

19th Biennial Conference of the Estuarine Research Federation

4-8 NOVEMBER 2007
PROVIDENCE, RHODE ISLAND

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Welcome to the 19th Biennial Conference

Welcome to ERF 2007, and let's continue to keep it friendly!

Welcome to ERF 2007. The program has exceptional scientific content, and you should find the intellectual stimulation you desire. The Conference Committee and many volunteers have exceeded expectations in both the science and the context for the presentation of that science. It is the latter aspect I wish to discuss.

Two years ago when I was installed, I told a story that captures the spirit of ERF meetings. It involved a microbiology conference that I attended as a graduate student and two faculty members I met. The first's handshake turned into a cold fish as he was told that I was a graduate student. The second engaged me in conversation over a beer and in the end bought the beers. Both introductions impressed me enough to remember the incidents over 30 years later. I've long forgotten the handshake guy, but the person who treated me well was Rita Colwell, later to be Director of NSF.

It is the spirit of Rita's treatment of me that I think has always permeated ERF meetings. If you are reading this, please bring that spirit to ERF 2007. Let's try to avoid or at least minimize the tempting hierarchy of interaction. If you have been coming to ERF meetings for a while, you may well be at the meeting to see old friends. Do it of course, but take time to speak with your friends' students or other junior professionals. If you are new to ERF, assume that people will treat you in a friendly manner, and that the person behind the authorship of journal articles is approachable.

I cannot promise that all members are equally approachable, or that any individual is approachable to the same degree at all times, so don't take offense or be discouraged if one approach is rebuffed. You'll make successful contacts more often than not, and you may have a good story 30 years from now.

One caveat: I know that my memory is not what it used to be - a trait shared by many in my cohort. Introducing yourself again to someone you may have met before never hurts and avoids embarrassing and awkward moments.

Bob Christian
ERF President 2005-2007



of the Estuarine Research Federation!

Greetings to All ERF 2007 Conference Attendees!

On behalf of the Steering Committee and the Program Advisory Council, we welcome you to the Estuarine Research Federation's 19th Biennial International Conference in Providence, Rhode Island. This conference carries on the best traditions of the Federation, and we have tried to craft the conference to heighten professional and social interactions, student and international participation and scientific synthesis.

The central attractions of the conference are the variety and excellence of scientific presentations, and the interchanges among scientists, managers, and students. The conference features nearly 1,300 oral and poster presentations in a comfortable and easy to navigate venue, with convenient areas for spontaneous conversations. We are particularly proud of our keynote plenary on Sunday, our Tuesday afternoon and Thursday morning thematic plenaries, our valuable workshops, and our poster hall, with its array of posters, vendor booths, and interaction areas.

The theme of this conference, and its underlying zeitgeist, is "Science for Society." During the conference, many aspects of the relationship between science and management will be explored. The theme-related goal is to enhance connections between those who are engaged in research and those who are responsible for coastal and estuarine management.

Social activities, get-togethers, contests, receptions, and performances are planned for every conference evening to help you get acquainted or re-acquainted with friends and colleagues from far and wide. You will also enjoy Providence- New England's "Renaissance City," which is full of wonderful restaurants and pubs in a setting rich in history and architecture. Providence offers something for everyone, from students to senior scientists. Beyond Providence, our field trips are tailored to help you better experience the joys of southern New England's coastline. We offer tours of shorelines, coastal islands, laboratories, seaports, and other attractions – all situated in the nearby area.

To close, we acknowledge the tremendous efforts of the ERF 2007 Steering Committee, ERF Headquarters, the Schneider Group, and all of our excellent volunteers and workers. For over three years many dedicated people have given selflessly of their time and talent to ensure that you have the best Federation conference experience possible.

We look forward to seeing you in Providence!

Jim Latimer and Giancarlo Cicchetti
ERF 2007 Conference Co-Chairs



ERF 2007 Conference Steering Committee

Conference Co-Chairs	Giancarlo Cicchetti, U.S. EPA Jim Latimer, U.S. EPA
Scientific Program Co-Chairs	Jonathan Pennock, Univ. of New Hampshire Marine Program/Sea Grant Linda Deegan, Marine Biological Lab Charles Roman, National Park Service
Poster Chairs	Charlie Strobel, U.S. EPA Stephen Hale, U.S. EPA
Workshop Chair	Ruth Carmichael, Dauphin Island Sea Lab
Abstract Database Manager	Susan Chalifoux, Univ. of New Hampshire Sea Grant
Computer Central Manager	Rebecca Banon, University of Rhode Island, Coastal Institute
International Program Chair	João Ferreira, Institute of Marine Research - Portugal
International Program Committee	Tony Hawkins, Plymouth Marine Lab, UK Pedro Monteiro, Council for Scientific and Industrial Research, South Africa Mingyuan Zhu, First Institute of Oceanography, P.R. China
Fund-raising, National	Mike Weinstein, NJ Marine Sciences Consortium
Fund-raising, Local	Charlie Natale, ESS Group, Inc. Liz Gowell, ESS Group, Inc.
Student Activities	Elizabeth Hinchey Malloy, Illinois-Indiana Sea Grant Jessica Burton-Evans, U.S. Army Corps of Engineers
Student Travel Awards	Paul Carlson, Florida Marine Research Institute
NSF UMEB Grant	Randy Chambers, William and Mary College
Student Presentation Judging/Awards	Dave Yozzo, HDR/LMS Dave Osgood, Albright College John Brawley, Saquish Scientific LLC
Student Workers	Janet Nestlerode, U.S. EPA Marty Chintala, U.S. EPA
Field Trips	Marci Cole, Save The Bay, RI Sue Tuxbury, Save The Bay, RI
Publicity Chair	Norm Farris, U.S. Army Corps of Engineers, MA Chip Young, URI Coastal Institute
Social Events	Veronica Berounsky, University of Rhode Island
Student Members-At-Large	John Durand, Romberg Tiburon Center Leanna Heffner, University of Rhode Island Amanda Kahn, University of North Carolina, Wilmington Heidi Mahon, Old Dominion University Carl Young, University of Washington Marc Skinner, University of New Brunswick Agatha-Marie Roth, Louisiana State University, Baton Rouge
Conference and Website Oversight	Joy Bartholomew, ERF HQ Janet Barnes, ERF HQ
Webmaster	Adam Haile, Duke University
Conference Administration	Helen Schneider Lemay, Schneider Group

ERF 2007 SCIENTIFIC PROGRAM ADVISORY COUNCIL

Andrea Copping, Anne Giblin, Barry Costa-Pierce, Bob Diaz, Candace Oviatt, Carl Friedrichs, Carlos Duarte, Cathleen Wigand, Charles Roman, Charlie Strobel, Christopher Deacutis, Cindy DelPapa, Darrin Dantin, Dave Burdick, Dave Flemer, Doug Lipton, Drew Carey, Ed Dettmann, Ed Monahan, Gail Chmura, Geno Olmi, Giancarlo Cicchetti, Hilary Neckles, Janet Barnes, Janet Nestlerode, Jeff Frithsen, Jim Cloern, Jim Hagy, Jim Latimer, Jim Turek, Joao Ferreira, John Brawley, Jonathan Pennock, Joy Bartholomew, Jurij Homziak, Ken Raposa, Linda Deegan, Marci Cole, Marshall Pregnall, Mike Connor, Nancy Rabalais, Pam Neubert, Pat Kremer, Paul Anderson, Paul Stacey, Peg Pelletier, Peter August, Robert Christian, Roelof Boumans, Ron Rozsa, Rutger Rosenberg, Scott Nixon, Stephen Threlkeld, Steve Hale, Steve Rego, Suzanne Bricker, Sylvie St. Jean, Ulrich Claussen, Veronica Berounsky, Walter Berry

ERF Governing Board, Committees, Journal and Staff

2005-2007 ADMINISTRATION

OFFICERS AND MEMBERS AT LARGE

President:	Robert Christian, East Carolina University
President-Elect:	Robert Howarth, Cornell University
Past President:	Linda Schaffner, Virginia Institute of Marine Science
Secretary:	Dan Dauer, Old Dominion University
Treasurer:	Carolyn Keefe, University of Maryland
Member-at-Large: (2003-2007) & Editor of CESN	Merryl Alber, University Of Georgia
Member-at-Large: (2005-2009)	Andrea Copping, Marine Sciences Laboratory, Seattle
Int'l Member-at-Large: (2003-2007)	Jorge Herrera-Silveira, CINVESTAV, Merida, Mexico
Member-at-Large: (2005-2009)	Eugene Olmi, NOAA, Coastal Service Center

AFFILIATE SOCIETY PRESIDENTS

ACCESS:	Mark Hanson, Gulf Fisheries Center, Canada
AERS:	David Yozzo, HDR/LMS
CAERS:	Wim Kimmerer, San Francisco State University
GERs:	Paul Montagna, Texas A&M University
NEERS:	Robert Buchsbaum, Massachusetts Audubon Society
PERS:	Sandy Wyllie-Echeverria, University of Washington
SEERS:	Marie E. DeLorenzo, NOAA/National Ocean Service

2007-2009 ADMINISTRATION

OFFICERS AND MEMBERS AT LARGE

President:	Robert Howarth, Cornell University
President-Elect:	Susan Williams, University of California, Davis
Past President:	Robert Christian, East Carolina University
Secretary:	Pat Glibert, University of Maryland
Treasurer:	Carolyn Keefe, University of Maryland
Member-at-Large: (2005-2009)	Andrea Copping, Marine Sciences Laboratory, Seattle
Member-at-Large: (2005-2009)	Eugene Olmi, NOAA, Coastal Service Center
Int'l Member-at-Large: (2007-2011)	Dan Conley, Lund University, Sweden
Member-at-Large: (2007-2011)	Ivan Valiela, Marine Biological Laboratory

AFFILIATE SOCIETY PRESIDENTS

ACCESS:	Simon Courtenay, Fisheries and Oceans Canada
AERS:	Leila Hamdan, U.S. Naval Research Lab
CAERS:	John Largier, Bodega Marine Lab
GERs:	Michael Poirrier, University of New Orleans
NEERS:	Pam Morgan, University of New England
PERS:	Jim Brennan, Washington Sea Grant Program
SEERS:	Eric Koepfler, Coastal Carolina University

JOURNAL OFFICIALS

Co-Editor-in-Chief:	James Cloern, U.S. Geological Survey, Menlo Park
Co-Editor-in-Chief:	Carlos Duarte, Instituto Mediterraneo de Estudios, Spain
Managing Editor:	Stephen Threlkeld, University of Mississippi

ERF COMMITTEE CHAIRS

Education:	Randy Chambers, College of William and Mary
Publications:	Susan Bell, University of South Florida
Finance:	Carolyn Keefe, University of Maryland

ERF STAFF

Executive Director:	Joy Bartholomew, ERF HQ
Chief Operations Officer:	Janet Barnes, ERF HQ
Web Master:	Adam Hale
Membership Services:	sg Meeting and Marketing Services

Conference at-a-Glance

Saturday 3-Nov	Sunday 4-Nov			Monday 5-Nov	Tuesday 6-Nov	Wednesday 7-Nov	Thursday 8-Nov	Friday 9-Nov		
Field Trips	Field Trips all day	Student Worker Training <i>Morning</i>	Conference Setup	Various Breakfast Meetings	Women's Aquatic Network Breakfast	Various Breakfast Meetings	No Scheduled Event	ERF Governing Board Meeting 2007-2009 Howarth Admin Board Members and ERF 2007 Leaders <i>morning only</i>		
ERF Governing Board Meeting 2005-2007 Christian Admin Board Members all day				Work-shops 1:00 PM to 5:00 PM	Registration and Computer Central Open at 1:00 pm	Morning oral sessions 8:00 am - 9:45 am			3 Thematic Plenaries	
						Morning break - Posters and Exhibits Open 9:45 am - 10:15 am				
						Morning Oral Sessions cont. Plus one workshop 10:15 am - 12:00 pm	Morning Oral Sessions cont.		Morning Oral Sessions cont.	Morning Oral Sessions cont.
		Poster session with light lunch.....Exhibits open 12:00 pm - 2:00 pm								
		Afternoon Oral Sessions 2:00 pm - 3:30 pm		Afternoon Oral Sessions	Afternoon Oral Sessions <i>plus one panel discussion</i>	Afternoon Oral Sessions				
		Afternoon break - Posters and Exhibits Open 3:30 pm - 4:00 pm								
		Afternoon Oral Sessions <i>Cont.</i> Plus one workshop 4:00 pm - 5:30 pm		3 Thematic Plenaries	Afternoon Oral Sessions cont.	Afternoon Oral Sessions <i>Cont.</i>				
		Affiliate Society Meetings 5:45 pm - 6:30 pm		Happy Hour <i>Mon,Tue,Wed. Posters and Exhibits Open</i>			Student Awards, Coastal Cabaret and Farewell Party			
Student Career and Networking Dinner 6:30 pm - 8:30 pm		Club ERF (ticketed) off-site starts 6:00 PM 		International Reception & ERF Business Meeting 6:00 pm - 7:30 pm						
Presidents' Welcome Reception 7:30 pm				ERF Unplugged off-site and Other Events on-site	Student Pub Night and Other Events					

Special Events, Workshops & Social Functions-at-a-Glance

Please see page 84 for Field Trip descriptions, page 60 for Workshops and page 62 for other meetings and functions

SATURDAY	TIME	LOCATION
ERF Governing Board Meeting	8:00 am - 5:00 pm	Westin, Waterplace BR 1
ERF Field Trips	varies	Westin Hotel Lobby
Governing Board/ERF 2007 Committee Reception	5:00pm	Westin, Newport/Washington
SUNDAY	TIME	LOCATION
ERF Field Trips	8:00 am - various	Westin Hotel Lobby
UMEB Field Trip	Meet at 7:30 am	Westin Hotel Lobby
Student Worker Training	9:00 am - 10:30 am	RICC, level 5
Tote Bag Stuffing	10:30 am	RICC, BR B
Workshop: Scientific Writing & Publishing (students)	1:00 pm - 3:00 pm	RICC, Rm 552AB
Workshop: Computer-Aided Tomography	1:00 pm - 5:00 pm	RICC, Rm 556AB
Workshop: Coastal Manager's Toolkit	1:00 pm - 5:00 pm	RICC, Rm 551AB
Workshop: High Speed Data Collection	3:00 pm - 5:00 pm	RICC, Rm 555AB
Workshop: Building Communications Bridges	3:00 pm - 5:00 pm	RICC, Rm 552AB
Workshop: Flow Measurement & Monitoring	3:00 pm - 5:00 pm	RICC, Rm 550AB
Awardee and Sustaining Members Recept.	4:00 pm - 5:30 pm	Westin, Blackstone
Keynote Address and ERF Awards	6:00 pm - 7:30 pm	Westin, Narragansett BR
President's Welcome Reception	7:30 pm - 9:00 pm	Biltmore Hotel, Grand Ballroom
MONDAY	TIME	LOCATION
IOOS Regional Associations poster room	8:00 am - 6:00 pm	RICC, Rm 553AB
Workshop/Demo: Multi-Sensor platform	10:15 am - 11.30 am	RICC, Rm 550AB
Workshop/Demo: Fluorometer	4:00 pm - 5:30 pm	RICC, Rm 550AB
ERF Happy Hour	5:30 pm	RICC, Poster/Exhibits Hall
Affiliate Society Meetings	5:45 pm - 6:30 pm	RICC Meeting Rooms
Student Pizza Social and Career "Speed Dating"	6:30 pm - 8:30 pm	RICC, BR A
ERF Unplugged - ERF musicians, singers, karaoke	8:30 pm - until...	McFadden's Saloon (off-site)
TUESDAY	TIME	LOCATION
Women's Aquatic Network Breakfast	7:00 am - 8:00 am	RICC, Rotunda
IOOS Regional Associations poster room	8:00 am - 6:00 pm	RICC, Rm 553AB
Three Thematic Plenaries	4:00 pm - 5:30 pm	RICC, BR-B, BR-D and Westin, Narr A
ERF Happy Hour - Club ERF preliminary	5:30 pm	RICC, Poster/Exhibits Hall
Club ERF - food, dancing, pool competition	6:00 pm - until...	Snooker's Lounge (off-site)
WEDNESDAY	TIME	LOCATION
(C) ERFInternational Forum: Reaching Out	1:00 pm - 2:00 pm	RICC, BR B
Panel Discussion: Urban Coastal Planning	2:00 pm - 3:30 pm	RICC, Rm 550 AB
ERF Happy Hour	5:30 pm	RICC, Poster/Exhibits Hall
International Reception & ERF Business Meeting	6:00 pm - 7:30 pm	Westin, Narragansett BR
NERRS Graduate Research Fellows 10-yr Celebration	6:30 pm - 8:00 pm	Check the conference web site: Events
URI-GSO Reunion	7:30pm	Westin, Newport/Washington
Student Pub Night	9:00 pm - until...	Ri Ra Irish Pub (off-site)
THURSDAY	TIME	LOCATION
Three Thematic Plenaries	8:00 am - 9:45 am	RICC, BR-B, BR-D and Westin, Narr A
Student Awards, Coastal Cabaret and Farewell Party	5:30 pm - 7:30 pm	RICC, BR-A & Rotunda

RICC = Rhode Island Convention Center; The Westin Hotel is connected to the RICC

Sunday Afternoon Plenary Session Schedule

PLENARY SCHEDULE

Time: 6:00 pm – 7:30 pm
Location: Westin Hotel, Narragansett Ballroom,
Street Level

Robert R. Christian, *presiding*
ERF President, 2005-2007

Welcome and Introductions
Jim Latimer and Giancarlo Cicchetti
ERF 2007 Conference Co-Chairs

President's Address
Robert R. Christian

Awards
Dennis M. Allen
ERF President, 2001-2003 & ERF Awards
Committee Chair

Odum Award for Lifetime Achievement
Grace S. Brush

*William A. Niering Award
for Outstanding Educator*
Alejandro Yáñez-Arancibia

*Donald W. Pritchard Award for Estuaries
and Coasts Geophysics Paper*

Lisa V. Lucas accepting for:
L.V. Lucas, D.M. Sereno, J.R. Burau, T.S.
Schrage, C.B. Lopez, M.T. Stacey, K.V.
Parchevsky, and V.P. Parchevsky

Cronin Award for Early Career Achievement
Elizabeth W. North

Distinguished Service Awards
Linda C. Schaffner and Stephen T. Threlkeld

Journal Reviewer Awards
Given by Stephen Threlkeld

Keynote Address
Rosina Bierbaum

Announcements
Jim Latimer and Giancarlo Cicchetti

PRESIDENT'S RECEPTION

Time: 7:30 pm
Location: Biltmore Hotel, Grand Ballroom

ERF 2007 Conference Keynote Address

THE IMPACT OF CLIMATE CHANGE ON ESTUARINE AND COASTAL ENVIRONMENTS



Rosina Bierbaum, Dean
School of Natural Resources
and Environment, University
of Michigan

Abstract

The physical impacts of climate change are beginning to be observed on all continents. Our understanding of how these impacts will alter ecosystems and affect human communities

is improving, but we need to conduct many more place-based assessments to evaluate possible coping options appropriate to different locales. We are also learning that there may be nonlinearities or thresholds in how systems respond to a changing climate. This keynote talk will discuss the importance of considering climate change within the context of multiple environmental stresses such as habitat fragmentation, traditional pollutants, invasive species, and over-fishing in order to design adaptation mechanisms. Examples will be drawn from the United States as well as international estuarine and coastal regions.

While slowing the rate of climate change and limiting the total temperature increase are absolutely crucial, we must also be developing wise planning and management options to cope with changes already underway. It is crucial that both aggressive mitigation and adaptation approaches be pursued now. These must be designed with input from a broad array of disciplines and stakeholders to ensure they are both feasible and societally acceptable.

BIOGRAPHY

Before joining the University of Michigan, Dr. Bierbaum served both the U.S. Congress and the U.S. President through twenty years of science policy leadership in Washington, D.C. As Acting Director of the White House Office of Science and Technology Policy, she was the Administration's senior scientific advisor on environmental research and development, with responsibilities for scientific input and guidance on a wide range of national and international environmental issues. She currently serves on the boards of the University Corporation for Atmospheric Research; the National Research Council's Board on Atmospheric Sciences and Climate; the Federation of American Scientists; the Environmental and Energy Study Institute; and the Energy Foundation. She is also a member of both the Design Committee for The Heinz Center's The State of the Nation's Ecosystems project and of the Executive Committee for the Tyler Prize for Environmental Achievement.

Dr. Bierbaum earned her Ph.D. in Ecology and Evolution at the State University of New York, Stony Brook.

ERF 2007 Scientific Award Recipients

The Federation is pleased to announce the recipients of the 2007 ERF awardees. Please plan to attend the ERF 2007 conference plenary on Sunday, November 4th, to congratulate them in person.

ODUM AWARD FOR LIFETIME ACHIEVEMENT

GRACE S. BRUSH, PROFESSOR

Whiting School of Engineering
Department of Geography and Environmental Engineering
Johns Hopkins University, Baltimore, Maryland

A primary criterion for this award is evidence of a sustained record of important contributions to our understanding of estuaries. During her long (almost 50 years) and productive career, Grace Brush has conducted an impressive array of local, regional, national and international research and educational activities, and there does not seem to be any slackening of her pace. Since her first publication in 1952, she has published many scientific papers during her career; her most recent work probes the effects of historical land use on tree growth.

Grace was a pioneer in estuarine paleoecology and truly expanded our thinking about past estuarine function and legacy effects on today's estuarine ecosystems. The committee notes the following statements included in the nomination package for Grace Brush: "she is one of the international superstars of estuarine science," and she has developed "a tremendous cumulative body of work" on historical changes to estuaries and the reasons why these happened.

Finally, Grace has made important contributions to estuarine research via her many decades of active support and leadership for programs such as the NSF-funded LTERs focusing on estuarine ecosystems, for ERF and AERS, for graduate education, and for advancing the roles and opportunities for women in science. Please extend congratulations to Grace for her important contributions to estuarine science.

WILLIAM A. NIERING AWARD FOR OUTSTANDING EDUCATOR

ALEJANDRO YÁÑEZ-ARANCIBIA, SENIOR SCIENTIST AND PROFESSOR OF COASTAL MANAGEMENT

University Anahuax of Xalapa, Mexico

For 30 years, Alex Yáñez has been teaching and conducting research in both academic and professional positions in Brazil, Costa Rica, the U.S., and most extensively in Mexico. Dr. Yáñez has taught thousands of students in fisheries, tropical ecology and coastal management courses and has been advisor to over 60 students at undergraduate honors, masters and doctoral levels. He is fondly known by his past students for his human qualities, and one student nominator pictured him in a boat, with a great smile and looking for the fishes in the mangroves. Along with the fishing vigor is academic rigor: many of his students have gone on to assume professional positions as directors, heads, and managers of estuarine and coastal sciences labs throughout Latin America.

Alex Yáñez has published over 200 scientific papers and 15 books, including textbooks and symposium volumes that are educational

source materials for estuarine and coastal science students and professionals internationally. His influence on the science and management of the tropical coastal zone extends from academia to governments and NGOs. For example, from 1990 until 1997, Dr. Yáñez was Head of the EPOMEX program (Center of Ecology, Fisheries and Oceanography of the Gulf of Mexico) at the University of Campeche, where the strong interaction between academic institutions and public agencies was described by one of his colleagues as "magical." Dr. Yáñez-Arancibia has been a major voice within the Estuarine Research Federation membership to champion the science and proper management of tropical coastal regions around the world. As an educator, Dr. Yáñez is most deserving of the prestigious William A. Niering Award.

DONALD W. PRITCHARD AWARD FOR ESTUARIES AND COASTS GEOPHYSICS PAPER

LISA V. LUCAS, RESEARCH ENGINEER

U.S. Geological Survey, Menlo Park, CA
Accepting for: L.V. Lucas, D.M. Sereno, J.R. Burau, T.S. Schraga, C.B. Lopez, M.T. Stacey, K.V. Parchevsky, and V.P. Parchevsky

The paper "Intradaily variability of water quality in a shallow tidal lagoon: mechanisms and implications" by L.V. Lucas, D.M. Sereno, J.R. Burau, T.S. Schraga, C.B. Lopez, M.T. Stacey, K.V. Parchevsky, and V.P. Parchevsky (2006. *Estuaries and Coasts* 29(5): 711-730) presents an object lesson for dealing with the challenges of measuring and analyzing the complexities of coastal ecosystems. Through an innovative and creative approach to the analysis of a mix of signals fluctuating over a broad range of frequencies in a natural system, the authors showed that structure and order could be extracted, despite these complexities and nonlinearities.

Lucas et al. instrumented a shallow, multiple-input lagoon in the Sacramento-San Joaquin River Delta system with both physical and biological sensors recording on a 10-minute cycle. They appealed to the body of knowledge on high-frequency physical variability to perform a careful scaling of relevant variables, ultimately producing a satisfying anatomy of the physical and biological signals revealing the component mechanisms that make up the observed periodicities.

Results from this study are relevant far beyond the type of ecosystem addressed and beyond the balance of mechanisms particular to this water body. The authors illustrate a method for avoiding misleading conclusions caused by sampling aliasing, but more importantly, they provide insight into ecosystem processes on both ends of the variability spectrum. Such insight is essential to the monitoring, understanding, and ultimately, the prediction of ecosystem function.

CRONIN AWARD FOR EARLY CAREER ACHIEVEMENT

ELIZABETH W. NORTH, ASSISTANT PROFESSOR

University of Maryland Center for Environmental Science
Horn Point Laboratory, Cambridge, MD

Dr. North received her PhD from the University of Maryland in 2001, where she was advised by Dr. Ed Houde (UMCES-Chesapeake Biological Laboratory). Elizabeth's dissertation, "Transport and Retention of Fish Early-Life Stages in Chesapeake Bay: Mechanisms and Implications for Recruitment," launched her on a career path

that critically examines ecological processes dependent on biological-physical interactions in estuaries and coastal seas.

While in her postdoctoral appointment with Dr. Raleigh Hood at the UMCES Horn Point Laboratory, Elizabeth rapidly became proficient in numerical modeling of bio-physical processes. In 2004, Elizabeth was appointed as a tenure-track Assistant Professor at UMCES-HPL. Elizabeth's research emphasizes modeling and field experiments to explain distributions and spatial patterns of meroplankton and ichthyoplankton (crabs, oysters, fish). Development and application of coupled, bio-physical models are prominent elements in her approach. Elizabeth's expertise is wide-reaching. She is a global expert on features and processes such as estuary turbidity maxima. Although only six years from her PhD, results, recommendations and advice emanating from Elizabeth's research have had major influences on understanding anadromous fish recruitments and on planning for oyster restoration in Chesapeake Bay.

Elizabeth has authored or co-authored 11 papers since her PhD, including four in Estuaries and Coasts. She has a strong international presence in the oceanography community and is highly regarded for her leadership and contributions to ICES,

and involvement in science planning and advisory activities (e.g., GLOBEC Steering Committee). Elizabeth has demonstrated excellence in research, teaching, graduate student mentorship, and applications of science to management needs. She exemplifies the qualities that distinguish recipients of the Cronin Award.

DISTINGUISHED SERVICE AWARDS

LINDA C. SCHAFFNER, PROFESSOR

The College of William and Mary
Virginia Institute of Marine Science
Gloucester, Virginia

For her myriad contributions to advance the Federation and its outreach as Member at Large (1997-1999), Secretary (1999 – 2001), and Presidential Succession (2001-2007)

STEPHEN T. THRELKELD, PROFESSOR

Department of Biology
University of Mississippi, University, Mississippi

For his contributions to improving the Federation's journal as: Managing Editor of Estuaries, 1998-2006 and Estuaries and Coasts, 2006 - 2007



Scientific Program, General Information

TWO CONNECTED VENUES

All ERF 2007 events (except for some evening functions) will take place in either the Rhode Island Convention Center (RICC) or the Westin Providence Hotel. These two facilities are connected by an enclosed walkway.

ORAL SESSIONS (PAGES 14-45)

Six of the 10 concurrent oral sessions are located on the fifth level of the RICC. The other four are located in the Westin Hotel: Narragansett ballroom sections A, B and C (street level) and the Providence Ballroom (third floor). One oral session will be held Monday morning in the Westin Waterplace Ballroom, second floor. Oral sessions begin every morning (Monday through Thursday) at 8:00 am and end every evening at 5:30 pm.

POSTER AND EXHIBIT HALL

The Poster and Exhibit hall is located in the Rhode Island Convention Center on the third level; Exhibit Hall sections C&D. Posters are organized by the theme of their corresponding oral session. Each poster is assigned a number and location corresponds to the poster hall map located on page 58.

POSTER PRESENTATIONS (PAGES 46-57)

Each poster will be displayed for two days, either Monday and Tuesday or Wednesday and Thursday, starting at 9:00 am on the first and ending after the evening happy hour on the second day. Coffee breaks, lunches and happy hours will be provided inside the poster/exhibit hall. Presenters will be available at their posters from 12:30 noon to 1:45 pm on their assigned day. A light lunch will be provided in the poster/exhibit hall.

SPONSORS AND SCIENTIFIC COMPANY EXHIBITS

Some of our sponsors and several for-profit scientific companies are exhibiting in booths located around the perimeter of the hall. Please take time to visit and thank them for their support. A list of sponsors is on the inside front cover. The exhibitor list is on page 61.

THEMATIC PLENARIES (PAGES 28 & 38)

The ERF 2007 Scientific Program chairs have committed two specific time slots for a total of six thematic plenaries. Three will convene on Tuesday afternoon from 4:00 pm to 5:30 pm, and three others will convene on Thursday morning from 8:00 am to 9:45 am. No other events will oppose these sessions. Each plenary will include time for questions and answers and/or a panel discussion.

WORKSHOPS AND PANELS (PAGE 60)

The ERF 2007 conference offers a large selection of workshops with topics including coastal planning, ecosystem based management, science writing and instrument applications. Six of the workshops, will convene at various times on Sunday, November 4, 2007, between 1:00 pm to 5:00 pm. Turner Designs will convene two instrument workshops on Monday, and a co-sponsored workshop/panel on urban coastal planning will convene on Wednesday afternoon. We look forward to the best workshop attendance yet!

