, Rhode Island. **Emily Shumchenia**, John King.	Hydrologic dynamics of a subtropical estuary, using geochemical tracers, Celestún, Yucatán, Mexico. **Jeremy Stalker**, René Price, Victor Rivera-Monroy, Jorge Herrera-Silveira, Sara Morales.
2:00		Wavelet analysis of synoptic variability in Tampa Bay, FL. **Monica Wilson**, Steven Meyers, Mark Luther.	Factors affecting brown tide blooms (*Aureococcus anophagefferens*) and productivity in mid-Atlantic coastal lagoons. **Margaret Mulholland**, George Boneillo, Peter Bernhardt.	Effects of salt marsh geomorphic structure on sediment accretion. **Joseph Bell**, Raymond Torres.	Developing benthic habitat maps and indexes of habitat value to assist in siting offshore wind farms within Rhode Island waters. **Monique LaFrance**, John King.	Impact of tropical cyclones across coastal regions in Mexico. Luis Farfán, **Kam-Biu Liu**, Victor Rivera-Monroy, Eurico D'Sa.
2:15		A review of glacier and ice sheet contributions to sea level rise in the 21st century. **W. Tad Pfeffer**.	Seagrasses as indicators of ecosystem change in south Florida Estuaries. **Margaret Hall**, Michael Durako, Manuel Merello.	Vegetation community structure in relation to elevation and sediment characteristics in the prograding Wax Lake sub-delta. **Azure Bevington**, Guerry Holm, Charles Sasser, Elaine Evers, Robert Twilley.	Multi-decadal mapping efforts of oyster (*Crassostrea virginica*) reef distributions in South Carolina, USA: applications for current and future natural resource management. **Kristin Schulte**, Peter Kingsley-Smith, Robert Van Dolah, Loren Coen.	Morphodynamics and conceptual model of seasonal opening/closure inlet in tropical coastal lagoons, Mex.: mgmt implications. **Alejandro Yanez-Arancibia**, John Day, Patricia Sanchez-Gil, Jose Ramirez-Gordillo, Jason Day, David Zarate, Hector Alafita, Jose Rojas, Ricardo Santacruz.
2:30		Climate related sea-level variations over the past two millennia. **Benjamin Horton**, Andrew Kemp, Jeffrey Donnelly, Michael Mann, Martin Vermeer, Stefan Rahmstorf.	Macroalgae as bioindicators of nutrient status of a strongly managed region of Biscayne Bay, Florida, USA. **Ligia Collado-Vides**, Viviana Mazzei, Travis Thyberg, Diego Lirman.	Spatial variability of marsh sedimentation processes in Dyke Marsh Preserve (VA, USA). **Cindy Palinkas**, Katharina Engelhardt, Andrew Elmore.	Evaluating human impacts on oyster reef coverage with GIS in Mosquito Lagoon, Florida. **Stephanie Garvis**, Paul Sacks, Linda Walters.	The geological record of a hurricane impact and storm surge ebb within a barrier island lagoon: the impact of East Galveston Bay by Hurricane Ike (SEPTEMBER 13, 2008). **Timothy Dellapenna**, Joseph Carlin, Austin Baker, Zachary Oyer, Thomas Bianchi.
2:45		Rates of sea-level rise during climatic warming. **Thomas Cronin**, Jesse Farmer.	Tracing nitrogen through landscapes to coastal wetlands using δ15N of larval fish. **Joel Hoffman**, John Kelly, Gregory Peterson, Anne Cotter.	Vegetation complexity and plant species richness in a tidal freshwater marsh. **Andrew Elmore**, Katia Engelhardt, Cindy Palinkas.	Predicting distribution and abundance of marine macroalgae. **Anne Middelboe**, Stefan Heinänen, Karin Füerhaupter.	An assessment of connectivity in estuarine and coastal populations in the Pacific off Baja California: what do we know? **Sharon Herzka**, Alfonsina Romo Curiel, Oscar Sosa-Nishizaki, Gabriela Montaño-Moctezuma, Axayácatl Rocha-Olivares, Reginaldo Durazo.
BREAK 3:00 PM – 3:30 PM						

MONDAY EARLY-AFTERNOON B

104-AB	201-AB	202-AB	203-BC	204-AB	
SCI-019 **Development of the Chesapeake and Other Large Aquatic Ecosystem TMDLs** Lewis Linker, Rich Batiuk, Gary Shenk and Ping Wang	SCI-049 **Linking Microbial Ecology and Ecosystem Function in Changing Aquatic Environments** Leila Hamdan and Robert Jonas	SCI-001 **Applications of Acoustic Methods and Other Novel Approaches in Coastal and Estuarine Habitat Mapping, Research and Monitoring** Tim Dellapenna and William Rodney	SCI-015 **Comparative Approaches to Valuation of Ecosystem Services for Estuarine Ecosystems** Jae-Young Ko	SCI-027 **Estuarine Sediment Dynamics** *cont'd*	
Putting millions of watershed residents on regulatory pollution diets: from Chesapeake Bay to the Great Lakes to Long Island Sound. **Richard Batiuk**.	It's a small world: microbial ecology, ecosystem function and change in aquatic environments. **Leila Hamdan**, Robert Jonas.	Application of acoustic methods to asssessing fish utilization of subtidal oyster reef habitats in Galveston Bay, Texas. **Bill Rodney**, Jennie Rohrer, David Westbrook, Lance Robinson.	Emergy values of estuarine ecosystems: environmental accounting for recovery of ecosystem values after disasters. **Mark Brown**.	Salt wedge controlled sediment dynamics of the Brazos River estuary, TX: storage in the lower river, transport to the shelf. **Joseph Carlin**, Timothy Dellapenna.	**1:30**
Atmospheric deposition fields and source attribution from CMAQ for the Chesapeake Bay TMDL process. **Robin Dennis**, Sergey Napelenok, Lewis Linker.	Increased reliance on microbial loop processes in the low salinity zone of the San Francisco Estuary. **Alexander Parker**.	Passive acoustics as a monitoring tool for evaluating oyster reef restoration. **Hilde Zenil**, Vincent Encomio, Grant Gilmore.		Seabed and shoreline dynamics of the Albemarle-Pamlico Estuarine System. **John Walsh**, David Corbett, Devon Eulie, Ryan Mulligan.	**1:45**
Assessing the fate, transport, and effects of nutrients in the Chesapeake watershed and implications for the Chesapeake TMDL. **Lewis Linker**, Gary Shenk, Ping Wang, Jeni Keisman.	Phytoplankton response to altered salinity influences bacterial biomass and production in the low salinity zone of the upper San Francisco Estuary. **Risa Cohen**, Alexander Parker.	Application of multibeam echosounders in Chesapeake Bay oyster restoration. **John Lazar**, David Bruce, Steven Giordano.	Emergy evaluation of the Youngsan River estuary in Korea. **Daeseok Kang**.	Tidal flat morphodynamics: a synthesis. **Carl Friedrichs**.	**2:00**
Monitoring applications in Chesapeake Bay TMDL development. **Peter Tango**, Richard Batiuk, Jeni Keisman, Lewis Linker, Gary Shenk, Katie Foreman.	Anaerobic metabolism in Chesapeake Bay. **Dong Lee**, Michael Owens, Byron Crump, Jeffrey Cornwell.	Examining the effect of slotted water control structures on salt marsh nekton ingress and egress using dual-frequency identification sonar (DIDSON) acoustic imaging. **Matthew Kimball**, Lawrence Rozas, Kevin Boswell, James Cowan.	Energy return on investment for ultra-deep water oil and gas in the Gulf of Mexico, including a case study of the Macondo Prospect. **Matt Moerschbaecher**, John Day.	Sediment resuspension by very small waves on an estuarine intertidal flat. **Malcolm Green**.	**2:15**
Possible responses of non-tidal stream and river communities to Chesapeake Bay's nutrient diet. **Claire Buchanan**, Adam Griggs, Ross Mandel, Andrea Nagel, Olivia Devereux, Adam Rettig.	Analysis of archaeal communities in Gulf of Mexico dead zone sediments. **Richard Devereux**, Jennifer Mosher, David Beddick, Diane Yates, Steven Brown, Tatiana Vishnivetskaya, Anthony Palumob.	Evaluating variability in nekton distribution, habitat association and behavior with high resolution imaging sonar. **Kevin Boswell**, Matthew Kimball.	Optimal ecosystem services provided through shellfish aquaculture: the role of property rights. **Gretchen Greene**, Jeffrey Fisher, Greg Reub, Bill Dewey.	Process-based morphodynamic modeling: hindcast and forecast of decadal erosion and sedimentation patterns in San Pablo Bay. **Mick van der Wegen**, Bruce Jaffe, Dano Roelvink.	**2:30**
Watershed influences on nearshore waters across the entire U.S. Great Lakes coastal region. **Jack Kelly**, Peder Yurista.	Microbial munchies, how carbon lability determines the fate of nitrate in wetlands. **Ember Morrissey**, Amy Jenkins, Bonnie Brown, Rima Franklin.	Acoustic and video evaluation of coastal habitats by side scan sonar coupled with remotely operated vehicle (ROV) survey. **Peter Straub**, Steven Evert, Tara Harmer Luke, Mark Sullivan.	A comparative assessment of ecosystem services for Galveston Bay, Texas. **Jae-Young Ko**, William Merrell, William Seitz.	Variability of suspended sediment concentration in Suisun Bay, California, and the relative influences of tides, meteorology, and river discharge. **Susanne Moskalski**, Raymond Torres.	**2:45**
BREAK 3:00 PM – 3:30 PM					

MONDAY LATE-AFTERNOON A

	101-A	101-BC	102-AB	102-C	103-A	103-BC
	SCI-036 **Implementing Ecosystem-Based Management in National Estuary Programs** Carl Hershner and Dean Carpenter	SCI-082 **Sea-Level Change: Patterns, Processes and Impacts** *cont'd*	SCI-021 **Drivers of Change in Shallow Coastal Photic Systems** *cont'd*	SCI-022 **Dynamic Feedbacks between Marsh Sedimentation and Vegetation** *cont'd*	SCI-208 **Food Web Analysis** Delbert Smee	SCI-014 **Coastal Lagoons and Estuaries in Mexico: Processes and Vulnerability** *cont'd*
3:30	Opportunities and challenges for applying Ecosystem Based Management to National Estuary Programs. **Carl Hershner**, Dean Carpenter, Molly Roggero, Kirk Havens.	Field observations and modelling of Holocene sea-level changes in the southern Bay of Biscay: keys to understand current relative sea-level rates along the Atlantic coast of SW Europe. **Eduardo Leorri**, Alejandro Cearreta, Glenn Milne.	Linking hydrogeo-morphology and food webs in salt marsh intertidal creeks. **Robert Christian**, Dennis Allen.	Increases in soil nitrogen alter short-form *Spartina alterniflora* root and shoot growth dynamics in a Virginia salt marsh. **Linda Blum**, Christopher OIcott, John Haywood, Robert Christian.	Differences in food web connectivity across intertidal gradients in embayment and fluvial dominated estuaries. **Emily Howe**, Charles Simenstad.	Mexican coastal lagoons and estuaries from Gulf of Mexico and Caribbean Sea: what we know and what we need to know about nutrient dynamics and eutrophic symptoms. Jorge Herrera-Silveira, Sara Morales-Ojeda, **Lorena Díaz**.
3:45	Incorporating system-based management processes within an East Coast ecosystem. **Dean Carpenter**, William Crowell, Carlton Hershner, Kirk Havens, Molly Roggero.	Towards an open-access Holocene sea-level database for the U.S. Atlantic and Gulf coasts. **Torbjörn Törnqvist**, Benjamin Horton, Marc Hijma, Simon Engelhart, Ping Hu, David Hill, Juan González.	Diel hypoxia response to residence time manipulation. **Nicholas Nidzieko**, Stephen Monismith.	$\delta^{15}N$ profiles in salt marsh sediment cores: evidence of changing land use and experimental fertilization. **Erin Kinney**, Ivan Valiela.	The importance of allochthonous subsidies to an estuarine food web along a salinity gradient. **Ester Dias**, Joel Hoffman, Pedro Morais, Anne Cotter, Joana Campos, Carlos Antunes.	Short-term variability of Mexican coastal lagoons, can they tell us something about long term variability? **Francisco Gutiérrez-Mendieta**.
4:00	Development of an ecosystem restoration strategy for the lower Columbia River using a multiple lines of evidence approach. **Catherine Corbett**, Chaeli Judd, Keith Marcoe, Gary Johnson, Ron Thom, Antonio Baptista, Nate Hyde et al.	Integrating new and old Holocene relative sea-level data from Louisiana and Florida: a dominant role for glacial isostatic adjustment. **Juan Gonzalez**, Torbjörn Törnqvist, Shiyong Yu.	Sediment and sunlight: nutrient and dissolved organic matter release from sedimentary organic matter photolysis. **Melissa Southwell**, Ralph Mead, Stephen Skrabal, Donna Glinsky, Robert Kieber, G. Brooks Avery, Catherine Luquire.	Response of tidal wetland plants to sub-lethal increases in salinity. **Lori Sutter**, James Perry, Randy Chambers.	Spatial and temporal variability in oyster food quantity and quality in the Delaware Estuary. **Danielle Kreeger**, Roger Thomas, Eric Powell, Jason Morson, Jennifer Gius.	Responses from subtropical semi-arid coastal lagoons to anthropogenic and natural influences. **Jose Arreola**, Lia Mendez, Gustavo Padilla, Refugio Lopez.
4:15	A comprehensive shellfish habitat restoration approach for Charlotte Harbor National Estuary Program. **Judith Ott**, Anne Birch.	ICE-5G and ICE-6G models of postglacial relative sea-level history applied to Holocene coral reef records of the Caribbean: investigating the influence of rotational feedback on GIA processes at tropical latitudes. **Marguerite Toscano** et al.	The role of photosynthetic bubble production in coastal permeable sands. **Chiu Cheng**, Markus Huettel.	Ecosystem carbon fixation regulated by tidal freshwater marsh plant responses to environmental disturbance. **Scott Neubauer**, Lori Sutter, Amanda Rotella.	Using food network models to understand ecosystem effects of green crab mitigation strategies. **Melisa Wong**, Mike Dowd.	Nitrogen cycling in coastal lagoons and estuaries in Mexico: biogeochemical processes and vulnerability to global change. **Michael Beman**.
4:30	Towards a South African estuarine management protocol. **Ayanda Matoti**.	Recommended changes in calculating relative sea-level rise in coastal Louisiana for project planning. **James Pahl**, Kristin DeMarco, Jennifer Mouton.	Synthesis by **Michael Kennish**.	Modeling the production of salt marsh grasses: environmental factors and elevation. **Yeajin Jung**, Adrian Burd.	Grazing impact of the invasive clam *Corbula amurensis* on the microplankton assemblage of the northern San Francisco Estuary. **Valerie Greene**, Lindsy Sullivan, Janet Thompson, Wim Kimmerer.	Physical and biological controls on dissolved silica distributions along a low-inflow, upwelling influenced coastal lagoon. Julieta Hernandez-Lopez, **Victor Camacho-Iba**r, Francisco Delgadillo, Walter Daessle, Eduardo Santamaria et al.
4:45	Discussion	Synthesis/Panel Led by **Thomas Cronin** and **Torbjorn Tornqvis**t		Monitoring an urban wetland: past, present, and future vegetation. **Karina Johnston**.	Hydrodynamic sensory stressors produce nonlinear predation patterns. **Delbert Smee**, Matthew Ferner, Marc Weissburg.	Panel Discussion Led by **Victor Camacho-Ibar**

MONDAY LATE-AFTERNOON B

104-AB	201-AB	202-AB	203-BC	204-AB	
SCI-019 **Development of the Chesapeake and Other Large Aquatic Ecosystem TMDLs** *cont'd*	SCI-049 **Linking Microbial Ecology and Ecosystem Function in Changing Aquatic Environments** *cont'd*	SCI-001 **Applications of Acoustic Methods and Other Novel Approaches in Coastal and Estuarine Habitat Mapping, Research and Monitoring** *cont'd*	SCI-061 **Multidisciplinary Evaluations of Ecosystem Services at the Regional Scale** Marc Russell, Donna Bilkovic, Darrin Dantin and David Yoskowitz	SCI-211 **Hydrology and Hydrodynamics** Michael Byrne	
Modeling for total maximum daily loads (TMDLs) in Chesapeake Bay. **Carl Cerco**.	Seasonal carbon cycling in freshwater wetland sediments: analysis of microbial activities, lipid biomarkers, and isotope geochemistry. **Katherine Segarra**, Vladimir Samarkin, Marcos Yoshinaga, Floroence Schubotz, Verena Heuer, Kai-Uwe Hinrichs, Samantha Joye.	Effects of artificial reef structures on the geology and biology of the seafloor: example from the inner continental shelf off Delaware. **Nicole Raineault**, Arthur Trembanis, Douglas Miller, Vincent Capone.	An integrative approach to ecosystem goods and services - putting the pieces together for the Tampa Bay region. **Marc Russell**, Janet Nestlerode, John Rogers, Michael Osland, Darrin Dantin, Fred Genthner, Amanda Spivak, Dragoslav Marcovich, Alex Almario, Jeannine Lessman, Paul Heitmuller, David Yoskowitz.	Hydrodynamics of Mosquito Lagoon, Florida. **Michael Byrne**.	**3:30**
Effects of sediment and nutrient on water clarity in Chesapeake Bay. **Ping Wang**, Lewis Linker, Richard Batiuk.	Sea-level rise and salt-water intrusion in tidal freshwater marshes and salt-marshes of the Delaware River Estuary. **Nathaniel Weston**.	Submerged aquatic vegetation in the Caloosahatchee River Estuary: the effect of both natural and anthropogenic freshwater inflow. **Beth Orlando**, Peter Doering.	An analysis of the ecosystem services from forests of the Tampa Bay Watershed. **Michael Andreu**, Robert Northrop, Shawn Landry, Marc Russell, Wayne Zipperer, Melissa Friedman, Carolyn Cheatham-Rhodes, Amr Abd-Elrahman.	Subtidal variability in the water levels in the St. Johns River. **Krista Henrie**.	**3:45**
Challenges of modeling shallow, nearshore waters. **Lawrence Sanford**.	Directly measured net N_2 fluxes in offshore New England sediments. **Elise Heiss**, Robinson Fulweiler.	Using high-frequency acoustics to monitor oxygen evolution in *Thalassia testudinum*, *Halodule wrightii*, and *Syringodium filiforme*. **Christopher Wilson**, Preston Wilson, Kenneth Dunton.	Ecological threshold responses by estuarine fauna to shoreline development with potential management solutions. **Donna Marie Bilkovic**, Molly Roggero, Carl Hershner.	The alteration of estuarine circulation due to large-scale construction: a Tampa Bay example. **Steven Meyers**, Amanda Linville, Mark Luther.	**4:00**
Assessing attainment of Water Quality Standards under simulated nutrient loading scenarios. **Jeni Keisman**, Gary Shenk, Ping Wang, Lewis Linker, Michael Barnes, Aaron Gorka.	A high CO2 world: method development investigating alterations in phytoplankton communities on a regional scale. **Susan Gifford**, S. Leigh McCallister.	Sebastian Inlet State Park nearshore waves, currents and temperature. **Christopher Flanary**, George Maul, Gary Zarillo.	Application of Artificial Intelligence for Ecosystem Services (ARIES) for assessing flows of ecosystem services related to subsistence fisheries and coastal protection in Madagascar. **Miroslav Honzák**, Gary Johnson, Kenneth Bagstad, Brian Voigt, Ferdinando Villa.	Synoptic surveys of near-surface hydrography in a Gulf of Mexico estuary. **Bret Webb**.	**4:15**
Splitting the check: development of load allocation rules for the multi-state Chesapeake TMDL. **Gary Shenk**, Rich Batiuk, Lewis Linker, Ping Wang.	Paradox of algal blooms in oligotrophic waters. **P. Sundareshwar**, S. Upadhayay, M. Abessa, S. Spaulding, B. Berdanier, C. Sandvik, A. Trennepohl, S. Honomichl.	NBII Gulf Coast fisheries mapping application: making coastal fisheries data and trend analyses available to a broad audience. **Kali Frost**, Lisa Gonzalez, Zach Vernon, Abishek Vardhan, Stephanie Glenn.	The Multiscale Integrated Model of Ecosystem Services (MIMES): the classification, dynamics, modeling and valuation of ecosystem services. **Roelof Boumans**, Thomas Fontaine, Joe Roman, Irit Altman, Winona Victery.	Sequential storm effects on barrier island morphology: data and modeling analyses. **Janelle Reynolds-Fleming**, Richard Luettich, Antonio Rodriguez.	**4:30**
Integrating Clean Water Act TMDL requirements with ecosystem based management in the Long Island Sound. **Mark Tedesco**.	Heterotrophic protist grazing before, during and following harmful cyanobacteria blooms in a shallow, tidally-influenced Columbia River floodplain lake (Vancouver Lake, Washington, USA). **Gretchen Rollwagen-Bollens**, Jennifer Boyer, Julie Zimmerman, Stephen Bollens.	Discussion	Session Synthesis	Integrated estuarine systems management: role of Adaptive Hydraulics model in ecosystem restoration in estuaries, Columbia River Estuary. **Elvon Childs**, Gaurav Savant, Jennifer Tate.	**4:45**

TUESDAY EARLY MORNING A

	101-A	101-BC	102-AB	102-C	103-A	103-BC
	OPEN	SCI-088 **Trends, Patterns and Shifts in Time-series of Coastal Ecological Data** William Michael Kemp and Walter Boynton	SCI-085 **Threats to Coastal Marine Habitats in the Tropical Indo-Pacific Region** Robert Coles, Norman Duke and Len McKenzie	SCI-071 **Preventing and Combating Aquatic Invasive Species** Susan Pasko and Peg Brady	SCI-038 **The Indian River Lagoon: An Estuary in Transition** M. Dennis Hanisak and Robert Virnstein	SCI-078 **Restoration Ecology in a Sustainable World** Michael Weinstein and R. Eugene Turner
8:00	OPEN	What information is contained in phytoplankton time series, and how can it be extracted? **James Cloern**, Alan Jassby.	Innovations in environmental communication, reporting and governance. **William Dennison**.	Hazard Analysis and Critical Control Point (HACCP) planning: invasive species applications. **Susan Pasko**, David Britton, Jonathan Thompson, Paul Heimowitz, Matthew Patterson, Jason Goeckler.	A diverse estuary requires diverse study and management: problems and approaches. **Robert Virnstein**, Dennis Hanisak.	Reversing two centuries of wetland degradation: can science better inform policy & practice? **Michael Weinstein**.
8:15		A case study of the Back River Estuary: strong management actions and ecological lag times. **Walter Boynton**, Younjoo Lee, Maureen Brooks, Michael Kemp.	Evaluating risk to seagrasses in the Tropical Indo-Pacific Region. **Robert Coles**, Alana Grech, Len McKenzie, Michael Rasheed.	Evaluating and mitigating invasion risk posed by saltwater aquarium strains of the macroalgal genus *Chaetomorpha.* **Rachel Odom**, Linda Walters.	17 years of therapy: seagrass monitoring in the Indian River Lagoon, FL. **Lori Morris**, Lauren Hall, Robert Chamberlain.	Ecology and hydrology of restoring wetlands in the lower Columbia River estuary. **Ronald Thom**, Heida Diefenderfer, Andre Coleman, Amy Borde, Curtis Roegner, Jerry Tagestad, Gary Johnson.
8:30		Comparative analysis of climatic forcing on phytoplankton community dynamics in two neighboring, mid-Atlantic estuaries. **Benjamin Peierls**, Nathan Hall, Hans Paerl.	The Shoreline Video Assessment Method (SVAM); a new tool for assessing shoreline mangrove biomass, biodiversity, condition and threats and quantifying change over time. **Jock Mackenzie**, Norm Duke.	An invasion potential scorecard: incorporating the human and ecological dimensions of aquarium species release. Priscilla Weeks, **Lisa Gonzale**z, Stephanie Glenn, Niki vonHedemann, Ian Fitch, Heather Prestridge, Michael Monticino.		Estimating benefits from tidal marsh restoration using monitoring indicators and ecosystem services. **David Burdick**, Gregg Moore, Gail Chmura.
8:45		Eutrophication and recovery in the tidal freshwater Potomac River: Gunston Cove and other stories. **R. Christian Jones**, Daniel Sklarew.	Effects of light reduction on the recovery of physically disturbed seagrass beds. **Siti Maryam Yaakub**, Paul Erftemeijer, Tjeerd Bouma, Peter Todd.	Mapping fine-scale variation of porewater salinity in tidal marshes vulnerable to exotic phragmites invasion using electromagnetic induction. **Gregg Moore**, David Burdick, Christopher Peter, Donald Keirstead.	Florida east coast lagoon fish assemblages: 56 years of research. **R. Grant Gilmore**.	River diversions are not restoring Mississippi Delta marshes and may promote losses. **Michael Kearney**, R. Turner, Alex Riter.
9:00		Does it take a "kick-start"? Ecological responses over time to large and fast nitrogen load reductions in Tampa Bay, Florida. **Holly Greening**, Anthony Janicki, Ed Sherwood, Ray Pribble.	Effective strategies to manage dredge related threats to tropical seagrass systems based on seagrass ecological requirements. **Michael Rasheed**, Katie Chartrand.	Where do we go from here? Interactive effects of salinity and temperature on two non-native mussels, *Mytella charruana* and *Perna viridis.* **Wei Yuan**, Linda Walters, Kimberly Schneider, Eric Hoffman.		Developing nekton-based metrics of habitat quality for the assessment of wetland restoration in tidal mangrove ecosystems. **Justin Krebs**, Carole McIvor, Susan Bell.
9:15		Long-term reductions in anthropogenic nutrients link to improvements in Chesapeake Bay habitat. **Nancy Rybicki**, Henry Ruhl.	Effects of large scale disturbance on coastal intertidal seagrass meadows of NE Queensland, north-eastern Australia. **Len McKenzie**, Michelle Waycott, Rudolf Yoshida, Naomi Smith.	Linking biogeographic and life history information for nonindigenous marine and estuarine species in the North Pacific: an introduction to the Pacific Coast Ecosystem Information System (*PCEIS*). **Katharine Marko**, Henry Lee, Deborah Reusser et al.	Evolution of water quality concerns in the Indian River Lagoon: a changing baseline from Ponce de Leon's landing to the final voyage of Shuttle Transport System (S.T.S.) Atlantis. **John Windsor**.	Long-term effects of ditch plugging on salt marshes and the subsequent development of innovative restoration techniques. **Susan Adamowicz**, David Burdick, Jordan Kramer, Lindsay Wagner, Jonathan Franklin, Eric Hazelton, Britt Argow, Zoe Hughes.
9:30		Unexpected resurgence of a submersed plant bed in Chesapeake Bay: analysis of time-series data. **Cassie Gurbisz**, W. Kemp.	Improving the health, resilience and productivity of the Great Barrier Reef and allied estuarine and coastal wetland environs: a function of innovative farming systems. **Adam West**, Mike Hanks, Bob Karfs, Stewart Lindsay, Peter Donaghy.	Two approaches to modeling population dynamics for assessing the effect of ballast treatment standards on reducing risk of AIS establishment. **Cynthia Cooper**, Carlton Hunt, Cheryl Dingus, Scott Libby.	The Indian River Lagoon: transition from Holocene to Anthropocene. **John Trefry**.	Ecological re-engineering of a freshwater impoundment for salt marsh restoration in a hypertidal system. **Tony Bowron**, Danika van Proosdij, Jeremy Lundholm, Nancy Neatt, Jennifer Graham.
	BREAK 9:45 AM – 10:15 AM					