WORKING TOWARDS A CARBON-NEUTRAL CONFERENCE

Over the past three decades, the effects of global climate change are more apparent. Considerable evidence exists that most of this change has been caused by human activities that have altered the chemical composition of the earth's atmosphere through a buildup of greenhouse gases. The Estuarine Research Federation Conference also impacts climate change by generating carbon emissions through activities such as transportation to, from, and during the meetings as well as use of energy at the event facilities.

As a participant in ERF, you are urged to donate to the first ERF Conference Carbon Emission Offset Fund where

100% of each contribution will support carbon sequestration projects. The two benefiting organizations are (1) Save the Bay – Narragansett Bay and (2) Rhode Island Tree Council associated with Arbor Day Foundation.

- **Save the Bay – Narragansett Bay** is a non-profit organization determined to restore and protect Narragansett Bay from harmful human activities through initiating programs to clean up the Bay, habitat restoration, and education of the public. For further information on Save the Bay, please visit their website (www.savebay.org).
- **The Rhode Island Tree Council** is also a non-profit organization working to create healthy forests and dedicated to improving Rhode Island's tree resources through tree planting and public education. For further information on the Rhode Island Tree Council, please visit their website (www.ritree.org).

Remember, you can reduce your carbon emissions during your trip following some simple tips listed on the ERF website.

ERF 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 ERF headquarters in writing.



Many thanks to the ERF 2007 conference Abstract Sorting Team who met at the University of New Hampshire to create the scientific program schedule. Pictured are: front row (left to right), Bob Emmett, Susan Chalifoux, Jim Latimer and Charles Roman; back row (left to right), Janet Barnes, Giancarlo Cicchetti, Norm Farris, Jon Pennock, Linda Deegan, Charlie Strobel, Helen Schneider-Lemay and Joy Bartholomew.

Personal Schedule

	SUNDAY 4 NOVEMBER	MONDAY 5 NOVEMBER	TUESDAY 6 NOVEMBER
7:00 AM			
8:00 AM			
9:00 AM			
10:00 AM			
11:00 AM			
12:00 NOON			
1:00 PM	REGISTRATION & COMPUTER CENTRAL OPEN	POSTER SESSIONS RICC, EXHBIT HALLS C&D	POSTER SESSIONS RICC, EXHBIT HALLS C&D
2:00 PM			
3:00 PM			
4:00 PM			3 THEMATIC PLENARIES 4:00 - 5:30 PM
5:00 PM			
6:00 PM	OPENING PLENARY SESSION AND AWARD CEREMONY 6:00 - 7:30 PM		
7:00 PM			
8:00 PM	WELCOME RECEPTION 7:30 PM		
9:00 PM			

WEDNESDAY 7 NOVEMBER	THURSDAY 8 NOVEMBER	NOTES
		7:00 AM
		8:00 AM
	3 THEMATIC PLENARIES 8:00 - 9:45 AM	9:00 AM
		10:00 AM
		11:00 AM
		12:00 NOON
POSTER SESSIONS RICC, EXHBIT HALLS C&D	POSTER SESSIONS RICC, EXHBIT HALLS C&D	1:00 PM
		2:00 PM
		3:00 PM
		4:00 PM
		5:00 PM
	STUDENT AWARDS, COASTAL CABARET AND FAREWELL PARTY 5:30 - 7:30 PM	6:00 PM
INTERNATIONAL RECEPTION AND ERF BUSINESS MEETING 6:00 - 7:30 PM		7:00 PM
		8:00 PM
		9:00 PM

Monday Early Morning Oral Presentations

	BR B (RICC)	BR D (RICC)	551 AB (RICC)	552 AB (RICC)	555 AB (RICC)
	SCI-030 Applications of Coastal Observing Systems for Research and Management Krista Kamer, Geno Olmi, Josie Quintrell and Jan Newton	SCI-005 Toward Successful Management of Estuarine and Coastal Eutrophication Suzanne Bricker and Jesper Andersen	SCI-011 Beyond Monitoring and Observing Systems: Scientific Tools and Applications Naomi Detenbeck, Peg Pelletier and Dan Campbell	SCI-002 Climate Effects on Tidal Wetlands Britt Argow and Zoe Hughes	SCI-022 Prediction and Understanding: Model Approaches, Applications and Performance Lora Harris, Mark Brush, Lisa Lucas, W. Michael Kemp and James Kremer
8:00	2928: Session Introduction - Applications of Coastal Observing Systems for Estuarine and Coastal Research and Management. Geno Olmi , Krista Kamer, Jan Newton, Josie Quintrell, Dave Easter.	Session Introduction. Jesper Andersen .	2356: e-Estuary: A Proposed Decision-support System for Coastal Management. Naomi Detenbeck , Marguerite Pelletier, Daniel Campbell.	1828: Climate Effects on Wetland Elevation Dynamics. Donald Cahoon .	1171: Applying Ecological Models to Environmental Restoration in the Everglades. Donald DeAngelis , Joel Trexler, Wolf Mooij, Douglas Donalson.
8:15	1619: From Buoys to Whales: Enhancing Ecosystem-Based Management through Observing System Data. Andrew Pershing .	1531: Land Use and Coastal Eutrophication. Grace Brush .	2636: If You Build It, (and Ask Them) They Will Come: Engaging End Users in the Product Development Process. Tom Shyka , Riley Morse, Tom Gale.	2222: A Spatial Model to Forecast Responses to Relative Sea Level Rise in North Carolina. Enrique Reyes , Christopher Buzzelli.	1355: Ecosystem Models and Sensitivity Analysis: An Impossible Combination? Elizabeth Fulton , Francis Pantus.
8:30	2453: Implementing a New Paradigm in Ocean Observing: A view from the COOLroom. Scott Glenn , Oscar Schofield, Robert Chant, Joshua Kohut, Janice McDonnell.	1450: Towards Harmonized Eutrophication Assessment Criteria for European Coastal Waters. Anna-Stiina Heiskanen .	2452: Managing (Knowledge) to Manage Estuaries and Coasts. Nigel Pontee , Adam Hosking.	2014: Climate Change and Coastal Marshes: Storms and Sediments, Floods and Droughts. Denise Reed .	2180: Improving Model Predictability Through Parallel Formulations, System-level Validation, and Stochastic Simulation (CHRP Narragansett Bay). Mark Brush .
8:45	1874: The Role of Real Time Ocean-Observing Data in Oil Spill Response: Examples from the Gulf of Mexico. Robert Martin , Cj Beegle-Krause.	1358: From Indicators to Multi Metric Assessment Tools: A Case Study from the Baltic Sea. Jesper Andersen .	1153: Technology Tools for Coastal-Marine Ecosystem-Based Management. Sarah Carr , Patrick Crist.	1562: Influence of Climate Variability on Marsh Surface Elevation Dynamics. Linda Blum , Mark Brinson, Robert Christian.	2002: Transport and Fate Model for PCBs in the Potomac River Estuary. Victor Bierman , Scott Hinz, Daniel Rucinski, Carlton Haywood, Claire Buchanan, Andrea Nagel.
9:00	1416: Texas HAB Detection and Management. Cindy Loeffler .	2521: Practical Developments in the Assessment of Coastal Eutrophication. Mirta Teichberg , Ivan Valiela, Sophia Fox, Erin Kinney.	1136: Management Tools for Setting Water Quality Goals for Seagrass Restoration. Charles Gallegos .	2872: A Foundation Species Moderates the Effect of Warming in a New England Salt Marsh Community. Keryn Bromberg , Mark Bertness.	1824: An Automatic, Mass-balance Approach for Nutrient Calibration in Chesapeake Bay Watershed Model. Jing Wu , Robert Burgholzer, Gary Shenk, Lewis Linker.
9:15	1868: An Ocean Observing System for Early Warning of Harmful Algal Blooms in Washington State. Dan Ayres , Vera Trainer, Barbara Hickey.	1298: Developing an Economic Indicator of Estuarine Eutrophication: The Asset Value of Estuaries. Douglas Lipton .	2076: A Process for Tracking Progress Towards Water Quality Targets in Tampa Bay Using Monitoring Data. Anthony Janicki , Holly Greening, Amy Poe.	1449: Climate-Linked Alteration of Ecosystem Services in Tidal Salt Marshes of Georgia and Louisiana: Preliminary Findings. Mark Hester , Irving Mendelssohn, Merryll Alber, Samantha Joye.	1875: GEM Box: Simulating Circulation in Estuarine Ecosystem Models at Ecologically Appropriate Scales (Narragansett Bay CHRP). James Kremer , D. Bergondo, M. Brush, D. Codiga, C. Kincaid, N. Nasota, D. Ullman, J. Vaudrey.
9:30	2609: Virtual Coastal Margins: Are they for real as management-supporting tools? Joseph Zhang , Antonio Baptista.	1643: Ecological Impacts of Hypoxia on Living Resources Workshop: Recommendations to Facilitate Management. David Kidwell , Alan Lewitus, Robert Magnien.	2229: Synthesis of SWMP Data for ASSETS Eutrophication Assessment of the North Atlantic Region NERR Systems. Christopher Dalton , Fred Dillon, Suzanne Bricker, Michele Dionne.	2860: Historic Records Shed Light on Marsh to Mangrove Change in Tidal Wetlands. Ellen Raabe , Laura Gauron.	2655: Using Fundamental Laws to Simulate Salt Marsh Response to Sea Level Rise. Lora Harris , Joseph Vallino.
	BREAK 9:45 am - 10:15 am				

Monday Early Morning Oral Presentations

556 AB (RICC)	NARR A (Westin)	NARR B (Westin)	NARR C (Westin)	PRV-IV (Westin)	Waterplace (Westin)	
SCI-129 Trophic Dynamics and Food Webs Eric Annis	SCI-049 Causes and Consequences of Genetic Variation in Estuarine Systems Christina Richards and Josh Mackie	SCI-044 Coastal Land Use: Permitting, Law and Management Pamela Neubert, Katie Barnicle, Don Schall and Gregor McGregor	SCI-052 Connectivity in Estuarine and Coastal Populations of Fish and Invertebrates David Secor and Claire Paris	SCI-075 Monitoring and Assessment of Seagrass Hilary Neckles	SCI-033 Evaluation of Non-native Oyster Introduction Jamie King, Roger Newell and Mark Luckenbach	
2471: Linking Primary Production to Menhaden Growth in Chesapeake Bay. Eric Annis , Edward Houde, Lawrence Harding, Michael Wilberg, Mike Mallonee.	2409: Genetic Ecology of Salt Marsh and Mangrove Plant Species. C.E. Proffitt , Steven Travis, Donna Devlin.	1397: Evaluation of SedCon Turbo® System Effect to Bivalve Bioaccumulation at a Berthing Facility within the Arthur Kill, NJ. Pamela Neubert , David Mitchell, Stephanie Wilson, John McCrossin.	2929: Introduction to Session: Population connectivity in coastal fishes. David Secor .	2141: Global Trajectories of Seagrasses: A Quantitative Assessment. William Dennison , Carruthers, Duarte, Fourqurean, Heck, Hughes, Kendrick, Kenworthy, Olyarnik, Orth, Short, Waycott, Williams.	1702: Potential Introduction of Non-native Oysters to Chesapeake Bay: What a Long Strange Trip It's Been. Mark Luckenbach , Jamie King, Roger Newell.	8:00
2314: Top-down and Bottom-up Interactions Induce Behavioral Shifts in an Intertidal Amphipod. David Johnson , John Fleeger, Linda Deegan.	1605: Hybridization Between Hexagrammos Fishes In A Coastal Marine Ecosystem: How Genomic Incompatibilities Maintain Species Boundaries. Karen Crow .	1490: The Massachusetts Endangered Species Act and Coastal Areas. Kathryn Barnicle , Donald Schall.	2816: Multiple Metrics of Habitat Connectivity and Value: Nursery utilization and population dynamics of California halibut. Joel Fodrie .	1800: Sarasota Bay Seagrass Monitoring Study: A Hierarchical Evaluation of Seagrass Polygon Dynamics. Anamari Boyes, Janet Gannon, Gary Raulerson , Bradley Robbins.	2293: Understanding <i>C. ariakensis</i> in Its Native Range. Ximing Guo , Haiyan Wang, Kimberly Reece, Jan Cordes, Standish Allen Jr., Heather Harwell, Mark Luckenbach.	8:15
1730: Benthic Habitat Quality and its Effects on Food Web Structure and Trophic Efficiency. David Gillett , Linda Schaffner, Iris Anderson.	2770: Population Genetic Structure and the Search for Adaptive Polymorphisms in the Estuarine anemone <i>Nematostella vectensis</i> . Adam Reitzel .	1621: Storm Damage Prevention and Flood Control Provided by a Barrier Beach, Plymouth Harbor, Massachusetts. Stanley Humphries .	1915: Application of the Nursery-role Hypothesis to Five Sub-populations of White Perch (<i>Morone americana</i>) in the Chesapeake Bay. Lisa Kerr , David Secor.	1953: A Hierarchical Framework for Seagrass Monitoring in Northeastern Estuaries. Hilary Neckles , Blaine Kopp, Bradley Peterson, Penelope Pooler Eisenbies.		8:30
2711: Comparing Seasonal Ecopath Food Web Models of Areas Open and Closed to Trawling in Core Sound, North Carolina. Rebecca Deeher , Joseph Luczkovich, Kevin Hart, Lisa Clough, Jeffrey Johnson, David Griffith.	1515: Genetic and Epigenetic Components of Fallopia Invasion of Novel Salt Marsh Habitat. Christina Richards , Massimo Pigliucci.	1827: Redeveloping the Urban Estuarine Waterfront: Permitting the Tockwotton on Waterfront Drive Project on Narragansett Bay. Laura Ernst , Kevin McKay, Jeanne Boyle, Linda Silveira.	1505: Estuarine Use by Sympatric Species: Allis Shad and Twaite Shad in the Gironde System. Aude Lochet , Eric Rochard.	2639: Testing the Effectiveness of the SeagrassNet Monitoring Protocol. Frederick Short, Rob Coles , Jeffrey Gaekle, Len McKenzie, Miguel Fortes, Evamaria Koch.	2381: Disease Considerations Relative to the Proposed Introduction of Exotic Suminoe Oysters to the Mid-Atlantic. Ryan Carnegie , M. Alavi, T. Alphin, C. Audemard, M. Bishop, G. Brown, E. Bureson et al.	8:45
2674: Response of Primary Producers and Consumers to Environmental Stressors in an Experimental Seagrass Community. Rachael Blake , J. Emmett Duffy.	2539: Using High Resolution Microsatellite Markers to Assess Population Genetics of <i>Thalassia testudinum</i> in Florida Bay. Eric Bricker , Joseph Zieman, Michelle Waycott.	1389: Small Dock Management: A Case Study for Bringing Science to Permitting and Policy Generation. Ruth Kelyt , Steve Bliven.	2729: Influence of Individual Trophic Interactions of Larval Fishes on Population Networks. Claire Paris .	1536: Indicators of the Indirect Effects of Dredging in a Temperate Seagrass System, Western Australia. Kathryn McMahon , Paul Lavery, Michael Mulligan, Anne Brearley, Adam Gartner.		9:00
1854: Trophic Structure and Resource Availability Alter SOM Composition in a Seagrass System: a Field Experiment. Amanda Spivak , Elizabeth Canuel, J. Emmett Duffy, James Douglass, J. Paul Richardson.	1403: Effective Population Size Estimates of Red Drum (<i>Sciaenops ocellatus</i>) in Charleston Harbor, South Carolina. Michael Erwin .	2447: The Massachusetts Ocean Partnership Fund An Innovative Collaboration to Advance Integrated Ocean Management. Stephanie Moura .	1708: Natural Tags to Estimate Philopatry and Connectivity in Aquatic Animals. Cynthia Jones .	2520: Automated Production of Seagrass Maps from Sidescan Sonar Imagery: Accuracy, Variability and Patch Resolution. Theodore DeWitt , Peter Lattin, Patrick Clinton, Hillmar Stecher III, Christina Folger, Stacy Strickland.	2493: Potential Direct and Indirect Interactions Between <i>Crassostrea ariakensis</i> and <i>Crassostrea virginica</i> . David Bushek , P. Kingsley-Smith, S. Allen, M. Bishop, C. Kelly, V. Kennedy, M. Luckenbach, R. Newell, D. Merritt et al.	9:15
1177: Predator-prey Behavior in Two Populations of Blue Crab in New Jersey. Jessica Reichmuth , Allen Place, Judith Weis.	2611: Grappling with Diversity in the Seagrass <i>Ruppia</i> in North America and Hawaii using Molecular Phylogenetics. Kimberly Peyton .	1472: U.S. Supreme Court & Limits of Governmental Power: Regulatory Takings & Eminent Domain. Gregor McGregor .	1322: Is Biocomplexity Important for New England Atlantic Cod (<i>Gadus morhua</i>) Resources? Jon Lochrke , Dave Martins, Steve Cadrin.	1445: A Seagrass Paradox: Density Declines as the Beds Expand. Lori Morris , Robert Virnstein.		9:30
BREAK 9:45 am - 10:15 am						

Monday Mid-Morning Oral Presentations

	BR B (RICC)	BR D (RICC)	551 AB (RICC)	552 AB (RICC)	555 AB (RICC)
	SCI-030 Applications of Coastal Observing Systems for Research and Management <i>cont'd</i>	SCI-005 Toward Successful Management of Estuarine and Coastal Eutrophication <i>cont'd</i>	SCI-011 Beyond Monitoring and Observing Systems: Scientific Tools and Applications <i>cont'd</i>	SCI-002 Climate Effects on Tidal Wetlands <i>cont'd</i>	SCI-022 Prediction and Understanding: Model Approaches, Applications and Performance <i>cont'd</i>
10:15	2863: A Coastal Ocean Observing and Prediction System for Tampa Bay, Florida. Mark Luther , Steve Meyers, Sherryl Gilbert, Vembu Subramanian, Monica Wilson, Heather Holm, Amanda Linville, Jeff Scudder.	2465: An Integrated Ecological Assessment in Chesapeake Bay: linking stressors, water quality, and ecosystem goods and services. Robert Wood , John Jacobs, Rense Kelsey, Xinsheng Zhang, Lowell Bahner.	1545: Source to Resource: Quantitatively Connecting Watershed Implementation Actions to Chesapeake Bay Restoration. Richard Batiuk , Bill Dennison, Steve Giordano, Dave Jasinski, Ben Longstaff, Scott Phillips, Gary Shenk.	2653: The Relative Importance of Mineral and Organic Matter Accumulation in Maintaining Marsh Elevation. James Morris .	1950: Lagrangian Simulation of Upper Ocean Planktonic Ecosystem Dynamics. Hidekatsu Yamazaki , Takeyoshi Nagai.
10:30	2117: Application of Coastal Ocean Observing Technologies: Serving North Carolina's Needs for Weather and Water Information. Lynn Leonard , Jennifer Dorton.	1231: Application of Eutrophication Screening Models to Coastal Bays in China: The case of Jiaozhou Bay, an example of top-down control, and lessons for integrated coastal zone management in China. Joao Ferreira , S. Bricker, Y. Xiao, X. Zhang, M. Zhu.	1904: Washington State's Enhanced, Interactive Coastal Atlas: Providing Information for Improving Shoreline Regulations and Projects. Kathy Taylor , Darby Veeck, Dan Saul, Tim Strickler.	2252: Response of Dominant Marsh Macrophytes to Inundation Regime. Christine Voss , Robert Christian, James Morris.	2607: Using Particle-tracking Models to Improve our Understanding of Larval Transport: methods and case studies. Elizabeth North, Zachary Schlag .
10:45	1745: Integrating Marine Observing Systems for Improved Water Quality Management in Long Bay, South Carolina. Emily McDonald , Dwayne Porter, Braxton Davis, Denise Sanger, Sadie Drescher.	1319: Why, How, and How Much to Reduce Nutrients that Cause Gulf of Mexico Eutrophication. Nancy Rabalais , R. Eugene Turner.	2638: The Tidal Creeks Model, Integrating Man and Nature. Susan Lovelace , David White.	1911: Seasonal Variations in the Ecomorphodynamics of Fundy Salt Marshes: Implications of Climate Change. Danika Van Proosdij .	2048: "Asari (short-necked clam) Project" as an Example of Interaction between Science and Policy. Keita Furukawa , Hirofumi Hinata.
11:00	1918: The National Estuarine Research Reserve Observations Pipeline: Improving Coastal Management with Assessments, Capability, and Delivery. Whitley Saumweber , Susan White.	2509: Managing Eutrophication in the Baltic, a Nitrogen-limited Sea with Large Nitrogen-fixing Blooms. Ragnar Elmgren , Ulf Larsson.	1802: The Real Wealth Purchased in a New England Fish Platter. Daniel Campbell , Nicole Schuetz, Cathleen Wigand.	1501: Spatial Pattern of Shorezone Wetlands in the Neuse River Estuary, North Carolina, USA. David Kunz , Mark Brinson.	1879: Modeling the Temporal and Spatial Variability in Bay Anchovy Habitat Suitability in Chesapeake Bay. Xinsheng Zhang , Lowell Bahner, Robert Wood, Edward Houde, Eric Annis, Lawrence Harding, Rense Kelsey, Stuart Ludsins, Stephen Brandt.
11:15	2302: What Controls Turbidity Levels in Humboldt Bay, California? Gregory Crawford , Frank Shaughnessy, Steve Walker, Chris Dugaw, Clark Fenton.	1356: Pathways of Ecosystem Responses to Eutrophication and Oligotrophication. Jacob Carstensen .	1629: A GIS Web Mapping Portal for Displaying Real-Time Environmental Information from the Top of the Watershed to the High Seas. John Kelley , Micah Wengren, Jason Greenlaw, Shelley Schindler.	2511: Comparative Importance of Winter Processes on New England Back-barrier High Marsh Sediment Budgets. Brittina Argow , Zoe Hughes, Duncan FitzGerald	2255: Quantifying Seasonal Shifts In Nitrogen Sources To Oregon Estuaries. Part II: Transport Modeling. Cheryl Brown , James Kaldy.
11:30	1719: Remote Sensing Assessment of Kelp Forest and Seagrass Meadow Productivity. Richard Zimmerman , Heidi Dierssen, Paul Bissett.	1908: Progress and Benefits of Eutrophication Management Efforts for Long Island Sound, New York and Connecticut. Paul Stacey , Mark Tedesco.	Synthesis/Discussion led by Peg Pelletier	Synthesis/Discussion led by Donald Cahoon, Denise Reed, James Morris and Danika Van Proosdij	2270: Modeling Phytoplankton Dynamics to Understand Sources and Losses in a Complex Tidal Low-Productivity System. Lisa Lucas , Nancy Monsen, James Cloern.
11:45	2602: Investigating Water Quality and Clarity Variability in Great Bay NH with a Coastal Observing System. J.R. Morrison , Philip Trowbridge, Thomas Gregory, Michael Novak.	2294: National Estuarine Eutrophication Assessment: Effects of Nutrient Enrichment in the Nation's Estuaries 1999-2004. Suzanne Bricker , B. Longstaff, W. Dennison, A. Jones, J. Woerner, E. Wicks, K. Boicourt.			2744: A Modeling Study of Alternate Stable States in Florida Bay. Christopher Madden , Amanda McDonald.
POSTER SESSIONS and LUNCH 12:00 pm - 2:00 pm					

Monday Mid-Morning Oral Presentations

556 AB (RICC)	NARR A (Westin)	NARR B (Westin)	NARR C (Westin)	PRV-IV (Westin)	Waterplace (Westin)	
SCI-129 Trophic Dynamics and Food Webs <i>cont'd</i> Darcy Lonsdale	Open	SCI-105 Contaminants and Pathogens Marie DeLorenzo	SCI-052 Connectivity in Estuarine and Coastal Populations of Fish and Invertebrates <i>cont'd</i>	SCI-072 Seagrass Monitoring and Assessment Frederick Short	SCI-033 Evaluation of Non-native Oyster Introduction Jamie King, Roger Newell and Mark Luckenbach, <i>cont.</i>	
1999: Stable Isotope Assessment of the Food Web in an Intertidal <i>Zostera noltii</i> Bed. Benoit Lebreton , P. Richard, G. Radenac, M. Bordes, M. Br��ret, C. Arnaud, G. Guillou, F. Mornet, C. Pfl��ger, G. Blanchard.		1556: Response of Salt Marsh Grass to Residual Petroleum Spilled 38 Years Ago in Wild Harbor, MA. Jennifer Culbertson , Ivan Valiela, Matthew Pickart, Emily Peacock, Christopher Reddy.	2261: Habitat Use, Behaviors, and Movements of Migratory Striped Bass During Summer Residence in Massachusetts. Sarah Pautzke , Martha Mather, John Finn, Robert Muth, Linda Deegan.	2727: Eelgrass (<i>Zostera marina</i> L.) status and trends in greater Puget Sound: local change within large-scale stability. Jeffrey Gaeckle , Pete Dowty, Blain Reeves, Helen Berry, Sandy Wyllie-Echeverria, Thomas Mumford.	2641: Projecting Population Dynamics of Eastern Oysters (<i>Crassostrea virginica</i>) and Non-native Suminoe Oysters (<i>C. ariakensis</i>) For Proposed Restoration Scenarios. Edward Weber , Jon Volstad, Mary Christman, Elizabeth North, Danny Lewis, Jodi Dew.	10:15
2434: Using Stable Isotopes to Assess Food Web Dynamics in the Coastal Marshes of the Aransas National Wildlife Refuge, TX. Jeffrey Wozniak , Stephen Davis, David Hoeinghaus.		1936: Trophic Transfer and Effects on Bluefish, <i>Pomatomus saltatrix</i> , Consuming Contaminated Prey. Allison Candelmo , Ashok Deshpande, Judith Weis.	1360: Exploring Connectivity Between Estuarine Fish Nurseries and Coastal Populations Using Otolith Elemental Fingerprints. Rita Vasconcelos , P. Santos, S. Tanner, V. Fonseca, A. Maia, M. Ruano, C. Latkoczy, D. G��nther, M. Costa, H. Cabral.	1145: Status of Seagrass Beds at Grand Bay National Estuarine Research Reserve, Mississippi. Hyun Jung Cho , Christopher May.		10:30
1622: Short-term Uptake of 15N Tracer by Autotrophs and Grazers in a Seagrass Bed. Michael Sullivan , Brian Fry, Erin Symonds.		1585: Gene Expression Signatures in Young of the Year Bluefish from Degraded Habitats. Peter Straub , Ashok Deshpande, William Phoel, Mary Higham, Bruce Dockum.	2673: Connectivity to Tidal Exchange Largely Controls Nekton Assemblage Structure in Mangrove-lined Wetland Ponds. Carole McIvor , Justin Krebs, Adam Brame.	2396: Seagrass Status Following the Hurricanes of 2004 in Indian River Lagoon, Florida. Kristen Sanderson , M. Dennis Hanisak.	1441: Economic Aspects of Native and Non-native Oyster Restoration in Chesapeake Bay. Douglas Lipton, Thomas Murray , James Kirkley, Tommy Leggett.	10:45
1623: Natural Stable Isotopes and Multiple Enriched Isotope Additions Reveal the Diet of Saltmarsh Consumers. Kari Galv��n , John Fleeger, Linda Deegan, Bruce Peterson.		2280: Use of the Marine Mud Snail, <i>Ilyanassa obsoleta</i> , to Assess Toxicity of an Estuarine Contaminant, Irgarol 1051. Meaghan Finnegan , Marie DeLorenzo.	1485: From Food Webs to Resilience: Using stable isotopes to connect the dots for juvenile Chinook in the Columbia River estuary. Greer Anderson , Charles Simenstad.	1453: The enigmatic <i>Halophila johnsonii</i> : rare, yet highly dynamic. Robert Virnstein , Lori Morris.	1517: Management of Native Oysters and Implications for Managing Non-Native Oysters in Maryland. Robert Wieland .	11:00
2431: Experimental Manipulation of Nutrients and Grazing on a Tropical Seagrass Meadow in Jobos Bay, PR. Ylva Olsen , Ivan Valiela.		2246: Toxicity of the Antifouling Compound Irgarol in Estuarine Systems. Marie DeLorenzo , Paul Pennington, Meaghan Finnegan, Katy Chung, Yelena Sapozhnikova, Mike Fulton.	2442: Seasonal Structure and Diversity of a Mid-Atlantic Nearshore Marine Fish Community. Ryan Woodland , David Secor.	2047: Seagrass Habitat Monitoring and Management in Bermuda. Sarah Manuel , Kathryn Coates, James Fourqurean, W. Judson Kenworthy, Matthew Hammond, Mandy Shailer.	2399: Introducing Non-Native Species: The Importance of a Broader Geographical and Temporal Context. Dianna Padilla .	11:15
1406: The Influence of Suspension-feeding Bivalves on the Pelagic Food Webs of Shallow Enclosed Bays. Darcy Lonsdale , Robert Cerrato, David Caron, Robert Holland, Allison Mass, Lee Holt, Rebecca Schaffner, Jeronimo Pan.		2769: Interaction between Basin Morphology and Water Quality: Case Study Marinas and Canal Subdivisions. George Guillen .	1849: The Role of Hypoxia in Mediating Predator-Prey Relationships in Estuarine Habitats. Danielle Tuzzolino , Timothy Targett, Robert Diaz.	1468: Assessment of Eelgrass (<i>Zostera marina</i>) Community Structure in New Jersey, 1998-2006. Paul Bologna .		11:30
2681: Diel Variability in the Production & Accumulation of Autochthonous Dissolved Organic Carbon in the Potomac River Estuary. Leila Hamdan , Christopher Osburn, Robert Jonas, Jude Apple, Thomas Boyd.		2461: Diversity and Distribution of Bacterial Communities in Dioxin-Contaminated Sediments from the Houston Ship Channel. Anne-Sophie Hieck , Peter Santschi, Kevin Yeager, Robin Brinkmeyer.	2532: Nekton Use of Salt Marshes Along a Gradient of Watershed Land Use. Marnita Chintala , Lesa Meng, Sandra Benyi, Marina Huber.	2615: Seagrass Ecosystems in Trouble: A Global Report Card from SeagrassNet. Frederick Short , Rob Coles, Aaren Freeman, Evamaria Koch, Miguel Fortes, Steven Victor.	Wrap-up	11:45
POSTER SESSIONS and LUNCH 12:00 pm - 2:00 pm						

Monday Mid-Afternoon Oral Presentations

	BR B (RICC)	BR D (RICC)	551 AB (RICC)	552 AB (RICC)	555 AB (RICC)
	SCI030 Applications of Coastal Observing Systems for Research and Management <i>cont'd</i>	SCI031 Human and Climatic Factors Affecting Eutrophication of Coastal Lagoons Michael Kennish and Hans Paerl	SCI061 Ecology, Modeling and Management ~ Getting it all Together Brian Williams and Andrea Copping	SCI002 Climate Effects on Tidal Wetlands <i>cont'd</i>	SCI022 Prediction and Understanding: Model Approaches, Applications and Performance <i>cont'd</i>
2:00	2257: Observations of Circulation and Water Quality in Long Island Sound. James O'Donnell , Hans Dam, Frank Bohlen.	1214: Eutrophic Condition of Mid-Atlantic Coastal Lagoons. Michael Kennish , Suzanne Bricker, Scott Haag.	1689: Ecology, Modeling, and Management. Brian Williams .	2298: Katrina Impacts to the Caernarvon Wetlands, Saint Bernard Parish, Louisiana. Duncan FitzGerald , Nick Howes, Mark Kulp, Zoe Hughes, Ioannis Georgiou, Shea Penland.	2372: Evaluating 2030 Climate Change in the Chesapeake Bay Watershed and Estuary. Lewis Linker , Thomas Johnson, Ping Wang, Carl Cerco.
2:15	1349: Informing Decisions on Washington State's Hood Canal Hypoxia from Integrated Observations and Modeling as Part of NANOOS. Jan Newton , David Martin, Dan Hannafous.	1460: Assessing Eutrophication Dynamics of the U.S.'s Largest Lagoonal Ecosystem (Pamlico Sound, NC) During a Period of Elevated Hurricane Activity. Hans Paerl , Benjamin Peierls, Karen Rossignol.	1736: Got Swarms? Successful Management of the Non-biting Midge Population in Seekonk River, Rhode Island. Carl Nielsen , Matt Ladewig.	1457: Shifting Pathways and Magnitude of Organic Matter Mineralization in Tidal Freshwater Marshes Following Sea-Level Rise. Nathaniel Weston , Melanie Vile, David Velinsky, Scott Neubauer, Samantha Joye.	1989: Coupling of Public Participated Observation and 3-D Circulation Model to Restore Canal Environment. Chizuru Satoh , Keita Furukawa, Keisuke Nakayama.
2:30	2684: Hypoxia and Fish Kills in Hood Canal (Washington State). Allan DevoI , Wendi Ruef, Jan Newton, Mitsuhiro Kawase.	1139: Long-term Climatological Effects on Coastal Plankton Blooms and Response of Associated Food Webs. Robert Livingston .	1898: Models for Management: the top three questions. Clifford Hearn .	2634: Nutrient and Hydrological Effects on Organic Matter Decomposition in Tidal, Saline Wetlands. Gregory Zogg , Richard MacKenzie.	1482: Applying a Tidal-timescale Model to Simulate Decadal-timescale Scenarios of Estuarine Geomorphic Change. Neil Ganju , David Schoellhamer.
2:45	1912: High Resolution Dissolved O ₂ Measurements Reveal Productivity and Respiration Dynamics of the Elkhorn Sloughs Estuary. Joseph Needoba , John Haskins, Kenneth Johnson.	2007: A Tale of Two Estuaries: Hydrology and Nutrient Loading in Biscayne and Florida Bays, USA. Joseph Boyer , Henry Briceno.	1327: Mixing of Supersaturated Phytoplankton Assemblages and the Precipitous Loss of Species. Daniel Roelke , Peter Eldridge.	2098: How Increased Flooding Affects Pore Water Biogeochemical Profiles Within Salt Marsh Sediments, a Mesocosm Experiment. Rachel Michaels , Joseph Ziemann.	2612: Integrated Modeling and Monitoring to Assess the Impact of Runoff at the Watershed Scale. Robert Johnston , P.F. Wang, Brian Skahill, Christopher May, Valerie Cullinan, Mindy Roberts, Sally Lawrence.
3:00	2159: Aiding short-term Environmental Decision Making using California's Coastal Ocean Currents Monitoring Program (COCMP). Krista Kamer , Newell Garfield, Burt Jones, Jeffrey Paduan, Eric Terrill, Mas Dojiri, Heather Kerker, Stephanie Peck.	2174: Water Quality in Indian River Lagoon, Florida: "Wet" vs. "Dry" Years. M. Dennis Hanisak , Kristen Sanderson.	1940: Managing a Developing Estuary - Integration of Hydrodynamic Models, Ecological Understanding, and Resource Management. Andrea Copping , Tarang Khangaonkar, Terry Williams, Tim Walls, Zhaoqing Yang.	2056: Plant Response to Elevated CO ₂ and Nitrogen Drives Soil Accretion in a High Brackish Marsh. J. Adam Langley , J. Patrick Meganigal.	Synthesis/Discussion led by Lora Harris, Mark Brush, Lisa Lucas, W. Michael Kemp and James Kremer
3:15	1756: Mispillion Harbor: An Example of Integrating Observing and Remote Sensing Data for Restoration and Management. Robert Scarborough , David Carter, Tricia Arndt, Michael Mensinger.	2225: Historical and Recent Anthropogenic Inputs Affecting the Water Quality of the Pettaquamscutt River Estuary (RI). Veronica Berounsky , Scott Nixon.	2100: Development of Recommendations for Breaching a Causeway to Reunite two Estuaries. Straud Armstrong , Feleke Arega, J. David Whitaker, A.W. Badr.	2718: Changing Climate, Changing Goals: Conservation and Measuring Success in the Face of an Uncertain Future. Roger Fuller , Peter Dunwiddie, Sonia Hall, Danelle Heatwole, Molly Ingraham, Kara Shaber Nelson.	
BREAK 3:30 pm - 4:00 pm					

Monday Mid-Afternoon Oral Presentations

556 AB (RICC)	NARR A (Westin)	NARR B (Westin)	NARR C (Westin)	PRV-IV (Westin)	
SCI-123 Plankton Ecology Michael Roman	SCI-006 Ecosystem Services Associated with Bivalve Shellfish: the Key to a New Management Paradigm? Robert Brumbaugh, Danielle Kreeger and Michael Beck	SCI-105 Contaminants and Pathogens cont'd Robin Brinkmeyer	SCI-053 Reconstructing Historical Ecosystem Structures and Function Charles Simenstad and Jennifer Burke	SCI-076 Seagrass Ecosystems Sara Green	
2506: Are Estuaries as Productive as we think? A Comparative Analysis of Estuarine Phytoplankton Productivity. Sarah Foster , James Cloern.	2342: From the Headwaters to Coast: A watershed-based perspective on ecosystem services furnished by bivalve shellfish. Danielle Kreeger .	1280: Seaweed Uptake of Organic Pollutants & Their Affect on Grazers: PCBs and PAHs. Don Cheney , Matt Brudner, Deana Aulisio, Kevin Gardner, Jason White.	2013: Historical Eco-Geomorphology of Coastal Dunes on the Northwest Coast of Ireland. Helene Burningham , Claire Barrett-Mold.	1933: Effects of River Inputs on Nutrient Cycling of Submerged Aquatic Vegetation in Lake Cataouatche, Louisiana. Sara Green , Erick Swenson, Brian Fry.	2:00
2575: Phytoplankton and Bacterial Nitrogen Uptake in Chesapeake Bay Measured Using a Flow Cytometric Sorting Approach. Paul Bradley , Deborah Bronk.	1842: Ecosystem Services Provided by Oyster Reefs: an Experimental Assessment. Kenneth Heck , Just Cebrian, Sean Powers, Kelly Major, Dottie Byron, Rochelle Plutchak, Nate Gerald.	2789: New Insights into the Wasting Disease Pathogen, <i>Labyrinthula</i> . Anne Boettcher , Timothy Sherman, Daniel Martin, Emily Boone, Melanie Caldwell, Neus Garcias, Sandy Wyllie-Echeverria.		1984: Patterns of Within-Shoot Nutrient Translocation Following Simulated Herbivory in the Seagrass <i>Posidonia oceanica</i> . Patricia Prado, Catherine Collier , Teresa Aloverro, Javier Romero.	2:15
1790: The Cape Fear River Plume as a Localized Region of Zooplankton Aggregation. Edward DuRant , Michael Mallin, Lawrence Cahoon.	1638: Flat Tree Oysters as Indicators in Sub-Tropical Climates. Heidi Hertler , Lindsay Martinez, Danielle Kreeger, Graciela Ramirez, Harvey Minnigh.	1916: A Comparative Study on Alternative versus Traditional Indicators of Fecal Pollution at Swimming Beaches. Kalle Matso .	2867: Linking Sea and Society: Holocene Environmental and Cultural Change in the Danish Baltic. David Ryves , Peter Rasmussen, Annemarie Clark, Peter Leavitt, Jonathan Lewis, Kaj Petersen, Rolf Vinebrooke.	1907: Seagrass Transplant Success Linked to Sediment Bacterial Communities. Eric Milbrandt , Paul Sokoloff, Jaime Greenawalt-Boswell.	2:30
1829: Winter Zooplankton Abundance, Distribution, and Vital Rates in the Chesapeake Bay Estuarine Turbidity Maximum. James Pierson , Michael Roman, David Kimmel, Raleigh Hood, Byron Crump, David Keller, Michael Malpezzi.	1812: Restoring Oyster Reefs to Recover Ecosystem Services. Jonathan Grabowski , Charles Peterson, Michael Piehler, Robert Conrad.	1310: Isolation of Fecal Coliform Bacteria from the American Alligator (<i>Alligator mississippiensis</i>). Michelle Johnston , Dwayne Porter, Geoffrey Scott, Laura Webster, Walter Rhodes.	2766: The Shannon Estuary Wetlands Complex, western Ireland: conservation and conflicts. Michael Healy , Kieran Hickey.	1726: Relating SAV Area to Water Clarity in Chesapeake Bay. Peter Bergstrom , Lee Karrh, Rebecca Golden, Kenneth Moore, Britt-Anne Anderson.	2:45
1618: Sea Nettle <i>Chrysaora quinquecirrha</i> in Chesapeake Bay: Factors Influencing Disappearance and Variability. Margaret Sexton , Raleigh Hood, Mary Beth Decker.	1902: Assessing the Physical and Ecological Footprint of Shellfish Aquaculture Gear in Long Island Sound, Connecticut. Tessa Getchis , Jamie Vaudrey, Robert Britton, James Kremer, Jim Markow, Kaitlyn Shaw.	2482: Adenoviruses as Fecal Contaminant Source Trackers in Buffalo and Whiteoak Bayous, Tributaries into Galveston Bay. Robin Brinkmeyer .	2535: Changes in San Francisco Bay Wetlands, 1850-2000. Robin Grossinger , Josh Collins.	2333: P Enrichment of Seagrass Meadows Causes Changes in Epiphyte Community Structure at Different Taxonomic Levels. Thomas Frankovich , Anna Armitage, James Fourqurean, Ania Wachnicka, Evelyn Gaiser.	3:00
1540: Immediate Local-Scale Observations Reveal Counter-Intuitive Relationship Between Wind and Barnacle Recruitment. Charles Mulligan , Kevin Johnson.	1502: Nekton Utilization of Constructed Intertidal Oyster Reefs and Aquaculture Structures in Delaware Bay, USA. Jaclyn Taylor , David Bushek.	2148: Developing a Non-Monetary Compensation Policy in the Case of Losing Public Beaches. Ami Kyungwoo Kang , George Parsons.	1968: Estuarine Habitat Change: What Can (and Can't) We Learn From Historic Maps and Aerial Photographs? Eric Van Dyke , Kerstin Wasson.	2259: Maximum Wave Energy Tolerated By SAV In Chesapeake Bay. Evamaria Koch , Mark Fonseca, Amit Mallhotra, Lee Karrh.	3:15
BREAK 3:30 pm - 4:00 pm					

Monday Late Afternoon Oral Presentations

	BR B (RICC)	BR D (RICC)	551 AB (RICC)	552 AB (RICC)	555 AB (RICC)
	SCI-030 Applications of Coastal Observing Systems for Research and Management <i>cont'd</i>	SCI-031 Human and Climatic Factors Affecting Eutrophication of Coastal Lagoons <i>cont'd</i>	SCI-061 Ecology, Modeling and Management - Getting it all Together <i>cont'd</i>	SCI-003 Coastal Ecosystem Planning: Interdisciplinary Science-based Approaches Mark Bain	SCI-039 Research Supporting Adaptive Management of Freshwater Flows Paul Montagna and Carla Guthrie
4:00	2545: Do Distance to Inlets and Orientation of Nursery Areas Affect Juvenile Fish Abundance in NC? Gregory Meyer , Joseph Luczkovich, Mark Brinson, Terry West.	2671: Biotic Feedbacks During Eutrophication of Coastal Bays: The role of plants in the "coastal filter." Karen McGlathery , Meredith Ferdie, Peter Berg, Kenneth Foreman, Anne Giblin, Robert Howarth, Roxanne Marino.	2560: Development of an Optical Water Quality Model in the Springs Coast Region of Southwest Florida. Veronica Crow , Chris Zajac.	1281: Ecosystem Planning: A Spatial Analysis Approach. Marci Meixler .	1293: Adaptive Management of the Nueces River System to Provide Stable Water Supplies and Environmental Flows. Paul Montagna , Erin Hill, Ray Allen, Bruce Moulton.
4:15	2487: Chesapeake Bay Observing System - Subregional Association of IOOS. Elizabeth Smith , Michael Koterba.	2234: Seasonal and Interannual Trends in Nitrogen and Brown Tide in Maryland's Coastal Bays. Patricia Glibert, Catherine Wazniak , Matthew Hall, Brian Sturgis.	2306: Adaptive Management as a Dialog in Plato's Cave. William Nuttle , William Dennison, Caroline Wicks.	2702: Use of Indicators for Coastal Ecosystem Planning and Management. Kathy Mills .	2218: Protecting Freshwater Inflows in Texas. Cindy Loeffler .
4:30	2572: Capture and Management of Water Quality Data using Hyperspectral Remote Sensing and SANDS. Luce Bassetti , Lisa Huddleston, Charles Bostater.	1216: Nitrogen Enrichment and Declining Seagrass Habitat in the Barnegat Bay-Little Egg Harbor Estuary, New Jersey. Scott Haag , Michael Kennish, Gregg Sakowicz.	2613: Eutrophication Modeling in the Neuse River Estuary: Lessons Learned and Future Perspectives. George Arhonditsis , Mark Borsuk, Craig Stow, Melissa Kenney, Kenneth Reckhow.	1442: Valuation of Ecosystem Services for Galveston Bay: A Case Study for Managing Urbanizing Estuarine Ecosystem. Jae-Young Ko , William Merrell, Marilu Hastings, Nicole Ekstrom, Elizabeth Shelton.	2760: Application of Geospatial Analysis to Freshwater Inflow Recommendation for Mission-Aransas Bay, Texas, USA. Grace Chen , Robin Riechers, Junji Matsumoto, Ruben Solis.
4:45	2598: High Resolution Current Velocity Measurements in Support of Dissolved Oxygen Study in Hood Canal, Washington. Eric Siegel , Matthew Alford, Wendi Ruef, Allan Devol.	1796: Coastal Lagoons of the SE Gulf of Mexico: Eutrophication Assessment. Jorge Herrera-Silveira , Sara Morales-Ojeda.	1539: An Ecofunctional Approach to Ecosystem-based Management for Narragansett Bay, Rhode Island. Alan Desbonnet , Barry Costa-Pierce.	1473: Ecosystem Planning: The Collaborative Process, "Lifblood" of Ecosystem-Based Management. Steve Gilbert .	2009: A Probabilistic Routine for Predicting Estuarine Salinity to Inform Management Decisions. Peter Doering , Chenxia Qiu.
5:00	Synthesis/Discussion led by Krista Kamer, Geno Olmi, Jan Newton and Josie Quintrell	2550: Incorporation of Anthropogenic Nitrogen into Estuarine Food Webs of the western Gulf of Mexico. Ken Dunton , Susan Schonberg, Amy Townsend-Small.	Synthesis/Discussion led by Andrea Copping	1415: Ecosystem Planning: A System Network Approach. Mark Bain .	1436: Freshwater Inflow Recommendations Based on Shifts and Reductions in Nursery Habitats in Tidal River Estuaries. Michael Flannery , Michael Heyl.
5:15		1378: Fertilizing the Land, Lagoons, and Sea; Stable Isotopic Insight into the Eutrophication of Coastal Egypt. Autumn Oczkowski , Scott Nixon.		2263: Ecosystem Planning: A Target Setting Approach. Dennis Suszkowski , James Lodge, Mark Bain. 5:30 1115: The Problem with Irish Estuaries: who does what? James Wilson .	2150: Setting Minimum Flows and Levels for A Spring-Dominated River System on Florida's West Coast. Michael Heyl . 5:30 1560: Economic Valuation of Freshwater Inflow and Ecosystem Services: A Double-Bounded Dichotomous Choice Approach. David Yoskowicz , Paul Montagna.

Monday Late Afternoon Oral Presentations

556 AB (RICC)	NARR A (Westin)	NARR B (Westin)	NARR C (Westin)	PRV-IV (Westin)	
SCI-113 Harmful Algal Blooms Kevin Sellner	SCI-006 Ecosystem Services Associated with Bivalve Shellfish: the Key to a New Management Paradigm? <i>cont'd</i>	SCI-021 Tracking Changes in Ecosystem Structure: How do we know what is Changing? Mark Hanson and Simon Courtenay	SCI-053 Reconstructing Historical Ecosystem Structures and Function <i>cont'd</i>	SCI-074 Climate Change and Anthropogenic Impacts on Seagrass Núria Marbà	
2548: Microcystis in the San Francisco Estuary. P. Lehman, G. Boyer, M. Satchwell, S. Waller.	1755: Habitat Value of Oyster (<i>Crassostrea virginica</i>) Aquaculture in Delaware Inland Bays. Gulnihal Ozbay, Patrick Erbland, Frank Marengi.	1166: Evolution of the Northumberland Strait Ecosystem Survey: Responding to Changing Management Demands and Priorities. John Mark Hanson.	1973: Historical Connections Between Watershed Land Use and Salt Marsh Functional Changes in a Pacific Estuary. Kristin Byrd, Maggi Kelly, Adina Merenlender.	1681: Trajectories of Mediterranean Seagrass (<i>Posidonia oceanica</i>) Populations during 1999-2007: Meadow Stability and Climate Change. Núria Marbà, Elena Díaz-Almela, Elvira Alvarez, C.M. Duarte.	4:00
1767: Detected Brevetoxins in Surficial Marine Sediments as Potential Sedimentary Molecular Biomarkers in Reconstructing HAB events. Wilson Mendoza, Ralph Mead.	2530: The Facilitation of Eelgrass Growth by Bivalve Filtration in Eutrophied Environments. Charles Wall, Bradley Peterson, Christopher Gobler.	2024: Changing Growth Rate of the Hard Clam, <i>Mercenaria mercenaria</i> , in Narragansett Bay, RI (USA). Kelly Henry, Scott Nixon.	1320: Linking Landscape Change with Ecological Function and Processes in the Columbia River Estuary. Jennifer Burke, Charles Simenstad.	1580: Impact of Sea-Level Rise on Water Quality Targets in Sarasota Bay. David Tomasko, Emily Keenan, Mark Alderson, Gary Raulerson.	4:15
2116: Persistence of the Marine Biotxin Domoic Acid at Depth in the Santa Barbara Basin, California. Emily Sekula, Claudia Benitez-Nelson, Robert Thunell, Steven Morton, Justina Burns, John Ferry.	2099: Quantification of Chlorophyll a Removal by Intertidal Oyster (<i>Crassostrea virginica</i>) Reefs Using in situ Fluorometry and a Comparison to Previous Laboratory Measurements. R.E. Grizzle, Jennifer Greene, Loren Coen.	2359: The Community Aquatic Monitoring Program (CAMP). Simon Courtenay, Marie-Hélène Thériault, Jim Weldon.	2120: Columbia River Circulation and Physical Habitat Opportunity: distinguishing natural variability from anthropogenic change. Antonio Baptista, Charles Seaton, Michela Burla, Joseph Zhang, Nathaniel Hyde.	1381: Leaf Reddening in Seagrasses: A Result of Stratospheric Ozone Depletion and Global Climate Change? Alyssa Novak, Frederick Short.	4:30
2273: Environmental Factors Modulating an Ichthyotoxic Dinoflagellate (<i>Karlodinium veneficum</i>) Bloom in the Neuse River Estuary, NC. Nathan Hall, Wayne Litaker, Elizabeth Fensin, Jason Adolf, Holly Bowers, Allen Place, Hans Paerl.	1807: Pathobiology of <i>Macoma balthica</i> and Other Bivalves of Chesapeake Bay. Shawn McLaughlin, Lewis Collier, Dorothy Howard, Robert Bingaman.	2077: Convergence of Spatial Abundance Quantiles as a Measure of Estuarine Organism Crowding During Low-inflow Periods. Ernst Peebles, Marin Greenwood.	2587: Ecological Interactions between Historical Tidal Shrub Habitat, Beaver, and Juvenile Salmon in the Skagit Delta. W. Gregory Hood.	1535: Vulnerability of Seagrasses in the Great Barrier Reef to Climate Change. Michelle Waycott, Catherine Collier, Kathryn McMahon, Peter Ralph, Len McKenzie, James Udy, Alana Grech.	4:45
1570: Numerical Modeling of the Initiation and Fate of Harmful Algal Blooms on the West Florida Shelf. Lyon Lanerolle, Richard Patchen.	1710: The Importance of Molluscan Habitat Along the Atlantic US Coast: Overview of a New ASMFC Review. Loren Coen, R.E. Grizzle.	2373: Seagrass on the Edge: local land-use practices threaten coastal seagrass communities in Sabah (Malaysia). Aaren Freeman, Frederick Short, Irwan Isnain, Fazrullah Razak, Rob Coles.	2231: Puget Sound and Hood Canal: Past 300 Years. Sherri Cooper, Jill Brandenberger, Eric Crecelius, Patrick Louchouart.	1304: A Practical Seagrass Shading Method to Resemble a Dredging Plume. Hugh Kirkman, Harry Houridis, Adam Cohen.	5:00
Synthesis/Discussion led by Kevin Sellner	1371: Hurricane Katrina Effects on Lake Pontchartrain Benthos and Water Quality Changes from Rangia Clam Loss. Michael Poirrier, Elizabeth Spalding.	2087: The Use of Vegetation Indices to Track Marsh Changes following Hurricane Disturbances. Brady Couvillion, Gregory Steyer, John Barras, Glenn Suir. 5:30 Synthesis/Discussion led by Mark Hanson and Simon Courtenay	2385: Reconstructing Historical Salinity Patterns in Florida and Biscayne Bays: providing a framework for restoration targets. G. Lynn Wingard.	2389: Evaluating Relationships between Mapped Seagrass Coverage and River Discharge: An Emphasis on Management Strategies. Kristen Kaufman, William Grant, Michael Heyl.	5:15

Tuesday Early Morning Oral Presentations

	BR B (RICC)	BR D (RICC)	551 AB (RICC)	552 AB (RICC)	555 AB (RICC)
	SCI-025 Physical Dynamics and Pathways for Production in River-Estuary Transition Zones Edward Houde and Lawrence Sanford	SCI-031 Human and Climatic Factors Affecting Eutrophication of Coastal Lagoons <i>cont'd</i>	SCI-024 Linking Landscapes, Food Webs and Fisheries Joel Hoffman and Jack Kelly	SCI-027 Coastal Outfalls: Environmental Responses to Sewage Effluent Carlton Hunt and Candace Oviatt	SCI-060 Innovations in Collection, Interpretation and Application of Monitoring Data Ping Wang, Jon Anderson, Richard Batiuk and Lewis Linker
8:00	2618: A Synthesis of Biological-Physical Interactions in the Chesapeake Bay Estuarine Turbidity Maximum. Elizabeth North , E. Houde, S. Chao, B. Crump, C. Friedrichs, R. Hood <i>et al.</i>	2212: Ecosystem Health Indexed through Networks of Nitrogen Cycling. Robert Christian , Cristina Bondavalli, Anna Christina Tyler, Iris Anderson, Karen McGlathery, Robert Ulanowicz, Pierluigi Viaroli, Christine Voss.	1475: Habitat Fragmentation can Reduce the Productivity and Energetic Carrying Capacity of Estuarine Ecosystems. James Cloern .	1330: Setting the Stage for Environmental Responses to Sewage Effluent Discharged from Coastal Outfalls: Objectives and Expectations. Carlton Hunt , Candace Oviatt.	2023: Estuarine Condition in National Estuary Program Sites in Northeast U.S.: Assessing the Assessments. John Kiddon , Henry Walker, Henry Buffum.
8:15	1816: Changes in Tidal Properties and Habitat in the Columbia River Tidal-Fluvial Zone. David Jay .	2457: Quantifying Rates and Mechanisms Controlling Sediment Nitrogen Fixation and Denitrification in a Eutrophic Estuary. Tonya Kane , Peggy Fong.	2291: Nekton Habitat Use Associated with Landscape Features and Salinity Regimes of the Barataria Estuary, Louisiana. Lawrence Rozas , Thomas Minello.	2113: Trends in Condition of the Southern California Bight: A Clean Water Act Success Story. Stephen Weisberg .	1872: A Comprehensive Classification Scheme for Coastal Habitats and Land Cover. Thomas Kutcher .
8:30	1865: Mechanisms of Sediment Flux and Turbidity Maintenance in the Delaware River Estuary. Christopher Sommerfield , Hua Yang, Kuo-Chuin Wong.	1717: Fate of Carbon and Nitrogen Sequestered by Macroalgae in a Coastal Lagoon. Amber Hardison , Bart Veuger, Iris Anderson, Elizabeth Canuel.	1998: Can Ecological Models Predict Food Chain Dynamics? Trophic Responses to Nutrient Increases in Seagrass Beds. Paul York , Brendan Kelaher, David Booth.	1823: Spatial, Seasonal and Interannual Phytoplankton Variability in Massachusetts Bay from SeaWiFS and <i>in situ</i> Data. Kimberly Hyde , Candace Oviatt, John O'Reilly, David Borkman.	2028: Management Applications for Chesapeake Bay Shallow Water Monitoring. Bruce Michael , Theodore Trice, Chris Trumbauer, R. Golden.
8:45	2000: Biological Origin of an ETM in a Macrotidal Estuary. Colin Jago , Sarah Jones.	1919: Macroalgae Identify the Relative Importance of Upwelling vs. Terrestrial Supplies of Nutrients to Coastal Estuaries. Peggy Fong , Katharyn Boyer, Anna Armitage.	2242: Using Fish Larvae to Assess Across-ecosystem Energy Flows at the Landscape-scale. Joel Hoffman .	1338: Fifteen Years of MWRA Water Quality Monitoring – Long-term Observations, Regional Patterns and Outfall Diversion. P. Scott Libby , Mike Mickelson, Carlton Hunt.	2196: The Chesapeake Bay Interpretive Buoy System: Targeting Multiple User Groups. Doug Wilson , Henry Pierce.
9:00	2075: Properties of Muddy Flocs in RETZs of the Chesapeake Bay and Its Tidal Tributaries. Grace Cartwright , Carl Friedrichs.	2443: Assessing the Impact of Coastal Development on Ecosystem and Public Health in the Southeast. Fred Holland , Denise Sanger, Guy DiDonato, Mike Fulton, Jill Stewart, Robert Van Dolah.	1102: Ecology of Microzooplankton in a Subtropical Estuary and Implications of River Water Diversion. Jennifer Putland , Richard Iverson.	1307: Water Column and Plankton Monitoring (1992-2006) and the Boston Harbor Outfall. Jefferson Turner , David Borkman, Scott Libby.	1697: Development of Autonomous Sensor Platform for Environmental Monitoring. Chen-Lu Yang , Keith Mackenzie, Kate Demello.
9:15	2166: Estuarine Adjustment. Parker MacCready .	Synthesis/Discussion led by Hans Paerl	1528: Stable Isotopes in Space: The Importance of Seagrass Meadows to Food Webs Beyond their Borders. Nathan Waltham , Rod Connolly.	2254: Ocean Outfalls, and Improvements to the Original Receiving-systems: lessons from Boston Harbor. David Taylor .	2029: Assessing Dissolved Oxygen Criteria Attainment in Virginia's Estuaries Using a Towed Undulating Vehicle. Howard Kator , Iris Anderson, Mark Brush, Jian Shen, Leonard Haas.
9:30	2785: High Frequency Physical Variability in the Chesapeake Bay Estuarine Turbidity Maximum. Lawrence Sanford , Yong Kim, Steven Suttles.		1544: Making Connections Between Coastal Landscapes and Coastal Ecosystems. John Kelly , Gerald Niemi.	2689: Bioavailability of Effluent Organic Nitrogen. Deborah Bronk , Margaret Mulholland, Elizabeth Canuel, Nancy Love.	2833: Organic Contaminants in the Thames River Estuary: Development of a passive sampler for the sediment-water interface. Tiffany St. George , Penny Vlahos.
	BREAK 9:45 am - 10:15 am				