TUESDAY EARLY MORNING B

104-AB	201-AB	202-AB	203-BC	204-AB	
SCI-012 **Climate Change - Anthropogenic Stressor Interactions in Estuarine and Coastal Systems** Erik Bonsdorff, Cheryl Brown and Walt Nelson	SCI-052 **Mangrove-Dominated Ecosystems: A Biogeographic Comparison of Structure and Function** Shing (Joe) Lee, Victor Rivera-Monroy, Erik Kristensen and Robert Twilley	SCI-057 **Microbial Source Tracking: Fecal Pollution Sources in Coastal Waters** Valerie Harwood and Helena Solo-Gabriele	SCI-053 **Mapping, Measuring and Modeling Salt Marsh Sedimentary and Hydrodynamic Processes** Clark Alexander, Jack Blanton, Al Garrett and Raymond Torres	SCI-051 **Managing Multiple Stresses to Coastal Ecosystems** Elizabeth Turner, Larry Pugh, Craig Stow and Michael Dowgiallo	
Global change and interspecific competition alter *Avicennia germinans* growth in the salt marsh-mangrove ecotone. **Lorae Simpson**, Ilka Feller, Samantha Chapman.	Mangrove ecosystem function and response to change: a biogeographic perspective. **Shing Yip Lee**, Erik Kristensen, Victor Rivera-Monroy, Robert Twilley.	Microbial source tracking: fecal pollution sources in coastal waters. **Valerie Harwood**, Helena Solo-Gabriele.	A Bay of Fundy salt marsh restoration at Aulac, NB, Canada - the first year. **Jeff Ollerhead**.	Sustainability, economic value, ecological impact of mussel farms in northern Adraitic Sea under different antropogenic and climatic scenarios. **Cosimo Solidoro**, Paola Del Negro, Simone Libralato, Donata Melaku Canu.	**8:00**
Climate change and invasions in coastal ecosystems. **Edwin Grosholz**.	Food web dynamics in mangrove environments: the use of stable C and N isotopes as indicators of environmental conditions and anthropogenic influence. **Erik Kristensen**, Ditte Kristensen, Perrine Mangion.	Case studies and caveats: microbial source tracking in coastal waters. **Valerie Harwood**, Katrina Gordon, Christopher Staley.	Tidal creek hydraulic geometry for salt marsh restoration in the Upper Bay of Fundy. **Jennifer Graham**, Danika Van Proosdij, Jeremy Lundholm, Tony Bowron.	Managing multiple stressors: the saga of Saginaw Bay. **Craig Stow**, Joseph DePinto, Juli Dyble, Tomas Hook, Donna Kashian, Tammy Newcomb, Scott Peacor.	**8:15**
Cumulative response of eelgrass meadows to warming, nutrient enrichment, and food web structure. **Michelle Brodeur**, F. Joel Fodrie, Michael Piehler.	Nutrient cycling and denitrification in sediments of mangrove estuaries on the Pacific coast of Panama. **Jane Tucker**, Anne Giblin, Samuel Kelsey, Ivan Valiela.	Enterococci ubiquitous within Southern Florida beach sediments. Matthew Phillips, **Helena Solo-Gabriel**e, James Klaus, Alan Piggot.	Use of tide stakes to interpret flow pathways and elevation patterns in a ditched New England salt marsh. **Lynsey LeMay**, Carl Friedrichs.	Evaluating the relationship between habitat alteration and resources species abundance in North Carolina estuaries: do fish respond to anthropogenic activities? **Jennifer Weaver**, Jeffrey Buckel, Scott Chappell.	**8:30**
In situ CO2 enrichment: impacts on a nearshore seagrass community. **Justin Campbell**, James Fourqurean.	Synthesis of soil organic matter and nutrient accumulation in the Everglades southern coastal ecotone: implications for hydrologic restoration. **Colin Saunders**, Carlos Coronado-Molina, Edward Castañeda-Moya, Randolph Chambers, Victor Rivera-Monroy, H. Carl Fitz et al.	Urban runoff and bacteriological water quality of a Chesapeake Bay sub-estuary. **Manju Nagarajan**, Fred Dobbs.	High resolution observations of wetland shoreline change in the Albemarle-Pamlico Estuarine System (APES). **Devon Eulie**, John Walsh, Reide Corbett.	Applying ecological resilience theory: modelling and testing the feedback loops to predict shifts in seagrass ecosystems. **Paul Maxwell**, Rod Connolly, Kylie Pitt, Andrew Olds.	**8:45**
The effects of warmer temperatures on *Spartina alterniflora* and salt marsh sediment characteristics. **Sophia Fox**, Ylva Olsen, Ivan Valiela.	Carbon and nutrient storage in riverine and scrub mangrove forests of the Florida Coastal Everglades. **Edward Castaneda-Moy**a, Robert Twilley, Victor Rivera-Monroy.	RT-PCR as a tool for microbial source tracking in coastal Connecticut. **Lauren Brooks**.	Measuring marsh surface elevation and shoreline change at multiple spatial and temporal scales in the New River Estuary, NC. **Carolyn Currin**, Michael Greene, Priscilla Delano, Lisa Cowart.	Modeling microalgal abundance with artificial neural networks: demonstration of a heuristic 'Grey Box' to deconvolve and quantify environmental influences. **David Millie**, Gary Weckman, William Young, James Ivey, Gary Fahnenstiel.	**9:00**
Combined effects of a toxicant and warming on a shallow-water sediment system. **Kristina Sundback**, Christian Alsterberg.	Hurricanes' effect on litterfall production of mangrove forests in the Yucatan Peninsula, Mexico. Ma. Fernanada Adame, Arturo Zaldívar, Claudia Teutli, Teresa Andueza, Juan Caamal, Haydee López, Romel Cano, Hector Hernández, Ricardo Torres, **Jorge Herrera-Silveira**.	Converging on quantitative microbial source tracking. **Donald Stoeckel**.	Numerical simulation of dye tracer experiment in Georgia tidal creek - marsh complex. **Alfred Garrett**, Jackson Blanton, David Hayes, Eliel Villa-Aleman, Julie Amft, Trent Moore.	Estuarine biotope mosaics and goals for habitat management: an application in Tampa Bay. **Giancarlo Cicchetti**, Holly Greening.	**9:15**
Eelgrass survival within two contrasting systems in the mid-Atlantic: the critical role of summer temperature. **Erin Shields**, Kenneth Moore, David Parrish, Robert Orth.	Observations of mangrove forest canopy rainfall in Everglades National Park. **Gordon Anderson**, Thomas Smith, Friedemann Scheibler.	Influence of animal age and diet on fecal shedding of Bacteroidales. **Orin Shanks**.	Flushing of conservative tracers from intertidal areas. **Jack Blanton**, Al Garrett, David Hayes, Julie Amft, Trent Moore, Eliel Villa-Aleman.	Tracking agricultural pollutant impacts to the Great Barrier Reef through an annual report card. William Dennison, **Rense Kelse**y, Chris Chinn, Carl Mitchell.	**9:30**
BREAK 9:45 AM – 10:15 AM					

TUESDAY MID-MORNING A

	101-A	101-BC	102-AB	102-C	103-A	103-BC
	OPEN	SCI-088 **Trends, Patterns and Shifts in Time-series of Coastal Ecological Data** *cont'd*	SCI-050 **Living Resource - Water Quality Feedbacks: A Win-Win with Biotic Restoration?** Jeffrey Cornwell, Carl Cerco and Lewis Linker	SCI-219 **Ecology of Invasive and Native Populations** Eric Hoffman	SCI-038 **The Indian River Lagoon: An Estuary in Transition** *cont'd*	SCI-078 **Restoration Ecology in a Sustainable World** *cont'd*
10:15	OPEN	Resolving drivers of variability in estuarine metabolism from sustained observations of water quality in the southeastern U.S. **Jane Caffrey**, Michael Murrell, Kendra Straub, James Hagy, Mark Woodry, Scott Phipps, Jennifer Wanat, Lee Edmiston, Mike Shirley.	Quantifying and evaluating habitat-specific nitrogen removal in estuaries. **Michael Piehler**, Ashley Smyth, Jonathan Grabowski.	Population genetics of a new introduction: green mussels in the Western hemisphere. **Matthew Gilg**.	Watershed, hydrodynamic and water quality model framework to support determination of TMDLs for Indian River Lagoon tributaries. **Andrew Stoddard**, Silong Lu, Paul Craig, Sang Yuk, Zhijun Liu, Christopher Wallen, Michael Schmidt, Richard Wagner et al.	Seed addition facilitates *Zostera marina* L.(eelgrass) recovery in a coastal bay system (USA). **Robert Orth**, Kenneth Moore, Scott Marion, David Wilcox, Mark Luckenbach, David Parrish, Barry Truitt, Bo Lusk, Karen McGlathery.
10:30		An exploration of metabolism in the Chesapeake Bay using the metabolic theory of ecology. **Lora Harris**, Casey Sperling, Walter Boynton, Meghann Niesen, Katherine Davis Ziombra.	Mitigation of estuarine eutrophication by aquatic habitat restoration? **Jeffrey Cornwell**, Lisa Kellogg, Michael Owens, Ken Paynter.	Clash of the Titans: investigating genetic variation in the global exotic Titan Acorn barnacle Megabalanus coccopoma. **Eric Hoffman**, Ocean Cohen, Linda Walters.	High-frequency water quality monitoring in the Central Indian River Lagoon, Florida. **M. Dennis Hanisak**, Kristen Davis.	Recovery trends in an eelgrass system restored by seeding: state changes and tipping points. **Karen McGlathery**, Laura Reynolds, Luke Cole, Robert Orth, Scott Marion, Arthur Schwarzschild.
10:45		Changes over time in the characteristics of the fish faunas of a large, microtidal estuary following major modifications. **Lauren Veale**, Peter Coulson, Ian Potter, Steeg Hoeksema.	Mussel farming questioned as a mitigation measure of eutrophication in the Baltic Sea. **Johanna Stadmark**, Daniel Conley.	Microtopography mediates competitive interactions between an introduced seagrass and its native congener. **Michael Hannam**, Sandy Wyllie-Echeverria.	Population ecology of the epiphytic foraminiferan *Sorites dominicensis* in the Indian River Lagoon, Florida. **Susan Richardson**.	Assessing functional equivalency of restored, no-take oyster reefs. **David Eggleston**, Brandon Puckett, Ray Mroch.
11:00		Decline of the blue crab fishery in North Carolina: recruitment variability, freshwater inflow, overharvesting or multiple stressors. **Matthew Ogburn**, Richard Forward.	Denitrification in salt marsh sediments: finding the "hot spots and hot moments." **Anne Giblin**, Jane Tucker, Ketil Koop-Jakobsen, Gary Banta.	Who are you, Charru? Identifying source populations of the exotic charru mussel. **Tamara Downs,** Linda Walters, Eric Hoffman.	Restoration of coastal wetland impoundments in the Indian River Lagoon, Florida: history, methods, and monitoring. **Ronald Brockmeyer**, Melinda Donnelly, William Greening, Stanley Howarter.	Does subsidy of oyster seed onto created reef structures enhance oyster populations? **Nathan Geraldi**, Charles Peterson.
11:15		Time series of oxygen concentrations in the Baltic Sea. **Daniel Conley**, Jacob Carstensen.	The influence of the eastern oyster, *Crassostrea virginica*, on sediment nitrogen cycling across a nutrient gradient in eutrophic Jamaica Bay, New York City. **Timothy Hoellein**, Chester Zarnoch, Allison Mass, Angeline David, Simon Morgan, Steven Polaskey.	Ecosystem under pressure: defining the dinoflagellate community in Galveston Bay, Texas (USA). **Jamie Steichen**, Alexandra Denby, Robin Brinkmeyer, Antonietta Quigg.	Oyster declines from boating activities and gains from restoration in Mosquito Lagoon, Florida. **Linda Walters**, Anne Birch, Jody Palmer, Steven Jachec, Paul Sacks.	Benefits for humans and habitats: examples of successful coral, oyster reef and anadromous fish habitat restoration at ecologically meaningful scales. **Amanda Wrona Meadows**, Robert Brumbaugh, Boze Hancock.
11:30		Estimating organic matter deposition and decay with a long-term sediment flux database and mechanistic model. **Damian Brady**, Jeremy Testa, W. Kemp, Walter Boynton, Dominic Di Toro.	Oyster restoration - feasibility and water quality benefits in a highly urbanized bay. **James Fitzpatrick**, James Lodge.	Development of a cohort population model for burrowing shrimps in Pacific Northwest estuaries. **Katelyn Bosley**, Brett Dumbauld.	Structural equation modeling approach to assessing oyster restoration and water quality in the St Lucie River Estuary, SE Florida. **Edward Proffitt**, Elizabeth Salewski, Donna Devlin, Glenn Coldren, Pedro Lara, Dana Smith, Benjamin Sollins, Kathryn Tiling.	Humans in the ecosystem: unintended adverse consequences of improving water quality in estuaries. **Rod Connolly**, James Webley.
11:45		Long-term trends in Chesapeake Bay seasonal hypoxia, stratification, and nutrient loading. Rebecca Murphy, **W. Michael Kemp**, William Ball.	Biotic and abiotic contributions to oyster-enhanced sediment denitrification. **Ashley Smyth**, Nathan Geraldi, Michael Piehler.	Discussion	Panel Discussion Led by **Dennis Hanisak** and **Robert Virnstei**n	The tool maker, more than the tools. **R. Eugene Turner**.
POSTER SESSIONS and LUNCH 12:00 PM – 1:30 PM						

TUESDAY MID-MORNING B

104-AB	201-AB	202-AB	203-BC	204-AB	
SCI-012 **Climate Change - Anthropogenic Stressor Interactions in Estuarine and Coastal Systems** *cont'd*	SCI-052 **Mangrove-Dominated Ecosystems: A Biogeographic Comparison of Structure and Function** *cont'd*	SCI-011 **Changes in Top-down Control and Roles of Large Consumers** Michael Heithaus, Kenneth Heck and John Valentine	SCI-053 **Mapping, Measuring and Modeling Salt Marsh Sedimentary and Hydrodynamic Processes** *cont'd*	SCI-205 **Ecosystem Stressors, Responses and Trends** Xiaoping Huang	
Effects of watershed development and climate events on ecosystem health in lagoons in the north central Gulf of Mexico. **Yushun Chen**, Just Cebrian, Bart Christiaen, John Lehrter, Jason Stutes.	Patterns of growth and herbivory in mangrove forests along latitudinal gradients in the Atlantic-Caribbean East Pacific and the Indo-West Pacific: consequences of nutrient over-enrichment. **Ilka Feller**, Catherine Lovelock, Marilyn Ball.	The grass is always greener: seagrass ecosystem function, megaherbivore populations and the myth of the pristine. **Teresa Alcoverro**, Nachiket Kelkar, Núria Marbà, Rohan Arthur.	Development of a shore profile algorithm: a case study of Weeks Bay, Alabama. **Kimberly Pevey**.	Influence of salinity and hydrology on interactions between mangroves and emergent marsh vegetation: a greenhouse study. **Rebecca Howard**, Janelda Biagas, Larry Allain.	**10:15**
Effects of climate change on temperature and salinity in the Yaquina Estuary, Oregon (USA). **Cheryl Brown**, Deborah Reusser, Darrin Sharp, Heejun Chang, Madeline Steele.	Carbon dynamics in mangrove ecosystems: a global perspective. **Daniel Alongi**.	Top-down control in a relatively pristine seagrass ecosystem. **Derek Burkholder**, Michael Heithaus, James Fourqurean, Aaron Wirsing.	Wave attenuation over intertidal flat adjacent to salt marsh. **Marije W. Smit**, Tjeerd Bouma, Peter M. Herman.	Interactive effects of nutrients, salinity, and flooding on oligohaline wetland vegetation following saltwater intrusion. **Whitney Kiehn**, Irving Mendelssohn.	**10:30**
Nutrient enrichment and pH perturbations in a phytoplankton-based coastal marine ecosystem. **Scott Nixon**, Michael Pilson, Autumn Oczkowski, Candace Oviatt.	Towards a systematic, benefit-evaluation approach to assessing change, and drivers of change, for tidal wetlands. **Norman Duke**, Jock Mackenzie.	Impacts of intense fishing pressure on community-level trophic cascades: an assessment using no-take and fished reefs throughout the Florida Keys National Marine Sanctuary. **John Valentine**, Kenneth Heck.	Landscape-scale patterns of tropical cyclone sedimentation in the northern Gulf of Mexico. **Andrew Tweel**, R. Turner.	The use of DMSO and DMSP to evaluate the physiological response of *Spartina alterniflora* to various disturbances. **Caroline McFarlin**, Merryl Alber.	**10:45**
Interannual variability: the elephant and the blind men. **Robert Livingston**.	Mangrove wetland productivity and vulnerability in Mexico: current trends in conservation and management in the context of global change. **Victor Rivera-Monroy**, Jorge Lopez-Portillo, Eurico D'Sa, Jorge Herrrera-Silveira, Marc Simard, Joanna Acosta-Velázquez et al.	The impacts of exploited higher-order consumers on the structure and function of a species-rich community. **Shanna Madsen**, John Valentine.	Sediment and total suspended solids data collection and analysis in Apalachicola Bay, FL. **Daina Smar**, Scott Hagen, Ammarin Daranpob, Davina Passeri.	Role of plant stress, *Fusarium*, and marsh crabs in Sudden Vegetation Dieback. **Wade Elmer**.	**11:00**
Severe droughts reduce estuarine primary productivity with cascading effects on higher trophic levels. **Michael Wetz**, Emily Hutchinson, Ross Lunetta, Hans Paerl, J. Christopher Taylor.	Shade and salt tolerance of rare, common and invasive mangroves. **Emily Dangremond**.	Size matters: the contribution of mega-infauna to the food webs and ecosystem services of an Oregon estuary. **Theodore DeWitt**, Stephen Pacella, Christina Folger, Peter Eldridge.	Climate change induced on overland sediment transport and wetland morphology in Apalachicola Bay, Florida, USA. **Ammarin Daranpob**, Scott Hagen, Daina Smar, Davina Passeri, Cheng Wang, Dingbao Wang.	Heavy metals in the benthic food chain of the eastern Chukchi Sea. **Austin Fox**, Emily Hughes, Robert Trocine, John Trefry, Nathan McTigue, Kenneth Dunton, Brenda Lasorsa.	**11:15**
The role of regional climate and other factors in controlling hypoxia. **Younjoo Lee**, Walter Boynton.	Damage and recovery of black mangrove (*Avicennia germinans*) from the January 2010 freeze on the Louisiana coast. **Richard Day**.	Seascape connectivity improves reserve performance: effects on fish abundance and grazing dynamics in reef ecosystems. **Andrew Olds**, Rod Connolly, Kylie Pitt, Paul Maxwell.	A nine-year record of elevation deficits with respect to relative sea-level rise in a Pacific Northwest estuary. **John Rybczyk**, Kara Kuhlman.	Trophic transfer of heavy metals in food web from the Pearl River Estuary, South China. **Xiaoping Huang**, Yanyi Zeng.	**11:30**
Linking weather patterns and climate extremes to coastal water quality in South Florida. **Douglas Pirhalla**, Scott Sheridan, Cameron Lee, Varis Ransi, Chuanmin Hu, Henry Briceño, Karsten Shein, Catherine Marzin.	Tree vs. tide: thresholds to mangrove seedling establishment on tidal flats. **Thorsten Balke**, Eva Van den Elzen, Erik Horstman, Claire Jeuken, Peter Herman, Edward Webb, Tjeerd Bouma.	Green turtles that "dig" for dinner and seagrass collapse? **Marjolijn J. Christianen**, Johan Van de Koppel, Leon P. Lamers, Marieke van Katwijk, Peter M. Herman, Tjeerd Bouma.	The contribution of vegetation to tidal marsh accretion is underestimated by measurements of mass of organic matter. **Gail Chmura**, Nadine Shatilla, Karen Rodriques-Gervais.	Tidal marshes in the Delaware estuary: historical reconstruction of chemical loadings. **David Velinsky**, Christopher Sommerfield, Don Charles, Richard Greene, Thomas Fikslin.	**11:45**
POSTER SESSIONS and LUNCH 12:00 PM – 1:30 PM					

TUESDAY EARLY-AFTERNOON A

	101-A	101-BC	102-AB	102-C	103-A	103-BC
	OPEN	SCI-068 **Paleoecology's Role in Decision-making: Adapting to Change Over Many Time-scales** G. Lynn Wingard and Ania Wachnicka	SCI-050 **Living Resource - Water Quality Feedbacks: A Win-Win with Biotic Restoration?** *cont'd*	SCI-083 **Source Habitat Quality and Metapopulation Dynamics in Marine Ecosystems** Pablo Munguia and Benjamin Walther	SCI-039 **Integrated Assessments of Valued Components and Services in Estuarine Ecosystems** Michael Reiter and Geoff Scott	SCI-029 **Everglades Restoration - Implementation, Benefits and Adaptation** Susan Kemp and Donald Deis
1:30	OPEN	Using historical ecology to reconnect habitat pattern and process at the landscape scale in the highly modified Sacramento-San Joaquin Delta, California. **Alison Whipple**, Robin Grossinger, Daniel Rankin, Josh Collins, Carl Wilcox.	Restoring bivalves to increase natural capital: a watershed-wide approach. **Peter Bergstro**m, Danielle Kreeger, Dan Spooner, Catherine Gatenby.	Source-sink dynamics in marine systems: semantics and mechanisms. **Benjamin Walther**, Pablo Munguia.	Moving from theory to practice in integrated ecosystem assessment. **Geoffrey Scott**, Michael Reiter, Mark Harwell.	Introduction by **Susan Kemp**.
1:45		Seagrass foraminifera of Florida Bay: proxy for water quality through time. **Laurel Collins**, Jie Chang, James Fourqurean.	Shedding light on murky waters: measuring functional responses of restored shellfish reefs and beds in Florida, Virginia and New York. **Robert Brumbaugh**, Anne Birch, Chris Clapp, Ryan Dale, Boze Hancock, Carl LoBue, Bowdoin Lusk, Barry Truitt.	Sources, sinks, and SLOSS: metapopulation dynamics guide the design of a marine reserve network. **Brandon Puckett**, David Eggleston.	Conceptual modeling for resource management and risk assessment in coastal areas. **Michael Reiter**, Mark Harwell, John Gentile, Geoffrey Scott.	
2:00		Paleoecologic record of change in Biscayne Bay, Florida, and the role of ecosystem history in restoration decision-making. **G. Lynn Wingard**.	The enduring primacy of top-down effects in shallow benthic ecosystems. **Kenneth Heck**, John Valentine.	Structural heterogeneity in source-sink estuarine communities. **Pablo Munguia**.	The utility of Conceptual Ecosystem Models for the development of a research and monitoring program at the Grand Bay National Estuarine Research Reserve. **Mark Woodrey**, Mohrman Christina, David Ruple, Mike Reiter, Mark Harwell.	Monitoring the effects of the Comprehensive Everglades Restoration on SAV and water quality in estuaries in the Northern Estuaries Region. **Peter Gottfried**, Kenneth Moore, Claus Hansen.
2:15		Late Holocene changes in diatom communities in South Florida estuaries caused by climate variability and anthropogenic alterations of watershed on the South Florida mainland. **Anna Wachnicka**, Evelyn Gaiser, Henry Briceño, Lynn Wingard.	Does the hardshell clam, *Mercenaria mercenaria*, influence nitrogen removal in eutrophic shallow estuaries? **Anna Christina Tyler**, Andrew Altieri, Brittany Bourdon.	Metapopulation dynamics in estuarine habitat restoration: do reference areas act as source populations? **Anna Armitage**, Michael Bell, Chuan-Kai Ho, Eric Madrid, Antonietta Quigg.	A watershed analysis of permitted coastal wetland impacts and mitigation methods within the CHNEP. **James Beever**, Whitney Gray, Lisa Beever, Daniel Cobb.	Hydropatterns and rainfall during the 2009-2010 hydrologic year (June to May) provide insight into how a restored Everglades might respond to sea level rise. **Jerome Lorenz**, Peter Frezza.
2:30		A synthesis of linked paleoecological and regression model evaluations to simulate Everglades hydrology and Florida Bay salinity response for CERP restoration performance measures. **Frank Marshall**, Georgiana Wingard, Susan Kemp.	Eat a clam, save the world: carbon sequestration in bivalve aquaculture. **Patrick Baker**, Shirley Baker.	Investigating shellfish closure areas as potential larval sources for northern quahog populations in Narragansett Bay, Rhode Island. **Jeffrey Mercer**, Candace Oviatt.	Integrating risk assessment of environmental stressors with impacts on ecosystem services and human health. **Geoffrey Scott**, Dwayne Porter, Hart Scott, Lisa Wickcliffe, Fred Holland, Anne Blair, Michael Reiter.	Restoration of nutrient-enriched Everglades through phosphorus load reduction and fire. **Cassondra Thomas**, ShiLi Miao.
2:45		Discussion	Wave and tidally driven flows within *Zostera marina* seagrass beds and their impact on sediment suspension. **Jennifer Hansen**, Matthew Reidenbach.	Panel Discussion Led by **Benjamin Walther**	Panel Discussion Led by **Michael Reiter**	Taylor Slough: an example that operations and flow can effect changes in the Everglades and Florida Bay. **Donald Deis**, Susan Kemp.
BREAK 3:00 PM – 3:30 PM						

TUESDAY EARLY-AFTERNOON B

104-AB	201-AB	202-AB	203-BC	204-AB	
SCI-017 **Coordinating Science and Policy through Regional Ocean Governance** Cristina Carollo	SCI-052 **Mangrove-Dominated Ecosystems: A Biogeographic Comparison of Structure and Function** *cont'd*	SCI-011 **Changes in Top-down Control and Roles of Large Consumers** *cont'd*	SCI-025 **Elemental Stoichiometry and Food Webs** Patricia Glibert and Richard Dugdale	SCI-205 **Ecosystem Stressors, Responses and Trends** *cont'd*	
Evaluating spatial governance initiatives. **Josh Eagle**.	Mangrove vulnerability to sea-level rise differs among sedimentary settings. **Karen McKee**, Ken Krauss, Donald Cahoon.	Seasonal variation in the behavior of reef fish at Gray's Reef National Marine Sactuary inferred from acoustic telemetry. **Noelle Hawthorne**, Matthew Ogburn, Catherine Carroll, Sarah Fangman, Greg McFall.	Elemental stoichiometry, productivity and food webs: introduction to the session. **Patricia Glibert**.	The Puget Sound Dissolved Oxygen Deficit - a tool to track sources and sinks in a water quality budget. **Julia Bos**, Christopher Krembs, Skip Albertson, Brandon Sackmann, Mya Keyzers, Laura Friedenberg, Carol Maloy.	**1:30**
Role of the United States Department of Interior in regional ocean governance under the National Ocean Policy Initiative. **Amardeep Dhanju**, Michael Rasser, Rodney Cluck.	The role of biotic processes on soil accretion and elevation change in mangrove forests in south Florida. **Carlos Coronado**, Fred Sklar, Edward Cataneda-Moya, Victor Rivera-Monroy, Robert Twilley.	The roles of American alligators in a subtropical estuary. **Adam Rosenblatt**, Michael Heithaus.	Do external nutrient ratios matter? Looking beyond growth and productivity- a stoichiometric perspective. **Patricia Glibert**.	Shallow lagoons in the north central Gulf of Mexico: long-term trends in benthic metabolism. **Bart Christiaen**, Jason Stutes, John Lehrter, Just Cebrian.	**1:45**
Designing Integrated Coastal Mapping for the Gulf of Mexico. **James Gibeaut**, Jennifer Wozencraft, Cristina Carollo, Seneca Holland, William Nichols.	Assessing the invasive potential of exotic mangroves in Florida using climate envelop models with down scaled AOGCM climate predictions. **Thomas Smith**, Lydia Stefanova, Vasubandhu Misra.	Abiotic and biotic drivers of intraspecific variability in behavior shape the ecological roles of juvenile bull sharks. **Philip Matich**, Michael Heithaus.	Environmental N:P ratios and phytoplankton productivity: effect of residence time and type of N. **Richard Dugdale**.	Water quality characterization and watershed planning in Double Bayou, a rural watershed of an urban estuary. **Stephanie Glenn**, Lisa Gonzalez, Kali Frost, Zach Vernon, Michael Lee, Lee Bodkin, Linda Shead.	**2:00**
Science and data needs for effective coastal and marine spatial planning. **Michael Rasser**, Amardeep Dhanju, Rodney Cluck.	Do mangrove ecosystems with different levels of diversity function differently? **Shing Yip Lee**.	The complexity of habitat complexity: how physical features of a New England estuary shape seasonal habitat use of migratory striped bass. **Cristina Kennedy**, Martha Mather, John Finn, Linda Deegan.	The balance between different contributions to the DIN pool in determining phytoplankton blooms in northern San Francisco Estuary. **Frances Wilkerson**, Richard Dugdale, Alex Parker, Al Marchi, Sarah Blaser, Christina Buck, Karen Taberski.	Effects of watershed urban development on water quality in coastal bayous, North Central Gulf of Mexico. **Daniel Grigas**, Just Cebrian, Brenna Ehmen, Mark Woodrey, Thomas Strange, William Underwood, John Lehrter, Yushun Chen.	**2:15**
Policy in planning an international network of marine protected areas. **Harriet Nash**.	Socioeconomic changes can affect mangrove biogeography. **Katherine Ewel**.	Stable isotopes as dietary indicators in northern Gulf manatees: understanding fringe habitat use. **Allen Aven**, Ruth Carmichael.	Stable isotopes reveal differences between nearshore habitats and subestuaries for resident Chesapeake Bay fishes. **Lori Davias**, Denise Breitburg.	Benthic diversity, community patterns and trends in Delaware Bay as revealed by the Delaware Estuary Benthic Inventory. **Doug Miller**, Angela Padeletti.	**2:30**
Location, location, location: management uses of marine benthic biogeographical information in coastal waters of the Northeastern USA. **Stephen Hale**, Melville Coté, Jr, Mark Tedesco, Renee Searfoss.	Synthesis by **Shing Lee**, **Erik Kristensen** and **Victor Rivera-Monro**y.	Do tiger sharks influence seagrass ecosystems through multiple indirect pathways? **Michael Heithaus**, Cindy Bessey, Derek Burkholder, James Fourqurean.	Fishing impacts on mid-trophic level species in coastal food webs: fishing up the food web? **Joseph Luczkovich**, Lisa Clough, Rebecca Deehr, Kevin Hart, Jeffrey Johnson, Beverly Johnson.	Evaluating growth potential, abundance, and condition of white perch (*Morone americana*) as a means to link land-use to fish condition in three Chesapeake Bay watersheds. **Julianna Brush**, James Councilman, John Jacobs.	**2:45**
BREAK 3:00 PM – 3:30 PM					

WEDNESDAY EARLY MORNING A

	101-A	101-BC	102-AB	102-C	103-A	103-BC
	SCI-008 **Collaborations among research, education & outreach professionals** Mary Curran,Eric Koepfler, Tina Miller-Way, Suraida Nanez-James, Jessie Kastler	SCI-202 **Biogeochemistry from Watersheds to Coastal Systems** Roxanne Marino, Robert Howarth, Andrew Sweetman	SCI-045 **Issues and Directions of the 2010 Gulf of Mexico Oil Spill** Chuck Hopkinson and David Yoskowitz	SCI-058 **Models and Applications of Chemical Markers in Biogenic Minerals** Jessica Miller and Benjamin Walther	SCI-042 **Integrating Social and Ecological Science for Ecosystem Based Management** Christopher Kelble, Larry Pugh and Peter Ortner	SCI-047 **Linkages of Watershed-Estuary Processes: Management and Change** Christopher Madden and Fred Sklar
8:00	Keeping science alive: collaborations with K12 teachers and marine educators. **Mary Curran**, Terry Aultman, Krista Hoover, Leona Gerido, Kathryn Sukkestad, Lindsay Gunzburger.	Nutrient and organic matter dynamics following storm events in the Mission-Aransas National Estuarine Research Reserve (NERR), Texas. **Rae Mooney**, Denise Bruesewitz, James McClelland, Wayne Gardner, Edward Buskey.	Open ocean impacts of the Macondo oil well blowout. **Samantha Joye**, Melitza Crespo-Medina, Antje Vossmeyer, Kimberley Hunter.	A biomineralization approach to developing climate proxies. **Glenn Gaetani**, Anne Cohen.	The hedgehog and the fox: a perspective for ecosystem based management. **David Loomis**.	Linkages of watershed-estuary processes in Florida Bay: management and change. **Christopher Madden**.
8:15	The GK-12 Program at Coastal Carolina University: linking estuarine research with science education. **Craig Gilman**.	Effects of salt water intrusion on denitrification and greenhouse gas emissions in tidal freshwater floodplain forests of southeast Georgia, USA. **John Marton**, Ellen Herbert, Christopher Craft.		The use of microchemical variation in biogenic minerals to track changing aquatic environments requires understanding of nucleation and growth in unusual media. **Brian Fryer**, Sonia Melancon, Heather McCann.	Developing integrated conceptual ecosystem models for use by human dimensions scientists to inform management. **Christopher Kelble**, William Nuttle, Joseph Boyer, Gary Hitchcock, Jack Stamates et al.	World-wide typology of near-shore coastal systems: how to define and apply the coastal filter of river inputs to the oceans. **Hans Dürr**, Goulven Laruelle, Cheryl van Kempen, Caroline Slomp, Michel Meybeck, Hans Middelkoop et al.
8:30	Do you look like a "typical" scientist? Analysis of middle and high school student perceptions of science and scientists. **Lindsey Kraatz**, Samuel Lake, Johnathan Maxel, Stephanie Salisbury.	Occurrence of anammox in intertidal marshes of the Yangtze Estuary. **Lijun Hou**.	Simulating the dispersal of aging oil from the Deepwater Horizon spill with a Lagrangian approach. **Elizabeth North**, Zachary Schlag, E. Eric Adams, Christopher Sherwood, Ruoying He, K. Hoon Hyun et al.	A plausible mechanism for uptake of manganese in fish otoliths - evidence and a model. **Karin Limburg**, George Jackman, Todd Hayden, Rita Oliveira Monteiro, Sara Turner, Christopher Nack, Yvonne Walther.	Linking human dimensions and ecosystem values into integrated conceptual ecosystem models to benefit ecosystem management. **Grace Johns**, Donna Lee, Bob Leeworthy, David Loomis.	Forecasting nutrient loading changes to estuaries from an ecosystem restoration project. Melissa Reynolds, Gretchen Ehlinger, Kelly Keefe, **Edwin Brown**.
8:45	Building bridges between ocean scientists and the community. **Rachel Kennison**.	The ebb and flood of silica in a New England salt marsh. **Amanda Vieillard**, Robinson Fulweiler, Joanna Carey, Zoe Hughes, Sergio Fagherazzi, Linda Deegan, Duncan FitzGerald.	Mapping of sediment and benthic conditions around the Deepwater Horizon accident site. **Joseph Germano**, David Browining, Eugene Revelas, Laura Riege.	*Mya arenaria* shells reveal changes in surface water temperature and primary productivity in the Gulf of Maine over the last 4400 years. **William Ambrose**, Alan Wanamaker, Beverly Johnson, William Locke, Marissa Maliwanag et al.	Integrating social science into Ecosystem Based Management: a case study of land use decision making in Coastal New Hampshire. **Erika Washburn**.	The spread of *Phragmites australis* in Chesapeake Bay - is it the perfect storm? **Dennis Whigham**, Karin Kettenring, Melissa McCormick, Heather Baron, Andrew Baldwin, Wardrop Denice.
9:00	COSEE Florida: an ocean science education collaborative for the Sunshine State. **Susan Cook**.	High frequency monitoring of the quantity and quality of dissolved organic matter flux between salt marsh and estuary of Plum Island LTER. **Yong Zhao**, Peter Raymond.	Deepwater Horizon oil and pelagic foodwebs in the Northern Gulf of Mexico: what do stable isotopes tell us about oil, subsurface turbid layers and discolored zooplankton? **Joseph Montoya**, Vernon Asper, Annalisa Bracco, Melitza Crespo-Medina, Arne Diercks, Samantha Joye, Uta Passow, Ajit Subramaniam, Tracy Villareal.	Can stable isotopes from otoliths reveal long term diet changes in North Atlantic cod (*Gadus morhua*)? **Jens Pedersen**, Torben Ankjærø, Jens Nielsen, Jens Christensen, Peter Grønkjaer.	Restoring oyster reefs in the northern Gulf of Mexico: socio-economic and geo-political factors affect restoration opportunities. **E. Ashby Nix**, Megan La Peyre, Bryan Piazza, Lucien Laborde.	Sediments as filters of applied nitrogen from discharging groundwater to low-relief coastal streams. **Aaron Mills**, Janet Herman.
9:15	Viewpoints on education and outreach: COSEE scientists address the broader impacts of their research. **Jessie Kastler**, Brian McCann, Catherine Cramer, Lisa Taylor.	Seagrass dieback in a shallow lagoon: response of gross primary production and nitrate concentrations. **Robert Howarth**, Melanie Hayn, Roxanne Marino, Neil Ganju, Karen McGlathery, Ken Foreman, Chris Sherwood et al.		Geochemical markers in elasmobranchs: the effects of temperature, growth, and water concentration on vertebral elemental composition. **Wade Smith**, Jessica Miller.	Stakeholder perceptions of ecosystem services of coastal habitats. **Lauren Hutchison**, Paul Montagna, Damion Scholz.	Multi-scale evaluation of linkages of sea-level rise and watershed inputs in the Virginia Coastal Reserve. **Enrique Reyes**, Robert Christian, Mark Brinson.
9:30	Taking teachers from the river to the coast: a COSEE Great Lakes and Lake Superior NERR collaboration. **Joel Hoffman**, Ralph Garono.	Seagrass dieback in a shallow lagoon: patterns of epiphytic nitrogen fixation with eutrophication. **Roxanne Marino**, Karen McGlathery, Robert Howarth, Melanie Hayn, Anne Giblin, Ken Foreman, Peter Berg.	Macondo-1 well oil-derived polycyclic aromatic hydrocarbons accumulated in mesozooplankton from the northern Gulf of Mexico via trophic transfer. **David Kimmel**, Siddhartha Mitra, Jessica Snyder et al.	The impact of continental migratory behaviour and habitat choice on the spawner quality of European eels. **Lasse Marohn**, Eva Jakob, Andreas Klügel, Reinhold Hanel.	Shellfish restoration meets socio-economic restoration along Alabama's coast. **Jeff DeQuattro**, Judy Haner, Jennifer Greene.	Effects of sediment organic matter content on morphology and light requirements of *Zostera marina* (eelgrass). **Arthur Schwarzschild**, Karen McGlathery, Patricia Wiberg.
BREAK 9:45 AM – 10:15 AM						

WEDNESDAY EARLY MORNING B

104-AB	201-AB	202-AB	203-BC	204-AB	
SCI-220 **Seagrass Ecology** Marianne Holmer and James Kaldy	SCI-034 **Human Impacts on the Health and Survival of Tidal Ecosystems** Matthew Kirwan, Keryn Gedan, Brian Silliman and Tom Mozdzer	SCI-066 **Numerical Modeling of Estuarine and Coastal Systems** Tate McAlpin, Gaurav Savant, Robert McAdory and David Smith	SCI-032 **Groundwater-Surface Water Exchange of Water and Constituents along Coastlines** Rene Price and Christopher Smith	SCI-224 **Restoration of Marshes, Shorelines and Estuaries** Lindsay Cross and David Tomasko	
Analyzing historical changes of seagrass landscape at Horn Island, Mississippi. **Linh Pham**, Patrick Biber.	Influence of climate warming on soil carbon accumulation rates in salt marshes. **Matthew Kirwan**, Glenn Guntenspergen, Linda Blum.	Numerical modeling of Mobile Bay. **Tate McAlpin**, Gaurav Savant, Gary Brown, Fulton Carson.	Quantifying the magnitude of submarine groundwater discharge to the west Florida shelf and implications to material budgets. **Christopher Smith**, Christopher Reich, Peter Swarzenski.	Restoring healthy shorelines with oyster shell breakwaters in the Northern Gulf of Mexico. **Just Cebrian**, Ken Heck, Sean Powers, Dottie Byron, Carl Ferraro, Josh Goff, Crystal Hightower, Ryan Moody, Shailesh Sharma.	**8:00**
Monitoring efforts for distribution, frequency, and abundance of Halophila johnsonii throughout its southern range. **Juliet Christian**, Margaret Hall.	Salt marsh plants and chronic eutrophication: vegetation, growth responses and N removal in a New England estuary. **R Scott Warren**, David Johnson, Linda Deegan.	The Southwest Coastal Louisiana Feasibility Study: regional scale hydrologic and salinity modeling and management scenario analysis for Chenier Plain. Beatrice Michot, Chunfang Chen, **Ehab Meselh**e.	Groundwater flow along the Louisiana deltaic coast driven by Mississippi River stage? **Jaye Cable**, Alexander Kolker, Karen Johannesson, Lorna Inniss.	Effects of artificial oyster reef material and age on oyster population and nekton community characteristics in the northern Gulf of Mexico: a space for time analysis. **Jessica Furlong**, Megan La Peyre, Bryan Piazza, Laura Brown, Ken Brown.	**8:15**
The abundance, distribution and biogeochemistry of marine plants and algae in Biscayne Bay, Florida. **Bryan Dewsbury**, James Fourqurean.	The contribution of land use practices to changes in tidal wetland condition and configuration in representative Delaware Estuary marshes. **Kelly Somers**, Danielle Kreeger, Angela Padeletti.	ADH hydrodynamic modeling of the Sacramento-San Joaquin Delta. **Stephen Sanborn**, Eugene Maak, Gaurav Savant, Christopher Wallen.	Radionuclide tracers of submarine groundwater discharge on an ocean island (Guam). **Matthew Charette**, Meagan Gonneea, Paul Henderson, John Jenson.	Comparison of natural and restored intertidal oyster reefs in Georgia. **Tiffany Ward**, Matthew Ogburn, Eric Ransom, D. Hoskins.	**8:30**
Eutrophication and its effect on seagrasses in St. Andrew Bay, Florida: seagrass productivity, epiphyte growth rates, and stable isotope indicators. **Linda Fitzhugh**, Jon Hemming, Jeff Chanton, William Burnett.	Fault-driven sea level rise, accretion, and land loss in a barrier island salt marsh. **Rusty Feagin**, Kevin Yeager, Charlotte Brunner.	Stratification on the Skagit Bay tidal flats. **Vera Pavel**, Britt Raubenheimer, David Ralston, Steve Elgar.	Influence of submarine groundwater discharge on the chemical and ecological composition of coastal waters of a Mediterranean Island (Majorca, Spain). **Antonio Tovar-Sánchez**, Gotzon Basterretxea, Valentí Rodellas, Sergio Ruiz-Halpern, Esther Garcés, Antoni Jordi et al.	Status of the Delaware Estuary Living Shoreline Initiative (DELSI). **David Bushe**k, Danielle Kreeger, Laura Whalen, Joshua Moody, Angela Padeletti.	**8:45**
Sulfide intrusion in seagrasses: do size and growth substrate matter? **Marianne Holmer**, Gary Kendrick.	Climate change and extreme weather impacts on salt marsh plants. **Autumn Oczkowski**, Cathleen Wigand, Erin Markham, Alana Hanson, Earl Davey, Roxanne Johnson.	Wave impact on 3D circulation and stratification within a macrotidal estuarine system. **Jenny Brown**, Rodolfo Bolaños, Alex Souza.	A geochemical and geophysical investigation of the geologic controls on coastal groundwater exchange in Copano Bay, Texas. Peter Swarzenski, Christopher Smith, **Eric Whicke**r, Timothy Dellapenna, Kyle Johnson, Joshua Williams.	Exploring the role of ribbed mussels (Geukensia demissa) in salt marsh stabilization. **Joshua Moody**, David Bushek, Danielle Kreeger, Richard Lathrop, Edwin Green.	**9:00**
Integrating life history models, environmental data and long-term monitoring to identify factors controlling *Ruppia maritima* dynamics at the Everglades-Florida Bay ecotone. **Theresa Strazisar**, Marguerite Koch, Peter Frezza, Joshua Filina, Christopher Madden.	Interactive factors affecting black mangrove (*Avicennia germinans*) range limit expansion in North Central Gulf of Mexico. **Christine Pickens**, Mark Hester.	Transport, structure, and mixing of a buoyant river plume subjected to variable cross shore winds. **Joseph Jurisa**, Robert Chant.	Rapid seawater circulation through animal burrows in mangrove forests - a significant source of saline groundwater to the tropical coastal ocean. **Thomas Stieglitz**, Jordan Clark, Gary Hancock.	Effects of restoration on ecosystem structure in tropical seagrass meadows. **Amanda Bourque**, James Fourqurean.	**9:15**
A large-scale comparison of morphological, growth, and flowering attributes of the seagrass *Thalassia testudinum* from three environmentally distinct areas in the Gulf of Mexico. **Ashley McDonald**, Patricia Prado, Ken Heck, Just Cebrian.	Effects of multiple interacting global change factors on introduced *Phragmites australis*. **Thomas Mozdzer**, J. Langley, William Teasley, Matthew Seal, J. Megonigal.	Simulation of flushing rate estimates in the Mosquito Lagoon, FL. **Jo-Ann Rosario-Llantin**, Gary Zarillo.	The effects of variability in tidal forcing on groundwater exchange in coastal wetlands. **Alicia Wilson**, James Morris, Willard Moore, Samantha Joye, Joseph Anderson, Charles Schutte.	New techniques and collaborations to restore seagrass in Tampa Bay, Florida: a case study on longshore bar creation. **Lindsay Cross**, Holly Greening, Michael Seifert, Susan Burtnett, Thomas Ries, Roy R. "Robin" Lewis.	**9:30**
BREAK 9:45 AM – 10:15 AM					

WEDNESDAY MID-MORNING A

	101-A	101-BC	102-AB	102-C	103-A	103-BC
	SCI-008 **Collaborations among research, education & outreach professionals** *cont'd*	SCI-202 **Biogeochemistry from Watersheds to Coastal Systems** *cont'd*	SCI-045 **Issues and Directions of the 2010 Gulf of Mexico Oil Spill** *cont'd*	SCI-059 **Monitoring Coastal Shoreline Position and Change** Brady Couvillion	SCI-030 **Exploring Human Dimensions and Decision-making in Coastal and Estuarine Management** Marilyn ten Brink and Thomas Fish	SCI-047 **Linkages of Watershed-Estuary Processes: Management and Change** *cont'd*
10:15	Efficacy of video-conferencing to deliver professional development to K-12 teachers on the Deepwater Horizon event at multiple locations across the Gulf of Mexico region. **Tina Miller-Way**, Chris Breazeale, Dan Brook et al.	Benthic-pelagic coupling in inner shelf ecosystems north and south of Cape Cod, MA. **Lindsey Fields**, Scott Nixon, Stephen Granger.	Was there a collapse of lower trophic structure on the Northern Gulf Shelf during DWH? **William Graham**, Robert Condon, Alice Ortmann, Laure Carassou, Richard Fulford, Ronald Kiene, Naomi Shelton, Laura Linn et al.	OPEN	Navigating the human dimensions landscape: providing access to practical social science information through HD.gov. **Thomas Fish**.	Land-use in the watershed and coastal ecosystem health in a karstic scenario of the Yucatan Peninsula, Mexico. **Sara Morales-Ojeda**, Ma. Fernanda Adame, Jorge Herrera-Silveira.
10:30	Coastal Bay Ecology: bridging the gap between Long Term Ecological Research at the Virginia Coast Reserve and local school teachers. **Arthur Schwarzschild**, Jill Bieri, David Smith, Karen McGlathery.	Benthic nutrient fluxes in Little Lagoon, Alabama. **Rebecca Bernard**, Lucie Novoveská, Hugh MacIntyre, Behzad Mortazavi.	Deepwater Horizon oil in Florida sandy beaches. **Markus Huettel**, Joel Kostka.	Mapping and assessing shoreline change along the Georgia Coast: a 2D, 3D, and 4D perspective. **Chester Jackson**, Clark Alexander, David Bush.	Sustaining ecosystem services in a changing climate - a job too big for science? **Christine Feurt**.	Effects of the Magdalena river re-communication with its former delta: changes in the phytoplanktonic primary production and respiration in the Pajarales Complex, 1989 to 2005. **Jose Mancera** et al.
10:45	EnvironMentors: a successful multidisciplinary environmental science mentoring program. **Melissa Baustian**, Melissa Monk, Susan Welsh, Lauren Land, Christopher D'Elia, Suzan Gaston.	Spatial and temporal variability of bottom dissolved oxygen in St. Lucie Estuary, Florida. **Zhiqiang Chen**, Peter Doering, Teresa Coley, Chris Buzzelli, Yongshan Wan.	The effect of Deep Water Horizon oil on oxygen consumption in north Florida beaches. **John Kaba**, Chris Hagan, Brian Wells, Stacia Dudley, Markus Huettel.	Coastline change detection utilizing ground-based laser scanning. **Tim Webster**.		Regional analysis of watershed nitrogen management options for improving coastal estuarine health. **Christine Costello**, Robert Howarth.
11:00	Scientific awareness through theatre: inspiring young people to value scientific practice as we adapt to climate change. **Victoria Hill**, Jenifer Alonzo, Amy Adcock, Fred Dobbs.	The importance of hydrodynamic regime in regulating organic matter impacts from fish farming on benthic ecosystem functioning. **Andrew Sweetman**, Carina Gunderstad, Jack Middelburg et al.	Naturally occurring marine organic substrates enhance microbial degradation of Macondo well crude oil. **Behzad Mortazavi**, Agota Horel, Patricia Sobecky, Jessica Powell, Melanie Beazley.	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**.	Decision-making regarding shoreline design and management along the Hudson River Estuary. **Shawn Dalton**.	Ecological monitoring of southern Everglades wetlands, mangrove transition zone and "white zone" interactions with Florida Bay. **Tiffany Troxler**, Chris Madden, David Rudnick.
11:15	Living shorelines: integrating current research into education and outreach programs at the Dauphin Island Sea Lab. **JoAnn Mitchell**, Tina Miller-Way.	Identifying factors that influence expression of eutrophication in a central California estuary. **Brent Hughes**, John Haskins, Kerstin Wasson, Elizabeth Watson.	Stable isotope composition of weathered oil: implications for tracing oil degredation and bioassimilation. **Ruth Carmichael**, Heather Patterson.	Assessing impacts of a living shoreline on shoreline retreat and slope: a comparison of techniques. **Shea Miller**, Megan La Peyre.	The QnD simulation model as a tool for adaptively managing human-environment interactions. **William Kanapaux**.	Hydrological conditions control P loading and aquatic metabolism in an oligotrophic, subtropical estuary. **Gregory Koch**.
11:30	Communicating estuary currents and modeling through an interactive computer exhibit. **Emily Lemagie**, James Lerczak, Shawn Rowe, Nancee Hunter.	Detection of pH shifts in the South Slough estuary, Oregon: exploration of relationships between changing carbonate chemistry, eutrophication, and net estuary ecosystem metabolism. **Steven Rumrill**, Alicia Helms et al.	Gulf of Mexico Sea Grant - perspectives on impacts and future needs related to the DWH oil spill. **Karl Havens**, Charles Wilson, LaDon Swann, Bob Stickney.	Land area change in Coastal Louisiana from 1932 to 2010. **Brady Couvillion**, John Barras, Gregory Steyer, William Sleavin, Michelle Fischer, Holly Beck, Nadine Trahan, Brad Griffin, David Heckman.	Decision analysis for a sustainable environment, economy, and society - a participatory framework for ecosystem services-based decision-making. **Marilyn Buchholtz ten Brink**, Patricia Bradley, Ann Vega, Brian Dyson et al.	Relating restored freshwater flow with materials exchange and estuarine water quality in the southern Everglades mangrove ecotone. **Gabriel Miller**, Henry Briceno, Stephen Davis.
11:45	Investigations related to the development of hatchery-based shellfish production in Zanzibar. **John Brawley**, Hauke Kite-Powell, Andy Yberg, Rick Karney, Skip Bennett, David Grossman, Narriman Jiddawi.	Can Spanish moss (*Tillandsia usneoides* L.) be used as a bioindicator of atmospheric mercury concentrations? **Kathryn Sutton**, Risa Cohen.	Effects of the Deepwater Horizon Oil Spill on Ecosystem Services: the interim report from the National Research Council. **David Yoskowitz**.	Preliminary results of a ground penetrating radar survey at the mouth of the Harney River, southwest coastal region, Everglades National Park, Florida. **James Murray**, Herbert Pierce, Lynn Wingard.	Panel Discussion Led by **Marilyn ten Brink** and **Tom Fish**	Innovations in environmental communication, reporting and governance. **William Dennison**.
POSTER SESSIONS and LUNCH 12:00 PM – 1:30 PM						

WEDNESDAY MID-MORNING B

104-AB	201-AB	202-AB	203-BC	204-AB	
SCI-220 **Seagrass Ecology** *cont'd*	SCI-034 **Human Impacts on the Health and Survival of Tidal Ecosystems** *cont'd*	SCI-066 **Numerical Modeling of Estuarine and Coastal Systems** *cont'd*	SCI-032 **Groundwater-Surface Water Exchange of Water and Constituents along Coastlines** *cont'd*	SCI-224 **Restoration of Marshes, Shorelines and Estuaries** *cont'd*	
The role of seed burial in reducing wave-based constraints on *Zostera marina* (eelgrass) recruitment success. **Scott Marion**, Robert Orth, Amit Malhotra, Mark Fonseca.	Recreational fishing triggers a trophic cascade and collapse of a marsh ecosystem. **Andrew Altieri**, Mark Bertness, Tyler Coverdale, Nicholas Herrmann, Christine Holdredge.	Integrating biological data with hydrodynamic and water quality information from numerical models using the Eulerian Lagrangian Agent Method (ELAM). **David Smith**.	Do seismically-imaged sag structures in Biscayne National Park influence submarine groundwater discharge? **Jeffrey King**, Kevin Cunningham, Cameron Walker, Ronald Reese.	Addressing scientific uncertainties and improving monitoring efficiency through advanced statistical analysis of RECOVER west coast oyster data. **Patricia Goodman**, Aswani Volety, Eric Smith, Sandra Shumway, Jerome La	**10:15**
Effect of multiple stressors on eelgrass *Zostera marina* L. from the Pacific Northwest, USA: manipulation of temperature and nutrients. **James Kaldy**.	Mangrove soil and vegetation change after tidal wetland creation: a 20-year chronosequence in Tampa Bay, FL. **Michael Osland**, Amanda Spivak, Janet Nestlerode, Alex Almario, Jeannine Lessman, Paul Heitmuller, Federico Alvarez, Marc Russell, Ken Krauss et al.	Hydrodynamic and water quality modeling in South Florida, USA. Chunfang Chen, Ehab Meselhe, Beatrice Michot, Ahmed Gaweesh, **Michael Waldon**.	Dynamic effects of oceanic forcing on flow and transport in a subterranean estuary. **Clare Robinson**.	Monitoring of hydrodynamic and ecological restoration in a Cantabric estuary: benthic fauna and saltmarsh vegetation. **Cristina Galván**, María Recio, José A. Juanes, Araceli Puente, Sonia Castanedo, Pablo Agudo, Raúl Medina.	**10:30**
Diurnal variation in chlorophyll fluorescence of *Thalassia testudinum* seedlings in response to controlled salinity and light conditions. Michael Durako, **Jacqueline Howart**h.	Use of computer-aided tomography (CT) imaging for quantifying coarse roots, rhizomes, peat, and particle densities in marsh soils. **Earl Davey**, Cathleen Wigand, Roxanne Johnson, Karen Sundberg, James Morris, Charles Roman.	Simulating hypoxia on the Texas-Louisiana shelf in the northern Gulf of Mexico. **Katja Fennel**, Jiatang Hu, Robert Hetland, Steven DiMarco.	Identifying nitrogen sources to thermally-heated tide pools on Hawaii Island using a multi-stable isotope approach. **Ambyr Mokiao-Lee**, Tracy Wiegner, Erik Johnson.	Environmental constraints on the establishment and expansion of a tule marsh in the Sacramento-San Joaquin Bay Delta: preliminary results. **Taylor Sloey**, Mark Hester.	**10:45**
Changes in leaf spectral reflectance of *Thalassia testudinum* seedlings in response to salinity variation and light reduction. **Michael Durako**, Jacqueline Howarth.	Patch size-dependent community recovery after massive disturbance. **Christine Holdredge**, Brian Silliman.	Hydrodynamic and water quality model of the Loxahatchee River and Estuary: a management tool. **Gary Zarillo**, Kim Zarillo.	Surface water metabolism potential of groundwater-fed near shore waters on the leeward coast of the Island of Hawaii. **Erik Johnson**, Tracy Wiegner.		**11:00**
Are there diurnal changes in photoprotective mechanisms in leaves of intertidal and subtidal *Halophila johnsonii*? **Nathan Gavin**, Michael Durako.	Biological impacts on an intertidal mudflat caused by human installations: the Seine estuary case. **Antoine Cuvilliez**, Gwenola de Roton, Chloe Dancie, Sandrine Laurand.	The St. Lucie Estuary experience of water quality modeling: from 3D to 0D. **Detong Sun**, Yongshan Wan, Peter Doering.	Benthic oxygen fluxes measured in the Gulf of Mexico using the eddy correlation technique. **Lindsay Chipman**, Peter Berg, Markus Huettel.	Preliminary assessment of potential water quality impacts for a proposed freshwater diversion in the vicinity of Violet, Louisiana. David Tomasko, **Emily Keenan**, Josh Carson.	**11:15**
Catalase, peroxidase and chlorophyll content in *Thalassia testudinum* beds in the International Biosphere Reserve Seaflower. **Margarita Albis**, Luz Marina Melgarejo, Brigitte Gavio.	Novel role and interactions of an introduced amphipod in San Francisco Bay eelgrass beds. **Katharyn Boyer**, Laura Reynolds, Lindsey Carr.	A numerical study of surface seiche response to hurricanes on Lake Okeechobee. **Yuepeng Li**, Keqi Zhang, Huiqing Liu.	Nutrient budgets of a shallow tidal estuary impacted by nitrogen-enriched groundwater flows. **Melanie Hayn**, Robert Howarth, Roxanne Marino, Neil Ganju, Christopher Sherwood, Peter Berg, Ken Foreman, Anne Giblin, Karen McGlathery.	Salinity barrier removal feasibility in Tampa Bay tidal tributaries. **Scott Deitche**.	**11:30**
Mesocosm experiments used to evaluate the morphological response of genetically distinct eelgrass (*Zostera marina*) populations to reduced light and increased sediment organic content level. **Holly Bayley**, Frederick Short, David Burdick, Gregg Moore, Anite Klein.	Oil-driven die-off of Louisiana salt marshes following the Deepwater Horizon oil spill. **Brian Silliman**, Jessica Diller, Christine Holdredge, Gabriel Kosazi, Andrew Zimmerman.	Application of a couple lake scale and nearshore wave-current coupled model to simulate the nearshore dynamics. **Meng Xia**, David Schwab.	Brackish groundwater discharge to the coastal wetlands of the Florida Everglades and its influence on surface water chemistry and ecosystem metabolism. **Rene Price**, Xavier Zapata-Rios, Gregory Koch.	Low cost retrofits for standard tide gates and restricted tidal marsh culverts to facilitate ecological restoration. **David Roman**, Marcus Quigley.	**11:45**
POSTER SESSIONS and LUNCH 12:00 PM – 1:30 PM					

WEDNESDAY EARLY-AFTERNOON A

	101-A	101-BC	102-AB	102-C	103-A	103-BC
	SCI-008 **Collaborations among research, education & outreach professionals** *cont'd*	SCI-077 **Response of Estuarine Systems to Reductions in Nutrient Loading** Candace Oviatt and Jason Krumholz	SCI-045 **Issues and Directions of the 2010 Gulf of Mexico Oil Spill** *cont'd*	SCI-043 **Integrating Undergraduate Research Experiences in Coastal and Estuarine Research** Tim Dellapenna, Janet Nestlerode and Elizabeth Heise	SCI-023 **Ecological Genetics of Seagrasses** Michelle Waycott and Eric Bricker	SCI-092 **Linking Hydrological Changes and Coastal Ecosystem Dynamics** Jennifer Pollack, Paul Montagna, Denise Sanger and Erik Smith
1:30	The documentation and monitoring of submerged aquatic resources in Lake Worth Cove, Florida: a collaboration between research, management, and educational entities. **Thomas Chesnes**, Scott Duncan, Charles Jabaly, Kathryn Swick.	The complex framework of change: how scientific data fit into the diverse set of constraints necessary to implement effective wastewater management policy. **Angelo Liberti**.	Changing dimensions of community well-being in the wake of the Deepwater Horizon disaster. **Maria Dillard**, Susan Lovelace, Theresa Goedeke.	Blurring the lines between research and education - undergraduate engagement in coastal marine research programs at Coastal Carolina University. **Paul Gayes**.	Ecological and evolutionary genetics of seagrass populations. **Michelle Waycott**.	Impacts of droughts and low flows on estuarine health and productivity. **Paul Montagna**, Terry Palmer, Carla Guthrie, George Ward.
1:45	Partnering with watershed organizations to produce tributary-specific report cards. **Sara Powell**, Heath Kelsey, Caroline Wicks, William Dennison, Jana Davis.	Communicating progress towards Maryland's nutrient reduction goals associated with the Chesapeake Bay TMDL. **Bruce Michael**, William Romano.	Value of decision analysis in stakeholder interactions for the restoration and recovery from the Gulf of Mexico oil spill. **John Carriger**, Stephen Jordan, William Benson.	Research as syllabus: scaffolding research-driven courses, from first-year seminar to senior capstone, in a liberal arts setting. **Brittina Argow**.	A Meta population distribution of *Thalassia testudinum* in the Caribbean and Gulf of Mexico. **Jent Kornelis van Dijk**, Michelle Waycott, Eric Bricker, Brigitta van Tussenbroek.	Gulf of Mexico tidal creeks: sentinel habitats for assessing the impact of coastal development on ecosystem health. **Denise Sanger**, Derk Bergquist, Anne Blair, George Riekerk, Laura Webster, Ed Wirth, Fred Holland.
2:00	Waccamaw River Volunteer Water Quality Monitoring Program: integrating needs of state and local stakeholders. **Kenneth Hayes**, Susan Libes, Christine Ellis.	Contribution of internal and external organic matter sources and sinks to the formation of periodic hypoxia in a tributary estuary: the York River, VA. **Samuel Lake**, Mark Brush, Iris Anderson, Howard Kator, Larry Haas.	The good news - bad news story of the Deepwater Horizon blowout for coastal marshes: a preliminary overview. **Irving Mendelssohn**, Qianxin Lin, Kevin Carman, John Fleeger, Aixin Hou, Jacqui Michel, Scott Zengel.	High-end undergraduate research experiences in marine science/marine biology at a small coastal campus: Texas A&M University at Galveston. **Timothy Dellapenna**, William Seitz, David Lawhon.	The importance of understanding spatial scale in aquatic plant research: implications of genetic diversity and neighborhood size in seagrass species. **Eric Bricker**, Michelle Waycott, Jay Zieman.	Importance of watershed land use in predicting benthic invertebrate condition in the Virginian Biogeographic Province, USA. **Marguerite Pelletier**, Arthur Gold, Jane Copeland, Liliana Gonzalez, Peter August.
2:15	TeachOceans.org - societies promoting a networking effort and related resources for ocean science K-16 education. **Eric Koepfler**, Sue Cook, Justine Glynn, Hall Mike, Teresa Mourad, Mario Godoy-Gonzalez, Robert Chen, Maureen Moses, Pranoti Asher et al.	Monitoring the ecological response of wastewater treatment facility nutrient reductions in Narragansett Bay, RI. **Leslie Smith**, Candace Oviatt, Mark Brush.		Optimizing undergraduate research and education in the geosciences. **Siddhartha Mitra**.	High eelgrass genetic diversity in Virginia is a result of disturbance and restoration using seed. **Laura Reynolds**, Karen McGlathery, Michelle Waycott, Robert Orth, Joseph Zieman.	Feast or famine for freshwater inflows to the Mission-Aransas Estuary: impacts on nutrients, plankton populations and net ecosystem metabolism. **Edward Buskey**, Denise Bruesewitz, Lindsey Pollard, Jena Campbell, Bradford Gemmell, Cammie Hyatt.
2:30	Panel Discussion Led by **Mary Carla Curran** and **Eric Koepfler**	Patterns in nutrient standing stocks and mass balance in Narragansett Bay, RI, with onset of loading reductions. **Jason Krumholz**, Candace Oviatt, Leslie Smith.	Impact of hydrocarbon contamination on nitrification-denitrification processes in Juncus roemerianus and Spartina alterniflora salt marshes. **Diane Schneider**, Julia Cherry, Behzad Mortazavi.	Every which way but loose - multiple strategies for effectively integrating student-led research in the field, in the laboratory, and abroad. **Arthur Trembanis**, Doug Miller.	Eelgrass genetics and resilience in southern New England and New York to support management and restoration success. **Frederick Short**, Anita Klein, David Burdick, Gregg Moore, Sarah Weigel, Steve Granger, Christopher Pickerell et al.	Impacts of stormwater management on watershed-coastal zone linkages: detention ponds as biogeochemical hotspots in coastal South Carolina, USA. **Erik Smith**, Amy Willman, Jennifer Plunket, Ashley Riggs.
2:45		Application of Walker and Syers' biogeochemical theory of soil development in the Anthropocene. **Kelly Henry**, Robert Twilley.	Effects of oil on the rate and trajectory of Louisiana marsh shoreline erosion. **Giovanna McClenachan**, R. Eugene Turner.	Talking turtle: use of diamondback terrapins for undergraduate research experiences. **Randy Chambers**.	Genetic diversity of high-latitude *Thalassia testudinum* communities in Bermuda. **Kimberly Holzer**, Eric Bricker, Karen McGlathery.	Impacts of inflow and wave resuspension on suspended sediment concentration in dewatered estuaries of Texas. **Anthony Reisinger**, James Gibeaut.
BREAK 3:00 PM – 3:30 PM						