Tuesday Early Morning Oral Presentations

556 AB (RICC)	NARR A (Westin)	NARR B (Westin)	NARR C (Westin)	PRV-IV (Westin)	
SCI-112 Geomorphology and Sediment Processes Maureen Corcoran and Anne Sigleo	SCI-010 Impacts of Climate Change and Energy Scarcity on Coastal Ecosystems John Day and Carles Ibañez	SCI-037 The Impacts of Human and Natural Disturbance on Mangroves Richard MacKenzie and Amanda Demopolous	SCI-050 Long-term Shifts in Faunal Assemblages in Eastern North America Rodney Rountree and Francis Juanes	SCI-070 Seagrass Habitat Gary Kendrick	
1808: Suspended and Benthic Sediment Relationships in the Yaquina Estuary, Oregon: Nutrient Processing. Anne Sigleo.	2861: Modeling our Economic Future in Response to a Changing Net Energy Future. Charles Hall , Bobbie Powers, William Schoenberg.	2707: The Habitat Value of Micronesian Mangroves and the Impacts of Natural and Human Induced Disturbances. Richard MacKenzie , Nicole Cormier.	2517: Long-term Shifts in Faunal Assemblages in Narragansett Bay, Rhode Island. Rodney Rountree , Francis Juanes.	1283: Can Grazing Manatees Alter Species Composition and Abundance in Tropical Seagrass Communities in Puerto Rico? W. Judson Kenworthy , Giuseppe Di Carlo, James Reid, Manuel Merello.	8:00
2633: Erosion of a Consolidated Fine-grained Shore and Contributions to Nearshore Turbidity. Jeffrey Halka , Lawrence Sanford.	1647: The Value of Coastal Wetlands for Hurricane Protection. Robert Costanza.	2456: Catastrophic Disturbance as Regulators of Wetland Community Structure and Function: typhoon impacts on mangrove benthos. Amanda Demopoulos , Richard MacKenzie, Nicole Cormier.	1877: Responses and Resilience of Zooplankton and Nekton to Climate Change in a Southeastern U.S. Estuary. Dennis Allen , Virginia Ogburn-Matthews, Tracy Buck.	1496: The Effect of Habitat Complexity on Predation Success: Re-evaluating the Current Paradigm in Seagrass Beds. Carly Steeves , Kenneth Heck.	8:15
2213: Natural Responses to Anthropogenic Alterations of the Matagorda Bay System, Northern Gulf of Mexico. Timothy Dellapenna , James Simons.	1686: Impacts of Climate Change and Energy Scarcity on Mediterranean Watersheds and Deltas. Carles Ibañez.	1350: Modeling Forest Recovery and Eco-physiological Function of Mangrove Stands: Life Without a Closed Canopy. Thomas Doyle, Ken Krauss.	1478: Changes in Species Composition of Fish and Macroinvertebrate Communities in the Southern Gulf of St. Lawrence. Hugues Benoit, Douglas Swain.	1309: Disturbance, Gap Recovery and Patch Dynamics of Subtropical Intertidal Species-Rich Seagrass Communities. Meredith Ferdie , Karen McGlathery, Joseph Ziemann.	8:30
1801: Detailed Quantification of Estuarine Sediment Deposits in the Hudson River Estuary: An Integrated Approach. Frank Nitsche , Timothy Kenna, Mackenzie Haberman.	2767: Energy implications of Louisiana Restoration Options. Lynette Cardoch , John Day, Roelof Boumans, Nathan Hagens.	1438: Mangroves as Protection from Storm Surges and Tsunamis: What Hydrodynamic Models and Actual Forests Reveal. Thomas Smith III	2016: Long-term Variation of Fish Assemblage Structure and Diversity in an Upper Chesapeake Bay Subestuary. Robert Aguilar , Anson Hines, Margaret Kramer, Michael Goodison.	2311: Assessing the Relative Habitat Value of Suspended Oyster Aquaculture Infrastructure to Coastal and Estuarine Epibenthic Fauna. Marc Skinner , Simon Courtenay.	8:45
1572: The Morphology and Tidal Propagation of the Dee Estuary, UK. Rowena Moore , Judith Wolf, Alejandro Souza, Stephen Flint.	1159: Challenges for Coastal Ecosystem-Based Management in Latin America. Alejandro Yanez-Arancibia , John Day Jr.	1602: Long-term Patterns of Above- and Belowground Primary Productivity of Two Florida Coastal Everglades Mangrove Forests. Edward Castaneda-Moya , Victor Rivera-Monroy, Robert Twilley, Sharon Ewe, Daniel Childers, Carlos Coronado-Molina.	2377: Linkages between Climate Change and the Facilitation of Invasive Species: long-term changes in fouling assemblages in southern New England, USA. Robert Whitlatch , Richard Osman.	2515: Insight from a die-off: Linking changes in macrophyte cover with ontogeny of infaunal communities. Stacy Villanueva , Susan Bell.	9:00
2551: Effects of Bulkheads on Bay Beaches. Nancy Jackson , Karl Nordstrom, David Smith, Sherestha Saini, Nicole Raineault, Diana Reyes.	1237: Coastal Ecology in Times of Scarcity. John Day.	2440: Mangroves and Climate in the Northern Gulf of Mexico, USA: A Study in Extremes. Richard Day.	2459: Decadal Changes in the Tidal Freshwater Fish Assemblage of a Potomac River Embayment. Chris Ruck , Richard Kraus, Chris Jones, Don Kelso.	1969: Multi-scale Spatial Patterns of Three Seagrass Species with Different Growth Dynamics. Gary Kendrick , Karen Holmes, Kimberly Van Niel.	9:15
2070: Towards a Sediment Transport Model of the Louisiana / Texas Shelf. Kehui Xu , Courtney Harris, Robert Hetland, James Kaihatu.	Synthesis/Discussion led by John Day	2502: Changes in mangrove forests: World-wide losses, and potential alterations from tropical deforestation. Sophia Fox, Ivan Valiela.	1845: Nekton Community Change in an Urbanized Estuary: Tampa Bay, Florida. Sean Keenan , Richard Matheson, Theodore Switzer, Marin Greenwood, Robert McMichael Jr.	2165: Could Climate Change and Eutrophication Promote <i>Ruppia</i> as the Seagrass of the Future? Tim Carruthers , S. Williams, M. Waycott, W. Dennison, C. Duarte, J. Fourqurean, K. Heck, A. Hughes, G. Kendrick <i>et al.</i>	9:30
BREAK 9:45 am - 10:15 am					

Tuesday Mid-Afternoon Oral Presentations

	BR B (RICC)	BR D (RICC)	551 AB (RICC)	552 AB (RICC)	555 AB (RICC)
	SCI-025 Physical Dynamics and Pathways for Production in River-Estuary Transition Zones <i>cont'd</i>	SCI-026 Watershed-based Nutrient Accounting: Coupling Catchments to Coastal Waters Robert Howarth and Dennis Swaney	SCI-024 Linking Landscapes, Food Webs and Fisheries <i>cont'd</i>	SCI-027 Coastal Outfalls: Environmental Responses to Sewage Effluent <i>cont'd</i>	SCI-060 Innovations in Collection, Interpretation and Application of Monitoring Data <i>cont'd</i>
10:15	2394: Modelling the Distribution of Oxygen Deficits in Highly Turbid Estuaries. S.A. Talke , H.E. De Swart, Victor De Jonge.	2523: Scenarios of Watershed Nutrient Sources, Forms & Exports: a Millennium Ecosystem Assessment "Global NEWS" Application. Emilio Mayorga , S. Seitzinger, A. Beusen, L. Bouwman, E. Dumont <i>et al.</i>	1921: Linking Estuaries, Land, and People – the Hudson River Estuary and Beyond. Karin Limburg .	2418: A Tale of Two Outfalls: Benthic Nutrient Cycling in Boston Harbor and Massachusetts Bay. Jane Tucker , Anne Giblin, Samuel Kelsey, Brian Howes, Charles Hopkinson.	1757: Annual and Decadal Trends in Distribution and Abundance of Chesapeake Bay Submersed Aquatic Vegetation: 1984-2004. Robert Orth , S. Marion, K. Moore, D. Wilcox, T. Carruthers, B. Dennison, M. Kemp <i>et al.</i>
10:30	1671: Physical-Biological Coupling in the Pearl River Estuary and Hong Kong Waters. Paul Harrison .	2802: Net Anthropogenic Nitrogen Inputs (NANI) and Riverine N Fluxes in the Mississippi River Basin. Gregory McIsaac , Mark David.	1714: Coastal Urbanization and Loss of Shellfishing Harvest in North Carolina. Michael Mallin .	1268: Spatial and Temporal Variations in Nutrient Limitation in Sub-Tropical Hong Kong Waters. Jie Xu , Alvin Ho, Xiangcheng Yuan, Kedong Yin, Paul Harrison.	1374: Use of Benthos Monitoring Data in a Predictive Eutrophication Model of Chesapeake Bay. Carl Cerco , Mark Noel.
10:45	1577: Food Web Structure and Cryptic Biodiversity Patterns in the St. Lawrence Estuarine Transition Zone. Gesche Winkler , Julian Dodson.	1507: Spatio-temporal Variation in NANI to Watersheds of the Lake Michigan Basin Over the 20th Century. Haejin Han , J. David Allan.	2844: A Holistic Approach to Determining Juvenile Snook Habitat Use in a Tampa Bay Tidal Wetland. Adam Brame , Carole McIvor.	2192: Reduced Winter Flounder Contaminant Burden and Neoplastic Effect Associated with Sewage Upgrades in Massachusetts Bay. Michael Moore , Lisa Lefkowitz, Ann Pembroke, Maurice Hall.	1855: Use of an Index of Biotic Integrity to Assess Phytoplankton Habitat Conditions in Chesapeake Bay. Richard Lacouture .
11:00	1394: Foodweb Support for Pelagic Fishes of the Upper San Francisco Estuary: Subtle Interactions and Subsidies. Wim Kimmerer .	2049: Modeling Nitrogen in the Susquehanna Basin USA Using the SCOPE-NANI Approach. Peter Woodbury , Dennis Swaney, Robert Howarth.	2510: Land Use Specific Nutrients and Selective Remineralization Supporting Fish Biomass in Southwest Florida's Tidal Rivers. Elon Malkin , David Hollander, Ernst Peebles.	2438: Monitoring Bioaccumulation Effects of Submarine Outfall Discharges in the North Coast of Spain. José Juanes , Beatriz Echavarri, Araceli Puente, César Álvarez, Andrés García, José Revilla, Gerardo García-Castrillo.	2217: Time-space Criteria for Water Quality in Chesapeake Bay. Paul Jacobson , Elgin Perry.
11:15	1782: Primary Production in the Chesapeake Bay ETM: Rates, Sources and Contribution to Higher Trophic Level Production. Raleigh Hood , David Keller, Dong-Yoon Lee, Byron Crump.	1857: Temperature as a Control on Proportional Nitrogen Export to Coastal Ecosystems: An application of the SCOPE nitrogen budgeting method. Sylvia Schaefer , Merryl Alber.	2260: Using Isotopes to Evaluate the Importance of Local and Far-field Nitrogen Sources in Greenwich Bay. Peter DiMilla , Scott Nixon, Mark Altabet, Richard McKinney.	2256: Long-term Evaluation of Sediment Quality Following Diversion of Sewage Effluent Discharge to Massachusetts Bay. Deirdre Dahlen , Carlton Hunt, Kenneth Keay.	2140: Application of a Standardized Method for Locating Upper and Lower Pycnocline Boundaries in Chesapeake Bay. Jeni Keisman , Thomas Fisher, Gary Shenk.
11:30	1452: Salinities in the Upper San Francisco Estuary Affect Phytoplankton Biomass and Dissolved Organic Carbon Availability. Risa Cohen , Anne Slaughter, Edward Carpenter.	2491: Nitrogen Budgets for Agricultural Watersheds and the Nitrogen and Oxygen Isotope Abundance in Discharged Nitrate. Thomas Jordan , Marilyn Fogel, Thomas Fisher, Adrienne Sutton.	1206: Linking Agricultural Landscapes, Food Webs and Fisheries in the Northern Gulf of Mexico. R. Eugene Turner , Nancy Rabalais.	2330: Benthic Community Structure and Biodiversity following Effluent Upgrades and Sewage Diversion from Boston Harbor to Massachusetts Bay. James Blake , Nancy Maciolek, Kenneth Keay.	1294: Characterization of Hyperspectral Reflectance Spectra in Estuary Waters. Chunlei Fan , John Schalles.
11:45	2672: Foodweb Dynamics of the Upper San Francisco Estuary: Upstream subsidies support downstream zooplankton populations. John Durand , Wim Kimmerer.	2021: Nutrient Flux Estimates in UK Catchments: Developing multi-proxy approaches for freshwater, estuarine and coastal waters. Penny Johnes .		2843: Long-Term Benthic Monitoring of Gulfstream Reef Shows "No-Effect" of Upstream Delray/Boynton Wastewater Outfall. William Precht .	2208: Suspended Sediment Flux in Chesapeake Bay and Tidal Tributaries Based on Monitoring and Modeling Data. Julie Herman , Carl Friedrichs, Carl Hershner.
POSTER SESSIONS and LUNCH 12:00 pm - 2:00 pm					

Tuesday Mid-Morning Oral Presentations

556 AB (RICC)	NARR A (Westin)	NARR B (Westin)	NARR C (Westin)	PRV-IV (Westin)	
SCI-048 Assessing Ecological Integrity: Using Multiple Indices and Ecosystem Components J. Ananda Ranasinghe and Angel Borja	SCI-118 Large Scale Natural Events Just Cebrian and Sean Powers	SCI-107 Estuarine Restoration Alison Leschen	SCI-050 Long-term Shifts in Faunal Assemblages in Eastern North America <i>cont'd</i>	SCI-073 Seagrass Ecophysiology Michael Durako	
1922: Evaluating Potential Predictors of Seagrass Community Structure and Density in South Texas Lagoons. Troy Mutchler , Ken Dunton.	2552: The Role of Natural vs. Anthropogenic Impacts Associated with Large-scale Hypoxia Following Hurricane Charley. David Tomasko , Chris Anastasiou.	2063: Thin-layer Deposition of Dredged Material: A technique for brackish marsh enhancement? Bryan Gossman, Bryan Piazza, Megan La Peyre .	2424: Cross-shelf Mixing of Fresh Water in the New York Bight and Implications in its Long Term Variability. Robert Chant .	1165: Leaf Optical Properties and Photosynthetic Leaf Absorptances in Seagrasses. Michael Durako .	10:15
2588: Evaluating Fish Community Structure from Size Spectra Indicators in Salt-front Regions of Estuaries. William Connelly , Edward Houde.	2472: Hurricane Effects on Seagrasses Along the Northern Gulf Coast. Dottie Byron , Kenneth Heck.	2108: Genetic Methods for the Identification of Suitable Smooth Cordgrass Transplants during Tidal Marsh Restoration. Steven Travis , James Grace.	1626: Ichthyoplankton Ingress Patterns at a North Carolina Inlet: Evidence for Temporal Shifts in Species Assemblage. Warren Mitchell , Jeffrey Buckel, J. Christopher Taylor, Gretchen Martin, Kyle Shertzer.	2526: Macroalgal Impacts and Patterns of Nutrient Supply to Eelgrass Beds in Tomales Bay, California. Brittany Huntington , Katharyn Boyer.	10:30
1833: Benthic Community Responses to Multiple Stressors in Shallow Water Habitats of Chesapeake Bay. Linda Schaffner , David Gillett, Jennifer Stanhope, Iris Anderson.	1412: Hurricane Rita Sediment Deposition on the Chenier Plain of Coastal Southwest Louisiana. Leigh Sharp , Greg Steyer, John Meriwether.	1305: Hydrodynamic Study for the Oyambre Estuary Restoration (Bay of Biscay, Spain). Sonia Castanedo , Maitane Olabarrieta, Fernando Mendez, Raul Medina, Susana Baston.	1713: Changes in the Fish and Macroinvertebrate Assemblage near Millstone Point, CT over the Past 30 Years. Donald Danila , Donald Landers.	1246: <i>In Situ</i> Responses of <i>Halophila johnsonii</i> to Hurricane-like Water Quality Conditions. Amanda Kahn , Michael Durako, Jeffrey Beal.	10:45
2026: Plan View Photos, Benthic Grabs & Sediment-Profile Images: Using complimentary techniques to assess response to seafloor disturbance. Stephanie Wilson , T. Fredette, D. Carey, J. Germano, P. Neubert.	2388: The Impact of Hurricane Katrina on the Structure and Functioning of Seagrass Meadows. Andrea Antón , Just Cebrian, Kate Sheehan, C. Drew Foster, Mary-Elizabeth Miller, Joshua Goff.	1885: Examining Potential Sediment P-Release in Response to Estuarine Restoration Using Biogeochemical Modeling. Richard Canavan , Caroline Slomp.	2250: Relating Long-term Trends in Hudson River Estuarine Fish Abundances to Climate Signals. Megan O'Connor , Francis Juanes.	2463: Nutrients in an Eelgrass Dominated Bay: Diurnal and Seasonal Fluctuations in the Water Column. Douglas Bulthuis , Paula Margerum, Nicole Burnett.	11:00
2332: A Measure of Benthic Invertebrate Community Condition for California Bays and Estuaries. Ananda Ranasinghe , Stephen Weisberg, Robert Smith, David Montagne, Bruce Thompson, James Oakden, David Huff.	2226: Recent Hurricanes and Their Impacts on Harmful Algal Blooms in South Florida. Brian Lapointe , Bradley Bedford, Charles Yentsch.	1147: Successful Eelgrass Restoration in a Previously Degraded Estuary (Boston Harbor): Lessons Learned. Alison Leschen , Ross Kessler, Bruce Estrella.	2327: Patterns of Larval Fish Ingress Into a New Jersey Inlet: Response to Climate Change. Kenneth Able , Mark Sullivan.	1346: Effects of Salinity Variability on the Submerged Aquatic Vegetation within the Coastal Mangrove Zone of Northeastern Florida Bay. Peter Frezza , Luis Cañedo, Jerome Lorenz.	11:15
1117: Development of an Integrated and Spatially Explicit Index of Chesapeake Bay Health (Bay Health Index). Michael Williams , Ben Longstaff, Claire Buchanan, Roberto Llanso, Bill Dennison.	2406: Response of Fishes and Mobile Invertebrates to Benthic Habitat Degradation Resulting from Hurricane Landfall. Sean Powers , Mark Benfield.	1146: Collaborative Effort to Restore Eelgrass Habitat in Puget Sound, WA. Kimberle Stark , Dana Woodruff, Matthew Boyle, Betty Bookheim, Laura Arber.	2474: Are Multiple Stressors More Likely to Cause Threshold Responses than Individual Severe Stressors? Denise Breitburg , Kathryn Cottingham.	1182: A Mesocosm Study to Determine the Effect of Lowered Salinity on Eelgrass (<i>Zostera marina</i> L.). Gregg Moore, Paul Sokoloff , Frederick Short.	11:30
2576: Assessing Ecological Integrity for Impaired Waters Decisions in Chesapeake Bay, USA. Roberto Llanso , Daniel Dauer, Jon Volstad.	1508: Effects of Storm-induced Salinity Changes on Submersed Aquatic Vegetation in Kings Bay, Florida. Charles Jacoby , Thomas Frazer.	2308: Application of the National Vegetation Classification System to Regional Initiatives in the Delaware Estuary Watershed. Krista Laudenbach-Nelson , E. Largay, C. Ferree, D. Kreeger, M. Maxwell-Doyle.	1427: Faunal Diversity and Stability in Shallow Water Estuarine Fish Assemblages in South Carolina, 1991 to 2006. Christopher McDonough .	2053: Steps Towards the Development of a Tissue Culture Protocol for <i>Zostera marina</i> . Kayti Tigani , John Gallagher, Denise Seliskar.	11:45
POSTER SESSIONS and LUNCH 12:00 pm - 2:00 pm					

Tuesday Mid-Afternoon Oral Presentations

	BR B (RICC)	BR D (RICC)	551 AB (RICC)	552 AB (RICC)	555 AB (RICC)
	SCI-025 Physical Dynamics and Pathways for Production in River-Estuary Transition Zones <i>cont'd</i>	SCI-026 Watershed-based Nutrient Accounting: Coupling Catchments to Coastal Waters <i>cont'd</i>	SCI-008 Water Quality Monitoring: Linking Local Efforts to a National Program Jane Caffrey	SCI-027 Coastal Outfalls: Environmental Responses to Sewage Effluent <i>cont'd</i>	SCI-062 15N as a Tracer of Nitrogen Pollution Sources Rebecca Barnes
2:00	2709: Environmental Variability, Chesapeake Bay Estuarine Turbidity Maximum Dynamics, and Survival of Striped Bass Larvae. Edward Martino , Elizabeth North, Edward Houde.	2258: Improving Regional Nutrient Management Model: new estimates of nitrogen loads in 16 northeastern US watersheds. Bongghi Hong , Dennis Swaney, Robert Howarth.	2926: Estuarine Monitoring within the National Water Quality Monitoring Network for U.S. Coastal Waters and their Tributaries. Jane Caffrey , Gail Mallard , Jaweed Hameedi , Charles Spooner .	2780: Using Hydrographic Data and EPA's Virtual Beach Model to Test Predictions of Beach Bacteria Concentrations. Walter Frick , Zhongfu Ge .	1192: Stable Isotope Ratios in Bivalve Shells Trace Wastewater Inputs from Watershed to Estuaries Through Time. Ruth Carmichael , Theresa Hattenrath , Ricky Alexander , Ivan Valiela .
2:15	1669: Physical and Biological Properties of the Estuarine Turbidity Maximum Region of the Chikugo River estuary, Japan: significance of spring bloom of <i>Sinocalanus sinensis</i> for early survival of an estuarine-dependent fish, Japanese seabass. Jun Shoji .	1803: NutrientNet: An Online Tool for Estimating Nonpoint Source Nutrient Losses. Mindy Selman , Jennifer Guiling , Evan Branosky .	1596: Regional Monitoring as Storytelling: San Francisco Bay's Regional Monitoring Program. Michael Connor .	1278: Bacterial Abundance and Production in Hong Kong Waters: Influence of Sewage and Pearl River Inputs. Xiangcheng Yuan , Alvin Ho , Jie Xu , Kedong Yin , Paul Harrison .	2420: Scaling up to the Whole: Using Nitrate Isotopic Signatures to Assess Processing and Export. Rebecca Barnes , Peter Raymond .
2:30	2202: Retention of Crab Larvae in a Coastal Null Zone. Charles Tilburg , Ana Dittel , Charles Epifanio .	1759: Managing Watershed Nitrogen Export at the Local Level: Accounting for Nitrogen Sinks. Arthur Gold , Peter Groffman , Kelly Addy , D.Q. Kellogg , Lorraine Joubert .	2540: Tracking Water and Soil Quality in the Maumee River Watershed using GIS and Remote Sensing. Jeremy Williams , Kevin Czajkowski .	1691: Impact Assessment by 3D Numerical Modelling: the Hong Kong Stonecutters Island Outfall. Jos Van Gils , Theo Van Der Kaaij , Leo Postma .	1811: Identifying Anthropogenic Nutrient Loading in Maryland's Coastal Bays Using Stable Isotope Analysis of Biological Indicators. Benjamin Fertig , Tim Carruthers , Bill Dennison .
2:45	1516: Freshwater Flow and the Productivity of the Black Bream Fishery in Gippsland Lakes, Australia. Gregory Jenkins , Jeremy Hindell , Stephen Swearer , Andrew Western , Eleanor Gee , Sandy Morison , Geoffrey Nicholson .	2323: Urban Stream Syndrome and the Impairment of Downstream Estuarine Ecosystems: Blackstone River and Narragansett Bay. William Sobczak .	1718: Water Quality Monitoring through Partnerships at Timucuan Ecological and Historic Preserve. Eva DiDonato , Mike McManus , Dana Morton , Nicole Robinson .	2512: A Post-Audit Analysis of the Impacts of Wastewater Treatment Plant Outfall Relocation on the Massachusetts Bays System. Richard Isleib , James Fitzpatrick .	2211: Quantifying Seasonally Shifts in Nitrogen Sources to Oregon Estuaries. Part I: Empirical 15N Macroalgae Data. James Kaldy , Cheryl Brown .
3:00	2239: Population Dynamics of <i>Limnoithona tetraspina</i> : The success of an introduced copepod in San Francisco Estuary. Alison Gould , Wim Kimmerer .	2055: Changing Land Use Effects on Water Quality in the Casperkill, a Hudson River Estuary Tributary. Marshall Pregnall , Mary Ann Cunningham , Kirsten Menking , Stuart Belli , Mark Schlessman .	1563: Reassessing Water Quality Along Coastal South Carolina Waters. Kenneth Hayes , Susan Wilde , Alan Lewitus , David White .	2318: Is Dilution the Solution to Pollution? An Intercomparison of Two Urbanized Systems - Boston Harbor and Jamaica Bay. James Fitzpatrick , Richard Isleib , Biswarup Guha .	2478: 15N Signatures in Salt Marsh Plants and Sediments as Indicators of Eutrophication. Erin Kinney , Ivan Valiela .
3:15	2610: Microzooplankton Dynamics in the Upper San Francisco Estuary. Joanna York , George McManus , Wim Kimmerer .	1592: Nitrogen to Phosphorus Ratios in Anthropogenic Inputs and Watershed Discharges to Chesapeake Bay. Marc Russell , Thomas Jordan , Donald Weller .	2235: Nutrient Trends and Transport in Northeastern U.S. Rivers. Elaine Todd Trench , John Mullaney , R. Edward Hickman , Gregory Schwarz , Richard Moore , Elizabeth Ahearn .	Synthesis/Discussion led by Candace Oviatt	***
	BREAK 3:30 pm - 4:00 pm				

Tuesday Mid-Afternoon Oral Presentations

556 AB (RICC)	NARR A (Westin)	NARR B (Westin)	NARR C (Westin)	PRV-IV (Westin)	
SCI-048 Assessing Ecological Integrity: Using Multiple Indices and Ecosystem Components <i>cont'd</i>	SCI-118 Large Scale Natural Events <i>cont'd</i>	SCI-040 Responses to Habitat Restoration: Build it and they will Come? Robert Murphy and Bill Rodney	SCI-131 Urban Estuaries Lisa Gonzalez	SCI-071 Seagrass Restoration and Recovery Giuseppe Di Carlo	
1498: Integrative Approaches to Assessing Estuarine Ecosystem Integrity: actions, awareness and accountability. Daniel Dauer.	1785: The Impact of Hurricane Ivan on the Primary Productivity and Metabolism of Marsh Tidal Creeks in the Northcentral Gulf of Mexico. Just Cebrian D. Foster, R. Plutchak, K. Sheehan, M. Miller, A. Anton, K. Major, K. Heck, S. Powers.	1420: Can Agricultural Run-off Be Effective in Estuarine Restoration? A Proposal for the Colorado River Delta in Mexico. Karen Hyun , Osvel Hinojosa-Huerta, Alejandra Calvo-Fonseca, Karl Flessa.	1791: The Upside-down Hudson River Estuary. David Griffith , Peter Raymond.	1818: Using Habitat Suitability Models to Characterize Seagrass Distribution in Charlotte Harbor, Florida. Renee Duffey , Jason Hale.	2:00
1369: The Estuarine Quality Paradox: Is it Possible to Define an Ecological Quality Status of Specific Modified and Naturally Stressed Estuarine Ecosystems? Jean-Claude Dauvin.	1703: Influence of Saltwater Storm Surge from Hurricanes Katrina and Rita on Coastal Louisiana Marsh Landscapes. Gregory Steyer , Sarai Piazza, Brian Perez, Leigh Sharp, Sijan Sapkota.	1856: Innovative, Spatially-Explicit Monitoring Tracks Wetland Elevation and Vegetation Dynamics at Badly Eroding Maryland (USA) Refuge. David Nemerson.	1104: Use of Biotic Indicators for Assessing the Impact of Urban Influx on Coastal Wetlands: a Case Study of Coombabah Lake, Queensland, Australia. Shing Yip Lee , Rod Connolly, Ruth Young.	2740: A wide scale Eelgrass (<i>Zostera marina</i>) die-off in Chesapeake Bay and Mechanisms of Initial Recovery. Scott Marion , Robert Orth.	2:15
1271: Using Multiple Ecosystem Components in Assessing Ecological Quality in Spanish Marine Waters. Angel Borja.	2185: Sustainability in Coastal Louisiana: Integrating ecosystem and community needs. Adam Hosking , Jean Cowan, Jon Porthouse.	1896: Rapid Colonization of Halophytic Vegetation Following Restoration of an Upper Bay of Fundy Salt Marsh. Tony Bowron , Nancy Neatt, Jeremy Lundholm, Danika Van Proosdij.	1985: Active Biomonitoring (<i>Corbicula fluminea</i>) for Contaminant Sources in the Urban Anacostia Estuary Watershed (MD, DC). Harriette Phelps.	2253: Large-scale Eelgrass Restoration Techniques: Lessons Learned from Narragansett Bay, Rhode Island. Susan Tuxbury.	2:30
1405: Selecting, Developing, and Maintaining Ecological Indicators/Indices of Estuarine Condition: The National Coastal Assessment Experience. James Summers.	2146: Case Study in Thailand of Post-Tsunami Livelihood Rehabilitation for Greater Coastal Resilience. Dawn Kotowicz.	2171: Interaction of Bottom Up and Top Down Factors in Oyster Reef Microcosms: Implications for Restoration. William Rodney.	2017: Biogeochemical Processes and Water Quality in Two Canals in the Urban Centre of Venice. Pierluigi Viaroli , Roberta Azzoni, Marco Bartoli, Daniele Nizzoli, Antonio Marcomini.	1395: Evaluation of Belowground Biomass Recovery in Physically Disturbed Seagrass Meadows. Giuseppe Di Carlo , W. Judson Kenworthy.	2:45
Synthesis/Discussion led by Stephen Weisberg	2630: Bacterioplankton Abundances in the Bay of Saint Louis, MS, Relative to Environmental Water Quality Prior to and After Hurricane Katrina. Allison Mojzis , Donald Redalje.	1754: Amtrak Culvert Improvement Project for Salt Marsh Restoration, Branford to Stonington, Connecticut. Darrell Oakley.	1222: Ecosystem Indicators Developed for a Texas-sized Urban Estuary: The Galveston Bay Indicator Framework. Lisa Gonzalez , L. James Lester, Steven Johnston.	1805: The Role of Seeds and Seedlings in the Recovery of Eelgrass Beds in Chesapeake Bay USA. Jessie Jarvis , Kenneth Moore.	3:00
	Synthesis/Discussion led by Just Cebrian and Sean Powers	1590: Chesapeake Bay Marshes Restored With Dredged Materials: Biogeochemistry and Plant Success in the First Two Years. Lorie Staver , J. Court Stevenson, Michael Owens, Jeffrey Cornwell.	1604: Groundwater Denitrification within Filled Salt Marshes. Kelly Addy , Arthur Gold, Mark Stolt, Peter Groffman.	2798: Long-term Growth Responses of Seagrass Posidonia Transplants to Nutrient Addition. Marion Cambridge , Gary Kendrick.	3:15
BREAK 3:30 pm - 4:00 pm					

Tuesday Afternoon Thematic Plenaries

Plenary session will replace the concurrent oral session on Tuesday afternoon from 4:00 pm – 5:30 pm

1. ECOSYSTEM-BASED MANAGEMENT FROM SCIENCE TO POLICY

Location: Rhode Island Convention Center, Fifth Floor, Ballroom B

Convener: **Andrew A. Rosenberg**, Institute for the Study of Earth, Oceans and Space, University of New Hampshire

Panelists: **Heather Leslie, Karen McLeod, and Mike Fogarty**

Ecosystem-based management is a well-developed concept in search of implementation. There are significant scientific and policy-making challenges to develop a truly cross-sectoral, integrated approach to coastal management that is centered on the goal of sustaining a full suite of ecosystem services.

In this presentation we will discuss those challenges from the perspectives of the development of scientific advice, changes in governance and new policy-making. We will also highlight some of the ongoing work to implement an ecosystem-based approach domestically and internationally.

2. WHERE IS THE C IN IOOS? THE RELEVANCY OF THE INTEGRATED OCEAN OBSERVING SYSTEM TO COASTAL AND ESTUARINE SCIENTISTS AND MANAGERS

Location: Westin Hotel, Street Level, Narragansett Ballroom A

Convener: **Eugene (Geno) Olmi**, NOAA Coastal Services Center, Charleston, South Carolina

Panelists: **Robert Christian, Jan Newton**

What are coastal ocean observing systems? Are they relevant to nearshore and estuarine environments? Who operates them? What kinds of data are available? How can you access these data? Come to this session and find out!

Ocean observing is often thought of as a tool for open-water oceanographers with little relevance to coastal or estuarine issues. This panel will explain the mission and structure of the U.S. Integrated Ocean Observing System (IOOS), its links to the Global Earth Observation System of Systems (GEOSS), and how these systems are providing data and information relevant to the nearshore environment.

Specific examples from Europe and the U.S. will highlight how coastal observations are being applied to coastal issues, along with the challenges of growing these nascent systems into a robust program. The session will conclude with a facilitated discussion that will allow the audience to ask the panelists questions and provide feedback on the successes, challenges, and future directions, including what would be most useful to them. Come learn about coastal observing systems and how they can benefit you!

3. SCIENCE, ENGINEERING AND POLICY TO REDUCE RISKS IN COASTAL LANDSCAPES: UNINTENDED CONSEQUENCES AND UNNATURAL HAZARDS

Location: Rhode Island Convention Center, Fifth Floor, Ballroom D

Convener: **Robert R. Twilley**, Louisiana State University

Highly engineered landscapes are intended to protect local communities and support a national economy, but often work against natural coastal processes. This endangers social and natural resources in ecosystems that rely on those coastal processes, and limits the ability to adapt to a changing climate. Catastrophic events (such as Hurricanes Katrina and Rita in 2005 and the Indian Ocean tsunami in 2004) should ultimately promote the resiliency of coastal communities, by adapting natural and social systems to these hazards.

However, the political urgency of rebuilding has historically promoted engineered infrastructure and ignored the ecological/social landscape. Coastal zone planning must integrate natural and social sciences if we are to achieve a sustainable and safe coastal landscape. First, ecosystem restoration must be designed to manage natural coastal processes. Second, ecological/social landscapes must incorporate adaptive management and the natural, social and engineering sciences. Third, after major disturbances, large-scale ecosystem restoration must proceed at the same urgent pace as rebuilding urban and industrial infrastructure. Finally, political will and funding must match aggressive planning.

Effective public policy behind water resource planning is arguably one of the most important safeguards of our national security, our natural resources, our public health, and our economic development—we cannot afford to ignore the ecological and social well-being of our coasts.

CONVENER BIOGRAPHIES

Dr. Andrew Rosenberg is a Professor in the Institute for the Study of Earth, Oceans, and Space at the University of New Hampshire, and has been a member of the U.S. Commission on Ocean Policy over the past three years. He is also Senior Vice President of MRAG Americas, a consulting company. Dr. Rosenberg holds a B.S. in Fisheries Biology from the University of Massachusetts, an M.S. in Oceanography from Oregon State University and a Ph.D. in Biology from Dalhousie University. He was the Deputy Director of NOAA's National Marine Fisheries Service from 1998-2000, and before that was the NMFS Northeast Regional Administrator. He has also served as the U.S. lead representative in several international fishery management organizations such as NAFO, NASCO and FAO. Dr. Rosenberg was on the faculty of Imperial College of Science and Technology in London for six years, and was also the Deputy Director of the Renewable Resources Assessment Group, a consultancy. Dr. Rosenberg's scientific work is in the field of population dynamics, resource assessment and resource management policy.

Dr. Eugene (Geno) Olmi is an ecologist with the NOAA Coastal Services Center in Charleston, South Carolina. For the past six years, Dr. Olmi has helped lead development of the regional component of the Integrated Ocean Observing System (IOOS), working closely with partners to create the social and physical infrastructure that will allow the successful implementation of IOOS. Dr. Olmi received his Ph.D. in Marine Science from the College of William and Mary, and has led a number of projects at state and federal agencies and academic institutions. Dr. Olmi's interests are in estuarine and fisheries ecology, and in the application of science and technology to coastal management.

Dr. Robert Twilley is Distinguished Professor in Louisiana Environmental Studies in the Department of Oceanography and Coastal Sciences at Louisiana State University, and serves as Associate Vice Chancellor of Research and Economic Development to develop the 'Coastal Systems and Society' program at LSU. Dr. Twilley also directs the Shell Coastal Environmental Modeling Laboratory and heads up the Coastal Louisiana Ecosystem Assessment and Restoration program, developing ecosystem models coupled with engineering designs to forecast the rehabilitation of coastal and wetland ecosystems. Dr. Twilley received his PhD in 1982 in plant and systems ecology from the University of Florida, and performed his post-doctoral studies at the University of Maryland on the Chesapeake Bay. Most of Dr. Twilley's research focuses on coastal wetlands both in the Gulf of Mexico, throughout Latin America, and in the Pacific Islands.

Notes

Wednesday Early Morning Oral Presentations

	BR B (RICC)	BR D (RICC)	551 AB (RICC)	552 AB (RICC)	555 AB (RICC)
	SCI-034 Coastal Records Help Understand Causes and Consequences of Climate Variability Alexander Kolker and Candace Oviatt	SCI-046 Impact of Climate Change on Coastal Biogeochemistry Scott Nixon and Robinson Fulweiler	SCI-016 Interdisciplinary Tools for Science Translation Christine Feurt	SCI-019 Modeling Hypoxia: Approaches and Application to Management Rick Greene, Alan Lewitus and Jim Hagy	SCI-017 Florida Bay: Current Status and Trends Pat Glibert, Cindy Heil and Chris Madden
8:00	1976: Ecological Forecasting in the Intertidal Zone: From Weather Forecasts to Body Temperatures and Mortality Risks. David Wethey , Lindsay Brin, Brian Helmuth.	1821: The Impact of Climate Change on Benthic Remineralization and Net Sediment N ₂ Flux. Robinson Fulweiler , Scott Nixon.	2927: The Coastal Training Program of the National Estuarine Research Reserve System: Transforming Traditional Approaches for Putting Science to Work. Oscar Romo .	1571: Multi-Budget Hypoxia Models: Approach, Advantages and Limitations. Dubravko Justic , Brian Fry, Zoraida Quiñones-Rivera, Bjoern Wissel.	1479: Disturbance and Ecosystem Change in Florida Bay and Southern Biscayne Bay. David Rudnick , Joseph Boyer, Stephen Blair, Christopher Madden, Stephen Kelly, Kevin Cunniff, Christopher Kelble.
8:15	1632: Whether to Worry About Weather: Understanding the Climate of Body Temperature in the Intertidal Zone. Brian Helmuth , Lauren Szathmary, Jerry Hilbish, David Wethey.	1207: Return to Neverland: Reverting Coastal Eutrophication. C.M. Duarte , Daniel Conley.	1229: Needs Assessment: the First Step in Designing Coastal Environmental Education for Professional Decision Makers. Rebekah Szivak , Jeffrey Pollack.	1486: Hypoxia on the Louisiana Shelf: Simulations of Coupled Phytoplankton Population and Geochemical Models. Peter Eldridge , Daniel Roelke.	2287: Long-term Nutrient Dynamics in Florida Bay Waters, USA. Henry Briceno , Joseph Boyer.
8:30	2219: Climate and Anthropogenic Change and Consequences in the Potomac Watershed and Chesapeake Bay. Henry Walker , Veronica Berounsky, Brent Yarnal, Norbert Jaworski, Edward Dettmann, James Latimer.	1380: The Influence of Climate on the Flux of Nitrogen from Large Watersheds. Robert Howarth , Dennis Swaney.	1245: Toward Ecosystem-Based Fisheries Management: Assessing Managers' Needs for Coastal Environmental Information. Jeffrey Pollack .	2019: Coupled Physical-Biogeochemical Modeling of the Louisiana Dead Zone. Katja Fennel , Robert Hetland, Steven DiMarco.	1555: Role of Dissolved Organic Material in Supporting Microalgal Communities in Florida Bay. Patricia Glibert , Cynthia Heil, Jeffrey Alexander, Sue Murasko, Merrie Beth Neely.
8:45	2091: Diatoms and their Palaeoenvironments from the Cores of the Delta of Pearl-River, South China. Jian Chen , Dongzhao Lan, Feng Cai, Jiang Xu.	1299: Inter-annual Variability in Spring Phytoplankton Blooms in the Gulf of Maine – Georges Bank Region of the Northwest Atlantic Continental Shelf. David Townsend , A. Thomas, R. Ji, N. Rebeck, D. Mountain.	1376: Conservation Development for a Healthy Bay. Jennifer West .	1431: Bayesian Ensemble Estimation in a Chesapeake Bay Hypoxia Model: Part I. Craig Stow , Don Scavia.	2353: Stable Isotopic Tracers Link Florida Bay Ecosystem Response to Changing Nutrient Inputs from the Everglades. Ana Hoare , David Hollander, Cynthia Heil, Patricia Glibert, Marta Revilla, Jeffrey Alexander, Sue Murasko.
9:00	1466: Long-Term Changes in <i>Skeletonema costatum</i> Abundance and Seasonal Pattern in Narragansett Bay. David Borkman , Theodore Smayda.	2244: Salinity Effects on Nitrogen Cycling in Estuaries. Anne GIBLIN , Nathaniel Weston, Jane Tucker, Gary Banta, Anne Bernhard, Charles Hopkinson.	2097: Technical Assistance for Community Based Watershed Planning. Heather Elmer , Frank Lopez, David Klarer, Phoebe Van Zoest.	1424: Bayesian Ensemble Estimation in a Chesapeake Bay Hypoxia Model: Part II. Don Scavia , Craig Stow.	1721: Differential Mechanisms Regulating the Northeastern Florida Bay Picoeyanobacterial Bloom in October 2006. Cynthia Heil , P. Glibert, C. Madden, S. Seitzinger, M. Neely, S. Murasko, J. Alexander, J. Leard.
9:15	2152: Long-term Winter Bloom Disappearance of a Cryophilic Diatom in Narragansett Bay and Winter Warming. Theodore Smayda , David Borkman.	1588: Climate Change, Harmful Algal Blooms, and the Apparent Oligotrophication of the Peconic Estuary. Robert Nuzzi .	2433: Fostering Coastal Stewardship: New Tools for Bridging the Science to Management Divide (Synthesis). Christine Feurt .	1778: Predicting Satellite-Derived Phytoplankton Absorption Over the Louisiana Shelf: Effects of Nutrients and Physical Forcing. Rebecca Green , Richard Gould, Dong Ko, Jim Hagy.	2207: Physiological Characteristics and Competitive Strategies of Bloom Forming Cyanobacteria and Diatoms of Florida Bay. Ralph Richardson .
9:30	2142: What Have we Learned from the Holocene Sea-level Records? Benjamin Horton .	2096: Temperature Driven Variations of Terminal Metabolism in Methanogenic Freshwater Sediments. Katherine Segarra , Samantha Joye, Vladimir Samarkin.		2367: Water Quality Modeling of Diel-cycling Hypoxia in Delaware's Coastal Bays. Damian Brady , Dominic Di Toro, James Kirby, Long Xu, Timothy Targett.	2724: Phosphorus Cycling in Florida Bay: A Synthesis. Marguerite Koch , Christopher Madden, Amanda McDonald, Ole Nielsen, Henning Jensen.
	BREAK 9:45 am - 10:15 am				

Wednesday Early Morning Oral Presentations

556 AB (RICC)	NARR A (Westin)	NARR B (Westin)	NARR C (Westin)	PRV-IV (Westin)	
SCI-057 Applying Coastal and Estuarine Science and Technology to Resource Management Dwight Trueblood and Richard Langan	SCI-126 Shellfish Ecology and Management Jay Lazar	SCI-133 Wildlife and Birds Richard McKinney	SCI-028 Morphological Evolution of Tidal Wetlands and Tidal Flats Bruce Jaffe and Carl Friedrichs	SCI-042 Integrating Biophysical, Social and Policy Sciences into Restoration Robert Muth, Martha Mather, John Finn and Rodney Zwick	
2004: Why Does Science Continue to be Marginalized in Natural Resource Management and Environmental Policy? Herman Karl.	2697: Large-scale Oyster Population Manipulation in the Chester River, a Low Salinity Subestuary of Chesapeake Bay. Kennedy Paynter , M.L. Kellogg.	2366: The Ecological Niche of Clapper Rails in Mississippi's Tidal Marshes. Scott Rush, Mark Woodrey , Aaron Fisk, Robert Cooper.	2094: Morphodynamics of Tidal Flat Coastlines: A Synthesis. Carl Friedrichs , John Wells, Joshua Bearman.	2930: Integrating Biophysical, Social and Policy Sciences into Restoration. Robert Muth , Martha Mather, John Finn, Rodney Zwick.	8:00
1234: Five Years of Modeling Experience with a Saltmarsh Restoration Design Tool. Ray Konisky , David Burdick.	2383: The Relationship between the Larval and Older Lifestages of Softshell clams (<i>Mya arenaria</i>). Paul Geoghegan , Christopher Gurshin, Al Legendre.	1190: Differential Habitat use by Coastal Birds in an Urban Environment. Richard McKinney , Kenneth Raposa, Thomas Kutcher, Christine Comeau.	2144: Factors Controlling Tidal Flat Morphology in South San Francisco Bay. Joshua Bearman , Carl Friedrichs, Amy Foxgrover, Bruce Jaffe.	1579: Linking Socio-economic and Environmental Indicators to Achieve Coastal Restoration Objectives. Robert Bowen.	8:15
2788: Regional Results from Research-Based Outreach and Education at the UNH Stormwater Center. Robert Roseen , Thomas Ballesterso, James Houle.	1569: Effect of Heat Shock Protein Expression on Dermo Resistance in Eastern Oysters (<i>Crassostrea virginica</i>). Crystal Ybanez , Rebekah Thomas, Gregory Stunz.	1866: As the Heron Flies: Trends in Population Abundance and Distribution of Texas Coastal Colonial Waterbirds. Stephanie Glenn.	1768: Sediment Supply Control on Intertidal Mudflat Area in Northern San Francisco Bay. Bruce Jaffe , Amy Foxgrover.	1764: The Promise and Pitfalls of Integrating Ecosystem Concepts into Workable Laws. John Duff.	8:30
1608: Lessons Learned on the Pathway to Technology Transfer of an Automated Seepage Meter. Matthew Charette , Andrew Helmingier.	2698: Factors Influencing Sex Ratios in Restored Oyster Populations in the Chesapeake Bay. M. Lisa Kellogg , Marcy Chen, Victor Kennedy, Kennedy Paynter.	1725: Offshore Wind and Birds: Avian Data Collection for the Cape Wind Energy Project. Christopher Rein.	1532: Modeling Settling Lag and Sediment Sorting in Intertidal Settings. David Pritchard.	1366: Decision Analysis: Application to Sustainable Management of Coastal Ecosystems. Jason Stockwell.	8:45
2201: Scientists and Decision-makers in Coastal Resource Management; Their Roles and Responsibilities. Steve Bliven.	1417: Using Oysters as Bioindicators of Freshwater Inflow Effects. Jennifer Beseres , Hae-Cheol Kim, Paul Montagna.	2637: Impacts of <i>Karenia brevis</i> Blooms on Marine Birds on the Central West Florida Coast. Michelle Van Deventer , Karen Atwood, Leanne Flewelling, Gabriel Vargo, Jan Landsberg, Danielle Stanek.	2209: Morphological Effects on an Estuarine Intertidal Mudflat Caused by Human Installations: the Seine Estuary, France. Antoine Cuvilliez , Julien Deloffre, Robert Lafite, Christophe Bessineton.	2378: Integrating Science into Coastal Restoration Decisions: Bridging the Divide Between Scientists and Policy Makers. Karen Peltó.	9:00
Synthesis/Discussion led by Kalle Matso	1282: Oysters: Bay Sentinels of Freshwater Inflows. Sammy Ray , Thomas Soniat, Lance Robinson.	1620: Food Web Impacts by Blooming Macroalgae in a Southern California Estuary. Lauri Green , Peggy Fong.	2158: Influence of Physical Processes on the Interpretation of Geochemical Profiles: the Seine Estuary (France). Julien Deloffre , R. Lafite, P. Lesueur, V. Mesnage, A. Motelay-Massei, B. Ouddane, F. Petit.	1893: Science-based, Multi-Jurisdictional Fishery Management in the Laurentian Great Lakes: What Makes It Work? Roy Stein , Marc Gaden.	9:15
	2695: Benthic Habitat Mapping in Support of Native Oyster (<i>Crassostrea virginica</i>) Restoration in Chesapeake Bay. Jay Lazar , Doug Levin, David Bruce, Steven Giordano, H. Ward Slacum, Colin Little.	1497: Beach Nourishment: An Essential Tool for Sea Turtle Conservation After a Century of Dredging and Jetties. Clay Montague.	1926: Pool Spacing, Channel Morphology, and Restoration in Tidal Forested Picea sitchensis Wetlands of the Columbia River Estuary, U.S.A. Heida Diefenderfer , D. Montgomery, A. Borde, A. Coleman.	1944: Interdisciplinary Science and Human Dimensions of Strategic Restoration: Nearshore Ecosystem Restoration in Puget Sound, WA. Charles Simenstad , Tom Leschine.	9:30
BREAK 9:45 am - 10:15 am					

Wednesday Mid-Morning Oral Presentations

	BR B (RICC)	BR D (RICC)	551 AB (RICC)	552 AB (RICC)	555 AB (RICC)
	SCI-034 Coastal Records Help Understand Causes and Consequences of Climate Variability <i>cont'd</i>	SCI-046 Impact of Climate Change on Coastal Biogeochemistry <i>cont'd</i>	SCI-108 Eutrophication/ Water Quality Mark Trice	SCI-019 Modeling Hypoxia: Approaches and Application to Management <i>cont'd</i>	SCI-017 Florida Bay: Current Status and Trends <i>cont'd</i>
10:15	1492: Coastal Archives of Intense Hurricane Activity over the last 6000 years: Patterns and Climatic Forcing. Jeffrey Donnelly , Phil Lane, Elyse Scileppi, Jonathan Woodruff.	2480: Future complications: Estuaries in a 21 st century of climate and human-driven ecological change. Lindsay Brin , Ivan Valiela.	2680: The Effect of Tidal Export from Salt Marsh Ditches on Estuarine Water Quality. Christopher Goble , Florian Koch.	2573: Numerical Simulation of Hypoxia in Hood Canal, Puget Sound. Bohyun Bahng , Mitsuhiro Kawase, Jan Newton, Allan Devol, Wendi Ruef.	1661: The Role of Sponges in Regulating Algal Blooms in Florida Bay, FL, USA. Charles Wall .
10:30	2243: Reconstructions of Tropical Cyclone Activity from Lagoons in the Western North Pacific. Jonathan Woodruff , Jeffrey Donnelly.	1474: Climate and Oyster Disease. Thomas Soniat , Eileen Hofmann, John Klinck, Eric Powell.	2779: Importance of Benthic N Flux as a Source of Nitrogen to Upper Newport Bay, California. Martha Sutula , Krista Kamer, Jaye Cable, Hillary Collis, William Berelson.	2658: South Puget Sound Dissolved Oxygen Study - An overview. Carol Maloy , Storrs Albertson, Julia Bos, Greg Pelletier, Mindy Roberts, Adrienne Stutes, Ryan McEliece, Simone Hoffer.	1456: Long-term Shifts in Seagrass Community Structure Follow Experimental Nutrient Enrichment in Florida Bay. Anna Armitage , Thomas Frankovich, James Fourqurean.
10:45	1667: Role of Abrupt Climate Change in River Delta Development. Liviu Giosan .	2417: Using Estuarine Phytoplankton to Study the Physiological Effects of Elevated pCO ₂ on Algal Growth. James Fuller , Frances Wilkerson, Alexander Parker, Richard Dugdale, Al Marchi, Victoria Hogue.	1447: Potential Impacts of Atmospheric Emissions from an Egg Laying Factory on the Nutrient Sensitive Surface Waters of Eastern North Carolina. John Fear , Karen Rossignol, Jeremy Braddy, Elizabeth Calendra, Hans Paerl.	2568: South Puget Sound Dissolved Oxygen Modeling. Mindy Roberts , Greg Pelletier, Storrs Albertson, Venkat Kolluru.	2536: Long-term Effects of Short-term and Long-term Nutrient Loading in an Oligotrophic Seagrass Ecosystem. Darrell Herbert , James Fourqurean.
11:00	1776: Searching the Late Holocene Sedimentary Record of the Mississippi Delta for Climate Related Sea-Level Oscillations. Juan Gonzalez , Torbjörn Törnqvist.	1589: Trends in Central Puget Sound Dissolved Oxygen Levels. Angela Groun , Tom Georgianna.	2692: Effects of Stormwater Runoff on Phytoplankton Dynamics in Santa Monica Bay, CA. Alina Corcoran , Kristen Reifel, Rebecca Shipe.	2082: Transferable, General Models for Evolving Stratification and Hypoxia: An empirical input-output approach (Narragansett Bay CHRP). Daniel Codiga .	2105: Seasonal and Regional Variations in Net Ecosystem Production in <i>Thalassia testudinum</i> Communities Throughout Florida Bay. Jessica Nagel , M. Kemp, J. Cornwell, M. Owens, D. Hinkle, C. Madden.
11:15	1839: Dynamically Driven Sea Level Change: Are there undiscovered climatic signatures embedded in tide gauge records? Alexander Kolker , Sultan Hameed.	2283: Evidence of Fires in Pre-Industrial Revolution Chesapeake Bay Sediments. Siddhartha Mitra , Joshua Dunn, Glendon Hunsinger.	1913: Eutrophication Potential of an Oligohaline Marsh Subjected to Differential Nitrogen and Phosphorus Enrichment. Sean Graham , Irving Mendelsohn, Kristen Laursen.	1831: Vertical Mixing Rates and Hypoxia in Western Long Island Sound. Grant McCardell , James O'Donnell.	2288: A Modeling Study of Competition, Salinity, and Nutrient Control of the Florida Bay Seagrass Community. Amanda McDonald , Christopher Madden.
11:30	2392: Seasonal Effects of the Southern Oscillation and Bermuda High on Freshwater Delivery to Coastal Georgia, U.S.A. Joan Sheldon , Adrian Burd.	2083: Phosphorus Composition of Sinking Particles from Guaymas Basin, Gulf of California. Gabrielle Lyons , Claudia Benitez-Nelson, Robert Thunell.	1909: Tracing the Fate of Added NO ₃ ⁻ in a Whole System Saltmarsh Eutrophication Experiment. Linda Deegan , Bruce Peterson, Deanne Drake, R. Scott Warren.	2397: Spatially Coherent Intermittent Stratification and Hypoxia in Disparate sub-regions of an Estuary (Narragansett Bay CHRP). Jamie Vaudrey , James Kremer, Daniel Codiga.	2555: Benthic Microalgal Standing Stock and Benthic Nutrient Flux in Florida Bay. Merrie Beth Neely , Gabriel Vargo.
11:45	2652: Event Exploration and Characterization Using Data from the Gulf of Maine Observing Network. Susan Elston , M. Kate Beard, Neal Pettigrew.	2127: Forecasting the Effects of Relative Sea Level Rise on Near Shore Habitats of North Carolina. Christopher Buzzelli , Enrique Reyes, Michael Piehler, Melisa Wong, Charles Peterson.	1683: Dynamics of Nutrients and Phytoplankton Biomass in Hong Kong Waters Before and After Sewage Abatement. Alvin Yam Tat Ho , Jie Xu, Xiangcheng Yuan, Kedong Yin, Paul Harrison.	2251: Modeling the Effects of Oxygen Dynamics on Southern Flounder (<i>Paralichthys lethostigma</i>) Nursery Habitat Quality: an eco-physiological approach. Félix Del Toro-Silva , J. Taylor, Tim Ellis, John Miller.	1568: Nitrogen Biogeochemistry in Florida Bay Sediments. Jeff Cornwell , Michael Owens, Michael Kemp.
	POSTER SESSIONS and LUNCH 12:00 pm - 2:00 pm				

Wednesday Mid-Morning Oral Presentations

556 AB (RICC)	NARR A (Westin)	NARR B (Westin)	NARR C (Westin)	PRV-IV (Westin)	
SCI-103 Carbon, Nutrient and other Material Budgets Denise Seliskar	SCI-101 Benthic Ecology James Pinckney	SCI-045 Rapid Assessments and Indicators of Tidal Wetland Functions and Condition Chuck Nieder, Jan Smith and Cathleen Wigand	SCI-028 Morphological Evolution of Tidal Wetlands and Tidal Flats <i>cont'd</i>	SCI-042 Integrating Biophysical, Social and Policy Sciences into Restoration <i>cont'd</i>	
1932: Nitrogen Cycling in Estuarine Wetlands of Taylor River, Florida. Victor Rivera-Monroy , Robert Twilley, Edward Castaneda-Moya, Pete Lenaker, Daniel Childers.	1974: Spheres of Influence, Recruitment, and Community Dynamics. Sarah Woodin , David Wethey.	2888: Developing the New England Rapid Assessment Method (NERAM) for Assessing Condition of Tidal Wetlands. Bruce Carlisle , Jan Smith, Marc Carullo, Cathleen Wigand.	2507: The Influence of Vegetation on the Morphologic Stability of Marshes and Channel Networks. Matthew Kirwan , A. Bradshaw Murray.	2387: A Recipe for Ecological Restoration of Estuarine and Coastal Ecosystems: an Example from South-western Australia. Suzanne Ayzavian .	10:15
1345: Nitrogen and Carbon Sequestration in Salt Marsh Plants When Eutrophication and Sea Level Rise Affect Our Estuaries. Tracy Elsey , John Gallagher, Denise Seliskar.	2571: Cumulative Degradation in Estuaries: The effects of habitat, loss fragmentation and community homogenization on resilience. Simon Thrush , Jane Halliday, Judi Hewitt, Andrew Lohrer.	2543: Comprehensive Wetland Monitoring in California. Josh Collins .	1954: Impact of Drainage Ditches on Salt Marsh Flow Patterns, Sedimentation and Morphology: Rowley River, Massachusetts. Lynsey LeMay , Carl Friedrichs.	2371: Anatomy of a Superfund Cleanup: Successes and Failures at Foundry Cove (Hudson River). Jeffrey Levinton .	10:30
1606: Belowground CO ₂ Evolution in East Coast Salt Marshes, USA. Weihong Wang , James Morris.	1978: Reef Kelp Subsidizes Secondary Production Other Marine Habitats. Glenn Hyndes .	2111: The Application of the New England Rapid Assessment Method (NERAM) and the California Rapid Assessment Method (CRAM) to Delaware's Tidal Wetlands. Debora Fillis , Andy Howard, Amy Jacobs.	1289: Do Plants Really Reduce Salt Marsh Erosion? Rusty Feagin , Starr Lozada-Bernard, Tom Ravens, Jennifer Irish.	2495: Interdisciplinary Long Term Research in the Coupled Watershed and Estuary of Plum Island Sound. Charles Hopkinson , J. Vallino, L. Claessens, L. Deegan, A. Giblin, B. Peterson, G. Pontius, V. Valentine <i>et al.</i>	10:45
2624: Short-term and Long-term Carbon Budgets of the Intertidal Seagrass <i>Zostera noltii</i> in South Portugal. João Silva , Rui Santos.	2620: Does Prior Grazing by the Sea Urchin <i>Lytechinus variegatus</i> Affect Palatability of Turtlegrass, <i>Thalassia testudinum</i> ? Kelly McKay , Kenneth Heck.	1388: Application of the Gulf Rapid Assessment Method (GRAM) to Measure Broad-Scale Gulf of Mexico Coastal Wetlands Condition. Janet Nestlerode , Josh Collins, Tom Heitmuller, John Macauley, Greg Steyer, Martha Sutula.	2642: Controlling the Marsh Edge: Wave Energy, Sediment Accretion and Vegetation Dynamics in Fringing <i>Spartina</i> Marshes. Carolyn Currin , Michael Greene, David Iwaniec, Daniel Childers.	1506: Integrating Objective Scientific Information on Biophysical Conditions into River-Herring Restoration Decisions in the Ipswich River. Martha Mather , Robert Muth, John Finn, Rodney Zwick.	11:00
2132: Basin-wide Extrapolation of Sediment Oxygen Demand Based on Sediment Physical and Bulk Chemical Properties. James Hill , Darlene Wells, Richard Ortt, Stephen VanRyswick.	2561: Protection from Grazers: An associational defense between kelp and an epiphytic bryozoan. Sarah Bryson .	1548: Rapid Assessment of Stable Isotopes in Support of Habitat Restoration. Marci Cole Ekberg , Wenley Ferguson, Richard McKinney.	2095: Do Retreating Marshes Create Seagrass Habitat? The importance of sand, plant morphology, and hydrodynamics. E. Caroline Wicks , Evamaria Koch.	1880: Integrating Socioeconomic and Institutional Considerations into Coastal Restoration Decisions. Robert Muth , Martha Mather, John Finn, Rodney Zwick.	11:15
2640: Behavior of Riverine Dissolved Organic Matter in Hudson Estuary. Wei Huang , Robert Chen, Bernie Gardner.	2224: Medium-Term Assessment of the Prestige Oil Spill Effects on Estuarine Benthic Communities of Cantabria (N Spain, Gulf of Biscay). Araceli Puente , G. Calderón, J. Juanes, A. García, J. Revilla, C. Álvarez.	1367: A Protocol for Rapidly Assessing Nekton Use of Salt Marsh Habitats. Kenneth Raposa .	1772: Factors Influencing Water Level Variability and Turbidity in a Central Delaware Tidal River. Susanne Moskalski , Christopher Sommerfeld.	1905: Putting it all Together: Interdisciplinary Integration through Agent-based Modeling. John Finn , Robert Muth, Martha Mather, Rodney Zwick.	11:30
1804: Net Ecosystem Metabolism in a Hypersaline Estuary: San Diego Bay. Francisco Delgadillo-Hinojosa , Alberto Zirino, Osmund Holm-Hansen, José Martín Hernández-Ayón, Thomas Boyd, B. Chadwick, Ignacio Rivera-Duarte.	1112: Impact of Hypoxia on the Functional Response of Predators. Rochelle Seitz , W. Chris Long.	1784: Developing a Nekton Index of Ecological State for Gulf of Maine Fringing Tidal Marsh. Michele Dionne , Michael Haas, Andrea Leonard.	1500: Morphological Models for Flood Risk Management in UK Estuaries. Andrew Lane , John Huthnance, Harshinie Karunarathna, Andrew Manning, Paul Norton, Dominic Reeve, Richard Soulsby, Jeremy Spearman, Ian Townend, Adrian Wright.	Synthesis/Discussion led by Martha Mather	11:45
POSTER SESSIONS and LUNCH 12:00 pm - 2:00 pm					