WEDNESDAY EARLY-AFTERNOON B

104-AB	201-AB	202-AB	203-BC	204-AB	
SCI-041 **Integrating Natural and Built Environments in Coastal Climate Change Adaptation** Carlton Hunt and Paul Kirshen	SCI-004 **Assessing Ecological Integrity Using Ecosystem-Based Approaches** Ananda Ranasinghe, Ángel Borja and Daniel Dauer	SCI-066 **Numerical Modeling of Estuarine and Coastal Systems** *cont'd*	SCI-064 **Nitrogen Dynamics in Low-oxygen Coastal Waters and Estuaries** Zhanfei Liu and Wayne Gardner	SCI-016 **Comparative Studies of Estuarine and Coastal System Properties** John Schalles, Evelyn Gaiser and Charles Jagoe	
Planning for climate change adaptation. **Carlton Hunt**.	Assessing ecological integrity using an ecosystem-based approach, within the European Marine Strategy Framework Directive: the case of the Basque Country (Bay of Biscay, northern Spain). **Angel Borja**, Ibon Galparsoro, Xabier Irigoien, Ane Iriondo, Iratxe Menchaca, Iñigo Muxika, Marta Pascual, Iñaki Quincoces, Marta Revilla, German Rodriguez, Marina Santurtun, Oihana Solaun.	Using a hydrodynamic model to assess the effects of water age on phytoplankton growth in the Lower St. Johns River. **David Christian**, Peter Sucsy, John Hendrickson, Yanfeng Zhang, Kijin Park, Joseph Stewart.	Nitrogen demand indicates nitrogen limitation of microbial activity in subsurface waters and sediments of the northern Gulf of Mexico hypoxic region. **Wayne Gardner**, Mark McCarthy, Xiao Lin, Steve Carini, Afonso Souza, Jiqing Liu, Zhanfei Liu.	OPEN	**1:30**
Adapting coastal agriculture and ecological services to sea-level rise: a role for seashore mallow. **John Gallagher**, Denise Seliskar, Donna Hamilton.		Model simulations of production and biomass of Mytilus edulis in the Fehmern Belt area. **Erik Rasmussen**, Ramunas Zydelis, Henrik Skov, Stefan Heinänen.		Introduction by **John Schalles**.	**1:45**
Seashore mallow as an ecosystem engineer. **Nicole Voutsina**, Denise Seliskar, John Galagher.	Ecosystem-based approach: the FORWARD project - Framework for Ria Formosa water quality, aquaculture, and resource development. **Camille Saurel**, João G. Ferreira, Maria-João Botelho, Miguel Caetano, João Lencart e Silva, Domitilia Matias, João Pedro Nunes, Laudemira Ramos, Marta Rocha et al.	Operational modelling of algal bloom for early warning of risks. **Hanne Kaas**, Anders Erichsen, Henrik Andersson, Flemming Mohlenberg.	Nitrification, denitrification, and anammox in the central basin of Lake Erie. **Robert Heath**, Xiaozhen Mou, Laura Leff, Darren Bade, Curtis Clevinger, Xinxin Lu.	Tidal and lateral asymmetry in stratification in a coastal plain estuary. **Nuvit Basdurak**, Arnoldo Valle-Levinson.	**2:00**
Incorporating resiliency into habitat restoration planning in Tampa Bay. **Edward Sherwood**, Holly Greening, Marc Russell, Lindsay Cross.	An integrated tool for complementary assessment of estuarine functioning according to the Habitat Directive. **José Juanes**, María Recio, Cristina Galván, Bárbara Ondiviela, Raúl Medina.		Diversity and abundance of genes representing microbes responsible for Nitrogen removal in Oxygen Deficient environments. **Amal Jayakumar**, Bess Ward.	Phytoplankton productivity in the surf zone of sandy beaches estimated by simultaneous in situ 14C incubations and fast repetition rate fluorometry. **Amanda Kahn**, Lawrence Cahoon.	**2:15**
Climate change vulnerability assessment and adaptation opportunities for salt marsh types in southwest Florida. James Beever, **Whitney Gra**y, Dan Cobb, Lisa Beever.	Assessing the ecological health of Chesapeake Bay. **Michael Williams**.		Denitrification in the tidal Potomac River: control by redox,salinity and riverine nitrate inputs. **Michael Owens**, Jeffrey Cornwell, Walter Boynton, Lora Harris, Eva Bailey.	Comparing algal chlorophyll spatial patterns within and between Gulf and East Coast National Estuarine Research Reserves. **John Schalles**, Olley John, Christine Hladik, John O'Donnell.	**2:30**
Hindcasting hydrologic and ecological response to sea level rise in the coastal Everglades to model future response to global change and restoration. **Catherine Langtimm**, Eric Swain, M. Dennis Krohn, Donald DeAngelis, Bradley Stith, Thomas Smith.	A Benthic Response Index to assess benthic community condition in the tidal freshwater Sacramento-San Joaquin Delta region of the San Francisco Estuary. **Ananda Ranasinghe**, David Gillett, Stephen Weisberg, Eric Stein.	Modeling restoration scenarios in a California bar-built estuary. **Dane Behrens**, John Largier, Fabian Bombardelli.	Ecosystem and nitrogen dynamics before, during, and after an anoxic water ventilation. **Veronica Berounsky**, Rahat Sharif, Lucie Maranda, David Borkman.	Intersite comparison of marsh spatial patterns using hyperspectral imagery at NERR sites along the Gulf and Atlantic coast. **Drew Seminara**, John Schalles.	**2:45**
BREAK 3:00 PM – 3:30 PM					

WEDNESDAY LATE-AFTERNOON A

	101-A	101-BC	102-AB	102-C	103-A	103-BC
	SCI-214 **Integrating Planning for Management and Policy** Cristina Carollo	SCI-077 **Response of Estuarine Systems to Reductions in Nutrient Loading** *cont'd*	SCI-045 **Issues and Directions of the 2010 Gulf of Mexico Oil Spill** *cont'd*	SCI-043 **Integrating Undergraduate Research Experiences in Coastal and Estuarine Research** *cont'd*	OPEN	SCI-092 **Linking Hydrological Changes and Coastal Ecosystem Dynamics** *cont'd*
3:30	Ecological risk assessment for marine spatial planning. **Joanna Bernhardt**, Katie Arkema, Gregg Verutes.	Indicators of nutrient abatement in seagrass communities after six years of wastewater treatment. **Darrell Herbert**, James Fourqurean.	The effects of oil pollution on aquatic primary productivity of a Louisiana coastal estuary. **Chris Lundberg**, John Day, Robert Lane.	Integrating undergraduate research experiences in coastal and estuarine research: experiential education using authentic research at the Cape Eleuthera Institute. **John Tiedemann**, Aaron Shultz, Chris Haak, Andy Danylchuk.		The annual cycle of mixing in an intermittent estuary. **Megan Williams**, Mark Stacey.
3:45	Ecosystem services, GIS, and simplified natural resource damage assessment. **Andrew Laughland.**	Long-term changes in sediment metabolism in Boston Harbor, Massachusetts. **Samuel Kelsey**, Jane Tucker, Anne Giblin.	Genetic monitoring of the effects of the Deepwater Horizon oil spill on an ecologically and commercially important indicator species, the Eastern oyster, along its Gulf coast range. **Holly Nance**, Ed Proffitt.	Greater success in restoration research with undergraduates. **Jeannine Lessmann.**		Seasonal wetland hydrology drives predator and prey co-occurrence in a subtropical estuary: implications for predator-prey interactions and trophic dynamics. **Jennifer Rehage**.
4:00	Designing a socio-economic program for fisheries management. **Shona Paterson**, Sarah Young, David Loomis.	Investigating the cause and ecological impacts of reduced primary production in Massachusetts Bay, MA, USA. **M. Conor McManus**, Candace Oviatt.	Changes in size and abundance of white shrimp in Louisiana Estuaries following the Deepwater Horizon oil spill. **Kim de Mutsert**, Joris van der Ham.	Estuarine applied ecology and restoration: a team-based collaborative research course. **Jeffrey Levinton**, J. Matt Hoch, Patrick Lyons.		Dewatering of estuaries: nekton respond to alterations in freshwater inflow. **Gregory Stunz**, John Froeschke, Megan Reese-Robillard, Jennifer Beseres Pollack.
4:15	Assessment of estuarine habitat distribution from a conservation perspective. **María Recio**, Bárbara Ondiviela, José Barquín, Diego Fernández, José Juanes.	Wastewater treatment plants and earthquakes: what are the 'blooming' seaweeds trying to tell us? **Neill Barr**, John Zeldis, David Schiel.	Survival and growth of estuarine fish following exposures of chemically enhanced dispersed oil from the Deepwater Horizon oil spill. **Rachel Brewton**, Richard Fulford, R. Griffitt.	Yah mon! Mentoring undergraduate research in Caribbean marine ecology. **Erin Burge**, Eric Koepfler.	OPEN	Use of salt-wedge intrusion by temperate seabass juveniles to ascend to upper estuary areas in the Yura River, Japan. **Taiki Fuji**, Akihide Kasai, Masahiro Ueno, Yoh Yamashita.
4:30	The Chesapeake Bay and the Military leading by example and making a difference in bay quality. **Francis Reilly**.	Fighting eutrophication. **Anders Erichsen**, Flemming Moehlenberg.	Acute toxicity of Surfactin, FA-Glu and COREXIT to larvae of Gulf killifish, Fundulus grandis. **Haibin Zhang**, John Nyman.	Panel Discussion Led by **Janet Nestlerode** and **Timothy Dellapenn**a		Ecosystem services generated by oyster reefs along the Texas Gulf Coast: indicators of the value of freshwater inflow. **Kathleen Welder**, David Yoskowitz, James Gibeaut, Paul Montagna, Jennifer Pollack.
4:45	Discussion/Q&A	Panel Discussion	Environmental conditions in northern Gulf of Mexico estuaries: before and after the Deepwater Horizon Oil Spill. **Virginia Engle**, Linda Harwell, Lisa Smith.			Influence of environmental and climatic variables on eastern oyster abundance and *Perkinsus marinus* (Dermo) disease in Texas. **Jennifer Beseres Pollack**.

WEDNESDAY LATE-AFTERNOON B

104-AB	201-AB	202-AB	203-BC	204-AB	
SCI-041 **Integrating Natural and Built Environments in Coastal Climate Change Adaptation** *cont'd*	SCI-004 **Assessing Ecological Integrity Using Ecosystem-Based Approaches** *cont'd*	SCI-066 **Numerical Modeling of Estuarine and Coastal Systems** *cont'd*	SCI-064 **Nitrogen Dynamics in Low-oxygen Coastal Waters and Estuaries** *cont'd*	SCI-016 **Comparative Studies of Estuarine and Coastal System Properties** *cont'd*	
A case study in sea level rise: can private property owners protect their property against rising tide levels without hard engineering solutions? **Lee Weishar**.	Using macrobenthic community structure to detect eutrophication in Southern California estuaries, bays, and harbors. **David Gillett**, J. Ananda Ranasinghe, Martha Sutula, Donald Cadien, Kenneth Schiff.	South San Francisco Bay flood risk and uncertainty analysis. **Joseph Letter**, Robert McAdory.	Effects of low oxygen on sediment nitrous oxide flux in a shallow, coastal ecosystem. **Sarah Foster**, Robinson Fulweiler, Eric Morgan, Elise Heiss.	Comparative analysis of the role of microbial mats in assessing shifting nutrient regimes in coastal Caribbean wetlands. **Evelyn Gaiser**, Josette La Hee, Joel Trexler.	**3:30**
Community adaptation to flood risks along the Gulf of Mexico. **Sam Brody**, Walter Peacock, Joshua Gunn.	Eutrophication index development to assess Barnegat Bay-Little Egg Harbor Estuary, New Jersey. **Benjamin Fertig**, Michael Kennish.	It's not your father's TABS/ RMA model anymore. **Marc Johnson**.	Anammox and denitrification in the Cape Fear River Estuary, North Carolina. **Bongkeun Song**, Matthew Hirsch, Ann Arfken, Kimberley Duernberger, Craig Tobias.	Geographic variation in salt marsh food webs. **Steven Pennings**, Chuan-Kai Ho, Laurie Marczak, Brittany McCall, Kazimierz Wieski, Huy Vu.	**3:45**
Coastal storm surge management under climate change through integration of adaptation planning of the built and natural environments. **Paul Kirshen**, Lauren Baker-Hart, Paul Dragos, Amanda Maxemchuk, Derek Michelin, Meghan O'Connor, Norman Richardson, Jessica Tenzar, Corey Wisneski et al.	Response of a nearshore fish community to shoreline modification, Potomac River, Maryland. Robert Murphy, Wesley Johnson, **Leslie Orzetti**.	Shoaled in? Method to minimize dredging in an estuarine environment using modeling. **Jennifer Tate**, Jeremy Sharp.	Alternative nitrate reduction pathways in experimentally fertilized New England salt marshes - removal versus recycling of biologically available N. Anne Uldahl, **Gary Bant**a, Eva Boegh, Anne Giblin.		**4:00**
Estimating climate change induced shifts in water supply from coastal lakes on the North Slope of Alaska using the North Slope Decision Support System. Stephen Bourne, Christopher Arp, **Kelly Brumbel**ow, Leslie Gowdish, William Schnabel.	Evaluation of size and abundance-based metrics of estuarine fish communities for ecosystem management. **William Connelly**, Edward Houde.	Shoaled in? Methods to minimize dredging in an estuarine environment using modeling - Part II. **Jeremy Sharp**, Jennifer Tate.	Effect of hypoxia on peptide hydrolysis in surface and bottom waters in the northern Gulf of Mexico. **Zhanfei Liu**, Wayne Gardner, Dietrich Epp-Schmidt.	Comparative studies of diamondback terrapin (*Malaclemys terrapin*) populations across their range. **Christina Mohrman**, Thomas Mohrman, Roger Wood, Charles Jagoe.	**4:15**
Shorezone characterization for climate change adaptation in the Bay of Fundy. **Barbara Pietersma**, Danika van Proosdij.	Structured decision-making as a framework for design of regional salt marsh monitoring. **Hilary Neckles**, Glenn Guntenspergen, Greg Shriver, Nicholas Danz, Whitney Wiest, Jessica Nagel.	Sediments as a source of chemicals for the marine environment? A case study for the Netherlands coastal waters. **Jos van Gils**, Remi Laane.	Panel Discussion Led by **Zhanfei Liu** and **Wayne Gardne**r	Effects of tropically associated gray snapper (*Lutjanus griseus*) and lane snapper (*Lutjanus synagris*) on growth rates of native pinfish (*Lagodon rhomboides*). **Rebecca Gericke**, Kenneth Heck, Joel Fodrie.	**4:30**
Panel Discussion Led by **Paul Kirshen** and **Carlton Hun**t	Predicting the effects of water quality on the growth of *Thalassia testudinum* in Tampa Bay with a dynamic simile-based model tool. **John Rogers**, Marc Russell.	A redesign of Ponce de Leon Inlet, FL: predicted changes using CMS, a fully-integrated numerical model. **Pamela Christian**, Gary Zarillo.		The algal vegetation in the outer part of Isfjorden, Spitsbergen: a revisit of Per Svendsens sites after 50 years. **Stein Fredriksen**, Maia Røst Kile.	**4:45**

THURSDAY EARLY MORNING A

	101-A	101-BC	102-AB	102-C	103-A	103-BC
	SCI-010 **Integrating Science and Decision Making** Mimi Becker, David Burdick, Kathryn Rosengren, Colin Lentz, Zachery Steele, Kenny Daher	SCI-055 **Marine Phytoplankton Community Dynamics: Response to a Changing Ocean Environment** Vincent Lovko	SCI-076 **Response of Coastal Ecosystems to Variation in Freshwater Inflow** Peter Doering and Melody Hunt	OPEN	SCI-006 **Beyond the Eulerian Approach to Understanding Estuarine Dynamics** James Lerczak, Parker MacCready and W. Rockwell Geyer	SCI-031 **Footprints and Pathways of Aquatic Ecosystem Change** Mike Elliott, Ángel Borja, Daniel Dauer and Steven Ferraro
8:00	Off the shelf, onto the shore: putting science to work solving today's problems in coastal management. **Colin Lentz**, Kathryn Rosengren, Zack Steele, Kenny Daher, Mimi Becker, David Burdick.	Dawn in the age of robotic phycology to understand changes in the world's oceans. **Oscar Schofield**.	Fish assemblages in the oligohaline zone of a southwest Florida river during periods of extreme freshwater inflow variation. **Philip Stevens**, Marin Greenwood, David Blewett, Tim MacDonald, Cameron Guenther.		Over-mixed or over-pumped? Tidal influence on estuarine exchange flow. **W. Rockwell Geyer**, Shih-Nan Chen.	The size of footprints of impact and the pattern of the trajectories of recovery from anthropogenic stressors in estuaries and marine areas - patterns amongst ecological components. **Mike Elliott**, Angel Borja, Kerri Gardner, Krysia Mazik.
8:15	Application of project-effect models in the 2012 Update of Louisiana's Comprehensive Master Plan for a Sustainable Coast. Mandy Green, **Alaina Owen**s, Carol Parsons-Richards, Denise Reed.		Establishing environmental favorability functions for a multivariate fish assemblage in the lower Alafia River, Florida. **Mike Wessel**.		Lateral structure of turbulent dissipation in an estuary from neap to spring tides. **Kimberly Arnott**, Arnoldo Valle-Levinson, Ming Li, Robert Chant.	
8:30	Adaptive management in the Louisiana Coastal Area. **Adam Baumgart-Getz**, Craig Fischenich, Barb Kleiss, Tomma Barnes, Ken Barr, Carol Richards, William Klein.	Changes in the San Francisco Bay phytoplankton community after a 1999 climate shift. **Tara Schraga**, Jennifer Teschler, James Cloern.	Managing freshwater inflow to optimize prey production for young estuarine-dependent fishes in the Caloosahatchee Estuary. **S. Tolley**, Mike Parsons, David Fugate, Brooke Denkert, Julie Neurohr, Kara Radabaugh, Scott Burghart, Ernst Peebles.		Controls on transport of suspended sediment into and out of the estuarine intertidal zone. **Lissa MacVean**, Jessica Lacy.	Spatio-temporal patterns of change in marine benthic communities: full species level assessment vs synthesis structural indices. **Victor Quintino**, Marti Anderson, Ana Rodrigues, Mike Elliott.
8:45	Evolving perspectives on estuarine research: the reality of practicing sustainability science in an effort to understand and protect an estuary. **Pamela Morgan**, Christine Feurt.	Coastal urbanization impacts on the phytoplankton community composition in Galveston Bay, Texas. **Tyra Booe**, Jamie Steichen, Rachel Windham, Samuel Dorado, Allison McInnes, Yuelu Jiang, Antonietta Quigg.	Drought and the decline of South Carolina blue crabs. **Kirk Parmenter**, Michael Childress.		Lagrangian studies in narrow and wide estuaries. **Robert Chant**, Arnoldo Valle-Levinson, Elias Hunter, Jige Guo.	Are fish effective indicators of intertidal habitat quality? **William Ellis**, Susan Bell.
9:00	Balancing the recreational use and protection of Florida's waterways. **Robert Swett**, Charles Listowski.	Phytoplankton community dynamics in Galveston Bay: importance of freshwater nutrient and sediment load. **Antonietta Quigg**, Tyra Booe, Jamie Steichen, Rachel Windham, Samuel Dorado, Allison McInnes, Yuelu Jiang, James Pinckney et al.	Modeling the impact of drought on South Carolina blue crabs. **Michael Childress**, Kirk Parmenter.		Exchange between an estuary and an intertidal marsh and slough. **Kevin Hsu**, Mark Stacey.	Restoration and degradation trajectories of the benthic communities of Chesapeake Bay. **Roberto Llanso**, Daniel Dauer, Michael Lane, Jody Dew-Baxter.
9:15	Panel Discussion Led by **David Burdick**, **Kathryn Rosengren**, **Zachery Steele** and **Colin Lent**z	Variable phytoplankton community composition in response to freshwater inflow and nutrient addition in Galveston Bay, Texas. **Samuel Dorado**, Tyra Booe, Jamie Steichen, Rachel Windham, Allison McInnes, Yuelu Jiang, Antonietta Quigg.	Macroinvertebrate indicators for establishment of minimum flows and levels for the Crystal River, Florida. **Douglas Strom**, Evans David, Lynn Mosura-Bliss.		The role of tidal oscillatory salt flux in Delaware Bay Estuary. **Maria Aristizabal**, Robert Chant.	Ecological periodic tables: in principle and practice. **Steven Ferraro**.
9:30		Effect of diuron and imazapyr herbicides on phytoplankton in the San Francisco Estuary in an experimental study. **Sarah Blaser**, Frances Wilkerson, Alexander Parker.	Oyster *Crassostrea virginica* as sentinels of ecosystem health and environmental perturbation: a case study in the Caloosahatchee Estuary, Fla. **Aswani Volety**, Lesli Haynes, Lacey Heine, Erin Rasnake, Patricia Goodman, Patricia Gorman, Peter Doering.		Using Lagrangian particle tracking in estuarine models to quantify residence time and mixing in estuaries. **Jim Lerczak**.	Eutrophication in the Gulf of Maine: analysis of key ESIP indicators. **James Latimer**, Christine Tilburg.
BREAK 9:45 AM – 10:15 AM						

THURSDAY EARLY MORNING B

104-AB	201-AB	202-AB	203-BC	204-AB	
SCI-002 **Adapting Coastal and Estuarine Management to Climate Change** Alex Score	SCI-060 **Morphological Feedbacks in Changing Coastal Environments** Zoe Hughes, Alexander Kolker and Carol Wilson	SCI-207 **Upper Trophic Level Ecology and Fisheries** John Mark Hanson	SCI-026 **Environmental Effects of Ocean Energy Development in Estuarine and Coastal Waters** Andrea Copping	SCI-081 **Seagrass and SAV Remote Sensing and Mapping: Current and Emerging Techniques** Paul Carlson, Robert Virnstein and Mark Finkbeiner	
Building the field of climate change adaptation through Climate Adaptation Knowledge Exchange (CAKE): case studies in Florida. **Alex Score**.	Sediment transport in the lowermost Mississippi River: implications for delta growth and coastline management. **Jeffrey Nittrouer**, John Shaw, Michael Lamb, David Mohrig.	Contrasting effects of size-selective fishing on Atlantic cod and American lobster - a refuge is critical. **John Mark Hanson**.	Ocean energy development: what effects can we expect on estuarine and coastal ecosystems? **Andrea Copping**, Scott Butner.	Monitoring submersed aquatic vegetation: techniques and applications in management in Chesapeake Bay, USA. **David Wilcox**, Robert Orth, Kenneth Moore, Jennifer Whiting, Anna Kenne, Amy Owens, Leah Nagey, David Parrish.	**8:00**
Indian River Lagoon (IRL) Climate Ready Estuaries (CRE) Projects. **Troy Rice**.	Chenier Plain coastal wetland development in southwest Louisiana: possible link to downdrift sedimentation from increased Atchafalaya River flow and storm deposits. **Cyndhia Ramatchandirane**, Alexander Kolker, Brittina Argow, Jeffrey Donnelly, Liviu Giosan.	The role of an intermittently closed, northern California estuary for the feeding ecology of juvenile steelhead. **Erin Seghesio**, Charles Simenstad.	Maine Tidal Power Initiative: fish interactions with a commercial-scale marine hydrokinetic device. **Gayle Zydlewski**, Haley Viehman, Garrett Staines, James McCleave.	Development of improved SAV detection and species discrimination capability with fused airborne bathymetric lidar and hyperspectral data. **Bruce Sabol**, Molly Reif.	**8:15**
The Southeast Florida Climate Change Compact - a coordinated approach to addressing climate change pressures at the regional level. **Jennifer Jurado**, Patti Webster, Susy Torriente, Nichole Hefty, Jon Van Arnam, Bonnie Finneran, Roman Gastesi, Michael Roberts et al.	Differential sedimentation in a Mississippi River crevasse splay. **Ioannis Georgiou**, Chris Esposito, Alex Kolker.	Ecological impacts of climate-related ichthyofaunal shifts on the northern Gulf of Mexico red snapper population: an experimental approach. **Anthony Marshak**, Kenneth Heck.	Acoustic tracking of migratory fishes in the Bay of Fundy's Minas Passage and FORCE turbine demonstration area. **Anna Redden**, Jeremy Broome, Michael Stokesbury, Rod Bradford.	Development of a tool to estimate baseline macroalgal biomass and percent cover for Narragansett Bay with digital imagery using a modified ImageJ open source analytical program. Christopher Deacutis, **Andrew Bird**, Giancarlo Cichetti, Lesley Lambert, Rebecca Sacks.	**8:30**
Integrating coral reef bleaching resilience into management strategies for Florida's coral reefs. **Meaghan Johnson**, James Byrne, Chris Bergh.	A new subsidence curve for Mississippi River Delta tide gauges and its implications for coastal restoration. **Alexander Kolker**, Sultan Hameed, Mead Allison.	Arctic fish community responds to warming of Greenland waters. **Peter Staehr**, Mikael Sejr, Henrik Lund, Kaj Sünksen.	Laboratory investigations of marine crustacean behavioral responses to electromagnetic fields. **Dana Woodruff**, Valerie Cullinan, Jeff Ward, Guri Roesijadi.	Water-depth correction module for seagrass mapping using hyperspectral data. **Hyun Jung Cho**, Duanjun Lu.	**8:45**
An integrated approach to climate change vulnerability, resiliency and adaptation. **Lisa Beever**, James Beever, Dan Trescott, Dan Cobb, Jason Utley, David Hutchinson, John Gibbons, Tim Walker, Judy Ott.	Biophysical feedbacks in barrier island transgression. **Chris Houser**, Brooke Saari.	When otolith microchemistry analysis reveals the unexpected: the migration patterns of the European flounder *Platichthys flesus* in a temperate estuary and the "sea-run mother" hypothesis. **Pedro Morais**, Ester Dias, John Babaluk, Carlos Antunes.	Potential far field effects of tidal energy extraction on intertidal ecosystems of the Bay of Fundy. **Danika van Proosdij**, Casey O'Laughlin, Tim Milligan, Ryan Mulligan.	Exploring the utility of the broadband multispectral sensor worldview2 for investigation of nearshore coastal environments. **Victoria Hill**, Richard Zimmerman, Paul Bissett, David Kohler.	**9:00**
Response of Florida shelf ecosystems to climate change. **Lisa Robbins**, Kimberly Yates, Paul Knorr.	Waves and tides responsible for the intermittent closure of the entrance of a small, sheltered tidal wetland at San Francisco, CA. **Daniel Hanes**.	Use of shallow lagoon habitats by nekton of the northeastern Gulf of Mexico. **Lawrence Rozas**, Thomas Minello, Darrin Dantin.	A modelling study of the effect of tide energy extraction on estuarine circulation and its implication to the change of marine ecosystems. **Zhaoqing Yang**, Taiping Wang, Andrea Copping.	Eelgrass (*Zostera marina* L.) monitoring in greater Puget Sound (Washington, USA): project development and results. **Jeffrey Gaeckle**, Pete Dowty, Helen Berry, Lisa Ferrier, Thomas Mumford.	**9:15**
Visualization of sea level rise and storm surge interactions in the Florida Keys. **Chris Bergh**.	What controls coastal marsh survival in the face of sea-level rise? Sedimentation? Waves? Biota? Floods? Lessons for more informed restoration. **Denise Reed**.	Resource partitioning among fish mesoconsumers along a marsh-mangrove ecotone: a response to a pulsed seasonal resource subsidy. **Ross Boucek**, Jennifer Rehage.	Offshore wind power potential and risks to birds and wildlife in North Carolina's coastal waters. **Christine Voss**, Stephen Fegley, Charles Peterson, Mike Waine, J. Taylor.	Mapping and analysis of seagrass prop scars in Greater Sarasota Bay. **Lauren Ali**, John Ryan, Jon Perry, Jennifer Shafer.	**9:30**
BREAK 9:45 AM – 10:15 AM					