Wednesday Mid-Afternoon Oral Presentations

	BR B (RICC)	BR D (RICC)	551 AB (RICC)	552 AB (RICC)	555 AB (RICC)
	SCI-035 Managing Shellfisheries: Models, HABs and Other Current Issues John Kraeuter and V. Monica Bricelj	SCI-059 Hydrodynamics of Tropical and Subtropical Semi-enclosed Systems Arnoldo Valle-Levinson and Alejandro Souza	SCI-108 Eutrophication/ Water Quality <i>cont'd</i>	SCI-019 Modeling Hypoxia: Approaches and Application to Management <i>cont'd</i>	SCI-007 Hydrologic Processes: From Shoreline Seepage to Shelf Dynamics Jaye Cable and William Nuttle
2:00	1221: Is Oyster Shell A Sustainable Estuarine Resource? John Klinck , Eric Powell.	1194: Retention of a Conservative Tracer in Marshes with Large Intertidal Areas. Al Garrett , Jack Blanton, Jim Bollinger, David Hayes, Julie Amft, Larry Koffman.	1848: Spatial and Temporal Patterns in Chlorophyll Fluorescence in Narragansett Bay, RI. Christopher Melrose , Mark Berman.	1353: Linking the Peters Mass Balance Model to Macrofaunal Indicators of Hypoxia. Chet Rakocinski .	1273: Estuarine and Coastal Zone Ecohydrology. Eric Wolanski .
2:15	2069: Shell Budgets for the James River, VA Oyster Resource. Roger Mann , Melissa Southworth, Juliana Harding, James Wesson.	1673: Subtidal Circulation in San Quintin Bay, Mexico, a Mediterranean Coastal Lagoon. Reginaldo Durazo , Xavier Flores, Alejandro Souza, Victor Camacho.	2412: Anomalous Low Phytoplankton Productivity in the Northern San Francisco Estuary. Frances Wilkerson , Victoria Hogue, Alexander Parker, Richard Dugdale, Al Marchi, Amy Kleckner, Jim Fuller.	2492: Hypoxia, Eutrophication, and Fisheries: A Cross-estuary Comparison of Fishery Landings. Lori Davies , Denise Breitburg, Darryl Hondorp.	2214: Colored Dissolved Organic Matter: From Watershed to Ocean. Bernie Gardner , Robert Chen, Wei Huang, Francesco Peri.
2:30	1223: The Import of Broodstock-Recruitment and Broodstock-Mortality Relationships in the Managing of Oyster Populations. Eric Powell , John Klinck, Kathryn Ashton-Alcox.	1534: The Importance of Tidal Pumping in a Mediterranean Lagoon. Alejandro Souza , Victor Camacho-Ibar, Reginaldo Durazo, Leslie Aveytua.	2477: A Phytoplankton Habitat Index for Estuarine Open Water Environments. Claire Buchanan .	2645: Simulating the Response of Chesapeake Bay Anchovy to Changed Nutrient Loads Using Coupled Models. Aaron Adamack , Kenneth Rose, Carl Cerco.	2274: River Inflow Effects on Spatial and Temporal Water Quality Patterns in Two Texas Estuaries. Stephen Davis , Daniel Roelke, George Gable, Hsiu-Ping Li, Kung-Jen Liu, Carrie Miller, James Pinckney, Antonietta Quigg.
2:45	1225: Understanding <i>Crassostrea gigas</i> Population Variability Using a Genetics-Based Model. Eileen Hofmann , Eric Powell, John Klinck, Dennis Hedgecock.	1850: Circulation in a Semi-arid Lagoon: Laguna San Ignacio. Clinton Winant , Guillermo Gutierrez de velasco.	2485: Decadal Changes in Macrophyte Abundance in Response to Different Land-derived N Loads in Waquoit Bay, Massachusetts. Sophia Fox , Mirta Teichberg, Gabrielle Tomasky, Ivan Valiela.	2508: Impacts of Eutrophication and Hypoxia on the Composition of Fisheries Landings. Darryl Hondorp , Denise Breitburg, Lori Davies.	1870: Influence of a Freshwater Diversion on Overland Flow in a Louisiana Deltaic Plain Estuary. Erick Swenson , Jaye Cable, Gregg Snedden.
3:00	2665: Physiological Responses of Juvenile <i>Mercenaria mercenaria</i> to Over-Winter Stress in New York, USA. Chester Zarnoch , Youssa Abdelhadi, Martin Schreiber, Matthew Sclafani.	1836: Circulation in a Semi-enclosed Bay Driven by Sea Level Variations and Wind. Aurélien Ponte , Guillermo Gutiérrez de Velasco, Arnoldo Valle-Levinson, Clinton Winant, Craig Winters.	2599: Field Experiments Provide Evidence that Nutrient Supply, Scouring, and Drag Control Macroalgal Accumulation in Estuaries. Rachel Kennison , Peggy Fong.	2236: Policy Responses to Hypoxia: A Punctuated Equilibrium Model. Richard Burroughs .	1935: The Use of Statistical Models with Paleosalinity Data to Simulate the Everglades Pre-Drainage Hydrology. Frank Marshall , DeWitt Smith, Cheryl Buckingham.
3:15	2304: Growth Rates of the Atlantic Surf Clam, <i>Spisula solidissima</i> , in Relation to Bottom Water Temperatures in the Middle Atlantic Bight. Juliana Harding , Adriana Picariello, Roger Mann, Eric Powell.	1979: Waves, Tides and Buoyancy: A tale of two coral reef estuaries. Stephen Monismith , James Hench, James Leichter, Ryan Lowe, James Falter, Marlin Atkinson.	1917: Eutrophication and Transboundary Nutrient Transport in Dutch Coastal Waters. Theo Prins , Anouk Blauw, Hanneke Baretta-Bekker, Remi Laane.	1750: Building Consensus in a Non-Regulatory Approach: How Science Can be a Valuable Ally. Darrell Brown , Kristen Goodrich, Tracy Rouleau.	2820: Mixology: just how does salt get into the sediment in the face of rapid SGD? Henry Bokuniewicz .
BREAK 3:30 pm - 4:00 pm					

Wednesday Mid-Afternoon Oral Presentations

556 AB (RICC)	NARR A (Westin)	NARR B (Westin)	NARR C (Westin)	PRV-IV (Westin)	
SCI054 Nutrient Budgets for Coastal Waters: Methodologies and Applications Dennis Swaney	SCI101 Benthic Ecology <i>cont'd</i>	SCI045 Rapid Assessments and Indicators of Tidal Wetland Functions and Condition <i>cont'd</i>	SCI063 Nekton Growth, Condition and Habitat Relationships Martin Posey	SCI036 Restoration Metrics to Assess Nekton Habitat Quality Megan LaPeyre and Lawrence Rozas	
2123: LOICZ Budgets: methodology and applications. Dennis Swaney.	1549: Spatiotemporal Patterns of Subtidal Benthic Microalgal Biomass and Community Composition in Galveston Bay, TX. James Pinckney.	2533: Geospatial Mapping of Species and Biomass in Georgia Salt Marshes using AISA Airborne Hyperspectral Imagery. John Schalles , Christine Hladik, Maria Volkmer, Daniel Saucedo.	2331: Habitat and Diet Overlap of Piscivorous Fishes on the inner Continental Shelf off New Jersey. Mark Wuenschel , Kenneth Able, Don Byrne.	1303: Habitat Restoration in Estuaries: Can we Move Beyond Structural Criteria. Michael Weinstein , Steven Litvin, Vincent Guida.	2:00
1181: Nitrogen Budgets for Ecology and Management: Patuxent River Estuary Case Study. Walter Boynton , Jim Hagy, Jeff Cornwell, Michael Kemp, Sarah Greene, Michael Owens.	2662: Controls on Stability and Resilience of Microbial Mats from the Florida Everglades. David Iwaniec , Daniel Childers.	2467: Relationships Between Watershed Emergy and Coastal New England Salt Marsh Structure and Function. Sherry Brandt Williams , Cathleen Wigand.	1586: Assessing Habitat Specific Fish Assemblages in Estuaries Along the Portuguese Coast. Susana França , Maria José Costa, Henrique Cabral.		2:15
1512: Nutrient Budgeting Approach to the Mediterranean and Black Sea Transitional Waters: Towards a Regional Initiative. Gianmarco Giordani , José Zaldivar, Dennis Swaney, Robert Christian, Pierluigi Viaroli.	1983: Microalgal Biofilms as Key Elements in Coastal Benthic Carbon Cycling. Graham Underwood.	1233: Components of a Reference-based Approach for Assessing the Condition of Tidal Freshwater Swamps. Richard Rheinhardt.	2762: RNA:DNA as an Indicator of Habitat Quality: Laboratory Assessment Using Larval Naked Goby <i>Gobiosoma bosc.</i> Michelle Satterwhite , Donald Baltz, Edward Chesney, Timothy Foster.	2183: Assessing Restoration Success Using Nekton-Based Metrics of Habitat Quality in a Tidal Mangrove Wetland. Justin Krebs , Carole McIvor, Susan Bell.	2:30
2005: Net Ecosystem Metabolism in two European Estuaries: Evaluation of methods. Frederic Gazeau.	1597: Sedimentary Algae on an Off-Shore Sand Shoal, Louisiana, USA. Mark Grippio , John Fleege, Carey Gelpi, Richard Condrey.	1599: Predicting Carbon and Nutrient Transformations in Tidal Freshwater Wetlands of the Hudson River. Stuart Findlay , Alicia Arrigoni, Klement Tockner.	1684: Growth and Condition Models for Juvenile <i>Solea senegalensis</i> and <i>Dicentrarchus labrax</i> : Effects of Temperature, Salinity and Food Supply. Vanessa Fonseca , Rita Vasconcelos, Patrick Reis Santos, Susanne Tanner, Henrique Cabral.	2556: Contrasting Nekton Densities Between Spartina Marsh-edge Sites Identified as Healthy or At Risk. Stephanie Cogburn , Donald Baltz, DeWitt Braud.	2:45
2416: Uncertainty and Accuracy of Indexes Derived by Budgeting Procedures. Cosimo Solidoro, Gianpiero Cossarini , Donata Melaku canu.	1793: Trophic Role of Benthic Bacteria Along the Year in an Intertidal Mudflat. Pierre-Yves Pascal , Christine Dupuy, Pierre Richard, Eric Arminot Du Chatelet, Clarisse Mallet, Nathalie Niquil.	1277: Use of Computer Aided Tomography Scan Imaging and Soil Respiration to Assess Salt Marsh Condition. Cathleen Wigand , Earl Davey, Charles Roman, Patricia Brennan, Mark Stolt.	1469: White Perch Bioenergetic Responses to Temperature, Salinity and Dissolved Oxygen. Deanna McQuarrie , David Secor.	1867: Intertidal Creek Nekton Response to <i>Phragmites</i> Removal: Evaluating Traditional Sampling Gears Versus Underwater Video. Matthew Kimball , Kenneth Able.	3:00
1675: Management Outcomes from LOICZ Biogeochemical Budgeting in New Zealand. John Zeldis.	1846: Tracking the Uptake and Fate of Benthic Microalgal Carbon and Nitrogen: A Dual Isotopic Approach. Frank Parker , Iris Anderson.	Synthesis/Discussion led by Martha Sutula, Charles Roman, Stuart Findlay and Bruce Carlisle	2156: Influence of Erosion Control Structures on Nekton and Benthos. Martin Posey , Troy Alphin, Spencer Rogers.	1393: Estimating Estuarine Habitat Suitability for Targeted Restoration at Multiple Scales in the Northern Gulf of Mexico. Lisa Smith , Janet Nestlerode, Pete Bourgeois, Linda Harwell.	3:15
BREAK 3:30 pm - 4:00 pm					

Wednesday Late Afternoon Oral Presentations

	BR B (RICC)	BR D (RICC)	551 AB (RICC)	552 AB (RICC)	555 AB (RICC)
	SCI-035 Managing Shellfisheries: Models, HABs and Other Current Issues <i>cont'd</i>	SCI-059 Hydrodynamics of Tropical and Subtropical Semi-enclosed Systems <i>cont'd</i>	SCI-108 Eutrophication/ Water Quality <i>cont'd</i>	SCI-009 The Science and Management of Native and Introduced <i>Phragmites australis</i> Randy Chambers and Laura Meyerson	SCI-007 Hydrologic Processes: From Shoreline Seepage to Shelf Dynamics <i>cont'd</i>
4:00	1230: Fishery Effects on the Hard Clam (<i>Mercenaria mercenaria</i>) Population in Great South Bay, NY: A modeling study. John Kraeuter , John Klinck, Eric Powell, Eileen Hofmann, S. Buckner, R.E. Grizzle, V.M. Bricelj.	2847: Comparative Hydrodynamics of Two Contrasting Bays. Carlos Schettini , Eliane Truccolo.	2297: Prospects for Reducing Agricultural Runoff of Nutrients, Sediments, and Pesticides. Kenneth Hinga .	1957: Common Reed Occurrence Along Estuarine Shoreline in Chesapeake Bay. Randolph Chambers , Kirk Havens.	1716: Groundwater Seepage from Subterranean to Surface Estuaries – Examples from Geochemical Tracer Surveys. Henrieta Dulaiova , Matthew Charette, William Burnett, Meagan Eagle Gonneea, Paul Henderson.
4:15	2841: Management of Shellfish Aquaculture: Application of the Right Spatial Scale. Jon Grant .	1372: Observations of Residual Exchange Flows in Subtropical Estuaries. Arnoldo Valle-Levinson .	2032: The Potential of Modified Agricultural Practices to Mitigate Eutrophication Events in the Taw Estuary (UK). Gerald Maier , Gillian Glegg, Alan Tappin, Paul Worsfold.	2600: How does <i>Phragmites australis</i> Tolerate Metal-contaminated Conditions: physiological approaches and ecosystem feedbacks in brackish marshes of New Jersey. Lisamarie Windham-Myers .	2421: Radon-222 as a Tracer of Coastal Groundwater Discharge: Examining controls on spatial variability of Radon-222. Laura Erban , John Crusius, Dirk Koopmans, Anne Giblin, Kevin Kroeger, Kenneth Foreman, John Bratton.
4:30	1313: The 2005 and 2006 New England Red Tides: Mechanisms, Management Challenges, and Future Forecasting Capabilities. Donald Anderson , Bruce Keafer, Dennis McGillicuddy, Ruoying He.	1154: Some Observations on the Sedimentary Regime of the Loxahatchee Estuary in Florida. Ashish Mehta , Mohamad Alkhalidi.	2245: Can Permeable Reactive Barriers Really Work to Remediate Groundwater-borne Nitrate Inputs to Coastal Ecosystems? Kenneth Foreman , Richard McHorney, Angela Vincent, Sabrina Moreau, Mark Anderson, Pio Lombardo, Joseph Vallino.	1614: Response of Native and European Varieties of <i>Phragmites australis</i> After Transplanting in a Salt Marsh. David Burdick , Chris Peter, Gregg Moore.	1892: Using Field Measurements, Laboratory-Assays, and Modeling to Examine Flow Conditions and Variations in Groundwater Biogeochemistry. William Porubsky , Christof Meile, Samantha Joye.
4:45	1276: Mitigating the Risk of Introducing Harmful Algae During Relocation of Bivalves. Hélène Hégaret , Sandra Shumway, Gary Wikfors.	2753: Bahamian Windrows and Whittings: Benthic processes shaped by wind-driven Langmuir Supercells. Heidi Dierssen , Richard Zimmerman, David Burdige.	1947: Temporal Changes in Sedimentary Denitrification Efficiency: The Effects of Bioirrigation and Reduced Bottom Water Oxygen. Michael Owens , Jeffrey Cornwell.	1863: Can Competition and Diversity Reduce the Success of Invasive <i>Phragmites australis</i> in a Tidal Marsh? Christopher Peter , David Burdick.	2191: Groundwater Discharge Impacts on Benthic Carbon Fluxes to a Coastal Lagoon. Jaye Cable , Jennifer Cherrier, Jonathan Martin, Christopher Smith, Amanda Dorsett, Moutusi Roy.
5:00	2783: An Individual-based Model Simulates the Effects of Brown Tide on Hard Clam Larvae. V.M. Bricelj , Eileen Hofmann, Eric Powell, John Klinck, John Kraeuter.	2011: Effects of Bathymetry, Friction and Rotation on the Exchange of Larvae between the Patos Lagoon Estuary and the Ocean. Elisa Helena Fernandes , Jack Blanton, José Henrique Muelbert.	1132: Natural Attenuation of Nitrogen in Wetlands and Waterbodies. Susan Peterson , John Teal, Lee Weishar.	2889: Intraspecific Hybridization of Native and Introduced Subspecies of <i>Phragmites australis</i> in North America. Laura Meyerson .	Synthesis/Discussion led by William Nuttle
5:15	1676: The Effect of Extermination materials for Red Tide in the Critical period of Spats larvae. Guihwan Na , Daeyoon Kim, Soyoung Park.	Synthesis/Discussion led by Arnoldo Valle-Levinson and Alejandro Souza	1715: Ecosystem Buffering of Nitrogen Enrichment in the Pearl River Estuarine Coastal Waters. Kedong Yin .	2891: Biological Control of <i>Phragmites australis</i> . Richard Casagrande , Bernd Blosssey.	

Wednesday Late Afternoon Oral Presentations

556 AB (RICC)	NARR A (Westin)	NARR B (Westin)	NARR C (Westin)	PRV-IV (Westin)	
SCI-054 Nutrient Budgets for Coastal Waters: Methodologies and Applications cont'd	SCI-101 Benthic Ecology cont'd	SCI-138 Adaptive Management Solutions Fred Sklar	SCI-065 Stress and Habitat Effects on Nekton Suzanne Ayvazian	SCI-036 Restoration Metrics to Assess Nekton Habitat Quality cont'd	
2694: Nutrient Loadings of Coastal Watersheds Draining into Estuarine Nursery Areas of the Gulf of Maine. Rita Oliveira Monteiro , Karin Limburg.	1488: Are Illuminated Shallow-water Sediments Robust Systems – or too Complex for Detection of Clear Stressor Effects? Kristina Sundback , Fredrik Larson, Dorte Petersen, Christian Alsterberg, Ingela Dahllof.	2579: A BACI and Repeated Measure Adaptive Management Approach for the Decompartmentalization of the Everglades. Fred Sklar .	2719: The Potential Effects of Shrimp Trawling on Abundance and Diets of Some Fishes in Core Sound, North Carolina. Kevin Hart , Rebecca Deehr, Lisa Clough, Joseph Luczkovich.	1142: Challenges for Use of Fish Metrics to Evaluate Everglades Restoration. Joel Trexler , Donald DeAngelis.	4:00
2790: Estimating Catchment Discharges and Loads to the Great Barrier Reef. Andy Steven , Phillip Ford, Perran Cook, Nicky Grigg, Markus Billerbeck.	1788: Detecting Benthic Primary Producers in the Hypoxia Region of the Northern Gulf of Mexico. Melissa Baustian , Nancy Rabalais.	1448: Avoiding and Minimizing Impacts When Planning an Offshore Pipeline: An Example from Tampa Bay, Florida. R. Allen Brooks , Michael Aubele, Jon Schmidt.	2175: Anthropogenic and Natural Stress Effects on Nekton Community Structure in Barataria Bay, Louisiana. Agatha-Marie Roth , Donald Baltz.	2666: Is Fish Habitat Quality Best Measured in Numbers or Nibbles?: Guidance from In Situ Video Recordings. William Ellis , Susan Bell.	4:15
2194: Nitrogen Processing within an Urbanized Tidal Creek Determined by an In Situ Isotope Tracer. Kimberley Duernberger , Craig Tobias, Michael Mallin.	2343: FLUXZILLA: A Comprehensive Analysis of over 7000 Sediment Oxygen and Nutrient Exchanges in Estuarine and Coastal Marine Systems. Eva Bailey , Walter Boynton, Sharon Moesel.	2869: Gulf of Maine Regional Ocean Science Planning. Judith Pederson .	2143: Hurricane Katrina's Effects on Nekton Communities in Seagrass and Bare Substrates in a Louisiana Estuary. Jamie Crowe , Donald Baltz.	1783: Evaluating High-volume Freshwater Inputs: Effects on Nekton Growth and Condition in Breton Sound, LA. Bryan Piazza , Megan La Peyre.	4:30
2564: Nitrate and Ammonium Fluxes Observed with Real-Time Sensors in the Land/Ocean Biogeochemical Observatory. Kenneth Johnson , Joseph Needoba, Luke Coletti, Hans Jannasch, Steve Fitzwater, Joshua Plant, Carole Sakamoto.	2139: Rates and Pathways of Nitrogen Removal from Shallow Permeable Sediments of the Wadden Sea. Joel Kostka , Thomas Gihring, Hang Gao, Heath Mills, Su Mei Liu, Gavin Collins, Gaute Lavik, Justus Van Beusekom, Marcel Kuypers.	1704: Permitting Offshore Wind Power: the Challenges of Following a Changing Regulatory Road Map. Terry Orr, Heather Heater .	1712: Faunal Assemblages and Habitat Preference in Caulerpa taxifolia and Seagrass Beds in Moreton Bay Queensland. Dana Burfeind , Ian Tibbetts, James Udy	2186: Nekton Utilization of Created Oyster Reefs in Intertidal and Shallow Subtidal Habitats of North Carolina. Edward Wilgis , Martin Posey, Troy Alphin.	4:45
Synthesis/Discussion led by Dennis Swaney	1895: Benthic Metabolism and Nutrient Cycling Across Salinity Gradients in Shallow Estuarine and Lagoonal Systems. Iris Anderson , Jen Stanhope, Linda Schaffner.	2856: Reducing Hurricane Damage by Using Nutrient-Rich Point Sources of Freshwater to Regenerate Cypress – Tupelo Swamps. Gary Shaffer , Christopher Lundberg, W. Bernard Wood.	1658: Prop Root Epibionts Enhance Fish Diversity and Biomass in Fringing R. mangle. James MacDonald , Judith Weis.	2321: Relationships Between Habitat Structure and Forage Fish in the Southern Everglades Mangrove Ecotone. Robin Bennett, Jerome Lorenz , Peter Frezza, Luis Cañedo.	5:00
	1634: Linking Benthic Microalgae to Coupled Denitrification. Craig Tobias .	***	1692: Seagrass Habitat Dynamics and Their Effect on Fish Community Structure. Bradley Robbins , Anamari Boyes.	2335: Individual Growth Rates and Residence Times as Success Metrics in Estuarine Nekton Habitat Restoration. Ronald Kneib .	5:15

Thursday Morning Thematic Plenaries

Plenary session will replace the concurrent oral session on Thursday morning from 8:00 am – 9:45 am.

1. ECOLOGICAL RESTORATION AND COASTAL WATERSHEDS: PIPE DREAMS VS. PORTFOLIOS

Location: Rhode Island Convention Center,
Fifth Floor, Ballroom B

Convener: **Margaret A. Palmer**, Chesapeake Biological Laboratory, University of Maryland Center for Environmental Science

Ecological systems are inherently dynamic systems; however, as humans have adapted natural systems to their needs, the variability so characteristic of ecosystems has been greatly reduced. Some would argue that this variability is central to the resilience of ecological systems – to their very ability to recover from or absorb disturbances – and that this attribute is severely compromised in most socio-ecological systems.

Nowhere is this more apparent than in coastal watersheds. Here, human constraints on the natural range of variability and our misguided management approaches have rendered ecological restoration a pipe dream. Our conceptualization of ‘restoration’ must be reshaped.

Starting with a focus on the fundamentals of restoration ecology and moving toward the realities of coastal watershed futures, I will explore a more diverse vision for restoration asking: Can we envision new ‘restoration portfolios’ that predispose coastal watersheds to adjust to changes...even changes outside the range of current expectations?

2. THE EPA'S GULF OF MEXICO HYPOXIA ASSESSMENT

Location: Westin Hotel, Street Level, Narragansett Ballroom A

Convener: **James G. Sanders**, Skidaway Institute of Oceanography

Presenters: **James Sanders** and **Catherine Kling**

Panelists: **Robert Howarth**, **Donald Scavia**, **R. Eugene Turner**, **Walter Boynton**, and **Daniel Conley**

Since 1985, scientists have been documenting a “dead zone” in the Gulf of Mexico each summer, an area of low dissolved oxygen that cannot support marine life. Oxygen depletion begins in

late spring, reaches a maximum in midsummer, and disappears in fall. To address this problem, the Mississippi River/Gulf of Mexico Task Force was formed to bring together representatives from federal agencies, states and tribes to consider options for responding to hypoxia. The Task Force produced a 2001 Action Plan based on ten management actions designed to reduce the extent of hypoxia and improve water quality.

In 2006, the EPA Science Advisory Board (SAB) Hypoxia Advisory Panel was charged with evaluating the state of the science regarding hypoxia in the Northern Gulf of Mexico, and was charged with evaluating progress that has been made in implementing the nutrient mitigation and control options. This plenary session will summarize the SAB Panel’s major findings and recommendations, and will bring together experts from the Gulf region and other areas in the world experiencing similar hypoxia to discuss the environmental, social, and economic issues faced in the Gulf and to outline the steps necessary to achieve a reduced hypoxic zone.

3. SCIENCE IN COASTAL DECISION-MAKING: A PANEL DISCUSSION

Location: Rhode Island Convention Center,
Fifth Floor, Ballroom D

Convener: **Jerry R. Schubel**, Aquarium of the Pacific

Panelists: **Don Boesch**, **Mike Connor** and **Margaret Davidson**

The goals of this discussion are to explore and evaluate alternative models for integrating science into decision-making, and to identify a portfolio of robust strategies for improving the integration of science into the coastal decision-making process. Throughout, the panelists will share what they have learned from their experiences.

Collectively, this group offers more than 100 years of experience as students and practitioners of applying and integrating science into coastal decision-making in a wide variety of coastal environments and at scales ranging from local to regional to national to international.

CONVENER BIOGRAPHIES

Dr. Margaret Palmer is the Director of the Chesapeake Biological Laboratory (CBL), University of Maryland Center for Environmental Science, where she is also a Professor. Dr. Palmer is an editor for the journal *Restoration Ecology* and serves on boards for the Chesapeake Bay Trust, American Rivers, the NSF National Center for Earth Surface Dynamics, and the NSF Long Term Ecological Research program. Dr. Palmer graduated from Emory University in 1977, then went on to earn her Ph.D. from the University of South Carolina in coastal oceanography in 1983. She taught and conducted research for 17 years as a Professor of Biology and Entomology at the University of Maryland in College Park, serving as Director of the Biological Sciences Program at the University of Maryland from 1997 – 1999 and as Director of Ecology at the National Science Foundation from 1999 – 2001. Dr. Palmer’s research expertise is riverine science, particularly stream and river restoration.

Dr. James Sanders is the Director of the Skidaway Institute of Oceanography, a campus of the University System of Georgia. He is President-Elect of the National Association of Marine Laboratories, is Chairman of the Board of Directors of the Southeast Atlantic Coastal Ocean Observing System, is a member of the Executive Committee of the Board of Governors of the Consortium for Oceanographic Research and Education, and is on the Ecological Processes and Effects Committee of the Science Advisory Board of the EPA. Dr. Sanders received his B.S. from Duke University in Zoology and his Ph.D. from the University of North Carolina in 1978 in Marine Sciences. Prior to his arrival

in Georgia, Dr. Sanders served as Head of the Academy of Natural Sciences’ Estuarine Research Center in Maryland from 1981 to 1999, then was Chairman of the Department of Ocean, Earth and Atmospheric Sciences at Old Dominion University in Virginia. Dr. Sanders has served on Boards of the Society of Environmental Toxicology and Chemistry, and the Estuarine Research Federation. Dr. Sanders has research expertise in trace element biogeochemistry with a particular interest in how trace elements are transported through coastal zones, how they are transformed by chemical and biological reactions during transport, and how they impact aquatic ecosystems.

Dr. Jerry Schubel is president and CEO of the Aquarium of the Pacific, and is director of the Aquarium’s Marine Conservation Research Institute. He also chairs the Ocean Research and Resources Advisory Panel, an interagency panel to advise the federal government on matters related to the Ocean. A Michigan native, Schubel holds a B.S. degree from Alma College; a Masters degree from Harvard University; a Ph.D. from The Johns Hopkins University; and an honorary doctorate from the Massachusetts Maritime Academy. Dr. Schubel has served on an NSF Council, on the US Committee of the Census of Marine Life, as an ERF president, on a number of National Research Council commissions, committees and boards, and is past chair of the National Sea Grant Review Panel. Dr. Schubel was dean and director of SUNY Stony Brook’s Marine Sciences Research Center from 1974 to 1994, and was president and CEO of the New England Aquarium from 1994 to 2001. Dr. Schubel’s current focus is on bringing together scientists, business leaders, decision-makers and other stakeholders to identify and explore alternatives for dealing with complex multidisciplinary environmental issues.

Notes



Thursday Mid-Morning Oral Presentations

	BR B (RICC)	BR D (RICC)	551 AB (RICC)	552 AB (RICC)	555 AB (RICC)
	SCI-056 Protection and Restoration: Are we Having an Effect? Ron Thom	SCI-014 Marine Aquatic Invasive Species and Ecosystem Management Elizabeth Fairey, Thomas Therriault and Michelle Harmon	SCI-041 Processes Linking Estuarine Organic Matter to Continental Shelf Eutrophication Michael Murrell and John Lehrter	SCI-058 Advancing Benthic Habitat Mapping Ray Valente and Robert Diaz	SCI-055 Challenges of Collaboration across Science, Policy and Education Disciplines Drew Talley and Shara Fisler
10:15	1315: Cumulative Ecosystem Response to Restoration Projects: An Approach in the Columbia River Estuary. Ronald Thom , H. Diefenderfer, G. Johnson, A. Borde, K. Sobocinski, G. Roegner, A. Whiting, E. Dawley, J. Skalski, B. Ebberts.	1967: Predicting the Invasion of Non-indigenous Mitten Crabs in Canada. Leif-Matthias Herborg , Thomas Therriault.	1781: Estuarine Shelf Exchanges in a Deltaic Louisiana Estuary: Implications for Coastal Carbon Budgets. Anindita Das , Dubravko Justic, Erick Swenson.	1910: Implementing the Coastal and Marine Ecological Classification Standard: Developing Mapping Guidance. Rebecca Allee , Mark Finkbeiner, Bill Stevenson.	2693: Challenges and Opportunities for International Cooperation in Coastal Resource Management. K. Jun Bando .
10:30	1244: We have had an effect! John Teal , Lee Weishar.	1962: Using an Individual-Based Model to Investigate the Underlying Causes of <i>Carcinus maenas</i> Recruitment Patterns. Kevin See .	1901: Marsh-Coastal Exchanges and the Net Metabolic State of Terrebonne Bay. Michael Dagg, Rodney Powell, Carrie Semmler , Nazan Atilla, Jean Rabalais.	2320: Between a Rock and a Sponge: Applying benthic habitat mapping schemes to seafloor mapping data. Drew Carey , R. Valente, M. Esten, T. Wilbur, D. Sampson, S. Ackerman, K. Ford, M. Carullo, R. Glenn, C. Woods, G. Berman, P. Neubert.	2854: Building Bridges: NOAA Federal-State Partnerships in Ecosystem Research, Data Dissemination and Outreach Programs. Susan White .
10:45	1151: The Importance of Topographic Heterogeneity in Salt Marsh Restoration. Joy Zedler .	1798: Biogeographic Investigation of Variation in Abundance, Morphology, and Behavior of the European Green Crab. Rikke Preisler .	2206: Primary Production and Community Respiration Rates on the Louisiana Continental Shelf Indicate Carbon Subsidies. John Lehrter , Michael Murrell, Jan Kurtz, Jim Hagy, Richard Greene.	1924: Taking Pictures of Mud from Different Angles: Implications for Benthic Habitat Characterization. Raymond Valente .	2516: Preparing Future Generations of Scientists for Cross-discipline Communication & Collaboration: The Communicating Ocean Sciences Model. Timothy Zimmerman et al .
11:00	1321: Fishery Habitat Restoration (1995-2005) in the Galveston Island State Park, Texas. Thomas Minello , Philip Caldwell, Lawrence Rozas.	1484: <i>Corbicula</i> and <i>Corbula</i> are Stressing the Restoration: Can we manage freshwater to limit their success? Janet Thompson , Francis Parchaso.	2361: Stable Isotope Studies of Plankton Dynamics Across the Louisiana Shelf. Brian Fry , Jim Hagy, Jan Kurtz, John Lehrter, Michael Murrell.	2295: Delaware Bay Benthic Mapping Project: Sub-Bottom Imaging to Constrain Geologic Setting and Potential Sand Resources. John Madsen , Bartholomew Wilson, David Carter.	2230: Developing Effective Strategies and Partnerships for the Conservation of Bahia de San Quintin, Mexico. Nirari Cardenas, Isabel Granillo , Scott Morrison.
11:15	1662: Addy Revisited: What has Changed with Seagrass Restoration in 58 Years? Mark Fonseca	2484: Nonindigenous Green Mussels, <i>Perna viridis</i> , in the Southeastern United States: patterns and limits of dispersal. Patrick Baker , Shirley Baker.	2541: Temporal Relationships Between Nutrient Inputs and Phytoplankton Biomass and Productivity in the Mississippi River Plume. Steven Lohrenz , Donald Redalje, Wei-Jun Cai.	2679: Combining and Extrapolating Remote Assessment Techniques in Coastal Habitats. Judi Hewitt .	1242: Salmon Easements: a Nearshore Habitat Protection Blueprint for the San Juan Archipelago. Tina Whitman , Shannon Davis, James Slocomb.
11:30	1779: Accountability Systems for Adaptive Management in the Restoration of Regional Ecosystems. Donald Boesch .	2131: Population Dynamics of the Zebra Mussel (<i>Dreissena polymorpha</i>) in the Hudson River: recruitment and post-recruitment processes. Helen Bustamante , Daniel Schneider.	2648: The Dynamics of CO ₂ in the Mississippi River Plume and Northern Gulf of Mexico. Wei-Jun Cai , Xianghui Guo, Feizhou Chen, Justin Hartmann, Wei-Jen Huang, Steven Lohrenz, Yongchen Wang.	1253: Backscatter Mapping Using Synthetic Aperture Sonar in Buzzards Bay, Massachusetts. Kathryn Ford .	2265: Linking Science, Education & Conservation in a Coastal Wetland in the Northern Gulf of California, Mexico. Hem Morzaria-Luna , A. Castillo-López, P. Valdivia-Jimenez, A. Iris-Maldonado <i>et al</i> .
11:45	Synthesis/Discussion led by Ron Thom	***	2317: A Comparison of Phytoplankton, Detrital, and CDOM Absorption Coefficients in Barataria, Terrebonne, and Atchafalaya Bays. Blake Schaeffer , Richard Greene, John Lehrter, James Hagy.	2669: Characterizing Chesapeake Bay Benthic Biotopes Using Sampling and Acoustic Habitat Mapping to Enhance Ecosystem Management. H. Ward Slacum , J. Lazar, R. Llanso, S. Giordano, D. Levin, D. Bruce, C. Little.	2696: Diadromous Fish Passage Restoration - A Decade of Experience in the Northeast. James Turek .
	POSTER SESSIONS and LUNCH 12:00 pm - 2:00 pm				

Thursday Mid-Morning Oral Presentations

556 AB (RICC)	NARR A (Westin)	NARR B (Westin)	NARR C (Westin)	PRV-IV (Westin)	
SCI-029 Valuation of Estuarine and Aquatic Restoration Robert Johnston, Eric Schultz, Kathleen Segerson and Elena Besedin	SCI-128 Tidal Emergent Wetlands Robert Buchsbaum	SCI-115 Hydrodynamics and Physical Processes James Lerczak and William Boicourt	SCI-015 Eutrophication and Aquaculture: Friends, Enemies or Allies? Joao Ferreira	SCI-004 Microbes: A Synthesis of Diversity, Community Composition and Biogeochemical Function Jennifer Bowen, Jude Apple and Byron Crump	
1197: Bioindicator-Based Stated Preference Valuation of Estuarine Restoration: An Application to Rhode Island Fish Passage. Robert Johnston , Eric Schultz, Kathleen Segerson, Elena Besedin, Jessica Kukielka, Deepak Joglekar.	1727: Effects of <i>Avicennia germinans</i> on Essential Ecosystem Processes in a Southeastern Louisiana <i>Spartina alterniflora</i> Saltmarsh. Carey Lynn Perry , Irving Mendelssohn.	1698: Modeling the Estuarine Circulation of Southampton Water, UK. Anne Levasseur , Lei Shi, Neil Wells, Duncan Purdie, Boris Kelly-Gerreyn.	2247: Predicting the Impact of Shellfish Farms on Water Quality. Anthony Hawkins , Joao Ferreira, Suzanne Bricker.	2458: An Overview of Estuarine Gradients and the Microbes that Live in Them. Byron Crump , Jennifer Bowen, Jude Apple.	10:15
2810: The Restored Chesapeake Bay: What is Preferred? James Kirkley .	2172: Surface Elevation and Sediment Deposition in Riparian Wetlands of the Lower Cape Fear River Estuary. Devon Eulie , Alex Croft, Lynn Leonard.	1654: Tidal and Baroclinic Exchange at the Mouth of a Salt Wedge Estuary. James Lerczak , W. Rockwell Geyer, David Ralston, Malcolm Scully.	2462: Nutrients or Not Nutrients? Integrated Multi-trophic Aquaculture is the Answer for a Balanced Ecosystem Approach. Thierry Chopin , S. Robinson, F. Page, K. Haya, L. Burridge, N. Ridler, G. Reid <i>et al.</i>	2657: Transferable Patterns in the Biogeography of Estuarine Bacterioplankton Communities. Jude Apple , Thomas Boyd, Byron Crump.	10:30
1527: Public Preferences and Values for Wetland Restoration Programs. Frank Lupi , Michael Kaplowitz, John Hoehn.	1318: Functional and Structural Recovery of an Intermediate Marsh in Coastal Louisiana Following an Oil Spill and <i>In-situ</i> Burn. Joe Baustian , Irving Mendelssohn, Qianxin Lin, John Rapp.	1263: Han River Estuary Surface Velocities from Satellite Imagery. Richard Mied .	1988: Sustainable Development of Mariculture in Chinese Coastal Waters. Mingyuan Zhu , Joao Ferreira, A.J.S. Hawkins, Xuelei Zhang, Ruixiang Li.	1943: Microbial Community Profiles and Gene Expression in the Columbia River Estuary and Plume. Lydie Herfort , Dan Murphy, Byron Crump, Holly Simon, Peter Zuber.	10:45
1832: The Value of Alternative Restoration Scenarios for the Rio Paraiba do Sul: A Choice-Modeling Experiment. James Kahn , Carlos Rezende, Laurence Eaton, Glauca Frago.	2411: Halophyte Zonation in a Western Gulf of Mexico Salt Marsh: Roles of Salinity, Competition and Inundation. Michael Rasser , Norma Fowler, Ken Dunton.	2177: The Effect of Deepening the Ems Estuary on Tidal Dynamics and Residual Circulation Patterns. O.S. Chernetskyy , S.A. Talke, H.M. Schuttelaars, H.E. De Swart.	2179: Dynamic and Ecological Role of Mussels Farms in a Mediterranean Coastal Area. Cosimo Solidoro , Alfred Beran, Marina Cabrini, Fabio Cummaudo, Paola Del Negro, Cinzia De Vittor, Simone Libralato, Marina Lipizer, Marco Minocci, Marina Monti.	2604: Variation in the Control of Bacterioplankton Metabolism Along an Estuarine Salinity Gradient. Benjamin Peierls , Hans Paerl.	11:00
2344: Economic Values for Shorebird Use and Nonuse in the Delaware Estuary. George Parsons , Kelley Appleman.	2305: A New Approach to Measuring Denitrification in Vegetated Salt Marsh Sediments. Ketil Koop-Jakobsen , Anne Giblin.	2203: Transverse Distribution of Flow and Suspended Sediment in Estuaries: Combined Analytical and Numerical Modeling Approach. Karin Huijts , George Schramkowski, Henk Schuttelaars, Huib De Swart.	2466: Virtual Oysters in Chesapeake Bay - A modeling study of productivity and top-down control of eutrophication. Joao Ferreira, Anthony Hawkins, Suzanne Bricker, Douglas Lipton, Brian Rothschild, Yongjin Xiao .	2408: Microbial Community Composition along a Salinity Gradient in a Subterranean Estuary. Jennifer Bowen , Kevin Kroeger, Byron Crump, John Crusius, John Bratton.	11:15
2619: Ecological Issues in the Valuation of Estuarine Resources: A California Case Study. Elizabeth Strange , P. David Allen II, David Mills.	1285: Factors Influencing Algal Biomass in Hydrologically Dynamic Salt Ponds in a Subtropical Salt Marsh Landscape. Carrie Miller , Stephen Davis, Daniel Roelke, Hsiu-Ping Li, Matthew Drifill.	1390: Studying the Interannual Variability in the Chesapeake Bay using the ChesROMS Community Model. Jiangtao Xu , Wen Long, Lyon Lanerolle, Raleigh Hood, Tom Gross, Christopher Brown, Raghu Murtugudde, Jerry Wiggert.	1451: LMPrawn - A Model for Management of Cultivated Penaeid Shrimp. Changbo Zhu , Joao Ferreira, Marcos Donato, A.J.S. Hawkins, Xiaojun Yan, Ana Nobre.	1343: Crenarchaeota Are Differentially Distributed in Relation to Salinity in a New England Estuary. Zachary Landry, Anne Bernhard .	11:30
1760: A Cost-Effectiveness Analysis of Nutrient Reductions through Oyster Restoration within Chesapeake Bay. Amanda Wenczel , George Parsons, Lee Anderson, Douglas Lipton.	2708: Tidal Freshwater Vegetation Monitoring in the Columbia River Estuary. Kathryn Sobocinski , Amy Borde, Ronald Thom, Jill Leary.	2316: Observation and Modeling of Tributary Estuaries in Chesapeake Bay. Edgar Davis, William Boicourt .	1386: The Changes of Sanggou Bay Ecosystem Suggest Top-Down Control of Plankton. Xuelei Zhang , Mingyuan Zhu, Ruixiang Li, Zongling Wang.	2793: Taxa Specific Responses in Growth and <i>nifH</i> Expression in Cyanobacteria in a Nitrogen-limited Subtropical Estuary. Pia Moisander , Hans Paerl, Jonathan Zehr.	11:45
POSTER SESSIONS and LUNCH 12:00 pm - 2:00 pm					

Thursday Mid-Afternoon Oral Presentations

	BR B (RICC)	BR D (RICC)	551 AB (RICC)	552 AB (RICC)	555 AB (RICC)
	SCI-056 Protection and Restoration: Are we Having an Effect? <i>cont'd</i> Jenni Wallace	SCI-014 Marine Aquatic Invasive Species and Ecosystem Management <i>cont'd</i>	SCI-102 Biogeochemistry - Organic and Inorganic Tamara Pease	SCI-058 Advancing Benthic Habitat Mapping <i>cont'd</i>	SCI-020 Nutrient Criteria for Estuaries: Strategies for Managing Water Quality James Hagy, Janis Kurtz and Ifeyinwa Davis
2:00	1900: Seagrass Recovery in Tampa Bay, FL: Sweating the Small Stuff Also. Holly Greening.	2603: Experimental Comparison of Treatment Methods for Sparsely Distributed <i>Spartina anglica</i> Infestations. Danelle Heatwole , N. Kathryn Morgan, Roger Fuller.	1365: Sources or Organic Matter in Surface Sediments of the Louisiana Continental Margin. Thomas Bianchi , Troy Sampere, Laura Wysocki.	2625: Mapping The Distribution of Bottom Sediments and Key Habitats in the Delaware Bay and River. Bartholomew Wilson , John Madsen, Dewayne Fox, Kyle Bisson, David Bruce, David Carter.	2931: The Importance of Numeric Nutrient Criteria for Estuaries. Ed Decker.
2:15	1462: Development of Predictive Performance Measures to Evaluate Proposed Alternatives for Comprehensive Everglades Restoration Plan Projects. Gretchen Ehlinger , Edwin Brown, Patti Sime, Cheryl Buckingham, Michelle Boudreaux.	2792: The Impact of Cordgrass, <i>Spartina alterniflora</i> , on Dungeness crab, <i>Cancer magister</i> , in Willapa Bay, Washington. P. Sean McDonald , Kirstin Holsman, Pablo Barreyro, David Armstrong.	2064: Role of Iron in the Remineralization of Carbon in Coastal Marine Sediments. Martial Taillefert , Deidre Meiggs, Gwendolyn Bristow, Jordon Beckler, Morris Jones, Kathleen Salome, Patrick Wilson, Hong Wu.	2015: Mapping the Relative Trophic Value of the Benthos. Robert Diaz , Jesse McNinch, Pace Wilber.	1591: Developing Nutrient Criteria for Estuaries with Variable Ocean Inputs: An example from the Pacific Northwest. Walt Nelson , Cheryl Brown, Bruce Boese, Theodore DeWitt, Peter Eldridge, James Kaldy, Henry Lee II, James Power, David Young.
2:30	2439: The Comprehensive Everglades Restoration Plan (CERP) Monitoring and Assessment Plan's (MAP) Role in Everglades Restoration. Elmar Kurzbach , Patti Sime, Gregory Graves, Matthew Harwell.	2178: <i>Caulerpa taxifolia</i> in Moreton Bay, Australia – native or nuisance? Jane Thomas , Dana Burfeind, James Udy, William Dennison.	1655: Iron, Sulfur, and Phosphorus Biogeochemistry Across the Estuarine Salinity Gradient of the Patuxent River, Maryland, USA. Jennifer O'Keefe , Jeffrey Cornwell.	2365: Coastal Geologic Habitats. Jon Boothroyd.	2205: Toward a New Conceptual Model for Nutrient Criteria Development in a New Hampshire Macrotidal Estuary. Philip Trowbridge , J.R. Morrison, James Latimer, Jonathan Pennock, Rich Langan, Frederick Short.
2:45	1557: Coastal Restoration and Hurricane Protection in Coastal Louisiana: Building on Science, Policy, and Partnerships. Richard Raynie , Greg Steyer, Darin Lee, Carol Richards, James Pahl.	1275: Allelopathic Effects of the Exotic Brazilian Pepper <i>Schinus terebinthifolius</i> on Growth of Native Saltmarsh Flora. Julia Leissing , Nicole Martucci, Danielle Green, Melinda Donnelly, Linda Walters.	1290: Biogeochemical Cycling of POM in Altamaha River Estuarine Sediments: Sources, Relative Reactivities, and Bacterial Utilization. Ming-Yi Sun , Jihong Dai.	2670: Mapping Shallow-subtidal Benthic Habitats using Pedologic Approaches. Mike Bradley , Mark Stolt, Jim Turrenne, Maggie Payne.	2301: An Approach for Developing Numeric Nutrient Criteria for a Gulf Coast Estuary. James Hagy , Janis Kurtz, Richard Greene.
3:00	2427: Measuring Restoration Effectiveness While Experiencing High Rates of Habitat Loss: Challenges for Coastal Louisiana. Cecelia Linder , John Foret.	1337: The Impacts of Perennial Pepperweed Invasion in Wetlands Along an Inundation Gradient. Christine Whitcraft , Drew Talley.	2168: Microbial Potential Hydrolytic Activity and Kinetics in Estuarine Sediments. Afonso Souza , Tamara Pease.	1169: Mapping Wood Waste in the Marine Environment: Deleterious Substance or Chips Ahoy? Joseph Germano , David Browning.	1637: Towards Criteria Development for Great Lakes Coastal Wetlands - a Summary of Successes, Challenges, and Recommendations. Anett Trebitz , John Morrice, Michael Sierszen, Jo Thompson, John Kelly.
3:15	2824: Estuarine Restoration Prioritization in the Lower Columbia River. Scott McEwen.	1630: Non-native Species in Seagrass Beds: A Review. Susan Williams.	1948: The Role of Organic Acid Exudates in Liberating Phosphorus from Seagrass-Vegetated Carbonate Sediments. Matthew Long , Karen McGlathery, Joseph Zieman, Peter Berg.	1368: Hyperspectral Mapping of Seagrass Abundance and Distribution in Saint Josephs Bay, Florida. Victoria Hill , Richard Zimmerman, Paul Bissett, Heidi Dierssen.	2338: Nitrogen-Chlorophyll Relationships for Ten U.S. Atlantic and Gulf Coast Estuaries: Implications for Management. Edward Dettmann.
	BREAK 3:30 pm - 4:00 pm				

Thursday Mid-Afternoon Oral Presentations

556 AB (RICC)	NARR A (Westin)	NARR B (Westin)	NARR C (Westin)	PRV-IV (Westin)	
SCI-121 Modeling David Christian	SCI-051 Sudden Vegetation Dieback in Tidal Wetlands: A New Phenomenon in the U.S.? Ron Rozsa, Stephen Smith and Susan Adamowicz	SCI-115 Hydrodynamics and Physical Processes <i>cont'd</i> Rockwell Geyer and Raymond Najjar	SCI-064 Habitat Effects on Nekton Communities Greg Stunz	SCI-004 Microbes: A Synthesis of Diversity, Community Composition and Biogeochemical Function <i>cont'd</i>	
1324: An Evaluation of the Estuary/Tidal Marsh Circulation Effects for the St. Johns River, Florida. Peter Bacopoulos , Scott Hagen, Peter Sucsy.	2577: Salt Marsh Dieback in Georgia. Merryl Alber , Jan Mackinnon, Dorset Hurley, Mary Carla Curran.	2347: Internal Variability of the Chesapeake Bay Physics. Wen Long , Jiangtao Xu, Lyon Lanerolle, Raleigh Hood, Tom Gross, Jerry Wiggert, Raghu Murtugudde, Christopher Brown.	1476: Tampa Bay Tidal Creeks As Nekton Habitat: Comparisons with Adjacent Habitats and Differences Between Creeks. Marin Greenwood .	1674: Assessing the Nitrogen Cycle of a Freshwater Tidal Estuary through Microbial Community and Nutrient Composition. Caroline Fortunato , Karen Bushaw-Newton.	2:00
2290: Residence Time Effects on Internal Organic Carbon and Nitrogen Load in a Southeast U.S. Coastal Plain River. John Hendrickson , Peter Sucsy.	1648: Report on the Investigations into Salt Marsh Dieback in Northern New England: Occurrences and Transplant Studies. Susan Adamowicz , Jeff Tash, Shonee Strickland.	2608: Seasonal Patterns of Residual Circulation in Elkhorn Slough: Physical Mechanisms and Their Ecological Role. Nicholas Nidzieko , Stephen Monismith.	1329: Oyster Reef as Essential Habitat for Finfishes and Invertebrates. Gregory Stunz , Thomas Minello, Lawrence Rozas.	2481: Microbial Populations Mediating Phytodetritus Degradation and Denitrification in Shallow Marine Permeable Sediments. Thomas Gihring , Michael Humphrys, Heath Mills, Joel Kostka.	2:15
2339: Hydrodynamic and Circulation Study of Crescent Lake in the St Johns River, Florida. Joseph Stewart , Peter Sucsy.	2102: The Impacts of Sudden Wetland Dieback in the Inland Bays of Delaware. Amy Jacobs , Debora Fillis, Andy Howard, Chris Bason.	2614: The Long and Short of Estuarine Dynamics. W. Rockwell Geyer , James Lerczak, Malcolm Scully, David Ralston.	1942: Field Assessment of the Feasibility of Enhancing Blue Crab Stocks in Upper Chesapeake Bay. Eric Johnson , Anson Hines, Alicia Young, Margaret Kramer, Michael Goodison, Robert Aguilar, Yonathan Zohar, Oded Zmora.	1728: Tracking Carbon Sources for Heterotrophic Bacteria in a Subtropical Seagrass Estuary. Clayton Williams , Rudolf Jaffé, Frank Jochem.	2:30
2210: The Effects of Urban and Industrial Developments and Hydrologic Alterations on Indian River Lagoon Salinity. Ki Jin Park .	1951: Relationships Among DMSP Concentration in <i>Spartina alterniflora</i> , Salt Marsh Dieback and <i>Littoraria irrorata</i> . Whitney Pate , James Morris.	1961: Dissolved Oxygen Stratification in Two Micro-tidal Partially-mixed Estuaries. Jing Lin , Lian Xie, Leonard Pietrafesa, Jian Shen, Michael Mallin, Michael Durako.	1127: Habitat Use by Nekton Along a Stream-Order Gradient in a Southeastern Louisiana Estuary. Pablo Granados-Dieseldorff , Donald Baltz.	2266: Connectivity and Gene Flow Among Populations of a Bloom-forming Diatom from Coastal and Estuarine Environments. Tatiana Rynearson .	2:45
2022: A Baroclinic Circulation Simulation for the Shallow Florida Rookery Bay Estuary. Lianyuan Zheng , Robert Weisberg.	2877: The Role of <i>Sesarma reticulatum</i> in Generating New England Salt Marsh Die offs. Christine Holdredge , Mark Bertness.	2804: Is there a Signal of Sea-level Rise in the Salinity of mid-Atlantic Estuaries? Raymond Najjar , Timothy Hilton, Brandon Katz, Michael Mann, Ming Li, Liejun Zhong.	1576: The Opening of Packery Channel in Corpus Christi, Texas: Impacts to Estuarine Nekton Recruitment. Megan Reese , Gregory Stunz, Amanda Bushon.	2362: Eutrophication and Bacterial Pathogen Abundance in Maryland and Virginia Coastal Bays, USA. John Jacobs , Robert Wood, Brian Sturgis, Matt Rhodes, Rense Kelsey.	3:00
Synthesis/Discussion led by David Christian	1524: Reasons for Sudden Marsh Dieback in 2006 on a Restoration Site at Blackwater National Wildlife Refuge. J. Court Stevenson , Lorie Staver, Michael Owens, Jeff Cornwell.	2027: The Temporal Variability of Seine River Discharge as a Key Parameter of Estuarine Hydrosedimentary Evolution. Nicolas Massei , Julien Deloffre, Anne Motelay-Massei, Johanna Mesquita, Robert Lafite, Benoit Laignel.	2351: Ichthyoplankton of the Lower Columbia River Estuary: Abundance, Distribution and Composition. Lisa Marko , Steve Bollens, G. Curtis Roegner.	2289: Integrating Models, Experiments and Field Observations to Examine Predator-Prey Interactions in the Plankton. Susanne Menden-Deuer .	3:15
BREAK 3:30 pm - 4:00 pm					