THURSDAY MID-MORNING A

	101-A	101-BC	102-AB	102-C	103-A	103-BC
	SCI-080 **Science Serving Coastal Communities: Research Translated to Management Actions** Susan Park, Denise Sanger and M. Richard DeVoe	SCI-055 **Marine Phytoplankton Community Dynamics: Response to a Changing Ocean Environment** *cont'd*	SCI-076 **Response of Coastal Ecosystems to Variation in Freshwater Inflow** *cont'd*	SCI-040 **Integrating Automated Ocean Observing Systems with Traditional Monitoring** Julia Bos, Stephanie Moore and Kimberle Stark	SCI-006 **Beyond the Eulerian Approach to Understanding Estuarine Dynamics** *cont'd*	SCI-018 **Dealing with Trade-offs: The Policy, Management and Science of Restoration** Fred Sklar and James Vearil
10:15	Humboldt Bay Initiative: ecosystem-based management in a changing world. **Susan Schlosser**, Rebecca Price-Hall, Paula Golightly, Mark Wheetley, Frank Shaughnessy.	Phytoplankton photopigment composition as an indicator of community structure, function, and ecosystem health. **James Pinckney**.	Epifaunal-based performance measures for estuarine ecosystem restoration. **Joan Browder**, Gladys Liehr, Darlene Johnson.	Quantitative coastal observation and modelling - tales from Australia. **Simon Allen**, Karen Wild-Allen, Mike Herzfeld, Nugzar Margvelashvili, Peter Thompson, Chris Sharman.	Residual circulation in estuaries that are shallow relative to their tidal amplitude: comparison of Eulerian and Lagrangian approaches. **Sarah Giddings**, Derek Fong, Stephen Monismith.	Dealing with Everglades trade-offs through participatory modeling. **Fred Sklar**, Walter Wilcox, Chris McVoy, Calvin Neidrauer.
10:30	Planning and evaluating workshops for coastal resource managers. **Denise DeLorme**, Marian Hanisko, Heidi Stiller, Graham Lewis, Scott Hagen.	Composition of inorganic and organic nutrient sources influences phytoplankton community structure in the New River Estuary, North Carolina. **Julia Altman**, Hans Paerl.	The effects of salinity pulses on three freshwater SAV species. **Rebecca Wright**, Kenneth Moore.	NEPTUNE Canada: real-time interactive information from the coast to the deep sea. Mairi Best, **Dilumie Abeysirigunawarden**a.	Estuarine exchange flow quantified with isohaline coordinates: contrasting long and short estuaries. **Shih-Nan Chen**, W. Rockwell Geyer, David K. Ralston, James A. Lerczak.	Challenges and incentives of scientific guidance for ecosystem process based restoration: The Puget Sound Nearshore Ecosystem Restoration Project (PSNERP) experience. **Charles Simenstad**.
10:45	Catching fishermen - engaging coastal users in marine renewable energy. **Kaety Hildenbrand**.	Patchiness in phytoplankton community composition and water quality in San Francisco Estuary. **Peggy Lehman**, Kristen Reifel, Francine Mejia, Nicole Pouton.	Changes in submerged aquatic vegetation in a high flushed subtropical estuary (Patos Lagoon, Southern Brazil). Margareth Copertino, Ulrich Seeliger, Leonir Colling, Carlos Bemvenutti, César Cordazzo, **Osmar Möller**.	Texas Automated Buoy System (TABS) sustainable ocean observations to protect the coastal environment. **John Walpert**.	Relative influence of Coriolis and advective accelerations in a coastal plain estuary. **Arnoldo Valle-Levinson**, Robert Chant, Ming Li.	Trade-offs at the edge of the Everglades: managing restoration, risks and expectations. **David Rudnick**, John Maxted, Christopher Madden.
11:00	Spatial management of an estuarine crustacean: integration of stakeholder participatory research and fishery data to inform policy decisions. **Eric Johnson**, Robert Aguilar.	The effect of winds and freshwater discharge on the variability of chlorophyll a concentration in the estuary of Patos lagoon (30°S, Brazil). **Ricardo Costa**, Osmar Möller, Clarisse Odebrecht, Paulo Abreu, Paulo Mattos.	Responses of *Vallisneria americana* to repeated pulses of salinity. **Charles Jacoby**, Cliff Ross, Dean Dobberfuhl, Tanya Stevens, Mallarie Yeager.	Integrating multiple water quality monitoring techniques for ecosystem assessments in Chesapeake Bay, MD. **Mark Trice**, Thomas Parham, Matthew Hall, Elgin Perry, Kenneth Moore, Benjamin Cole, Brian Smith et al.	Wave driven exchange between coral reef lagoons and the coastal ocean. Liv Walter, Jim Hench, Oliver Fringer, **Stephen Monismith**.	Trade-offs for management of aquatic ecosystem function in the Everglades. **Joel Trexler**.
11:15	Herbivory impacts on a nutrient-enriched freshwater coastal wetland in Louisiana. **Garh Shaffer**, John Day, Jason Day, Bernard Wood, Robert Lane, Rachael Hunter.	Variability in the frequency and magnitude of vernal *Phaeocystis pouchetii* and diatom blooms over 20 years (1992-2011) in Massachusetts Bay, USA. David Borkman, **Phillip Libb**y.	Effects of freshwater discharge on survival and productivity of *Syringodium filiforme* (Manatee Grass) in Southern Indian River Lagoon. **Christopher Buzzelli**, Rebecca Robbins, Peter Doering, Zhiqiang Chen, Detong Sun et al.	Scale effects in the use of continuous recording data when compared to monthly synoptic sampling in salinity data collection in Biscayne Bay, Florida. **Sarah Bellmund**, Steve Blair, Herve Jobert, Gregory Garis, Omar Abdelrahman.	Does mixing control estuarine exchange? **Parker MacCready**, David Sutherland.	Sustainability research supporting Gulf of Mexico ecosystem restoration: EPA's Office of Research and Development. **Stephen Jordan**, William Benson.
11:30	Development of a tool for beach managers to identify sources and locations of macroalgae around southwest Florida barrier islands. **Eric Milbrandt**, Greg Foster, Ray Grizzle, Mike Parsons, Loren Coen.	Ecology of harmful cyanobacteria (Lyngbya spp.) in the Indian River Lagoon. **Valerie Paul**, Theresa Meickle, Jennifer Sneed, Kathleen Semon, Sherry Reed, Sarath Gunasekera.	Tidal wetlands in the dynamic hydrologic regime of the lower Columbia River and estuary. **Amy Borde**, Heida Diefenderfer, Valerie Cullinan, Shon Zimmerman, Ronald Thom, Ronald Kaufmann, Nichole Sather et al.	Detecting changes in hypoxia using IOOS buoys and NEP surveys. **James O'Donnell**, Todd Fake, Frank Bohlen, Kay Howard-Strobel.	A new method for calculating form drag and energy conversion due to tidal flow past a headland. **Sally Warner**, Parker MacCready, James Moum, Jonathan Nash.	Sediment and nutrient tradeoffs in restoring Mississippi River Delta. **Robert Twilley**, Victor Rivera-Monroy, Azure Bevington, Edward Castaneda, Henry Kelly, Ben Branoff.
11:45	Modus operandi to analyze impacts in urban and peri-urban mangrove areas. **Marilia Cunha-Lignon**, Milton Kampel, Ricardo Menghini, Julien Flandroy, Yara Schaeffer-Novelli, Gilberto Cintrón, Niko Koedam et al.	Seasonal and short-term dynamics of phytoplankton primary production in the Baltic Sea - North Sea transition depends on taxonomic composition and a suite of external forcings. **Flemming Møhlenberg**, Louise Schlüter et al.	Estimation of freshwater inflow requirements for a semi-arid salt marsh using emergent plants as indicators of ecosystem condition. **Joseph Stachelek**, Ken Dunton.	Synthesis/Q & A Led by **Kimberle Stark**	Panel Discussion Led by **James Lerczak**, **Parker MacCready** and **W. Rockwell Gey**er	Mississippi Delta restoration in focus. **John Day**, James Cowan.
POSTER SESSIONS and LUNCH 12:00 PM – 1:30 PM						

THURSDAY MID-MORNING B

104-AB	201-AB	202-AB	203-BC	204-AB	
SCI-002 **Adapting Coastal and Estuarine Management to Climate Change** *cont'd*	SCI-060 **Morphological Feedbacks in Changing Coastal Environments** *cont'd*	SCI-201 **Benthic Ecology** Ed Proffitt	SCI-067 **Nutrients in Coastal Waters - Loads, Models and Interpretation** Frank Marshall and Larry Pugh	SCI-081 **Seagrass and SAV Remote Sensing and Mapping: Current and Emerging Techniques** *cont'd*	
Climate change, precipitation and impacts on estuarine restoration. **Jeffrey Levinton**, Michael Doall, David Ralston, Adam Starke, Bassem Allam.	Crab mediated tidal creeks formation in salt marshes. **Huy Vu**, Kazimierz Wieski, Steven Pennings.	Influence of habitat type on multiple predator effects when invasive green crabs (*Carcinus maenas*) and native rock crabs (*Cancer irroratus*) prey on soft-shell clams (*Mya arenaria*). **Anne Cheverie**, Melisa Wong, Claudio DiBacco.	Miami-Dade County multi-decadal surface water quality database for Biscayne Bay and its watershed: utility in management, modeling and policy development. **Stephen Blair**, Susan Markley, Omar Abdelrahman, Maurice Pierre, Christopher Avila, Forrest Shaw.	Considerations for successful image collection for seagrass mapping. **Mark Finkbeiner**.	**10:15**
Forecasting vegetation changes in coastal Louisiana: the future without additional action. **Jenneke Visser**, Scott Duke-Sylvester, Whitney Broussard.	The effects of crab bioturbation on Mid-Atlantic saltmarsh tidal creek extension: geotechnical and geochemical changes. **Carol Wilson**, Zoe Hughes, Duncan FitzGerald.	Dig or suck? A comparison of methods to quantify intertidal bivalve populations in Pacific Northwest estuaries. **Stacy Galleher**, Anthony D'Andrea, Kelsey Adkisson, Jennifer Boyer, Amy Hutmacher.	The contribution of benthic nutrient regeneration to primary production in a shallow eutrophic estuary, Weeks Bay, Alabama. **Ashley Riggs**, Behzad Mortazavi, Jane Caffrey, Helene Genet, Scott Phipps.	Improving offshore seagrass maps of Florida's Springs Coast through a combination of digital aerial imagery and remote sensing. **Keith Kolasa**, René Baumstark, Paul Carlson.	**10:30**
A web-based tool for estimating climate change induced shifts in storm intensity and frequency in Florida. **Stephen Bourne**, Kelly Brumbelow, Leslie Gowdish, Tom Singleton.	Geomorphologic response of tidal marshes to accelerated sea-level rise, Southwest Florida. **Kim Pierce**, Michael Savarese.	Potential impacts of restored oyster reefs on submerged aquatic vegetation. **Shailesh Sharma**, Joshua Goff, Dottie Byron, Just Cebrian, Ken Heck, Sean Powers.	Relationships between instream nutrient loads and watershed nutrient inputs. **Sylvia Schaefer**, Merryl Alber.	Monitoring changes in high-turbidity submerged aquatic vegetation (SAV) beds in North Carolina's estuaries using single-beam sonar and low-light video. **Cecilia Krahforst**, Joseph Luczkovich, Richard Curran, Judson Kenworthy, Christine Addison, Don Field et al.	**10:45**
Enhancing climate outreach in coastal areas of the U.S. southeast and Caribbean. **Geno Olmi**, Stephanie Fauver, Jessica Whitehead.	Coastal land-use, groundwater, and surficial salt marsh morphology: preliminary results from a pilot study in Gouldsboro, ME. **Kristin Wilson**, Andrew Reeve, Joseph Kelley.	Do condition index and incidence of dermo differ in reef flat vs. mangrove prop root oysters? **Pedro Lara**, Edward Proffitt.	Recommended indicators of estuarine water quality for Georgia. **Joan Sheldon**, Merryl Alber.	Discovery, mapping and characterization of seagrass beds in the Ten Thousand Islands, Florida, USA using manatee telemetry, spatial modeling, and a camera-based sampling system. **Daniel Slone**, James Reid, W. Kenworthy, Susan	**11:00**
Prospects for conserving endangered wildlife populations in Pacific coast salt marshes under expected sea-level rise. **Karen Thorne**, Kevin Buffington, Kyle Spragens, Michael Casazza, Cory Overton, Kathleen Swanson, Judith Drexler,David Schoellhamer et al.	Geomorphological analyses of U.S. Atlantic coast salt marshes: testing the ramp vs. platform hypothesis. **Brittina Argow**, Carolin Ferwerda, Karina Chung, Jennifer Errington, Cataia Ives, Audrey Mutschlecner, Kate Philbrick, Kimberly Reed, Mary Kate Schneeweis.	The effects of oyster harvest on the community structure and trophodynamics of resident oyster reef communities in coastal Louisiana. **Steve Beck**, Megan La Peyre.	An evaluation of the water quality status of Georgia estuaries and coastal waters using recommended indicators. **Merryl Alber**, Joan Sheldon.	Areas of seagrass loss and stable coverage: do fine-scale maps of patch dynamics agree with trends detected by larger scale assessments? **Kristen Kaufman**, Susan Bell.	**11:15**
Redefining salinity regimes for wetland vegetation along the northern Gulf of Mexico. **Whitney Broussard**, Jenneke Visser, Scott Duke-Sylvester.	Legacies of ditching and ditch-plugging in New England salt marshes: long-term effects on hydrology, elevation, and soil characteristics. **Robert Vincent**, David Burdick, Michele Dionne.	Effects of shoreline hardening on the recruitment of jellyfish, *Chrysaora quinquecirrha*, polyps in the Chesapeake Bay. **Heather Soulen**, Jenna Malek, Denise Breitburg.	Modeling climate change effects of nutrient dynamics in the Guadalupe Estuary. **Evan Turner**, Paul Montanga, Jim McClelland, Alexey Sadovski, Rachel Mills.	The Seagrass Integrated Mapping and Monitoring (SIMM) Program of Florida: providing information to a broad user community. **Laura Yarbro**, Paul Carlson.	**11:30**
Application of a novel methodology for assessing climate change vulnerabilities of wetlands using expert judgment: results for San Francisco Bay and Massachusetts Bays. **Amanda Babson**, Jordan West.	Physical and biological controls on intertidal wetland vulnerability to sea-level rise. **Donald Cahoon**.	Endocrine disrupting compounds and their implications for the horseshoe crab populations of Delaware Bay and Delaware's Inland Bays. **Emily Maung**, Douglas Miller.	OPEN	Panel Discussion Led by **Paul Carlson**, **Mark Finkbeiner** and **Robert Virnste**in	**11:45**
POSTER SESSIONS and LUNCH 12:00 PM – 1:30 PM					

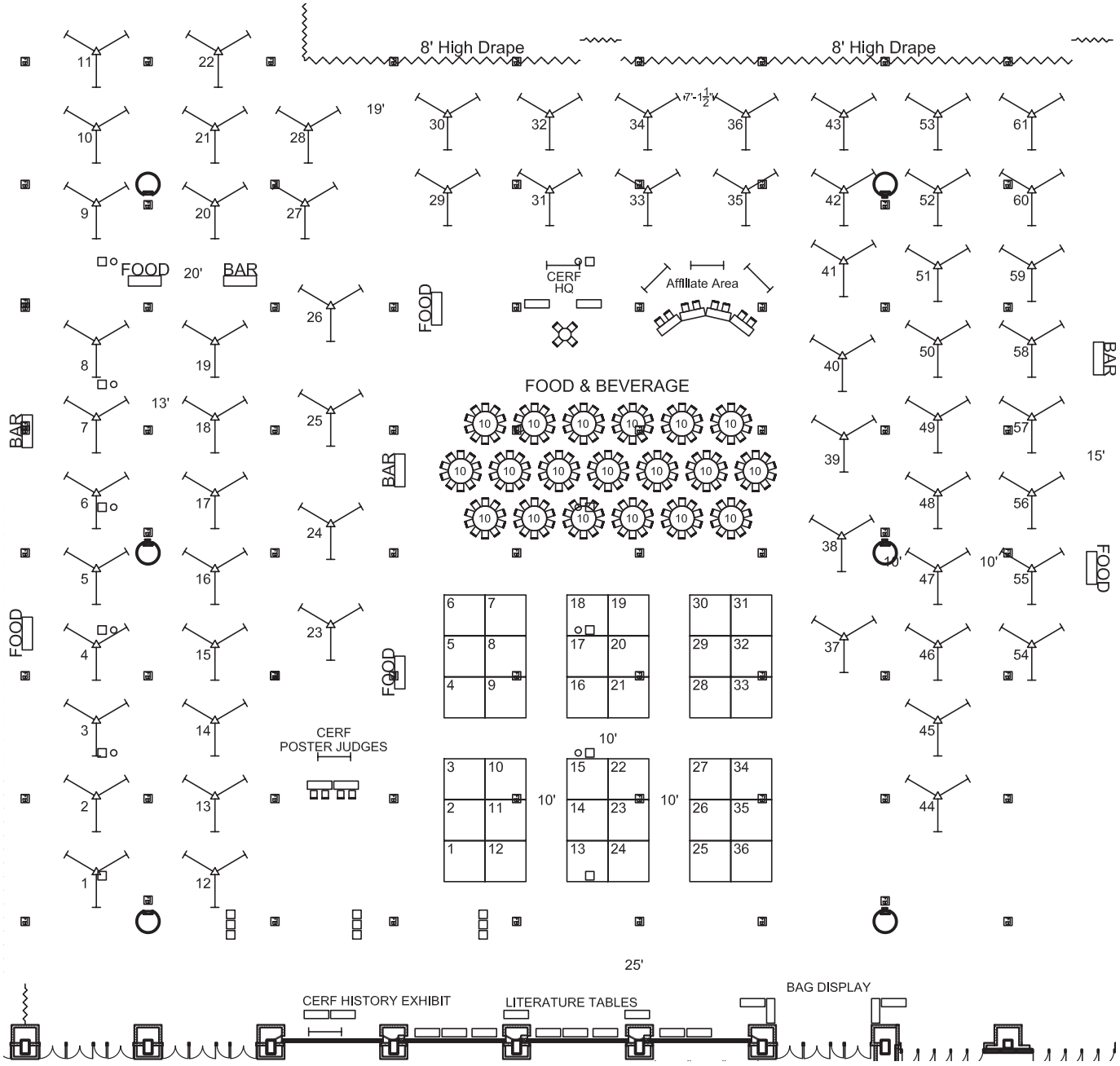
THURSDAY EARLY-AFTERNOON A

	101-A	101-BC	102-AB	102-C	103-A	103-BC
	SCI-080 **Science Serving Coastal Communities: Research Translated to Management Actions** *cont'd*	SCI-213 **Macroalgae in a Changing World: Detecting and Understanding Responses** Brian Lapointe	SCI-076 **Response of Coastal Ecosystems to Variation in Freshwater Inflow** *cont'd*	SCI-040 **Integrating Automated Ocean Observing Systems with Traditional Monitoring** *cont'd*	SCI-069 **Parasite-Host Relationships** Mary Carla Curran, Zachary Long and James Byers	SCI-018 **Dealing with Trade-offs: The Policy, Management and Science of Restoration** *cont'd*
1:30	Bacterial source tracking guides management of boat head waste in a coastal resort area. **Michael Mallin**, Mary Haltom, Bongkeun Song, Mary Tavares.	N:P ratios and taxonomic shifts among macroalgal blooms in South Florida's coastal waters. **Brian Lapointe**, Laura Herren.	Coupling low salinity zone habitat with pulsed isohaline positioning to quantify resource-based freshwater inflow. **Melody Hunt**, David Swift, Daniel Haunert, Yongshan Wan.	Detecting patterns of water quality at multiple scales: a Matryoshka-based monitoring approach for Puget Sound. **Brandon Sackmann**.	Interactive effects of enrichment and the manipulation of intermediate hosts on infection prevalence and food web structure. **Zachary Long**, Shawn Leroux, Michel Loreau.	Model analysis of eutrophication constraints on an Everglades restoration project. **H. Carl Fitz**.
1:45	Evaluation of bacteriological and nutrient concerns in near shore waters of a barrier island community in SW Florida. Eric Milbrandt, **Mark Thompso**n.	Mapping the spatial and temporal abundance of seasonal drift macroalgae in the Indian River Lagoon, FL. **Greg Foster**.	Relationships of freshwater inflow with the location of the chlorophyll a maximum and seasonal phytoplankton populations in three tidal rivers in Southwest Florida. **Michael Flannery**, Xinjian Chen, Allan Willis, Keith Hackett, Ralph Montgomery et al.	Anatomy of a picoplankton bloom in a subtropical central Florida lagoon. **Jim Ivey**, Sue Mursasko, Cynthia Heil, David Millie, Jullie Brame, Gary Weckman, Ashley Yunker, William Young, Jennifer Wolny, April Granholm.	The role of ectoparasites in Caribbean coral-reef food webs. **Amanda Demopoulos**, Paul Sikkel.	Understanding conflict and contestation in watershed restoration: anthropology provides key insights into the socio-historical tensions animating competing visions for restoration success in watershed landscapes. **Rebecca Garvoille**.
2:00	The problem of effluent organic nitrogen. **Deborah Bronk**, Rachel Sipler, Carolina Funkey, Quinn Roberts, Marta Sanderson.	Genetic identification of a cryptic, non-native alga (*Gracilaria vermiculophylla*) and assessment of nitrogen subsidies using a stable isotope tracer. **Dana Gulbransen**, Karen McGlathery, Carlos Frederico Gurgel.	How does river flow variability affect the spatial and temporal distribution of phytoplankton in Apalachicola Bay, Florida? **Natalie Byars**, Michael Wetz.	Beach swimming advisory prediction tools using beach monitoring, remote sensing and coastal and ocean observation system data. **Dwayne Porter**, Heath Kelsey, Shannon Berry, Sean Torres, Dan Ramage, Geoff Scott, Virginia Shervette.	Juvenile ascaridoid nematodes and food webs in the Gulf of Mexico and Lesser Antilles. **Michael Andres**, Robin Overstreet.	Developing and implementing a sediment quality management strategy for a regionally important bird foraging area: McKay Bay, Florida. **Gerold Morrison**, Edward Sherwood.
2:15	Balancing ecological and municipal water demand in a southeastern Massachusetts coastal stream. **Sara Grady**, Margaret Kearns, Samantha Woods.	Top-down and bottom-up regulations in a high nutrient-high herbivory macrotidal coastal ecosystem in Northern Patagonia, Argentina. **Paulina Martinetto**, Mirta Teichberg, Ivan Valiela, Diana Montemayor, Oscar Iribarne.	Discharge control of cyanobacteria bloom composition and its effect on water quality in the Lower St. Johns River, a eutrophic Atlantic Coastal Plain Estuary. **John Hendrickson**, Edward Phlips, Mary Cichra.	The urge to merge: data integration over differing spatial and temporal scales. **Kimberle Stark**, Cheryl Greengrove, Curtis Degasperi, Skip Albertson.	Does the bopyrid parasite *Probopyrus pandalicola* affect the density, behavior, and reproductive success of the daggerblade grass shrimp *Palaemonetes pugio*? **Mary Curran**, Krystle Yozzo, Sue Ebanks, Michael Partridge, Tracey Modeste, Jakelin John et al.	"Mother's" beaches and their water quality issues: inner Cabrillo Beach. **Robert McAdory**, John Foxworthy, Patrick Kinney.
2:30	Where the rubber hits the road: local land use decisions and protecting water quality in the St. Mary's River (Maryland) watershed. **Robert Paul**.	Biomass and productivity of Arctic and Sub-Arctic Ascophyllum nodosum populations. **Núria Marbà**, Dorte Krause-Jensen, Birgit Olesen, Peter Christensen, Poul Pedersen.	Texas application of a salinity zone method illustrates need for a broader estuarine inflow regime framework. **Norman Johns**.	Monitoring the temporal and spatial variability of phytoplankton at species level using a combination of measuring buoys, pigment analysis and fast screening microscopy. **Louise Schlüter**, Flemming Møhlenberg.	How does temperature affect the starvation rate of the daggerblade grass shrimp *Palaemonetes pugio* infected with the bopyrid isopod *Probopyrus pandalicola*? **Michele Sherman**, Mary Curran.	Balancing the needs of boaters and seagrass ecosystems in Southwest Florida. **Althea Hotaling**, Thomas Ankersen, Robert Lingle, Robert Swett, Charles Listowski.
2:45	Panel Discussion	Kelp along Greenland's coast - response to climate forcing. **Dorte Krause-Jensen**, Núria Marbà, Birgit Olesen, Peter Christensen, Mikael Sejr, Joao Rodrigues, Søren Rysgaard.	Synthesis by **Peter Doering**.	Synthesis/Q & A Led by **Stephanie Moore**	Synthesis by **Mary Carla Curran** and **Zac Long**.	OPEN
BREAK 3:00 PM – 3:30 PM						

THURSDAY EARLY-AFTERNOON B

104-AB	201-AB	202-AB	203-BC	204-AB	
OPEN	SCI-037 **Improving Our Nation's Assessments of Coastal Habitats** Correigh Greene, Stephen Brown, Susan-Marie Stedman and Kirsten Larsen	SCI-070 **Perspectives on Organic Carbon as Stress Indicator for Marine Benthos** Walt Nelson, Erik Bonsdorff and Melanie Frazier	SCI-067 **Nutrients in Coastal Waters - Loads, Models and Interpretation** *cont'd*	SCI-222 **Technology and Methods Advancement and Application** Carlton Hunt	
OPEN	The NOAA Fisheries Service Habitat Assessment Improvement Plan: an overview of the plan and steps taken to improve marine habitat science. **Correigh Greene**, Stephen Brown, Mary Yoklavich, Joe Nohner, Kristan Blackhart, Kirsten Larsen.	Marine benthic quality assessment by using the Pearson-Rosenberg model. **Rutger Rosenberg**.	Spatial and temporal dynamics of chlorophyll in the Lower Suwannee River/Estuary: analysis of a long-term dataset. **Andrea Krzystan**, Charles Jacoby, Thomas Frazer.	Automated identification and enumeration of bivalve larvae using polarized light. **Jacob Goodwin**, Elizabeth North.	**1:30**
	An assessment of coastal and estuarine habitat in support of the National Fish Habitat Action Plan. **Joe Nohner**, Kristan Blackhart, Correigh Greene, Allison Candelmo, David "Moe" Nelson, Stephen Brown.		Modeling the effects of sea level rise on estuarine nitrogen cycle: examining the fate and transport of nitrogen in the Cape Fear River Estuary, NC, USA. **David Hines**, Jessica Lisa, Stuart Borrett, Bongkeun Song.	Characterization of phytoplankton communities using a novel submersible imagine flow cytometer - FlowCAM®. **Carlton Hunt**, Harry Nelson, Chris Sieracki, Derek Michelin, Doug Pape, Michael Neal, Caleb Chitwood.	**1:45**
	Integrating conservation between land and sea: strategies for West Coast estuaries. **Sarah Newkirk**, Mary Gleason, Matt Merrifield, Jeanette Howard, Robin Cox, Megan Webb.	Habitat saprobity and benthic succession in coastal transitional ecosystems. Davide Tagliapietra, Marco Sigovini, **Paolo Magni**.	Tidal prism modeling of phytoplankton and nitrogen concentrations in Narragansett Bay and its sub-embayments. **Mohamed Abdelrhman**, Dan Campbell.	Developing wetlands correction factors for a LiDAR-derived "bare earth" Digital Elevation Model in northeasten Florida. **Sandra Fox**, Palmer Kinser, Keenan Lawrence, Clay Montague, William Wise.	**2:00**
	Linking local and regional land use with abundance and composition of fish in Puget Sound's pelagic zone. **Casimir Rice**, Correigh Greene.	Influence of sediment organic carbon on estuarine benthic species of the U.S. west coast. **Melanie Frazier**, Walt Nelson, Henry Lee.	Improved tools for calculating NANI (Net Anthropogenic Nitrogen Input) in the watersheds of U.S. and Europe. **Bongghi Hong**, Dennis Swaney, Robert Howarth, Christoph Humborg.	Evaluation of hydromulching as an establishment technique for Baccharis halimifolia at coastal restoration sites. **Michael Dupuis**, Mark Hester.	**2:15**
	Atlantic Coast Marine Assessments: integrating and distributing spatial data for complex decision making in marine systems. **Jennifer Greene**, Mark Anderson, Jay Odell.	TOC as a regional sediment condition indicator: parsing effects of grain size and organic content. **Walt Nelson**, Melanie Frazier, Henry Lee.	Phase 5.3 Watershed Model accuracy assessment methods. **Guido Yactayo**.	CYCLE-NH4: a tool for long-term, in-situ, high-temporal resolution ammonium measurements. **Corey Koch**, James Ingle, Ron Zaneveld, Casey Moore, Andrew Barnard.	**2:30**
	The Penobscot Estuarine Fish Community and Ecosystem Survey. **Michael O'Malley**, Justin Stevens, Rory Saunders, Christine Lipsky, John Kocik.	Panel Discussion Led by **Walt Nelson**	Synoptic prediction of estuarine water quality: the "CLUES Estuaries" tool. **John Zeldis**, Ude Shankar, Hoyle Jo, Dave Plew, Philip Gillibrand.	Validation of simultaneous IRGA-based measurements of CO_2 uptake and O_2 production in phytoplankton cultures. **Alina Corcoran**, Wayne Van Voorhies.	**2:45**
BREAK 3:00 PM – 3:30 PM					

OCEAN CENTER EXHIBIT HALL AND POSTER MAP



SCI-O01 APPLICATIONS OF ACOUSTIC METHODS AND OTHER NOVEL APPROACHES IN COASTAL AND ESTUARINE HABITAT MAPPING, RESEARCH AND MONITORING

Dittmar, John; Russell, Marc; Jordan, Steve.Hurricane impacts on ecological services and economic values of coastal urban forest: a case study of Pensacola, Florida. (Pos. 44-E)

Neatt, Nancy; Lemieux, Ben; Baker, Greg; van Proosdij, Danika; Bowron, Tony. Considerations in the use of high resolution, low-altitude aerial photography for coastal wetland restoration. (Pos. 39-E)

Perry, Jon S.; Dominguez, Amanda; Janneman, Rene. SEA Team - citizen scientists in Sarasota. (Pos. 39-F)

SCI-O02 ADAPTING COASTAL AND ESTUARINE MANAGEMENT TO CLIMATE CHANGE

Auman, Monette V.; Von Holle, Betsy; Stiner, John C. Mitigating loggerhead sea turtle (Caretta caretta) nest temperatures in response to climate change. (Pos. 23-C)

Kane, Sara; Lausche, Barbara. Addressing climate change in the Sarasota Bay NEP region. (Pos. 23-F)

Manuel, Sarah; Coates, Kathryn; Kenworthy, W. Judson; Fourqurean, James W. Distribution of tropical seagrass species in Bermuda in relation to light availability. (Pos. 23-E)

Williams, Asher. Phosphate management and increased tidal range. (Pos. 23-B)

SCI-O14 COASTAL LAGOONS AND ESTUARIES IN MEXICO: PROCESSES AND VULNERABILITY

de la Lanza Espino, Guadalupe. El Yucateco lagoon, Tabasco, their physicochemical and autoregulation tendency. (Pos. 15-A)

Perales-Valdivia, Hector; Sanay-Gonzalez, Rosario. The hydrography of a highly stratified estuary located in a tropical and microtidal region: the Jamapa River Estuary,Veracruz, Mexico. (Pos. 15-B)

SCI-O15 COMPARATIVE APPROACHES TO VALUATION OF ECOSYSTEM SERVICES FOR ESTUARINE ECOSYSTEMS

Cardenas, Andres; Dellapenna, Timothy; Ko, Jae-Young. Economic valuation of Sabine Bank: sand resource versus fishery habitat. (Pos. 31-B)

Reynolds, Melissa J.; Brown, Edwin; Volety, Aswani; Ehlinger, Gretchen S. An evaluation of flow and salinity relationships for the Caloosahatchee and Saint Lucie River Estuaries. (Pos. 31-A)

SCI-O19 DEVELOPMENT OF THE CHESAPEAKE AND OTHER LARGE AQUATIC ECOSYSTEM TMDLS

Barnes, Michael; Shenk, Gary; Wu, Jing; Linker, Lewis. Chesapeake Bay Program Phase 5.3.2 Watershed Modeling Application. (Pos. 31-E)

Pribble, Ray; Janicki, Anthony; Peene, Steve; Semmes, Robert; Hackett, Keith. Deconstructing seagrass and water quality dynamics within the Indian River Lagoon for TMDL development. (Pos. 31-F)

SCI-O21 DRIVERS OF CHANGE IN SHALLOW COASTAL PHOTIC SYSTEMS

DeLeo, Lee Ann; Alexander, Clark; Robinson, Mike; Venherm, Claudia; Bulski, Karrie; Morrall-Ansley, Mindi. Field assessment and simulation of shading from alternative dock construction materials. (Pos. 2-A)

Hanson, Alana; Wigand, Cathleen; Johnson, Roxanne; Oczkowski, Autumn; Davey, Earl; Markham, Erin. Sea level rise and climate change effects on marsh plants *Spartina alterniflora* and *Typha angustifolia* using mesocosms. (Pos. 3-A)

Johnson, Roxanne; Wigand, Cathleen; Hanson, Alana; Davey, Earl; Oczkowski, Autumn; Markham, Erin. Preliminary results from a mesocosm marsh experiment with treatments simulating three tidal flooding and precipitation conditions. (Pos. 2-F)

Maxey, Johnathan D.; Anderson, Iris C.; Brush, Mark J.; Piehler, Michael F.; Currin, Carolyn A.; Stanhope, Jennifer W. Estimating system-wide sources and sinks of nitrogen in a shallow mid-Atlantic estuary - the role of light availability. (Pos. 2-E)

McPherson, Meredith L.; Zimmerman, Richard C.; Hill, Victoria J. Environmental and physiological influences on δ13C of Zostera marina (eelgrass). (Pos. 2-D)

Perez, Alex; Puig-Santana, Glauco A.; Fourqurean, James W.; Collado-Vides, Ligia. Nutrient dynamics of benthic flora in Florida Bay: a long-term approach. (Pos. 3-B)

Salgado, James M.; Schneider, Sabrina; Thyberg, Travis; Lirman, Diego; Collado-Vides, Ligia. Macroalgal dynamics and nutrient content reveal trophic status in Biscayne Bay. (Pos. 3-F)

Stanhope, Jennifer W.; Anderson, Iris C.; Brush, Mark J. Variation in photic area with climatic changes in a shallow estuary. (Pos. 3-E)

Vandermeulen, Ryan A.; Gundersen, Kjell. Balancing photosynthesis and community respiration in an estuarine coastal environment in the Northern Gulf of Mexico. (Pos. 2-B)

Whitehead, Meaghan L.; Anderson, Iris C.; Currin, Carolyn A.; Reece, Kimberly S. Benthic nitrogen fixation: an autochthonous source of nitrogen to the New River Estuary, NC. (Pos. 2-C)

SCI-O22 DYNAMIC FEEDBACKS BETWEEN MARSH SEDIMENTATION AND VEGETATION

Delano, Priscilla C.; Currin, Carolyn A. Biomass and surface elevation change in *Juncus roemerianus* marshes of the New River Estuary, NC. (Pos. 8-D)

Lauer, Nathan; Williams, Asher; Ross, Cliff; Hackney, Courtney. The effects of elevated salinity on wetland soil organic content, vegetation structure, and physiology of Taxodium distichum within the lower St. Johns River. (Pos. 8-C)

Skinner, Christa; Van Proosdij, Danika. Changes in grain size spectra and floc content over time in a macrotidal salt marsh restoration site. (Pos. 8-E)

SCI-O27 ESTUARINE SEDIMENT DYNAMICS

Aijun, Wang; Xiang, Ye; Jian, Chen. Environmental dynamic mechanisms for sedimentary structure formed by typhoon over coastal wetland, Luoyuan Bay, China. (Pos. 6-B)

Allen, Kerri A.; Leonard, Lynn A. Sedimentation patterns in an estuarine marsh: Freeman Creek, North Carolina. (Pos. 6-D)

Souza, Alejandro J.; **Amoudry, Laurent O.** Effects of density gradients and freshwater river input on sediment transport in estuaries. (Pos. 6-E)

MONDAY POSTER SESSIONS

Balentine, Karen M.; Elling, Evert; Anderson, Gordon H.; Smith III, Thomas J. Observations of entrained sediment deposition within mangrove forests along the Shark River in Everglades National Park. (Pos. 6-A)

Carini, Stephen A.; Duernberger, Kim A.; Lisa, Jessica A.; Tobias, Craig; Song, Bongkeun. Salinity effects on sediment nitrogen cycling processes in the Cape Fear River Estuary. (Pos. 8-F)

Fugate, David; Parsons, Michael L.; Neuroh, Julie; Denkert, Brooke; Markley, Laura. Sediment dynamics in a shallow subtropical lagoon. (Pos. 5-D)

Jain, Mamta; Khare, Yogesh; Mehta, Ashish J. Critical wind speed for turbidity rise in some shallow Florida lakes. (Pos. 6-C)

John, Chandy V. Application of hydraulic, hydrodynamic and water quality models for TMDLs and BMPs for river and estuary. (Pos. 7-D)

Lee, Michael T. Evaluating the variability of sediment and nutrient loading into Texas estuaries and bays from riverine systems. (Pos. 7-B)

Li, Yunhai; Chen, Jian; Huang, Caibin. The impact of typhoon "Fung-wong" on the distribution patterns of heavy metals in the Quanzhou Bay, China. (Pos. 7-E)

Greengrove, Cheryl; Masura, Julie; **Moore, Stephanie**; Bill, Brian; Emenegger, Jennifer; Leigh, Portia; Salathè Jr., Eric; Banas, Neil; Mantua, Nathan; Anderson, Don; Stein, John. The distribution of overwintering cysts of the harmful algae Alexandrium catenella in the surface sediments of Puget Sound, WA, in 2011. (Pos. 8-A)

Salisbury, Stephanie K.; Canuel, Elizabeth A.; Anderson, Iris C.; Tobias, Craig R.; Stanhope, Jennifer W.; Hardison, Amber K. Tracing carbon pool dynamics in shallow coastal sediments using an *in situ* labeling experiment. (Pos. 8-B)

Sottolichio, Aldo; Etcheber, Henri; Schmidt, Sabine; Castaing, Patrice; Schmeltz, Marjorie. Monitoring turbidity maximum in the upper reaches of the Gironde macrotidal estuary (France): implications for estuarine ecology. (Pos. 6-F)

Whipple, Anthony; Reynolds-Fleming, Janelle; Neve, Ryan; Luettich, Rick. Spatial changes in sediment resuspension in a small estuarine system. (Pos. 7-C)

SCI-O31 FOOTPRINTS AND PATHWAYS OF AQUATIC ECOSYSTEM CHANGE

Benyi, Sandra J.; Adams, Darvene A. Decadal changes in benthic community measures in New York Harbor. (Pos. 40-B)

Condon, Elizabeth D.; Carmichael, Ruth H.; Calci, Kevin R.; Burkhardt, William. Historical record of human impacts in a coastal estuary system using chemical and bacterial indicators. (Pos. 39-D)

Morkeski, Kate; Deegan, Linda A.; Peterson, Bruce J.; Hughes, Zoe J.; Fagherazzi, Sergio. Landscape-level saturation in nitrogen uptake capacity of saltmarshes with chronic nutrient enrichment. (Pos. 39-C)

SCI-O35 HYPOXIA EFFECTS ON AQUATIC LIVING RESOURCES

Adamack, Aaron T.; Mason, Doran M. Development of an Atlantis ecosystem-based model for the Louisiana-Texas continental shelf. (Pos. 52-D)

Barba, Allison; Roman, Michael R.; Pierson, James P. Zooplankton response to hypoxia in the Chesapeake Bay. (Pos. 52-E)

Burrell, Rebecca; Breitburg, Denise; Hondorp, Darryl; Keppel, Andrew G. Breathless nights: diel-cycling hypoxia and the prevalence of *Perkinsus marinus* (Dermo) infections in *Crassostrea virginica.* (Pos. 52-B)

Clark, Virginia; Breitburg, Denise; Burrell, Rebecca. The effect of diel-cycling hypoxia on eastern oyster (Crassostrea virginica) clearance. (Pos. 52-C)

Smith, Mason. An evaluation of hypoxia-inducible factor (HIF) as a biomarker for detecting low oxygen exposure in an estuarine fish. (Pos. 52-F)

SCI-O36 IMPLEMENTING ECOSYSTEM-BASED MANAGEMENT IN NATIONAL ESTUARY PROGRAMS

Migliori, Michael. Volunteer support and enhancement of research and monitoring activities of the National Estuarine Research Reserve System: program implementation and impact. (Pos. 42-F)

Whalen, Laura; Kreeger, Danielle; Bushek, David; Moody, Joshua. Practitioner's guide to shellfish-based living shorelines for salt marsh erosion control and environmental enhancement in the Mid-Atlantic. (Pos. 42-E)

SCI-O37 IMPROVING OUR NATION'S ASSESSMENTS OF COASTAL HABITATS

Coen, Loren D.; Proffitt, C. Edward; Geiger, Stephen P.; Kimbro, David L.; Weinstein, John E. The Deepwater Horizon (DWH) oil spill: efforts to establish a baseline assessment and potential changes to a critical habitat, oyster reefs and their associated fauna across multiple Florida Gulf estuaries. (Pos. 42-C)

Giordano, Steven D.; Bruce, David; Lazar, John V. Habitat assessment: supporting adaptive habitat restoration and living resource management in Chesapeake Bay. (Pos. 42-D)

Nestlerode, Janet; Serenbetz, Gregg; Scozzafava, Michael E. Reference site selection for wetland condition assessments: integrating best professional judgement and objective selection criteria. (Pos. 42-B)

SCI-O40 INTEGRATING AUTOMATED OCEAN OBSERVING SYSTEMS WITH TRADITIONAL MONITORING

Bailey, Eva M.; Boynton, Walter R.; Hall, Matthew R. How low can it go? The Chesapeake Bay shallow water DO limbo stick. (Pos. 41-C)

Graziano, Alexander; Jones, R. Christian. Diel and seasonal patterns in continuous water quality monitoring data from a fixed site on the tidal freshwater Potomac River. (Pos. 41-D)

Leonard, Lynn; Dorton, Jennifer; Porter, Dwayne; Fletcher, Madilyn. Coastal Ocean Observing in the Carolinas. (Pos. 41-E)

Loranger, Scott; Tamburri, Mario. Real-time environmental monitoring of the Patuxent River. (Pos. 41-B)

Martignette, Aj; Siwicke, Jeff; Milbrandt, Eric. Lessons learned: a look at the challenges of maintaining a real-time water quality sensor network. (Pos. 41-F)

SCI-O49 LINKING MICROBIAL ECOLOGY AND ECOSYSTEM FUNCTION IN CHANGING AQUATIC ENVIRONMENTS

Li, Wenda; Dobbs, Fred C. Are organic marine aggregates "hotspots" for viruses? (Pos. 39-B)

Menning, Damian; Garey, James. Biogeochemistry of a subterranean estuary in West Central Florida. (Pos. 39-A)

SCI-O54 MARINE HABITAT MAPPING

Younan, Lawrence. Turner Designs' Fluorometric Integrated Nautical mapping System (C-FINS). (Pos. 41-A)

SCI-O55 MARINE PHYTOPLANKTON COMMUNITY DYNAMICS: RESPONSE TO A CHANGING OCEAN ENVIRONMENT

Buck, Christina; Wilkerson, Frances; Largier, John; Parker, Alexander; Dugdale, Richard. The influence of marine nutrients on phytoplankton blooms in a low-inflow estuary. (Pos. 55-B)

Green, Lauri; Fong, Peggy; Sutula, Martha. Macroalgal blooms in California estuaries may drive changes in macrofaunal abundance and community structure from the bottom up. (Pos. 55-A)

Kurtz, Jan; Murrell, Michael; Schaeffer, Blake; Lehrter, John. Phytoplankton communities in Louisiana coastal waters and the continental shelf. (Pos. 55-F)

Markley, Laura R.; Parsons, Michael L.. What causes phytoplankton blooms in the Caloosahatchee estuary, Florida? (Pos. 55-E)

SCI-O56 MICROBES: DIVERSITY, GENE EXPRESSION AND ECOLOGICAL FUNCTION

Bowen, Jennifer L. Shedding new light on denitrification in salt marshes: what can we learn from the deep diversity of nirS genes in the Great Sippewissett Salt Marsh fertilization plots? (Pos. 38-A)

Guevara, Rafael; Boyer, Joseph N. Addition of organophosphonate-P triggers an increase in cyanobacterial community dominance in an oligotrophic, P-limited estuary, Florida Bay. (Pos. 38-B)

Niesen, Meghann E.; Harris, Lora. Documenting phytoplankton biodiversity in the Potomac river estuary with microscope, HPLC, and DNA identification. (Pos. 38-C)

SCI-O60 MORPHOLOGICAL FEEDBACKS IN CHANGING COASTAL ENVIRONMENTS

Ameen, A.; Dosemagen, S.; Griffith, A.; Harada, C.; Kolker, A.; Warren, J. Monitoring post-oil spill recovery of coastal wetlands using non-invasive techniques. (Pos. 32-E)

Woo, Han Jun; Cho, JIn Hyung; Jang, Suk; Choi, Jong KuK. Changes in sediment characteristics in the semi-enclosed Geunso Bay, West Coast of Korea. (Pos. 32-C)

Wright, Samantha; FitzGerald, Duncan; Hughes, Zoe. Belowground decomposition as the mechanism behind surface elevation loss in ditched marshes. (Pos. 32-D)

SCI-O61 MULTIDISCIPLINARY EVALUATIONS OF ECOSYSTEM SERVICES AT THE REGIONAL SCALE

Dantin, Darrin; Russell, Marc; From, Andrew; Genthner, Fred; Nestlerode, Janet; Almario, Alex; Alvarez, Federico; Krauss, Ken; Harvey, James; Osland, Michael. Influence of watershed characteristics on wetland hydrology (Tampa, FL). (Pos. 36-F)

SCI-O67 NUTRIENTS IN COASTAL WATERS - LOADS, MODELS AND INTERPRETATION

Carsey, Thomas; Stamates, Jack; Zhang, Jia-Zhong; Featherstone, Charles; Brown, Cheryl; Visser, Lindsey; Bishop, Joseph; Kotkowski, Rachel. Dense human populations near sensitive coral ecosystems: nutrients in the waters of the SE Florida reef track. (Pos. 49-D)

Collins, James R.; Raymond, Peter A.; Bohlen, W. Frank; Howard-Strobel, Mary M. *In situ* nitrate measurements and new productivity in central Long Island Sound. (Pos. 49-B)

Isenberg, William N.; Bukaveckas, Paul A. Nutrient sources supporting chronic algal blooms in the tidal freshwater James River Estuary. (Pos. 49-A)

Lamb, Annesia L.; Boger, Rebecca B.; Branco, Brett F. Analyzing the trends of water quality indicators over time in Jamaica Bay, NY. (Pos. 48-C)

Moseman-Valtierra, Serena; Kroeger, Kevin D.; Deegan, Linda; Valiela, Ivan. Nitrous oxide fluxes from coastal marshes with pulsed or chronic nutrient additions. (Pos. 48-D)

Straub, Kendra; Caffrey, Jane; Woodrey, Mark; Phipps, Scott; Wanat, Jennifer. Comparing nutrient levels and phytoplankton response in 3 northern Gulf of Mexico estuaries. (Pos. 49-C)

Swaney, Dennis P.; Hong, Bongghi; Alexander, Richard B.; Brakebill, John W.; Smith, Richard A.; Howarth, Robert W. Assessment of regional variation of drivers of watershed nitrogen export to coastal waters using SPARROW and NANI. (Pos. 49-E)

SCI-O82 SEA-LEVEL CHANGE: PATTERNS, PROCESSES AND IMPACTS

Beck, Holly J.; Couvillion, Brady R. Remotely sensed analysis of marsh collapse thresholds in coastal Louisiana. (Pos. 25-F)

Maher, Nicole; Starke, Adam; Wigand, Cathleen; Davey, Earl, Sommi, Amanda. Marsh elevation response to sea level rise on Long Island, NY. (Pos. 24-D)

Nelson, Paul R.; Smith, Tom J.; Range, Ginger T. Mangrove islands disappear from Whitewater Bay, Everglades National Park. (Pos. 24-C)

Simon, Matt; Travis, Steve; Zogg, Greg. Effects of sea level rise on sediment microbial decomposition in Atlantic Coast salt marshes. (Pos. 24-E)

SCI-O87 TRAINING A NEW GENERATION OF SCIENTISTS IN OCEANS AND HUMAN HEALTH

Atkinson, Lowell; Brown, Lauren. Changes in human health and well-being resulting from the Deep Water Horizon oil disaster. (Pos. 47-F)

SCI-O91 ZOOPLANKTON DYNAMICS IN A CHANGING WORLD: FROM INDIVIDUAL TO POPULATION

Akiyama, Satoshi; Ueno, Masahiro; Yamashita, Yoh. Effects of seasonal temperature change on the population dynamics of the mysid *Orientomysis japonica* in the Yura Estuary of the Tango Sea, Japan. (Pos. 54-C)

Bollens, Stephen; Breckenridge, Joanne; Rollwagen-Bollens, Gretchen; Cordell, Jeffery; Kalata, Olga. Invasive copepods and plankton dynamics of the Lower Columbia River Estuary. (Pos. 54-F)

MONDAY POSTER SESSIONS

Denkert, Brooke A.; Andresen, Megan M.; Burghart, Scott E.; Fugate, David; Peebles, Ernst B.; Tolley, S. Gregory. Responses of zooplankton assemblages to variable freshwater inflow in the Caloosahatchee River and Estuary, Florida. (Pos. 54-D)

Favier, Jean-Baptiste; Winkler, Gesche. Geographic segregation of the cryptic species complex Eurytemora affinis in the upper St. Lawrence estuary: habitat exploitation and trophic position. (Pos. 54-E)

SCI-204 CORALS IN FLORIDA AND THE CARIBBEAN: DIVERSITY, SUCCESS AND RESTORATION

Lee, Larisa; Valentine, John. Impacts of foundation species richness on ecosystem structure and function. (Pos. 38-E)

Santos, Isaac R.; Eyre, Bradley. Ocean acidification, coral reefs and porewater exchange in permeable sands. (Pos. 38-F)

Studivan, Michael S. The effect of the oil dispersant Corexit EC9500A on bleaching of the alcyonacean soft coral Xenia elongata. (Pos. 38-D)

SCI-208 FOOD WEB ANALYSIS

Dean, Jessica; Sparks, Eric; Woodrey, Mark; Boettcher, Anne. Does herbivore pressure and diversity vary across Northern Gulf of Mexico salt marshes? (Pos. 1-B)

Eberhardt, Alyson; Burdick, David. How soon do you become what you eat? A stable isotope feeding experiment with American eels (*Anguilla rostrata*). (Pos. 1-F)

McInnes, Allison S.; Nunnally, Clifton; Rowe, Gilbert; Davis, Randall; Quigg, Antonietta. The big role of little fish: herring spawn, an important contributor to the food web in Simpson Bay, Prince William Sound, Alaska. (Pos. 1-C)

Silva, Diana; **Moon, Daniel**. Productivity mediates a cross-ecosystem trophic cascade. (Pos. 1-D)

Vaslet, Amandine; France, Christine; Phillips, Donald L.; Feller, Ilka C.; Baldwin, Carole C. Stable-isotope analyses reveal the importance of seagrass beds as feeding areas for juvenile *Myrophis punctatus* (Anguilliformes: Ophichthidae) recruiting in the coastal waters of Florida. (Pos. 1-A)

Wepking, Carl J.; Bollens, Stephen M. Ichthyoplankton community dynamics in a Northeast Pacific estuary: Willapa Bay Washington, USA. (Pos. 1-E)

SCI-211 HYDROLOGY AND HYDRODYNAMICS

Duffy, Chris; **Bhatt, Gopal**; Leonard, Lorne; Yu, Xuan. Towards a distributed hydrologic modeling framework for the Chesapeake Bay Watersheds. (Pos. 29-A)

Hansell, Heath; Walters, Linda; Jachec, Steven. A comparison of restored oyster reef success based upon measured hydrodynamics. (Pos. 29-E)

Li, Chunyan; Chen, Changsheng; White, John R.; Lin, Huichan. Asymmetric tidal straining and mechanism investigation. (Pos. 29-B)

Liblik, Taavi; Lips, Urmas. Changes in the thermohaline structure from hours to years in the Gulf of Finland (Baltic Sea). (Pos. 29-C)

Schaeffer, Jeff; Carlson-Mazur, Martha L.; Larson, James; Richardson, William; Gaugush, Robert; Nelson, John; Fitzpatrick, Faith; Seelbach, Paul. Influences of landscape and hydrologic mixing on rivermouth ecosystems of the Laurentian Great Lakes. (Pos. 29-F)

Shaha, Dinesh Chandra; Cho, Yang-Ki. Spatial variation of longitudinal dispersion coefficient in an estuary. (Pos. 29-D)

SCI-226 WETLAND STRUCTURE AND FUNCTION

Anderson, Christopher J.; Lockaby, B. G. Foliar nutrient dynamics of forested wetlands along a tidal gradient on the Apalachicola River, FL, USA. (Pos. 26-A)

Cadol, Daniel; Elmore, Andrew; Engelhardt, Katia. Using inundation timing to estimate flow resistance through marsh vegetation. (Pos. 26-D)

Calvo-Cubero, Juan; Ibáñez, Carles; Rovira, Albert; Sharpe, Peter J.; Alcaraz, Carles; Reyes, Enrique. Factors controlling water quality and vertical accretion on experimental constructed wetlands (Ebro Delta, Spain). (Pos. 26-C)

Corman, Sarah S. Salt marsh productivity and phenology in a changing climate: the importance of resource allocation in *Spartina alterniflora.* (Pos. 25-E)

Costanza, Brooke L.; Brinson, Mark; Christian, Robert; Blum, Linda; Kirwan, Matthew. Patterns for primary production in high and low marsh communities across multiple scale. (Pos. 25-B)

Elsey-Quirk, Tracy; Velinsky, David J.; Kreeger, Danielle; Maxwell-Doyle, Martha; Padeletti, Angela. Initiation of intensive long-term wetland monitoring in the Delaware Estuary and Barnegat Bay, Mid-Atlantic, USA. (Pos. 26-B)

Erickson, Amy A.; Lee, Woody; Parsons, Kathleen. Hurricane impact on mangrove tree crab populations in Florida. (Pos. 26-E)

Lee, Courtney T.; Armitage, Anna R. Does ecotypic-based genetic diversity of a dominant plant impact ecosystem health and stability? A case study in a restored *Spartina alterniflora* marsh. (Pos. 26-F)

Murphy, Theresa; Heffner, Leanna; Nixon, Scott. Nitrogen-fixation and denitrification activity in Narragansett Bay, Rhode Island salt marshes located along a nutrient concentration gradient. (Pos. 25-C)

Wight, Bethany; Darby, Phil; Valentine-Darby, Patty. Long term patterns of seasonal water depths and impacts on apple snails and snail kites in the Everglades. (Pos. 25-D)

Yozzo, David J.; Alderson, Carl; Cotroneo, Chris; Craft, Christopher B. Woodbridge Creek, New Jersey salt marsh restoration - year one monitoring. (Pos. 25-A)

SCI-O12 CLIMATE CHANGE - ANTHROPOGENIC STRESSOR INTERACTIONS IN ESTUARINE AND COASTAL SYSTEMS

Beckett, Leah H.; Baldwin, Andrew H. Effects of geomorphology on coastal marsh subsidence in Chesapeake Bay. (Pos. 15-D)

Charneco, Marisa E.; Filina, Joshua L.; Dutra, Elizabeth; Koch, Marguerite S. The metabolic effects of high pCO_2 and temperature on an important reef macroalga, *Halimeda discoidea.* (Pos. 24-A)

Cleave, Autumn; Boyer, Katharyn. Effects of invasive *Limonium ramosissimum* on native salt marsh communities in a changing environment. (Pos. 15-C)

Voynova, Yoana G.; Sharp, Jonathan H. Ferry monitoring to evaluate the influences of large river discharge and coastal upwelling on the Delaware Bay microbial biogeochemistry. (Pos. 15-E)

Wigand, Cathleen; Roman, Charles; Davey, Earl; Stolt, Mark; Johnson, Roxanne L.; Hanson, Alana; Cahoon, Don; Lynch, James; Moran, S. Bradley. Contribution of cultural eutrophication to marsh loss in Jamaica Bay (NY). (Pos. 15-F)

SCI-O25 ELEMENTAL STOICHIOMETRY AND FOOD WEBS

Jinuntuya, Malee; Zimmerman, Richard C.; Hill, Victoria J. Simulating the effects of CO2 enrichment on nitrogen metabolism in eelgrass (Zostera marina L.). (Pos. 14-F)

Kress, Erica; Parker, Alex; Wilkerson, Frances; Dugdale, Richard; Mueller-Solger, Anke. Assessing phytoplankton communities in two urbanized rivers with contrasting inorganic nitrogen speciation. (Pos. 23-A)

SCI-O29 EVERGLADES RESTORATION - IMPLEMENTATION, BENEFITS AND ADAPTATION

Bennett, Robin; Lorenz, Jerome; Trexler, Joel; Huebner, Scott; Frezza, Peter; McDonald, Amanda. Distinguishing natural variability from water management effects in analysis of ecological data for Everglades restoration. (Pos. 28-C)

Hedgepeth, Marion Y.; Roberts, Richard; Hu, Gordon; Conrad, Cecilia. The effects of freshwater flow and salinity on shrub and groundcover communities of the Loxahatchee River Floodplain, Florida. (Pos. 28-B)

Bellmund, Sarah; Serafy, Joseph; **Jobert, Herve**; Garis, Gregory. Setting ecological restoration targets: a proposed methodology for Biscayne Bay, Florida. (Pos. 28-D)

Scerno, Deborah H.; Hall, Bill; Kemp, Susan; Graves, Greg; Burch, Barbara; Darling, Elizabeth; Kostura, Heather; Yonick, Al. An innovative solution for storing and retrieving biological and ecological monitoring data for the Everglades. (Pos. 28-E)

SCI-O38 THE INDIAN RIVER LAGOON: AN ESTUARY IN TRANSITION

Aquino-Thomas, Jessene; Proffitt, Edward. Factors affecting red mangrove (Rhizophora mangle) prop roots as habitat for oysters (Crassostrea virginica) in the Indian River Lagoon. (Pos. 27-D)

Lasi, Margaret A.; Helsel, Dennis; Tweedale, Wendy A. Developing optical water quality models using geometric mean functional regression for the Indian River Lagoon system, Florida. (Pos. 28-A)

Ley, Janet A.; Allen, Mike S. Assessing the potential effectiveness of a catch-and-release-only reserve along Florida's east coast for rebuilding common snook (Centropomus undecimalis) populations. (Pos. 27-F)

Rhodes, Adelaide. Indian River Lagoon meiobenthic copepod abundance and biodiversity near the mouth of the St. Lucie River Estuary. (Pos. 27-A)

Sacks, Paul; Garvis, Stephanie; Sacks, Joshua; Alden, Andrea; Walters, Linda. Migration of intertidal oyster reefs along boating channels in the northern Indian River Lagoon system. (Pos. 27-B)

Salewski, Elizabeth; Proffitt, C. Edward. Oyster reef restoration in southeast Florida: macroinvertebrate communities shaped by discharges from Lake Okeechobee. (Pos. 27-E)

Smith, Leah; Bolivar, Sara; Yuan, Wei; Cohen, Sarah; Sheets, Beth; Hoffman, Eric; Walters, Linda. Clonal ascidians overgrowing intertidal oyster reefs in the Indian River Lagoon, Florida. (Pos. 27-C)

SCI-O39 INTEGRATED ASSESSMENTS OF VALUED COMPONENTS AND SERVICES IN ESTUARINE ECOSYSTEMS

Neikirk, Betty B.; Moore, Kenneth A.; Neckles, Hilary A.; Skidds, Dennis; Stevens, Sara. Vital signs monitoring of estuarine conditions over multiple scales at three Virginia National Parks in the National Park Service Northeast Coastal and Barrier Network. (Pos. 52-A)

SCI-O5O LIVING RESOURCE - WATER QUALITY FEEDBACKS: A WIN-WIN WITH BIOTIC RESTORATION?

Dalrymple, D. Joseph; Carmichael, Ruth H.; Walton, William. Potential for increased nitrogen removal by native triploid eastern oysters. (Pos. 18-E)

Forsyth, Melinda; Harris, Lora. Investigations of the effects of oyster morphology on particle capture using a hybrid ecosystem individual-based model. (Pos. 19-A)

Gaona, Marie; Gourlie, Samantha; Hester, Chelsea; Langsten, Holly; Sartory, Lindsay; Smith, Heather; Rivera, Sebastian; O'Connor, Ashlynn; Caffrey, Jane M. Community metabolism and nutrient fluxes in transplanted and natural seagrass beds in Pensacola, FL. (Pos. 18-C)

Ketover, Rheannon; Loh, Ai Ning. Comparing benthic remineralization of organic matter between two fringing mangrove habitats within southern Estero Bay, Florida. (Pos. 18-A)

O'Connor, Ashlynn; Caffrey, Jane M.; Baldwin-Moss, Amy; Fugate, Beth; Bishop, Penelope. Role of light, pore water nutrients and hydrogen sulfide in the success of seagrass restoration in Pensacola Bay, FL. (Pos. 18-B)

Premo, Katherine M.; Tyler, Anna Christina. Non-consumptive effects of predators alter the ability of invertebrates to modify sediment biogeochemistry and benthic microalgal abundance. (Pos. 19-F)

White, Caitlin L.; DeWitt, Theodore H.; Stecher, Hilmar A. Measuring nutrient flux in Pacific Coast salt marshes using fluctuating water-level chambers. (Pos. 18-D)

Zarnoch, Chester B.; Hoellein, Timothy J.; Mass, Allison; Law, Doris; Paramanand, Narendra; Mummini, Swathi; Israel, Gena; Zaharov, Vitaly; Yan, Hanen. Eastern oyster, Crassostrea virginica, feeding and absorption within a eutrophic estuary. (Pos. 19-B)

TUESDAY POSTER SESSIONS

SCI-O51 MANAGING MULTIPLE STRESSES TO COASTAL ECOSYSTEMS

Freeman, Angelina M.; Renfro, Alisha A.; Kemp, G. Paul. Accelerating the Myrtle Grove Delta Building Project. (Pos. 40-F)

Kim, Ji Yoon; Kim, Gu-Yeon; Park, Hee-Sun; Kim, Seong-Bo; Im, Ran Yeong; Joo, Gea-Jae. How does the monsoon influence topographic characteristics, soil factors, and plant distribution on a coastal dune in the Nakdong River Estuary? (Pos. 40-E)

Lele, Vrushali K.; deFur, Peter L. Cumulative risks to Eastern oysters, *Crassostrea virgincia* in the James River, VA. (Pos. 40-C)

Steyer, Gregory D.; Couvillion, Brady R.; Wang, Hongqing; Rybczyk, John; Trahan, Nadine; Beck, Holly; Holm, Guerry O.; Sleavin, William. Spatial modeling of relative elevation and soil organic carbon storage in coastal Louisiana. (Pos. 40-A)

SCI-O52 MANGROVE-DOMINATED ECOSYSTEMS: A BIOGEOGRAPHIC COMPARISON OF STRUCTURE AND FUNCTION

Renchen, Jeff; Stanford, Alice; Proffitt, Ed; **Devlin, Donna**. Genetic structure of the mangroves Rhizophora mangle and Laguncularia racemosa in Florida and the Caribbean. (Pos. 37-F)

Forde, Alexander J.; Gruner, Daniel S.; Parker, John D.; Feller, Ilka C. Top predators and productivity gradients affect herbivory and plant architecture in mangrove forests. (Pos. 45-B)

Naidoo, Gonasageran; Naidoo, Yougasphree. Oil pollution in mangroves. (Pos. 37-D)

Stroud, Lauren; Donnelly, Melinda; Walters, Linda. Potential predation by arthropods and crustaceans on red mangrove propagules in Mosquito Lagoon, Florida. (Pos. 37-E)

SCI-O53 MAPPING, MEASURING AND MODELING SALT MARSH SEDIMENTARY AND HYDRODYNAMIC PROCESSES

Alexander, Clark; Robinson, Mike; Venherm, Claudia; Pedersen, Jorn; Bartholdy, Jesper; Viso, Richard. Integrating new techniques for salt marsh research with traditional sedimentological studies: the Groves Creek example. (Pos. 3-D)

Callaway, John C.; Borgnis, Evyan L.; Turner, R. E.; Milan, Charles S. Sediment accretion and carbon sequestration in San Francisco Bay tidal wetlands. (Pos. 5-E)

Carle, Melissa V.; Sasser, Charles E.; Wang, Lei; Twilley, Robert. Characterizing spatial pattern in deltaic wetland vegetation using WorldView-2 multispectral imagery. (Pos. 5-A)

Chassereau, Jessica; Torres, Raymond; Bell, Joseph. A comparison of gps and lidar dems. (Pos. 4-B)

Hayes, David; Garrett, Al; Amft, Julie; Moore, Trent; Venherm, Claudia. Dye tracer experiment in a Georgia tidal marsh system. (Pos. 4-E)

Hladik, Christine M.; Alber, Merryl. Correcting LIDAR errors greatly improves Digital Elevation Models of salt marshes. (Pos. 4-A)

King, Rachel A.; Brown, Cheryl A.; Mochon Collura, TChris. Carbon and nitrogen accumulation rates in salt marshes in Oregon, USA. (Pos. 5-F)

Marsan, Yvonne M.; Leonard, Lynn A. Forcing factors and sediment deposition patterns in a southeastern North Carolina salt marsh. (Pos. 4-D)

Moore, Trent; Amft, Julie; Blanton, Jack; Robinson, Mike; Alexander, Clark. Effects of morphology on tidal distortion and energy dissipation in a tidal creek system. (Pos. 4-F)

O'Laughlin, Casey; van Proosdij, Danika. Intertidal energy and sedimentation in the Bay of Fundy, Nova Scotia, Canada. (Pos. 5-C)

Poirier, Emma; Van Proosdij, Danika; O'Laughlin, Casey. Sedimentary dynamics within a hypertidal salt marsh and tidal creek system. (Pos. 4-C)

Robinson, Michael H.; Alexander, Clark R.; Hladik, Christine M. Acquisition of integrated, field-based, subtidal and intertidal marshlands morphology and comparison to LiDAR data. (Pos. 3-C)

Venn, Cynthia; Culp, Brian M.; Brunskill, Jeffrey C.; Shepard, Michael K. A technique for monitoring salt marsh subhabitats: integration of Quickbird satellite imagery with GIS to map subzones in a Virginia salt marsh. (Pos. 5-B)

SCI-O69 PARASITE-HOST RELATIONSHIPS

McCullars, James E.; Modeste, Tracey; Curran, Mary C. The presence of the daggerblade grass shrimp *Palaemonetes pugio* and *Palaemonetes vulgaris* in Savannah, Georgia. (Pos. 54-A)

SCI-O76 RESPONSE OF COASTAL ECOSYSTEMS TO VARIATION IN FRESHWATER INFLOW

Bhatt, Gopal; Kumar, Mukesh; Duffy, Chris; Weller, Donald. Physics based approach to understand space and time dynamics of freshwater discharge to estuaries. (Pos. 53-C)

Doering, Peter H.; Chamberlain, Robert. Dry season inflows to the Caloosahatchee Estuary based on the distribution and abundance of zooplankton. (Pos. 43-B)

Kowalski, Joseph L.; DeYoe, Hudson R. The effects of freshwater discharge on the Lower Laguna Madre following landfall of Hurricane Alex, July 2010. (Pos. 43-C)

Lee, Jungwoo; Webb, Bret M. Tidal current characteristics with the diurnal tidal system in a shallow estuary. (Pos. 53-F)

Maticka, Samantha; Valle-Levinson, Arnoldo. Response of the James River estuary's longitudinal density gradient to river input. (Pos. 43-A)

McConnell, Robert; Woithe, Robert; Janicki, Anthony; Montgomery, Ralph. Refinements to Comprehensive Hydrobiological Monitoring Program after twelve years of monitoring for estuarine impacts. (Pos. 53-E)

Pegus, Courtney; Ogburn, Matthew B.; Hoskins, D. L. The missing link: do postlarval white shrimp *Litopenaeus setiferus* use pressure and salinity as cues for estuarine immigration? (Pos. 43-D)

Pulich, Warren; DeYoe, Hudson. Application of hydrodynamic modeling techniques to assess water quality effects on Lower Laguna Madre, Texas, seagrasses. (Pos. 43-F)

Savidge, William; Blanton, Jack; Brink, Jon. Minimal localized effects of stormwater runoff on oxygen dynamics on salt marsh platforms. (Pos. 53-A)

Thomas, Roger L.; Kreeger, Danielle A. Recruitment and growth of spat oysters (*Crassostrea virginica*) in San Antonio Bay, TX following prolonged disturbance events. (Pos. 43-E)

Wozniak, Jeffrey R.; Parker, Steven; Swannack, Todd M. The effects of exceptional drought conditions on estuarine inflow patterns and coastal marsh salinity in the Guadalupe/San Antonio Basin, Texas. (Pos. 53-B)

SCI-O78 RESTORATION ECOLOGY IN A SUSTAINABLE WORLD

Evans, N. Tay; Dukes, Wesley; Weinstock, Andrew; Ostrikis, Kate; Ford, Kathryn. Eelgrass (Zostera marina) restoration in Massachusetts Bay. (Pos. 17-F)

Lemieux, Ben; Van Proosdij, Danika; Lundholm, Jeremy; Bowron, Tony. The influence of drainage network and morphological features on the vegetation recovery pattern of a macro-tidal wetland restoration project. (Pos. 17-D)

Peterson, Gary W.; Baltz, Donald M. A comparison of nekton assemblages from natural and restored barrier island marshes in Terrebonne/Timbalier and Barataria basins in Louisiana. (Pos. 17-C)

Ransom, Eric; Ward, Tiffany; Ogburn, Matthew B.; Hoskins, D. L. Evaluation of the vertical structure of a variety of materials used to restore intertidal oyster reefs in Georgia. (Pos. 17-A)

Schwarting, Lindsay; Casas, Sandra; La Peyre, Jerome; La Peyre, Megan. Suitability of living oyster reef sites with respect to oyster mortality, growth, and condition: inter and intra-site variability in oyster population viability. (Pos. 17-E)

Willis, Jonathan M.; Dupuis, Michael J.; Pickens, Christine J.; Hester, Mark W. Determining the toxic, beneficial and no effect endpoints of a commercially-available soil amendment for coastal plant restoration applications. (Pos. 17-B)

SCI-O81 SEAGRASS AND SAV REMOTE SENSING AND MAPPING: CURRENT AND EMERGING TECHNIQUES

Carlson, Paul R.; Yarbro, Laura A.; Julian, Paul. A time series analysis of seagrass cover in the Suwannee River Estuary. (Pos. 14-A)

Hall, Lauren M.; Steward, Joel S. Seagrass mapping IS management of the Indian River Lagoon, FL. (Pos. 14-B)

Norton, Ashley; Borrelli, Mark; Trembanis, Art; Brown, Taylor. Mapping and quantifying morphological parameters of eelgrass (Zostera marina) beds in eastern Cape Cod Bay, MA using an interferometric sonar system. (Pos. 14-C)

Virnstein, Robert; **Rajasekhar, Samuel**. All maps have errors: how to illustrate this map uncertainty. (Pos. 14-D)

Young, David R.; Clinton, Patrick J.; Specht, David T.; Mochon Collura, T Chris. Expansion of the invasive dwarf eelgrass, Zostera japonica, in Yaquina Bay, Oregon. (Pos. 14-E)

SCI-O88 TRENDS, PATTERNS AND SHIFTS IN TIME-SERIES OF COASTAL ECOLOGICAL DATA

Browne, James P. Changing edges: how they can inform us about the causes of salt marsh loss. (Pos. 36-E)

Johnson, Jacqueline M.; Buchanan, Claire. Validating the Chesapeake Bay Phytoplankton Index of Biotic Integrity with recent data. (Pos. 36-D)

Mattila, Johanna; Mustamäki, Noora. Changes in coastal fish communities in the northern Baltic Sea - community level responses to fishing pressure and eutrophication. (Pos. 36-A)

Sperling, Casey L.; Boynton, Walter R.; Jasinski, Dave; Bailey, Eva M.; Ceballos, Maria C. Community metabolism in Chesapeake Bay: historical and contemporary measurements. (Pos. 36-B)

SCI-201 BENTHIC ECOLOGY

Standorf, Kali; **Bolivar, Sara**; Walters, Linda; Turner, Teresa; Hoffman, Eric. Preserving a keystone species: analyzing the genetic diversity of the long-spined sea urchin *Diadema antillarum* after a disease-induced bottleneck event. (Pos. 57-A)

Estes, Maury G.; Carmichael, Ruth H.; Mills, Angela J. Molts reveal life-history patterns of American horseshoe crab populations in fringe habitats. (Pos. 57-B)

Hanke, Marc; Posey, Martin; Alphin, Troy. Patch dynamics and the role of edge and interior for southeastern North Carolina oyster reef communities. (Pos. 58-D)

Larkin, Patrick; Schonacher, Tabitha; Barrett, Michael; Paturzzio, Mindy. Development and characterization of microsatellite markers for the seagrass Halodule wrightii. (Pos. 49-F)

Leathem, Sean P.; Allen, Kerri A.; Leonard, Lynn A. Physical effects of reef rugosity on three dimensional hydrodynamics and sedimentation over transplanted oyster reefs in a shallow tidal creek system. (Pos. 58-C)

Miller-Way, Tina. The effects of oyster reefs on annual patterns of benthic metabolism and nutrient flux in a Gulf of Mexico estuary. (Pos. 57-D)

Murphy, Anna E.; Anderson, Iris C.; Luckenbach, Mark L.; Stanhope, Jennifer. Impacts of Mercenaria mercenaria aquaculture on sediment and water quality: the role of macroalgae. (Pos. 57-E)

Neurohr, Julie M.; Tolley, Greg. Lethal and sublethal responses of *Eurypanopeus depressus* to the water accommodated fraction of number 2 fuel oil. (Pos. 58-B)

Ozbay, Gulnihal; Fay, Johnna. Relationship between water quality and total bacteria and Vibrionaceae concentrations in Eastern oysters (Crassostrea virginica). (Pos. 57-F)

Quintero Alvarez, Jesús M.; Soto Jiménez, Martín F.; Amezcua, Felipe. Trophic ecology of the fish community in a subtropical coastal lagoon (SE, Gulf of California) determined by stable isotopes. (Pos. 58-A)

Smith, Dana K.; Proffitt, Edward. Influences on recruitment of Crassotrea virginica in the Indian River Lagoon. (Pos. 58-E)

Thompson, Christine M.; York, Richard; Gallager, Scott M. Abundance and transport of Mercenaria mercenaria larvae in Waquoit Bay, MA in 2009. (Pos. 57-C)

Woodworth, Chelsea A.; Heller, Ian S.; Young, David R.; DeWitt, Theodore H. Nekton species distribution and abundance within and among four Oregon estuaries. (Pos. 56-C)

SCI-205 ECOSYSTEM STRESSORS, RESPONSES AND TRENDS

Botton, Mark L.; Malin, Mia; Esposito, Christopher; Cusumano, Lucas; Hamilton, Mary. Sublethal effects of pollution on horseshoe crab embryos: responses to oxidative stress caused by exposure to copper and cadmium. (Pos. 34-B)

deFur, Peter L.; Pinsker, Nathan I.; Zamora-Duran, Maria A.; Williams, Laura E.; Isaac, Margaret L. Follow up on the effects of the BP oil spill on the Gulf of Mexico ecosystem. (Pos. 34-E)

McFarland, Katie; Devine, Jeff; Donaghy, Ludovic; Volety, Aswani. Effects of lowered salinity on the survival and clearance rate of the green mussel, Perna viridis, and the eastern oyster, Crassostrea virginica. (Pos. 34-C)

Park, Gyung Soo; Yoon, Seong Jin; Park, Kwang Seok; Yoon, Seok Min; Kim, Kwang Seob; Lee, Mujun. Estimation of benthic impacts of marine pollutants using two types of microcosms. (Pos. 34-D)

SCI-207 UPPER TROPHIC LEVEL ECOLOGY AND FISHERIES

Brandt, Stephen; Sellinger, Cynthia; Kolesar, Sarah; Roman, Michael; Pierson, Jamie; Boicourt, William. How does hypoxia affect habitat quality of fishes? (Pos. 45-A)

Brenner, Ryan; Chigbu, Paulinus. Growth, mortality, and recruitment of Blue Crab (Callinectes sapidus) in relation to environmental factors in the Maryland Coastal Lagoons. (Pos. 44-C)

Flaherty, Kerry E.; Switzer, Theodore S.; Winner, Brent L.; Keenan, Sean F. Habitat use of gray snapper (Lutjanus griseus) in several Florida estuaries. (Pos. 44-F)

Gloeckler, Kristen M.; Miller, Jessica; Black, Bryan. Barium peaks and environmental variability recorded in black (Sebastes melanops) and canary (Sebastes pinniger) rockfish otoliths. (Pos. 45-E)

Liehr, Gladys; Browder, Joan; Jackson, Tom. Length-weight relationship and condition factor of epifaunal fish species along Biscayne Bay shoreline, Florida. (Pos. 44-A)

Marlow, Abby; Guillen, George J. Injury rates of Diamondback terrapin (Malaclemys terrapin) in Galveston Bay, TX. (Pos. 45-F)

Nims, Megan K.; Walther, Benjamin D. Use of otolith microchemistry to establish freshwater residency patterns of southern flounder (Paralichthys lethostigma) on the Gulf coast of Texas. (Pos. 44-B)

Romo-Curiel, Alfonsina E.; Herzka, Sharon Z.; Sepulveda, Chugey; Aalbers, Scott. Evaluation of the population structure of the white seabass (Atractoscion nobilis) along the western coast of North America based on otolith carbonate stable isotope analysis. (Pos. 44-D)

Switzer, Theodore S.; Matheson, Richard E.; McMichael, Robert H. Dynamics of neritic ichthyofaunal assemblages in the eastern Gulf of Mexico: implications for susceptibility to broad-scale environmental perturbations. (Pos. 44-E)

SCI-213 MACROALGAE IN A CHANGING WORLD: DETECTING AND UNDERSTANDING RESPONSES

Ochoa Izaguirre, Maria J.; Soto Jiménez, Martin F.; Voltolina, Domenico. Spatial and temporal variation in macroalgae δ15N values from a highly impacted coastal lagoon in the Gulf of California. (Pos. 37-B)

Schneider, Sabrina; McBride, Joshua; Blair, Stephen; Avila, Christian; Anderson, William; Thyberg, Travis; Lirman, Diego; Drury, Crawford; Collado-Vides, Ligia. Macroalgal blooms in a heavily urbanized area of South Florida. (Pos. 37-C)

Solomon, Joshua; Odom, Rachel; Walters, Linda. Preventing introduction: outlining safe methods for killing aquarium *Chaetomorpha* prior to disposal. (Pos. 37-A)

SCI-219 ECOLOGY OF INVASIVE AND NATIVE POPULATIONS

Emery, Hollie E.; Fulweiler, Robinson W. The effects of Phragmites invasion, tidal restriction and marsh restoration on the greenhouse gas emissions in a New England salt marsh system. (Pos. 55-C)

Goupil, Nathalie; Donaghy, Ludovic; Volety, Aswani K. Effects of salinity on the hemocytes of the green mussel, Perna viridis, from Florida. (Pos. 56-D)

Ortiz, Antonio C.; Walters, Linda J.; Hoffman, Eric A.; Calestani, Cristina. Nutritional stress induces sex reversal in Mytella charruana, an introduced marine mussel in the southeastern United States. (Pos. 56-A)

Sorgini, Crystal A. Incorporating novel genetic and molecular analysis into Spartina spp., integrated weed eradication management. (Pos. 56-F)

Spinuzzi, Samantha L.; Schneider, Kimberly; Walters, Linda; Nash, Ethan; Yuan, Wei; Hoffman, Eric. Tracking the distribution of non-native marine species, *Mytella charruana*, *Perna viridis*, and *Megabalanus coccopoma*, along the southeastern United States coastline. (Pos. 56-E)

Toothman, Byron R. Biogeochemical effects of Gracilaria vermiculophylla invasion within a tidal estuarine lagoon. (Pos. 55-D)

SCI-222 TECHNOLOGY AND METHODS ADVANCEMENT AND APPLICATION

Medeiros, Kelly C. Trial of new pCO2 sensor in multiparameter water quality monitoring associated with Zostera marina beds in Little Pleasant Bay, Cape Cod National Seashore. (Pos. 19-C)

Wild-Allen, Karen; Rayner, Mark; Malan, Jacques; Hughes, David; De Boer, Phil; Chalk, Curt; Allen, Simon. A near-real-time coastal mooring to support water quality modelling and resource management. (Pos. 19-D)

SCI-004 ASSESSING ECOLOGICAL INTEGRITY USING ECOSYSTEM-BASED APPROACHES

Padeletti, Angela T.; Kreeger, Danielle; Maxwell-Doyle, Martha; Deller Jacobs, Amy; Quirk, Tracy; Velinsky, David; Belton, Thomas; Frizzera, Dorina. Mid-Atlantic Coastal Wetland Assessment: monitoring tidal wetlands through rapid and intensive methods to support better management strategies. (Pos. 35-C)

Thomas, Jane; Dennison, Bill; Carruthers, Tim. Lessons learned from the Natural Resource Condition Assessment program. (Pos. 35-B)

Wicks, E. Caroline; Kelsey, Heath; Schwartz, Laurie; Stack, Bill; Dennison, William; Powell, Sara. Assessing the ecological and human health status of Baltimore's Inner Harbor. (Pos. 35-A)

SCI-008 BRIDGING THE GAP: COLLABORATIONS AMONG RESEARCH, EDUCATION AND OUTREACH PROFESSIONALS

Goodale, Timothy. Marine science instruction through student centered service learning projects. (Pos. 48-F)

Marshall, Frank. Research projects of Cetacean Logic Foundation are examples of modeling and analysis tools for linking watershed freshwater and nutrient loads and estuarine and coastal hydrology, salinity, and water quality for the evaluation of Florida coastal waters. (Pos. 48-B)

Hadley, Nancy; **Shervette, Virginia**. Developing volunteer-friendly nekton sampling methods for the assessment of ecological function of restored oyster reefs. (Pos. 48-E)

Smee, Delbert L.; McCollough, Cherie. An informal program changes science perceptions. (Pos. 48-A)

SCI-030 EXPLORING HUMAN DIMENSIONS AND DECISION-MAKING IN COASTAL AND ESTUARINE MANAGEMENT

Barraza, Eleonor; Francis, Jeffrey M.; Gibeaut, James C.; Yoskowitz, David W. Ecosystem services on a sandy barrier island: a geographic representation. (Pos. 33-A)

Bickford, Wes; Frizzera, Dorina. Investigating living shorelines as a form of shoreline protection in New Jersey. (Pos. 33-E)

Harwell, Matthew C. USEPA - Gulf Ecology Division is "Adapting to Change". (Pos. 33-F)

Needelman, Brian A. Realism, implementation, climate change, and coastal wetland ecosystem services. (Pos. 33-B)

SCI-034 HUMAN IMPACTS ON THE HEALTH AND SURVIVAL OF TIDAL ECOSYSTEMS

Cannon, Amy; Ozbay, Gulnihal. Monitoring aquatic health in wastewater discharge point source in Delaware Inland Bays Tidal Canal: a case study on heavy metal contaminants. (Pos. 34-F)

Kerner, Sara M.; Sparks, Eric L.; Watson, Kellen P.; Cebrian, Just. Gulf Coast salt marshes: does eutrophication = more grazing? (Pos. 33-C)

Plunket, Jennifer S.; Smith, Erik M.; Willman, Amy. Storm water detention ponds in the landscape of coastal South Carolina. (Pos. 34-A)

Weaver, Carolyn A.; Armitage, Anna R.; Parnell, Allison. Nutrient effects on *Spartina alterniflora* and *Avicennia germinans*: implications for competition in a marsh-mangrove ecosystem. (Pos. 33-D)

SCI-041 INTEGRATING NATURAL AND BUILT ENVIRONMENTS IN COASTAL CLIMATE CHANGE ADAPTATION

Loke, Lynette H. L.; Bouma, Tjeerd J.; Todd, Peter A. Enhancing biodiversity on coastal defenses though engineering topographic heterogeneity. (Pos. 35-F)

Tibbetts, Jeremy; Van Proosdij, Danika; Forbes, Don; Giles, Philip. A conceptual model for determining coastal vulnerability in a macrotidal environment. (Pos. 35-E)

SCI-043 INTEGRATING UNDERGRADUATE RESEARCH EXPERIENCES IN COASTAL AND ESTUARINE RESEARCH

Burge, Erin J.; Burnett, Nicholas P. *MarSci*: a journal publishing undergraduate research in the marine and aquatic sciences. (Pos. 47-B)

Devlin, Colleen; Wicks, Katlyn; Sacks, Paul; Bowdon, Melody; Walters, Linda. Service-learning in undergraduate and graduate marine biology courses: strategies for enhancing both learning and community engagement. (Pos. 47-D)

Loh, Ai Ning; Parsons, Michael L.; Rumbold, Darren G.; Savarese, Michael; Volety, Aswani K. Coastal watershed research for undergraduate students at Florida Gulf Coast University. (Pos. 47-A)

Venn, Cynthia; Hranitz, John M.; Shepard, Michael K.; Brunskill, Jeffrey C.; Culp, Brian M. A model for integrating undergraduate research into course content across disciplines: salt marsh mapping as a focus for courses in Remote Sensing, GIS, Field Zoology, Marine Ecology and Wetlands Ecology. (Pos. 47-C)

SCI-045 ISSUES AND DIRECTIONS OF THE 2010 GULF OF MEXICO OIL SPILL

Exline, Gracie; Welch, Christina; Vestal, Alexandra; Pelot, Robert; Ederington-Hagy, Melissa; Hileman, Fredrick; Snyder, Richard. Coquina *Donax variabilis* as indicators of coastal PAH pollution along sandy beach shorelines. (Pos. 46-C)

Kastler, Jessie; Snyder, Chris; Collier, Teresa; Fisher, Robbie. Responsive oil spill outreach based in science. (Pos. 46-F)

Malizzi, Lawrence D.; Trumbull, Lyle. The Natural Resource Advisor Program: an innovative approach to protect natural and cultural resources during the Deepwater Horizon oil spill response. (Pos. 46-A)

Ross, Jennifer L.; Webb, Bret M.; Dzwonkowski, Brian; Park, Keyong; Valle-Levinson, Arnoldo. Lagrangian observations over a region influenced by the Mobile Bay outflow plume. (Pos. 45-C)

Scheffel, Whitney A.; Heck, Kenneth L.; Cebrian, Just; Moody, Ryan M. Has the Deepwater Horizon oil spill had a negative impact on the seagrass communities and associated juvenile finfish and shellfish in the North Central Gulf of Mexico? (Pos. 46-D)

Snyder, Richard A.; Ederington-Hagy, Melissa; Hileman, Fredrick; Moss, Joseph; Amick, Lauren; Carruth, Rebecca; Gaona, Marie; Marks, Joel. PAH concentrations across the Florida Panhandle Bight Shelf after the BP MC 252 well failure. (Pos. 46-E)

Tiling-Range, Ginger; Smith, Thomas J.; Nelson, Paul R.; Morgan, Karen. An assessment of "pre-oil" baseline condition of Florida coastal habitats with low-level, oblique aerial photographs. (Pos. 46-B)

Voss, Joshua D.; Edge, Sara E. Oil, dispersant, and disease: impacts and interaction on corals in the Florida Keys. (Pos. 45-D)

SCI-O47 LINKAGES OF WATERSHED-ESTUARY PROCESSES: MANAGEMENT AND CHANGE

Chambers, Randy; Boyer, Joseph; Childers, Dan; Fourqurean, James; Rivera-Monroy, Victor; Russell, Timothy. Variation in nutrient coupling between wetlands and open water of two Everglades river systems. (Pos. 30-F)

Chen, Momo; Matos, Alix; John, Chandy V.; Leonard, Paul M. The Tar - Pamlico Hydrodynamic and Water Quality Model: an assessment tool for freshwater inflow, salinity-mediated habitat, and water quality. (Pos. 32-A)

Kelly, Stephen P.; Rudnick, David T.; Madden, Christopher J.; Frankovich, Thomas A.; McGee-Absten, Vicki. Comparative study of saline lake dynamics and restoration responses in the Everglades-Florida Bay ecotone. (Pos. 30-D)

Lane, Robert R.; Huang, Haosheng. The Bayou Boeuf Basin Water Quality Improvement Project. (Pos. 30-A)

Larson, James H.; Hoffman, Joel; Schaeffer, Jeff; Richardson, William B.; Trebitz, Anett; Sierszen, Michael; Morrice, John; Seelbach, Paul. The future of Great Lakes rivermouth research. (Pos. 32-B)

McDonald, Amanda A.; Madden, Christopher J.; Marshall, Frank E. Projected effect of Everglades restoration on Florida Bay seagrass communities. (Pos. 30-B)

Ransibrahmanakul, Varis; Pirhalla, Doug; Sheridan, Scott; Lee, Cameron. Evaluating relationships between weather patterns and coastal water quality in South Florida using synoptic climatological approaches. (Pos. 30-E)

SCI-O58 MODELS AND APPLICATIONS OF CHEMICAL MARKERS IN BIOGENIC MINERALS

Barnett, Beverly K.; Patterson, William F. Assumptions, methods of extracting and application of juvenile red snapper otolith chemical signatures in the northern Gulf of Mexico. (Pos. 60-C)

Cathey, Andrew M.; Kimmel, David G. The elemental chemistry of natural waters within a well-mixed estuarine system during periods of hard clam Mercenaria mercenaria larval dispersal. (Pos. 61-E)

Loewen, Tracey; Babaluk, John; Mochnacz, Neil; Reist, James; Halden, Norman. Characterizing geochemical otolith signatures to discriminate between Dolly Varden populations (Salvelinus malma) from the Yukon Territory and Northwest Territory, Canada. (Pos. 61-D)

Miller, Jessica; DiMaria, Ruth. Factors influencing otolith elemental incorporation: implications for field applications. (Pos. 61-C)

Mohan, John; Walther, Benjamin; Thomas, Peter. Investigating relationships between hypoxia exposure and otolith chemistry in experimental and natural conditions. (Pos. 61-F)

Rolls, Holly J.; Jones, David L.; McIvor, Carole C.; Ley, Janet A.; Peebles, Ernst B. Resolving the relative importance of fish nursery habitats using otolith elemental fingerprints. (Pos. 61-A)

Walther, Benjamin D.; Rowley, Jillian. Stable isotope ratios in oyster shell carbonate as proxies of droughts and floods in subtropical estuaries. (Pos. 61-B)

Wetzel, Lisa A.; Larsen, Kimberly A.; Zimmerman, Christian E.; Reader, Jeff; Kennedy, Brian P. The importance of using multiple methods to analyze biogenic minerals in fish otoliths for unraveling life history complexities. (Pos. 60-D)

SCI-O64 NITROGEN DYNAMICS IN LOW-OXYGEN COASTAL WATERS AND ESTUARIES

Burnett, Paul; Orcutt, Karen; Gundersen, Kjell; Mojzis, Allison; Redalje, Don. The nitrogen budget in coastal waters of the Northern Gulf of Mexico is influenced by seasonal hypoxic events. (Pos. 50-F)

Genthner, Fred J.; Marcovich, Dragoslav T.; Lehrter, John C. Measuring potential denitrification enzyme activity rates using the membrane inlet mass spectrometer. (Pos. 50-E)

SCI-O66 NUMERICAL MODELING OF ESTUARINE AND COASTAL SYSTEMS

Anwar, Nawrin; Robinson, Clare. Nutrient transport and transformation in a tidally influenced subterranean estuary. (Pos. 60-A)

Bever, Aaron J.; Friedrichs, Marjorie A.; Friedrichs, Carl T.; Scully, Malcolm E. Is there any air down there? Using multiple 3D numerical models to investigate hypoxic volumes within the Chesapeake Bay, USA. (Pos. 60-F)

Branoff, Benjamin; Twilley, Robert R.; Rivera-Monroy, Victor H.; Bevington, Azure; Castañeda, Edward. Nitrogen transformation in a prograding, Louisiana delta: a modeling approach. (Pos. 60-B)

Carson, Fulton C.; McAlpin, Tate; Letter, Joe. The new Morganza to the Gulf of Mexico levee system. (Pos. 59-C)

Jang, Dongmin; Hwang, Jin Hwan; Park, Yong Gyu. A numerical modeling study on the effects of geomorphology and river discharge on the salt wedge of the Seom-jin River, Korea. (Pos. 59-E)

McWilliams, Samuel G.; Walters, Linda; Jachec, Steven. Application of SUNTANS to optimize restoration efforts of Crassostrea virginica within Canaveral National Seashore, Florida. (Pos. 60-E)

Testa, Jeremy M.; Kemp, William M. Production and transport of organic matter to fuel hypoxia in Chesapeake Bay: a modeling analysis. (Pos. 59-A)

Vu, Huy Cong; Hwang, Jin Hwan; Jang, Dongmin. Influence of sea level rise on salt intrusion and mixing in Mekong river estuary. (Pos. 59-F)

Zajac, Zuzanna; Stith, Brad; Langtimm, Catherine; Swain, Eric; Lohmann, Melinda; Bowling, Andrea. Global sensitivity and uncertainty analysis of habitat suitability index models for submerged aquatic vegetation in southwest Everglades National Park. (Pos. 59-D)

SCI-O77 RESPONSE OF ESTUARINE SYSTEMS TO REDUCTIONS IN NUTRIENT LOADING

Romano, William D. Potomac River response to biological nutrient reduction at Blue Plains wastewater treatment plant. (Pos. 50-A)

SCI-O79 SCIENCE FOR COMMUNITY LEADERS - A SPECIAL POSTER SESSION

Boynton, Walter R.; Testa, Jeremy; Kemp, Michael; Cornwell, Jeffery; Owens, Michael; Palinkas, Cindy; Bailey, Eva. This estuary needs a pollution diet: how much is enough for restoration? (Pos. 20-C)

Haydt, Paul; **Brockmeyer, Ronald**; Beal, Jeff; Smith, Kent; Bryan, Dana; Shirley, Michael; Macfarlan, Daphne; Adimey, Nicole; Birch, Anne; Stodola, Paul. Northeast Florida Coastal Habitat Restoration Initiative. (Pos. 22-F)

Caffery, Suzie; Escue, Diahn; Walters, Linda. Environmental stewardship of the next generation through literacy and action: creating conservation-themed storybooks and meaningful engagement for pre-schoolers. (Pos. 10-E)

Carswell, Ben L.; Arthur, Courtney D. Marine debris is everyone's problem: the NOAA Marine Debris Program is working to find solutions. (Pos. 10-C)

Christian, Robert R. Coastal wetlands and sea-level rise - it isn't a bathtub! (Pos. 21-B)

Cross, Lindsay M. Tsunamis unlikely to impact coast of Florida. (Pos. 9-F)

Donnelly, Melinda; Walters, Linda; Greening, William; Howarter, Stanley; Brockmeyer, Ronald E. Mosquito impoundment restoration in Northern Mosquito Lagoon. (Pos. 20-E)

Donnelly, Melinda; Yuan, Wei; Walters, Linda; Hoffman, Eric. Non-native species on Florida's east coast: should we be worried? (Pos. 20-F)

Fertig, Benjamin; Kennish, Michael J.; Reding, Melanie. Ecological and societal impacts of New Jersey legislation regulating fertilizer nitrogen inputs to Barnegat Bay - Little Egg Harbor (New Jersey). (Pos. 21-F)

Argow, Brittina A.; **Ferwerda, Carolin J.** Accessing and understanding publicly available LiDAR data to prepare for coastal wetland evolution in response to rising sea level: GIS, geomorphological analyses, and coastal adaptation to change. (Pos. 22-E)

Fourqurean, James. Predicting hurricanes of the future? (Pos. 21-A)

Frost, Jessica R.; Jacoby, Charles A. Jellyfish and chips. The next "It's what's for dinner" in Florida? (Pos. 10-F)

Gallagher, John L.; Seliskar, Denise M. Can salt marsh plants help your community adapt to population growth and climate change? (Pos. 21-D)

Greening, Holly. Driving the bus: community leaders collaborate to define and meet water quality goals. (Pos. 20-D)

Greening, William P.; Brockmeyer, Ronald; Beal, Jeff. Mosquito breeding area source reduction techniques employed in restored mosquito impoundments. (Pos. 9-B)

Hopkinson, Charles; Havens, Karl. Gulf of Mexico oil spills: is Florida's east coast vulnerable? (Pos. 11-A)

Magnien, Robert; Puglise, Kimberly; Boyer, Joseph N.; Nuttle, William; Ortner, Peter B.; Mitchell, Carol; Kelble, Chris; Loomis, David; Bergh, Chris; Lorenz, Jerry; Hunt, John; Fletcher, Pamela. Herding cats: is it possible to reach agreement on goals for South Florida's coastal ecosystems? (Pos. 9-C)

Manis, Jennifer E.; Walters, Linda; Donnelly, Melinda; Sacks, Paul; Stiner, John; Schwadron, Margo. Saving history: restoring Turtle Mound with living shorelines. (Pos. 9-E)

Switzer, Theodore; MacDonald, Tim; **Matheson, Richard**; McMichael, Robert. Addressing fisheries-independent data needs for red snapper (*Lutjanus campechanus*) and other reef fishes: new surveys off the Florida coast. (Pos. 9-D)

Menning, Damian; Garey, James. Biogeochemistry of a subterranean estuary in West Central Florida. (Pos. 21-C)

Nestlerode, Janet A.; Russell, Marc J.; Dantin, Darrin; Harvey, James; Osland, Michael; Yoskowitz, David W.; Alvarez, Federico. Mapping Ecosystem Services in the Tampa, FL Watershed. (Pos. 9-A)

Pahl, James W. River diversions as a component of the State of Louisiana's strategy to achieve a sustainable coastal zone. (Pos. 11-E)

Raynie, Richard C.; **Pahl, James W.**; Villarrubia, Charles. Understanding the technical issues associated with the construction and operation of river diversions in the State of Louisiana. (Pos. 11-F)

Parkinson, Randall W.; Fergus, John. Assessing municipal vulnerability to predicted sea level rise: City of Satellite Beach, Florida, USA. (Pos. 10-B)

Plantier Santos, Carlota; Yoskowitz, David W. GecoServ: a window to the value of our natural environment. (Pos. 20-B)

Sanger, Denise M.; Holland, A. Fred. Application of tidal creek research in management decisions. (Pos. 21-E)

Seavey, Jennifer R.; Cameron Devitt, Susan E. Between the river and the deep blue sea: how freshwater limitations aggravates sea level rise impacts. (Pos. 10-A)

Turner, Beth; Brown, Chris; Fisher, Kathleen; Green, David; Scheurer, David; Valette-Silver, Nathalie. NOAA ecological forecasts: emerging tools for coastal resource managers. (Pos. 20-A)

Virnstein, Robert; Rajasekhar, Samuel. What a map does not tell you, and what to ask. (Pos. 22-B)

Walters, Linda J.; Sacks, Paul; Birch, Anne; Palmer, Jody. Improving the Indian River Lagoon through community-based oyster reef restoration. (Pos. 22-A)

Williams, Susan L. Stemming the tide of invasive species. (Pos. 10-D)

SCI-O92 LINKING HYDROLOGICAL CHANGES AND COASTAL ECOSYSTEM DYNAMICS

Hughes, Andrea L.; Wilson, Alicia M.; Morris, James T. Hydrologic variability in a salt marsh: assessing the links between drought and acute marsh dieback. (Pos. 50-B)

SCI-2O2 BIOGEOCHEMISTRY FROM WATERSHEDS TO COASTAL SYSTEMS

Allen, Jenny R.; Baldwin, Andrew H.; Cornwell, Jeffrey C. Biogeochemical effects of salinity intrusion on microbially mediated processes in tidal freshwater sediment. (Pos. 51-F)

Butler, Tom; Marino, Roxanne; Howarth, Robert. Sources of atmospheric nitrogen to the Upper Susquehanna River/ Chesapeake Bay watershed with special reference to ammonia. (Pos. 51-C)

WEDNESDAY POSTER SESSIONS

Cho, Jin Hyung; Jeong, Kap Sik; Lee, Jun Ho; Lee, Seong Yong; Yoo, Lee Sun; Kang, Jeong Won; Woo, han Jun; Kim, Seong Ryul; Yoo, Hai Soo. Fluxes of nutrients in sedimentary pore water: evidence of phosphorite formation in the South Korea Plateau, East Sea. (Pos. 51-B)

Duernberger, Kimberley; Lisa, Jessica; Carini, Steve; Tobias, Craig; Song, Bongkeun. Comparison of denitrification and anammox along vertical sediment depths in the Cape Fear River Estuary. (Pos. 50-D)

Herbert, Ellen R.; Marton, John M.; Craft, Christopher B. Patterns of sulfate reduction and inorganic sulfur speciation in tidal freshwater forest soils experiencing saltwater intrusion. (Pos. 50-C)

Medina Calderon, Jairo H.; Moreno Moreno, Andres N. Quantification of organic matter and physical-chemical characterization of mangrove soil at Hooker Bay, San Andres Island - Colombia. (Pos. 51-A)

Terrell, Julia B. Assessment of eutrophication parameters spatially throughout Choctawhatchee Bay, located in the Panhandle of Florida. (Pos. 51-D)

Yarrington, Charles. Teasing apart the relationship between the intertidal mud snail, Ilyanassa obsoleta, and bloom-forming macroalgae. (Pos. 51-E)

SCI-220 SEAGRASS ECOLOGY

Bulthuis, Douglas A.; Bohlmann, Heath; Burnett, Nicole M.; Richardson, Monte; Shull, Suzanne. Seasonal growth and expansion of native and non-native eelgrasses on an intertidal flat in the Pacific Northwest. (Pos. 12-E)

Byron, Dorothy A.; Heck, Kenneth; Kenworthy, W. Judson. Restoring propeller damage in seagrass meadows of the Northern Gulf Coast: do bird roosts as passive fertilizer delivery systems work? (Pos. 13-F)

Celebi, Billur; Zimmerman, Richard C.; Hill, Victoria J. The impacts of increasing dissolved CO_2 concentration and flow on carbon concentrating mechanism in eelgrass *Zostera marina* L. (Pos. 12-F)

DeYoe, Hudson R.; Kowalski, Joseph L.; Krull, Christian P.; Allison, Terry C. Seasonal production and biomass of the seagrass Syringodium filiforme Kützing in a subtropical Texas lagoon. (Pos. 13-A)

Griffin, Nina E.; Durako, Michael J. The effect of hyposalinity on the physiology and survival of Halophila johnsonii Eiseman. (Pos. 12-A)

Loucks, Kyle; Waddell, David; Ross, Cliff. Localization and dynamics of reactive oxygen species production in diseased seagrasses. (Pos. 12-B)

Martin, Daniel L.; Wyllie-Echeverria, Sandy; Gaydos, Joe C.; Sullivan, Brooke; Boone, Emily; Anne, Boettcher. Labyrinthula pathogenicity and seagrass susceptibility to infection: a multipronged approach. (Pos. 13-C)

Olesen, Birgit; Krause-Jensen, Dorte; Marbà, Nuria; Christensen, Peter B. Biomass and production of sub-arctic eelgrass (Zostera marina) meadows in Greenland. (Pos. 13-D)

Swerida, Rebecca M.; Koch, Evamaria W.; Sanford, Lawrence P. Interactions between sediment, hydrodynamics and submersed aquatic vegetation in the Chesapeake Bay. (Pos. 12-D)

Trevathan, Stacey M.; Kahn, Amanda; Ross, Cliff. Short term impacts of elevated salinity and infection on the physiology and biochemistry of the seagrass *Thalassia testudinum.* (Pos. 12-C)

SCI-224 RESTORATION OF MARSHES, SHORELINES AND ESTUARIES

Bernhard, Anne; Marshall, David; Yiannos, Lazaros. Increased variability of microbial communities in restored salt marshes nearly 30 years after tidal flow restoration. (Pos. 16-C)

Blomberg, Brittany N.; Pollack, Jennifer B.; Montagna, Paul A. Using reclaimed oyster shell to restore subtidal reef habitat in South Texas. (Pos. 16-D)

Greiner, Jill T.; McGlathery, Karen J. Assessing the importance of seagrass habitat restoration to carbon sequestration in the shallow coastal zone. (Pos. 16-B)

Lundberg, Dorothea J.; Needelman, Brian A.; Leisnham, Paul T. Hydrology of restored Atlantic Coast and Chesapeake Bay grid-ditched marshes. (Pos. 16-F)

Sempier, Stephen H.; Goecker, Meg; Havens, Karl; Stickney, Robert; Swann, LaDon; Wilson, Charles. Gulf of Mexico Hydrological Restoration Identification and Prioritization Project. (Pos. 16-A)

Singh, Diana A.; Carr, Lindsey A.; Boyer, Katharyn E. Assessing interactive effects of eelgrass and oyster restoration on invertebrate community establishment. (Pos. 16-E)

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SPECIAL MEETINGS AND SOCIAL FUNCTIONS

SUNDAY, 6 NOVEMBER 2011

CERF SUSTAINING MEMBERS RECEPTION WITH THE SCIENTIFIC AWARDEES AND KEYNOTE SPEAKER

By invitation

Date and Time: Sunday, 6 November, 4:00 – 5:30 pm
Location: OC - 2nd Floor Foyer

CERF invites our sustaining members to attend a special reception to thank you for your support of the Federation, congratulate our 2011 scientific awardees, and speak with the keynote speaker, Dr. Robert Costanza.

STUDENT ORIENTATION MEETING "CRASH COURSE IN CERFING"

Date and Time: Sunday, 6 November, 4:30 – 5:30 pm
Location: OC - Room 202 AB

New to CERF? Student newcomers and student veterans of CERF meetings are invited to attend this orientation meeting hosted by Amanda Kahn and Leanna Heffner. This is your time to meet and have coffee with other CERF student members and conference attendees, learn to navigate events and get the most out of your CERF conference experience.

KEYNOTE ADDRESS AND CERF SCIENTIFIC AWARDS

Date and Time: Sunday, 6 November, 6:00 – 7:30 pm
Location: OC - Ballroom

Plan to attend to congratulate the winners of the 2011 CERF scientific awards and hear keynote speaker Bob Costanza speak about Solutions for Sustainable Prosperity of Humans and the Rest of Nature in the Coastal Zone.

PRESIDENTS' WELCOME RECEPTION

Sponsored by YSI Incorporated

Date and Time: Sunday, 6 November, 8:00 - 10:00 pm
Location: Hilton – Coquina Ballroom

On behalf of the Federation Presidents, we invite you to the Hilton to greet old friends and new at this reception. The CERF conference begins 40 years – to the day – since the first ERF conference. Celebrate the opening of the 21st biennial conference of the Coastal and Estuarine Research Federation and 40 years of C/ERF's accomplishments of the past and look forward with anticipation to the future. Plan to ring in CERF's 40th year with the people who share your enthusiasm for coastal and estuarine ecosystems! All attendees at Sunday's Opening Reception will receive a coupon redeemable at the bar for a Seabreeze, the Hilton's signature drink, or a soft drink, whichever is preferred.

MONDAY, 7 NOVEMBER 2011

CERF HAPPY HOUR

Date and Time: Monday, 7 November, 5:00 – 6:30 pm
Location: OC - Exhibit Hall

Cash bar and munchies. Check out the posters; visit the exhibitors; rendezvous with friends and colleagues for this evening's activities.

AFFILIATE SOCIETY MEETINGS

Date and Time: Monday, 7 November 6:30 – 7:30 pm
Location: OC, Oral Session Rooms

Plan to attend your region's Affiliate Society Meetings to learn what is happening! See page 6 for meeting locations.

CERF STUDENT CAREER NETWORKING EVENT

Date and Time: Monday, 7 November, 7:30 – 9:30 pm
Location: OC - Ballroom

The pizza social and career event is back with your hosts, Leanna Heffner and Amanda Kahn.

ALL undergraduate and graduate students are invited to attend. This event provides students a fantastic and unique opportunity to network with established scientists and recently employed graduates in a fun and casual atmosphere.

Students will have a chance to pick panelists' brains about topics such as career options, student internships, and employment opportunities. And did we mention FREE pizza and drinks?! Panelists represent different careers (academia, federal agencies, state agencies, NGOs, consulting, and more!)

TUESDAY, 8 NOVEMBER 2011

WOMEN IN SCIENCE NETWORKING LUNCH

Sponsored by Sponsored by Association of National Estuary Programs. Ticket required.

Date and Time: Tuesday, 8 November, 12:00 - 1:30 pm
Location: OC Ballroom

Tuesday's Women in Science Networking Lunch provides a compelling and fun program, and it is an excellent opportunity to network with current and soon-to-be colleagues and friends. This year's event will present speaker Margaret Leinen.

Dr. Margart Leinen is Executive Director of the Harbor Branch Oceanographic Institute and is the founder and president of the Climate Response Fund, a nonprofit to foster discussion of climate engineering research and to decrease the risk that these techniques might be called on or deployed before they are adequately understood and regulated. Previously, she spent two years as the chief science officer of Climos, Inc., and prior to these posts in the nonprofit and private sectors, Leinen served at the National Science Foundation. Much of Leinen's work at the NSF involved identifying new major research infrastructure needs, advancing those needs and successfully defending $1 billion in initiatives to the National Science Board for subsequent funding by Congress.

Leinen's career includes academic leadership at the University of Rhode Island, both as the vice provost for marine and environmental programs and as dean of the Graduate School of Oceanography. She received her doctorate in oceanography from the University of Rhode Island, her Master of Science in geological oceanography from Oregon State University and her Bachelor of Science in geology from the University of Illinois. (Source: FAU Media Release, Dec 2010)

CERF HAPPY HOUR

Sponsored by YSI Incorporated

Date and Time: Tuesday, 8 November, 5:00 – 7:00 pm
Location: OC Exhibit Hall

YSI, Inc. invites you to enjoy drinks and snacks while you check out the posters; visit the exhibitors; rendezvous with friends and colleagues for this evening's activities.

CERF BUSINESS MEETING

Date and Time: Tuesday, 8 November, 6:30 – 8:00 pm
Location: OC – Room 103 A

Please stop by to learn about what is happening within CERF and to welcome CERF's 2011-2013 administration.

WEDNESDAY, 9 NOVEMBER 2011

"CERF THE TURF" 2011 5K FUN RUN/WALK

Date and Time: Wednesday, 9 November, 7:00 – 9:00 am (Runners assemble at Hilton Clocktower on the beach beginning at 6:30 am)
Location: Hilton Beachfront

CERF is hosting a 5K (3.1 mile) Fun Run/Walk along the beach on Wednesday morning at the Hilton beachfront, 7:00 am. Pre-registration is required by the afternoon of 8 November. All paid participants will get a unique keepsake and water. Special prizes will be awarded for the first place finishers from each Affiliate Society and the first three male and female finishers in each of four categories: Zoea (up to age 29), Megalopae (30-39), Juveniles (40-49), and Adults (50+).

SCIENCE FOR COMMUNITY LEADERS SPECIAL POSTER SESSION AND CERF HAPPY HOUR

In conjunction with Daytona Beach Museum of Arts and Sciences

Date and Time: Wednesday, 9 November, 5:30 – 7:00 pm
Location: OC Exhibit Hall

New at CERF 2011, Science for Community Leaders (SCL) will provide a venue to encourage interaction between our conference attendees, the Daytona Beach Museum of Arts and Sciences membership, and other community leaders. Community leaders will be invited to talk with our conference attendees in an informal social setting, which will be contained within the main poster hall. Be there whether presenting an SCL poster or not!

While the invitees would be initially welcomed at the special poster area, they would also be encouraged to view posters throughout the poster hall and talk to all of the presenters available that evening. So, even if you are not participating directly in the special poster session, we encourage you to show-off your research when the community leaders tour the poster hall.

See page 55 for the list of this special session's poster presentations.

CERF 2011 STUDENT PUB NIGHT

Date and Time: Wednesday, 9 November, 9:00 pm – ???
Location: Mai Tai Bar

Come down to the Mai Tai Bar to relax and mix with other students in a casual setting. (Any non-student CERF attendees also are welcome!) Located in the Ocean Walk Shoppes next to the CERF headquarters hotel, Hilton Daytona Beach Oceanfront Resort. See http://www.maitaibar.com/daytona-beach/about.php for more information.

THURSDAY, 10 NOVEMBER 2011

STUDENT AWARDS PRESENTATIONS AND FAREWELL PARTY

Date and Time: Thursday, 10 November, 5:30 – 8:30 pm
Location: OC - Ballroom

Light hors d'oeuvres and bar. Student Presentation Awards and Carbon Neutral check presentation. Throughout this week our volunteer judges evaluated most of the student oral and poster presentations. Tonight, the highest-ranking students receive monetary awards and recognition for their exceptional work. Come support the students, boogie down and say farewell until CERF 2013 in San Diego, California!

OTHER SPECIAL EVENTS, WORKSHOPS, AND TOWN HALLS

TOWN HALL MEETING: NOAA'S 5-YEAR RESEARCH PLAN (2013-2017)

Date and Time: Tuesday, 8 November 2011, 12:00 - 1:30 pm
Location: OC – 101 A

With NOAA's Next Generation Strategic Plan (NGSP) completed, NOAA is developing its 5-Year Research Plan (2013-2017) and is seeking input from the broader scientific community. This town hall will review the overarching scientific challenges in the NGSP and describe efforts to identify associated needs and gaps. We seek participants' input so NOAA can produce a Research Plan that takes into account the perspectives and capabilities of the extramural oceanic and atmospheric science community.

TOWN HALL MEETING: FORECASTING SCENARIOS FOR ESTUARINE AND COASTAL MANAGEMENT: CAN WE FOCUS THE CRYSTAL BALL?

Date and Time: Tuesday, 8 November 2011, 5:00 pm
Location: OC – 101 A

Moderators: Jim Fitzpatrick (HDR -| HydroQual), Michael Kemp (UMCES), and Elizabeth Turner (NOAA)

This "town-hall meeting" will be a facilitated discussion of scenario-type modeling for estuarine and coastal management applications. Our goal is to identify existing and future predictive information needs of estuarine and coastal water quality and natural resource managers and policymakers so that they can be translated into operational criteria for scenario-based forecasts. Examples of issues to be addressed are:

- What types of scenario-type models are needed?
- Uncertainty - how can uncertainties and model assumptions be specified and articulated with model results?
- Hindcasting-how can simulation tests of ecosystem responses to past management actions be used to improve scenario forecasts?

WORKSHOP: EXPLORE THE OCEAN IN GOOGLE EARTH

Date and Time: Tuesday, 8 November 2011, 5:00 - 7:00 pm
Location: OC – 102 C

During this interactive session, Curator Charlotte Vick will showcase how to use Google Earth tools, places and tours. She will guide you through some of the top ocean layers, provide illustrations of creative use of Google Earth and explain how organizations and individuals upload stories for educational and mission outreach. There will be active Q&A on how to use Google Earth for strategic advantage on your own website and how to leverage and repurpose your existing content to further your goals. For the best experience, laptops are suggested but not necessary.

EVENT: RECEPTION AND REUNION FOR THE UNIVERSITY OF RHODE ISLAND GRADUATE SCHOOL OF OCEANOGRAPHY'S 50TH ANNIVERSARY

Date and Time: Tuesday, 8 November 2011, 8:00 pm
Location: Hilton - Room TBD

2011 marks the 50th Anniversary of the establishment of the GSO! Help us celebrate even if you can't come to Rhode Island. Whether you were in the first class that entered GSO or you are presently a graduate student there, we want YOU to come enjoy some food and beverages, look at old photos, catch up with friends and introduce yourself to new colleagues. Join us Tuesday, 8 November, at 8:00 pm at the Hilton Daytona Beach Oceanfront Hotel.

EVENT: LSU SC&E 10TH ANNIVERSARY REUNION FOR ALUMNI, FACULTY, STUDENTS, AND STAFF

Date and Time: Wednesday, 9 November 2011, 7:00 pm
Location: Hilton - Room TBD

LSU School of the Coast & Environment invites all alumni, faculty, students, and staff—past and present—to laissez les bons temps rouler at the School's 10th Anniversary event. Come share Cajun food and music (guaranteed to have you saying Ca c'est bon!) as we toast the School's anniversary and celebrate our biggest success stories—our graduates! Be sure to stop by the LSU SC&E booth in the exhibition area to pick up your ticket or email your ticket request in advance to mberg41@lsu.edu.

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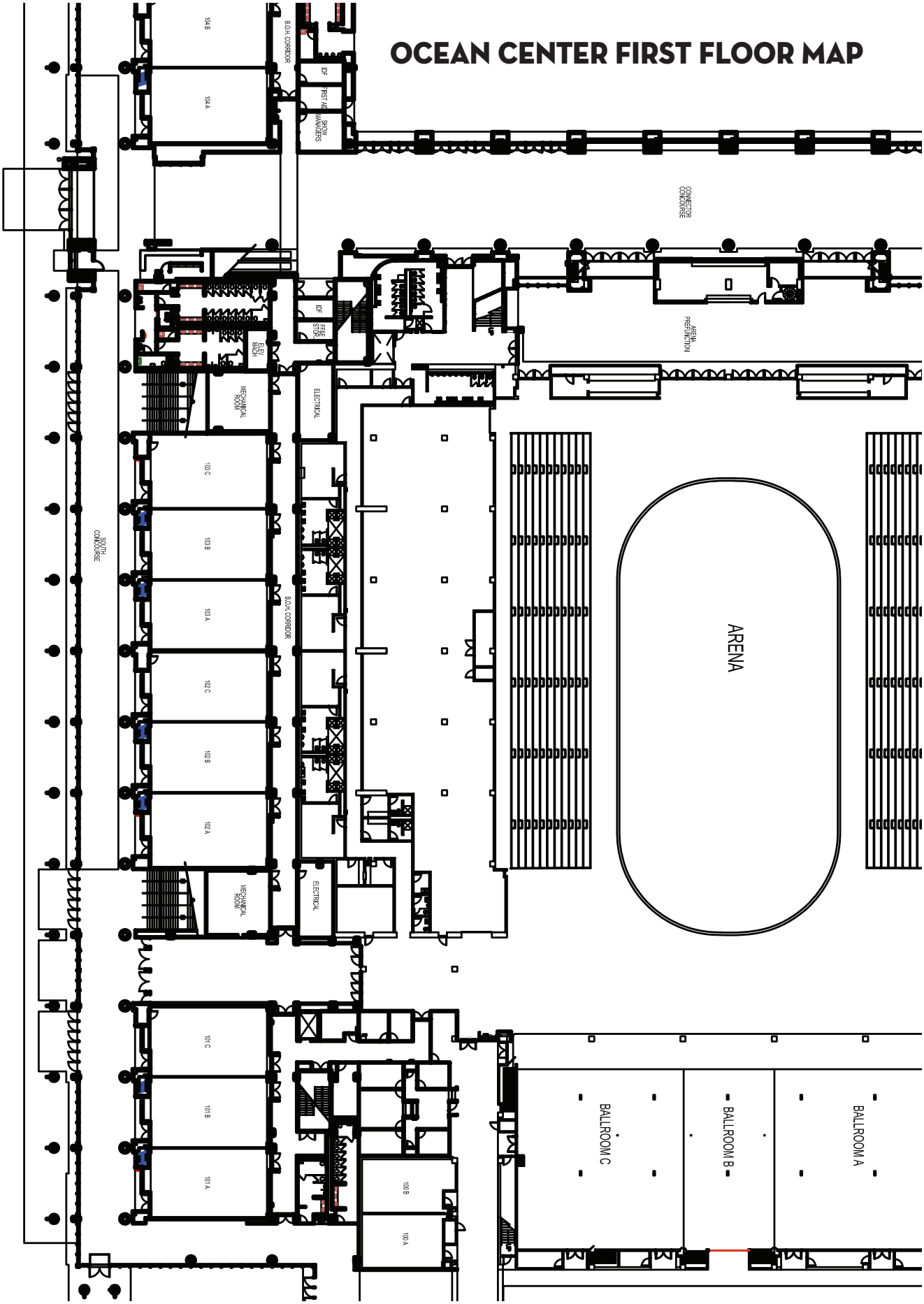

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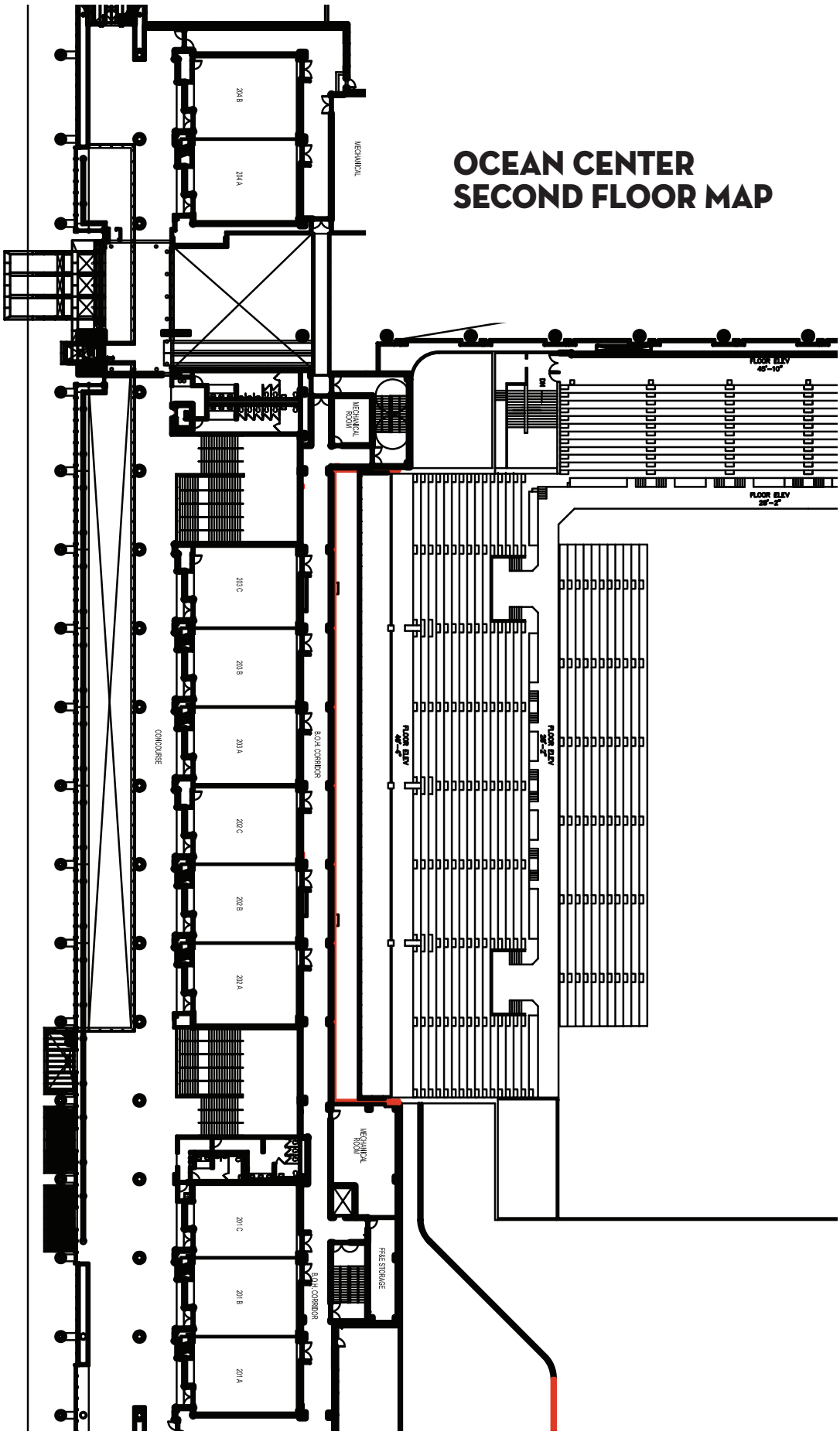

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