Thursday Late Afternoon Oral Presentations

	BR B (RICC)	BR D (RICC)	551 AB (RICC)	552 AB (RICC)	555 AB (RICC)
	SCI-056 Protection and Restoration: Are we Having an Effect? <i>cont'd</i> Kay McGraw	SCI-014 Marine Aquatic Invasive Species and Ecosystem Management <i>cont'd</i>	SCI-102 Biogeochemistry - Organic and Inorganic <i>cont'd</i>	SCI-043 <i>Fundulus heteroclitus</i> : Model Species for Environmental Research Diane Nacci and Marta Gomez-Chiarri	SCI-020 Nutrient Criteria for Estuaries: Strategies for Managing Water Quality <i>cont'd</i>
4:00	1825: A High Resolution Hydrodynamic Model of Puget Sound to Support Nearshore Restoration Feasibility and Design. Tarang Khangaonkar , Zhaoqing Yang, Stephen Breithaupt, Cheegwan Lee.	2626: Invasive Tunicates and Patterns of Ecosystem Change in New England. K. Elaine Hoagland , Mary Carman.	2114: Latitudinal Variation in the Availability and Utilization of Dissolved Organic Nitrogen by <i>Spartina alterniflora</i> . Thomas Mozdzer , Joseph Zieman, Karen McGlathery.	1814: Anthropogenic Impacts on the Feeding Ecology and Bioenergetics of Mummichogs in an Urban Estuary. Daisuke Goto , William Wallace.	2444: DIN is an Inadequate Descriptor for Evaluating Nitrogen Based Effects on Estuarine Ecosystems. Richard Dugdale , Jonathan Sharp, Frances Wilkerson, Alexander Parker.
4:15	1945: New Tools for Restoration: From Multi-objective Planning to Protecting Investments. Michael Beck , Robert Brumbaugh, Zach Ferdana, Caitlyn Toropova, Jay Udelhoven.	2720: Changes in Ballast Water Management and Delivery to the Chesapeake Bay: 1993 - 2005. Mark Minton , Linda McCann, A. Whitman Miller, Gregory Ruiz.	2414: Bacterial Diversity, Enzyme Activities and Soil CO ₂ Flux Along a P Gradient in a Coastal Peatland, Panama. Tiffany Troxler , Makoto Ikenaga, Len Scinto, Joseph Boyer, Ben Giraldo, Amanda Dean, Rachel Collin.	2646: <i>Fundulus heteroclitus</i> : A model organism for metal exposure and biotransfer from sediments in intertidal habitats. Celia Chen , Joseph Shaw, Nicholas Fisher, Jessica Dutton.	2721: Application of an Estuarine Classification for Development of Estuarine Nutrient Criteria. Richard Smith , Christopher Madden.
4:30	2204: Restoring Cape Cod Salt Marshes: Placing Success in the Context of Community Valuation. Jessica Dominguez .	1587: An Unwelcome Guest? Status of the American Eel Parasite <i>Anguillicola crassus</i> in New Jersey Estuaries. Mark Sullivan , Marcy Howland, Thomas Andersen, Kenneth Able.	1806: Upwelling Intensification Enhances Nutrient Supply to a Coastal Lagoon in Baja California during Spring 2005. Victor Camacho-Ibar , Reginaldo Durazo, Alejandro Souza, Eduardo Santamaria, Adan Mejia, José Hernández-Ayón, Adriana González.	1504: Development of a Mummichog (<i>Fundulus heteroclitus</i>) Bioassay for Endocrine Disruption. Deborah MacLatchy .	1748: Relevance of Estuarine Classification for Nutrient Criteria Development. Jan Kurtz , Jim Hagy, Richard Greene.
4:45	2450: Defining System-wide Success for the Comprehensive Everglades Restoration Plan using a Science-based Process. John Ogden .	1959: A Canadian Perspective on Conducting Risk Assessments: Recent Application and Experiences. Thomas Therriault , Nicholas Mandrak.	2519: Comparative Florida Bay nitrogen dynamics in August 2004, January 2005, and November 2006. Wayne Gardner , Mark McCarthy.	2749: Intermittent Hypoxia Alters Fecundity in the Gulf Killifish, <i>Fundulus grandis</i> . Ann Cheek .	1774: Eutrophication Policy Responses: Comparative Studies of the Pearl River, Black Sea and Gulf of Mexico. Mindy Selman , Suzie Greenhalgh, Evan Branosky.
5:00	Synthesis/Discussion led by Ron Thom	2299: How do Marine Invasive Species Affect the Ability to Manage Ecosystems in Atlantic Canada? Andrea Locke .	1595: Water Quality Impacts of Agriculture on the Choptank River Estuary. David Whittall , Eton Codling, Tom Fisher, Cathleen Hapeman, Dean Hively, Greg McCarty, Laura McConnell, Cliff Rice.	2277: Evolved Resistance to Dioxin-like Compounds in Atlantic killifish (<i>Fundulus heteroclitus</i>): Role of Receptor Polymorphisms. Mark Hahn , Sibel Karchner, Diana Franks, Brad Evans, Ann Tarrant, C. Sarah Cohen, Denise Champlin, Diane Nacci.	Synthesis/Discussion led by James Hagy
5:15		Synthesis/Discussion led by Elizabeth Fairey	2835: Carbon Transport and Cycling in Western Long Island Sound. Penny Vlahos , Hans Dam, James Kremer, James O'Donnell.	2731: Relaxed Selection on a Biotransformation Locus in Estuarine Fish Populations Exposed to Chemical Contaminants. Sarah Cohen , Glen Yang, Sheh May Tam, Denise Champlin, Diane Nacci.	
	Student Awards, Coastal Cabaret and ERF 2007 Farewell Party 5:30 pm - 7:30 pm				

Thursday Late Afternoon Oral Presentations

556 AB (RICC)	NARR A (Westin)	NARR B (Westin)	NARR C (Westin)	PRV-IV (Westin)	
SCI-121 Modeling <i>cont'd</i>	SCI-051 Sudden Vegetation Dieback in Tidal Wetlands: A New Phenomenon in the U.S.? <i>cont'd</i>	SCI-115 Hydrodynamics and Physical Processes <i>cont'd</i> David Jay and Malcolm Scully	SCI-066 Nekton at the River-Estuary Transition Zone Steven Ferraro	SCI-023 Narrowing the Gap between Science and Policy for Effective Management Elizabeth Hinchey, Lewis Lawrence, Scott Lerberg and Janet Nestlerode	
2705: Swamp Succession in Coastal Louisiana: an Individual-based Modeling Approach. Susanne Hoepfner , Kenneth Rose.	1212: Understanding Salt Marsh Dieback on Cape Cod: Timelines, Patterns, and Processes. Stephen Smith , John Portnoy, Kelly Chapman.	1487: Effects of Estuarine Habitat Restoration: The Influence of Recovering Perimeter Habitat on Estuarine Hydrodynamics. Lissa MacVean , Mark Stacey.	1941: Competitive Interactions between Juvenile Chinook Salmon and Threespine Stickleback in the Columbia River Estuary. Sarah Spilseth .	1464: Performance Metrics: An Overview of Ecological "Outcome" Measurement at EPA. William Benson , Norman Birchfield, Neil Stiber, Arden Calvert, James Summers.	4:00
1600: Automated Riverine Water Quality Calibration of The Chesapeake Bay Program's Watershed Model. Gary Shenk , Jing Wu, Lewis Linker.	1769: Incidence of Plant Pathogens in Salt Marshes Affected by Sudden Wetland Dieback. Wade Elmer , James LaMondia, Clark Robertson, Susan Useman, Ray Schneider, Kerry O'Donnell, Robert Marra, Frank Caruso.	2149: Residual Circulation in the Hudson River Estuary. Malcolm Scully , W. Rockwell Geyer.	1795: Downstream Migration of Salmonid Smolts in Oregon Rivers and Estuaries. James Power , Steven Johnson, Derek Wilson, James Ray.	2398: Achieving Impact With Science Through Effective Engagement. Brian Miller .	4:15
1939: Modeling of the Snohomish River Estuary Plume: Spatial and Temporal Variability. Zhaoqing Yang , Tarang Khangaonkar.	2368: Constructing an Index of Salt Marsh (<i>S. alterniflora</i>) Health and Productivity. Mary Carla Curran , Marc Frischer, Jeffrey King, Tina Walters, Trey Mace.	2138: Influence of Richardson Number on Water Column Dissolved Oxygen Concentration and Nutrient Cycling on the Eastern Texas-Louisiana Shelf. Steven DiMarco , Piers Chapman.	1392: Nekton-Habitat Associations in a Pacific Northwest (USA) Estuary. Steven Ferraro , Faith Cole.	2542: Texas and the National Coastal Assessment: Toward integrated monitoring for more effective coastal ecosystem assessment and management. James Simons , Charles Smith.	4:30
1678: Modeling of Nutrient Dynamics in a Coastal Lagoon Through Ecosystem Model. Leslie Aveytua Alcazar , Victor Camacho, Alejandro Souza, J. Icarus Allen.	1780: Remediating the Effects of Global Climate Change on Salt Marsh Functions. Camille Stagg , Irving Mendelssohn.	1903: The Hydrodynamic Modeling of Croatan-Albemarle-Pamlico Estuary System. Meng Xia , Leonard Pietrafesa, Lian Xie, Machuan Peng, Shaowu Bao.	1899: Chinook Salmon Rearing in the Lower Columbia River Estuary. Regan McNatt , Susan Hinton, Daniel Bottom.	2441: Connecting Scientists and Decision-Makers: Lessons Learned in South Carolina. Denise Sanger , Debra Hernandez.	4:45
1099: Simplified Modeling of Constituent Concentration for Biological Response. Mohamed Abdelrhman .	1446: An Analysis of the Proximal Causes of Drought-induced Salt Marsh Dieback in Coastal Louisiana. Irving Mendelssohn .	2324: Lateral Circulation Driven by Boundary Mixing and the Associated Transport of Sediments in Idealized Partially-Mixed Estuaries. Shih-Nan Chen , Lawrence Sanford.	2538: A Novel Approach to Quantifying the Effects of Derelict Crab Traps in Chesapeake Bay. Steven Giordano , H. Ward Slacum, Jay Lazar, Jon Volstad, Doug Levin, David Bruce, Colin Little.	2167: South Carolina's Approach to Probability-based Monitoring: Trends and Uses. Robert Van Dolah , Derk Bergquist, David Chestnut.	5:00
2817: Numerical Modeling of the Impacts of Chilled Fresh Water Discharge in a Salt-Stressed Marsh. Gary Brown , Kevin Barry.	Synthesis/Discussion led by Ron Rozsa	2248: Use of Satellite to Identify Monthly-seasonal Mesoscale Surface Boundary Features in Pacific Northwest Marine Environments. Varis Ransibrahmanakul , Douglas Pirhalla, Timothy Mavor, Randall Clark, John Christensen.	2061: Mainstem and Backwater Fish Assemblages of the Tidal Caloosahatchee River: Implications for Freshwater Inflow Studies. Philip Stevens , Chuck Idelberger, David Blewett.	2537: Ruddiman Creek Great Lakes Legacy Act Sediment Remediation: A Community-Driven Sediment Cleanup Project. Susan Boehme , Marc Tuchman.	5:15
Student Awards, Coastal Cabaret and ERF 2007 Farewell Party 5:30 pm - 7:30 pm					

Monday-Tuesday Poster Sessions

SCI-003 – COASTAL ECOSYSTEM PLANNING: INTERDISCIPLINARY SCIENCE-BASED APPROACHES

- (1477) **Coffey, Ruth.** Submarine Groundwater Discharge as an Environmental "Currency" Limiting Population and Development on Islands. (Mon, Position 1-A)
- (2051) **Dalton, Tracey;** Thompson, Robert. Exploring Spatial Dynamics of Human Interactions with Coastal Ecosystems. (Mon, Position 1-D)
- (2585) **Hayes, Lisa V.;** Porter, Dwayne E. Implementing the Use of Low Impact Development Practices (LIDs) in Coastal South Carolina. (Mon, Position 1-B)
- (1274) **Quinn, Bryan E.** Coastal Change and Regeneration: Long Term Approaches for Design and Planning on Rhode Island's Shore. (Mon, Position 1-C)

SCI-005 – TOWARD SUCCESSFUL MANAGEMENT OF ESTUARINE AND COASTAL EUTROPHICATION

- (2862) **Claussen, Uli;** Zevenboom, Wanda. Pan-European Assessment of the Eutrophication Status of Rivers, Lakes, Coastal and Marine Waters. (Mon, Position 8-B)
- (2737) **Tango, Peter;** Johnson, Jacqueline M.; Batiuk, Richard. Towards Developing a Harmful Algal Bloom-Based Estuarine Chlorophyll *a* Criteria in Chesapeake Bay. (Mon, Position 8-A)



Eel grass restoration diver

SCI-011 – BEYOND MONITORING AND OBSERVING SYSTEMS: SCIENTIFIC TOOLS AND APPLICATIONS

- (2035) **Longstaff, Ben;** Williams, Michael R.; Dennison, Bill; Wicks, E. Caroline; Jasinski, Dave; Tango, Peter; Conner, Chris; Keisman, Jeni; Batiuk, Richard. Supporting Management Through an Annual Cycle of Ecological Forecasting and Integrated Assessment. (Mon, Position 30-B)
- (2794) **Reed, Robert E.;** Burkholder, JoAnn; Dickey, David A.; Kinder, Carol A.; Brownie, Cavell. Temporal and Spatial Variability in High Resolution Cross-Estuarine Physical-Chemical Structure in the Neuse Estuary, North Carolina, USA. (Mon, Position 30-C)
- (1373) **Tilburg, Christine M.;** Keeley, David; Russell-Robinson, Susan; Shyka, Tom; Gale, Tom. Developing Integrated Geospatial Tools for Coastal and Ocean Managers in the Transboundary Gulf of Maine. (Mon, Position 30-A)
- (2853) **Woodruff, Dana;** Copping, Andrea E.; Thom, Ronald M.; Graves, Sara J.; Bolte, John; Hardin, Danny; Judd, Kathleen; Judd, Chaeli; Quattrocchi, Dale; Engel-Cox, Jill; Gajewski, Stephen; Guzy, Michael; Conover, Helen; Keiser, K.; Estes, Maury; Barrett, Charley; Gulbrandsen, Tom. The Gulf of Mexico Regional Collaborative (GoMRC): Developing Tools for Coastal Habitat Restoration Planning. (Mon, Position 30-D)

SCI-018 – COMPARABILITY OF ESTUARINE AND COASTAL ZONE INDICATORS AT VARYING SPATIAL SCALES

- (1471) **Engle, Virginia;** Burgan, Barry. The National Coastal Condition Report III. (Mon, Position 23-D)
- (1426) **Nelson, Janet;** Tolan, James. Is Dissolved Oxygen Concentration a Major Determinant of Overall Ecosystem Health in Texas Tidal Streams? (Mon, Position 23-A)
- (2101) **Simone, Emaly N.;** Cunningham, Patricia A.; Engle, Virginia; Burgan, Barry. The National Estuary Program Coastal Condition Report. (Mon, Position 23-E)
- (2374) **Tolan, James M.** Community-Level Response to Freshwater Inflow: Do We Need a Different Measuring Stick? (Mon, Position 23-F)

SCI-021 – TRACKING CHANGES IN ECOSYSTEM STRUCTURE: HOW DO WE KNOW WHAT IS CHANGING?

- (2562) **Cole, Luke W.;** McGlathery, Karen J. Evaluating Restoration of *Zostera marina* (L.) and Ecosystem Succession in the Coastal Lagoons of Virginia. (Mon, Position 12-D)
- (1443) **Greenawalt-Boswell, Jaime.** Coastal Shoreline Mapping: Combining Photo-Interpretation Technology with on-the-Ground Volunteer Observations. (Mon, Position 12-A)
- (2651) **Hall, Margaret O.;** Durako, Michael. Seagrasses as Indicators of Ecosystem Change in South Florida Estuaries. (Mon, Position 12-F)
- (2046) **Johnson, Roxanne;** Perez, Kenneth; Davey, Earl; Rocha, Kenneth. Proposed Criterion to Define Anthropogenic Impact on Estuarine Benthic Communities using Bray-Curtis Similarity Index. (Mon, Position 12-B)
- (2627) **Shirley, Thomas;** Simons, James; Lester, L. James; Schultz, Tara; Vega-Cendejas, Maria E. A Proposed Trophic Database for the Gulf of Mexico Large Marine Ecosystem: An Ecological Interaction Database. (Mon, Position 12-E)
- (2534) **Yarbro, Laura A.;** Carlson, Paul R.; Arnold, Herman; Sunderman, Stephanie O.; Ketron, Alice. Seagrass Losses in Old Tampa Bay, Florida: Is it Bioturbation or Water Quality? (Mon, Position 12-C)

SCI-022 – PREDICTION AND UNDERSTANDING: MODEL APPROACHES, APPLICATIONS AND PERFORMANCE

- (1228) **Bourne, Stephen;** Fox, Sandra; Sucsy, Peter; Montague, Clay; Ceric, Aisa; Kinser, Palmer. ACES: Building a GIS-based Analytical Framework for Coastal and Estuarine Study. (Mon, Position 15-B)
- (1705) **Cowles, Geoffrey W.;** Helenbrook, Brian T. Implicit Solution of the Shallow Water Equations on Unstructured Grids using DualTime-Stepping. (Mon, Position 15-D)
- (1227) **Fox, Sandra;** Ceric, Aisa; Bourne, Stephen; Sucsy, Peter; Montague, Clay; Kinser, Palmer. Assessment of Water Quality in the Guana-Tolomato-Matanzas Estuary: A First Application of the ACES Workbench. (Mon, Position 15-A)
- (2216) **Herman, Julie D.;** Shen, Jian; **Huang, Jie;** Hershner, Carl H. Management Applications of Water Residence Times and Tidal Flushing Characteristics Using Water Quality Modeling Techniques. (Mon, Position 24-B)
- (2006) **Kokubu, Yusaku;** Hidekatsu, Yamazaki. Water Exchange Controlled by Mixing Process at the Mouth of Tokyo Bay. (Mon, Position 15-F)
- (1897) **Ma, Hongguang;** Townsend, Howard; Zhang, Xinsheng; Sigrist, Maddy. Fisheries Ecosystem Model in Chesapeake Bay and its Links with Water Quality. (Mon, Position 15-E)
- (2812) **Rybczyk, John;** Kairis, Peter. Sea Level Rise and Eelgrass Productivity in Padilla Bay, Washington: A Field and Modeling Study. (Mon, Position 24-F)
- (2068) **Ryu, Seung Woo;** Ryu, Cheong-Ro; Yoon, Han-Sam. A Study on the Characteristics of Deposition in Nakdong Estuary. (Mon, Position 24-A)
- (1238) **Stoughton, Margaret A.;** Zimmerman, Richard C. The Biooptics of *Syringodium filiforme* Canopies: Effects of Cylindrical Leaves on Light Distribution and Absorption. (Mon, Position 15-C)
- (2354) **Walker, Samuel P.;** Porter, Dwayne E. An Integrated Model for Monitoring and Predicting *Phragmites australis* Colonization in a Managed Estuarine Reserve. (Mon, Position 24-E)

Monday-Tuesday Poster Sessions

SCI-025 – PHYSICAL DYNAMICS AND PATHWAYS FOR PRODUCTION IN RIVER-ESTUARY TRANSITION ZONES

- (1458) **Houk, Adam.** Observations of the Spatial Structure of Turbulent Mixing in a River Plume Front. (Tue, Position 21-E)
- (2566) **Jahn, Ginger L.;** North, Elizabeth W. Do Striped Bass (*Morone saxatilis*) Spawn in Response to High Flow Events? (Tue, Position 31-E)
- (1503) **Lara-Dominguez, Ana;** Sainz, Eduardo; Day, John, W. Dynamics of Fish Community in a Tropical Ephemeral Inlet, La Mancha Lagoon, Gulf of Mexico. (Tue, Position 21-F)
- (2173) **Lee, Daniel Dong-Yoon;** Hood, Raleigh R.; Crump, Byron. Community Metabolism of Estuarine Turbidity Maximum in Chesapeake Bay: Primary Production, Respiration, and Size-Fractionated Respiration. (Tue, Position 31-C)
- (1975) **Lee, Young-Bok;** Yoon, Han-Sam; Ryu, Cheong-Ro. Tidal Exchange Variation on Pier Bridge Between Busan New-port and Nakdong Estuary. (Tue, Position 31-B)
- (2340) **Parker, Alexander E.;** Hogue, Victoria; Wilkerson, Frances; Dugdale, Richard C. Evaluating the Contribution of Bacterioplankton Carbon to the Foodweb of the Northern San Francisco Estuary. (Tue, Position 31-D)
- (1520) **Ullman, David S.;** Hebert, David. Enhancement of Vertical Mixing at a Constriction in a Partially Mixed Estuary (CHRP Narragansett Bay Project). (Tue, Position 31-A)
- (2309) **Urban-Rich, Juanita;** Baer, Steven; Sutor, Malinda. Using FDOM to Detect Zooplankton in the Gulf of Mexico. (Tue, Position 31-F)

SCI-026 – WATERSHED-BASED NUTRIENT ACCOUNTING: COUPLING CATCHMENTS TO COASTAL WATERS

- (1706) **Crean, Daniel J.;** Iricanin, Nenad; Doering, Peter H. Effects of Extreme Climatic Events on Nutrient Loads into Two Managed Estuaries in South Florida. (Tue, Position 26-A)
- (2200) **Hayes, Ken M.;** Wilde, Susan B.; Williams, Patrick R.; Lewitus, Alan J. Transfer of Pollutants and Harmful Algae from Stormwater Ponds into Adjacent Estuarine Systems. (Tue, Position 26-D)
- (2622) **Henderson, Paul;** Gonneea, Meagan Eagle; Charette, Matthew. Nitrogen Loading Within Quonochontaug Pond: The Use of Computer Generated Models. (Tue, Position 26-E)
- (1786) **Kile, David B.;** Schell, Tiffany M.; Osgood, David T. Effects of Floodplain Restoration on Sediment Loading within the Delaware Bay Watershed. (Tue, Position 26-B)
- (1284) **Lussier, Suzanne M.;** Da Silva, Sara N.; Wigand, Cathleen. Linkages between Watershed Development, Streams, and Receiving Salt Marshes. (Tue, Position 26-F)
- (1481) **Molisani, Mauricio;** Becker, Helena; Hijo, Carlos. Effect of the Large Dam on Land-Sea Fluvial Transport in a Brazilian Semi-Arid Watershed. (Tue, Position 27-E)
- (1564) **Parrish, Alise N.;** Maqway, Melania D.; Nkotagu, Hudson; O'Reilly, Catherine. Deforestation and the Disruption of Nutrient and Sediment Composition in Aquatic Ecosystems of Northeastern Tanzania. (Tue, Position 27-F)
- (1858) **Poleto, Juliette C.;** Brush, Mark J.; Anderson, Iris C. Application of a Nitrogen Loading Model to a Virginia Eastern Shore Watershed. (Tue, Position 26-C)
- (1198) **Prezioso, Jerry;** McKinney, Richard A.; Oczkowski, Autumn J. Spatial Variability of Nitrogen Isotope Ratios of Particulate Material from Northwest Atlantic Continental Shelf Waters. (Tue, Position 27-D)

SCI-027 – COASTAL OUTFALLS: ENVIRONMENTAL RESPONSES TO SEWAGE EFFLUENT

- (2282) **Durell, Gregory;** Dahlen, Deirdre; Hunt, Carlton D.; Keay, Kenneth. Response of Sewage Tracers and Contaminants in Boston Harbor Sediments Following Improvements to Sewage Treatment. (Tue, Position 27-A)

- (1332) **Hunt, Carlton D.** Long-term Chemical Monitoring Using Indigenous and Caged Mussels Yield Similar Trends in Boston Harbor. (Tue, Position 24-C)
- (2350) **Kelsey, Samuel;** Tucker, Jane; Giblin, Anne E.; Howes, Brian; Hopkinson, Charles S. Long Term Trends in Sediment Fluxes in Boston Harbor Since Outfall Relocation. (Tue, Position 27-B)
- (1820) **La Sota, Nicole;** Bergondo, Deanna L.; Kincaid, Chris. Observational and Numerical Experiments on the Flushing of Nutrients in the Providence River Estuary. (Tue, Position 24-D)
- (2446) **Spivey, Mary;** Mallin, Michael A.; Song, Bongkeun; Rublee, Parke. The Use of PCR as a Means of Identifying Sources of Fecal Bacteria Pollution in the Tidal Creeks of New Hanover County, North Carolina. (Tue, Position 27-C)

SCI-030 – APPLICATIONS OF COASTAL OBSERVING SYSTEMS FOR RESEARCH AND MANAGEMENT

- (2668) **Ambler, Julie W.;** McLenegan, Erin; Moisan, Tiffany A.; Blanco, Jose L.; Mäkinen, Carla P.; VanSant, Kristin. Summer Zooplankton from Wallops Island Coastal Observation System, and Plumes from Delaware and Chesapeake Bays. (Mon, Position 19-B)
- (1758) **Anderson, Britt-Anne;** Moore, Kenneth A.; Reay, William; Friedrichs, Carl; Wilcox, David; Hoffman, Frederick; Nelson, Todd. Virginia Estuarine and Coastal Observing System: Water Quality and Physical Monitoring for Virginia's Estuaries. (Mon, Position 10-F)
- (2078) **Balcom, Prentiss H.;** Fitzgerald, William F. Measuring Sediment Oxygen Demand Using Benthic Chambers - Long Island Sound Integrated Coastal Observing System (LISICOS). (Mon, Position 11-A)
- (1240) **Buskey, Edward.** Research and Monitoring Programs at the New Mission Aransas National Estuarine Research Reserve. (Mon, Position 10-A)
- (2128) **Dorton, Jennifer;** Leonard, Lynn; Fletcher, Madilyn; Purvis, Charlton; Pfaff, Steven. Carolinas Coast Marine Weather Portal, COOS and NOAA's NWS Working Together for the Marine Community. (Mon, Position 11-C)
- (1295) **Ellison, Robert M.** A New Paradigm for Water Quality Monitoring - Man-deployable, Water Quality Mapping AUV for the Masses. (Mon, Position 10-B)
- (1521) **Lie, Heung-Jae;** Cho, Cheol-Ho; Lee, Seok; Lim, Eun-Pyo. Integrated Monitoring Program on the Marine Environment in the Saemangeum Coastal Area, West of Korea. (Mon, Position 10-D)
- (2557) **McLean, Scott D.;** Lewis, Marlon R.; Cullen, John J.; Adams, Steve; Andrea, John; Feener, Scott; Johnson, Kenneth S.; Jannasch, Hans W.; Coletti, Luke J.; Fitzwater, Steve E.; Moore, Casey; Barnard, Andrew. High Resolution Real-Time Monitoring of a Spring Bloom with the Land/Ocean Biogeochemical Observatory (LOBO). (Mon, Position 19-A)
- (2090) **Milbrandt, Eric C.;** Martignette, Alfonse J.; McLean, Scott D.; Zimmerman, Richard C. Improving Seagrass and Ecosystem Management with High Resolution Water Quality Instrumentation. (Mon, Position 11-B)
- (1437) **Nardello, Ilaria;** Zimmerman, Richard; Hill, Victoria; Ruble, David. Use of Remotely Sensed Ocean Color to Retrieve Biogeochemical Properties in the Lower Chesapeake Bay. (Mon, Position 10-C)
- (1615) **Pahl, James W.;** Lee, Darin M.; Raynie, Richard C.; Steyer, Greg D.; Kleiss, Barbara A. Developing a Barrier Island Comprehensive Monitoring Program within the Louisiana System-Wide Assessment & Monitoring Plan. (Mon, Position 10-E)
- (2813) **Peri, Francesco;** Chen, Robert; Gardner, Bernie; Pollard, Michael; Calder, Matt. Wireless Sensor Network Measurements of the Temperature Field in Savin Hill Cove. (Mon, Position 11-F)
- (2375) **Stumpf, Richard P.;** Wynne, Timothy T.; Hyde, Kimberly J.W.; Warner, Robert A.; Litaker, Wayne; Tester, Patricia A.; Tomlinson, Michelle C. Satellite Detection of Algal Blooms in Colored Water with Pamlico Sound, North Carolina as an Example. (Mon, Position 11-D)
- (2772) **Wells, Tami;** Powell, Jonathan; Runnels, Denise; Rudnick, R. Matt; Boettcher, Anne. A Change Detection Study of a Coastal Saltmarsh in Mississippi. (Mon, Position 19-C)

Monday-Tuesday Poster Sessions

(2410) Wynne, Timothy T.; Tomlinson, Michelle C.; Stumpf, Richard P. Detecting Cyanobacteria in the Great Lakes Using Satellite Imagery. (Mon, Position 11-E)

SCI-033 – EVALUATION OF NON-NATIVE OYSTER INTRODUCTION

(2154) Choudhury, Arpita; Lundstrom, Ronald; Scott, Geoffrey I. Ploidy Validation of *Crassostrea ariakensis* by Quantitative Polymerase Chain Reaction. (Mon, Position 16-E)

(2473) Harwell, Heather D.; Kingsley-Smith, Peter R.; Kellogg, M. L.; Allen Jr., Standish K.; Meritt, Donald W.; Paynter, Kennedy P.; Luckenbach, Mark W. Effects of Oyster Species, Habitat Complexity and Habitat Location on Reef-Associated Fauna in Chesapeake Bay. (Mon, Position 16-F)

(2080) Kelly, Christopher J.; Newell, Roger I. E.; Scarpa, John; Laramore, Susan E.; Dungan, Christopher F.; Carnegie, Ryan B. Diploid *Crassostrea virginica* and *Crassostrea ariakensis* Studies in Mesocosms Simulating Chesapeake Bay and Florida Estuaries. (Mon, Position 16-A)

SCI-037 – THE IMPACTS OF HUMAN AND NATURAL DISTURBANCE ON MANGROVES

(1963) Barreto, M. B. Influence of Human Activities and Climate Variability on Mangrove Mortality in Venezuelan Caribbean Coast. (Tue, Position 19-F)

(1690) Feller, Ilka C.; Lovelock, Catherine E. Nutrient Enrichment Intensifies Hurricane Damage and Prolongs Recovery in Indian River Lagoon Mangrove Ecosystems. (Tue, Position 19-E)

(1357) Naidoo, Gonasageran. Coal Dust Pollution Effects on Mangroves. (Tue, Position 19-D)

(2716) Teutli-Hernandez, Claudia; Herrera-Silveira, Jorge; Zaldivar-Jimenez, Arturo; Hernandez-Saavedra, Raquel. Mangrove Natural Regeneration Influenced by Artificial Nutrient Discharges in Karstic Areas. (Tue, Position 18-D)

(2268) Tiling, Ginger; Smith III, Thomas J.; Anderson, Gordon H.; Balentine, Karen M.; Ward, Greg A.; Whelan, Kevin R.T. Spatial Analysis of Long-Term Recovery of a Mangrove Forest Following the Passage of Hurricane Andrew. (Tue, Position 18-C)

SCI-040 – RESPONSES TO HABITAT RESTORATION: BUILD IT AND THEY WILL COME?

(2181) Altimari, Christina. Monitoring the Natural Recovery of a Restored New England Salt Marsh in Rye, New Hampshire. (Tue, Position 34-D)

(2777) Archer, Pamela; Miller, Jessica; Vander Schaaf, Dick. Re-establishment of the Native Olympia Oyster, *Ostrea conchaphila*, in Netarts Bay, Oregon. (Tue, Position 34-E)

(1408) Donnelly, Melinda; Brockmeyer, Ronald E.; Stewart, Jonas; Greening, William P.; Walters, Linda. Recovery of Saltmarsh Flora and Fauna at Restored Mosquito Impoundments in Mosquito Lagoon (Volusia County, FL). (Tue, Position 34-B)

(1627) Leonard, Andrea M.; Michele, Dionne. Nekton Response to Hydrologic Restoration of New England Salt Marsh-Estuarine Ecosystems. (Tue, Position 34-F)

(1906) Neatt, Nancy; Bowron, Tony; Van Proosdij, Danika; Lundholm, Jeremy. Learning to Crawl Before Learning to Walk - Macro & Mesotidal Wetland Restoration (Compensation) in Atlantic Canada. (Tue, Position 34-C)

SCI-044 – COASTAL LAND USE: PERMITTING, LAW AND MANAGEMENT

(2597) Paul, Robert W. Motivating Local Government to Protect Estuarine Water Quality through Land Use Practices. (Mon, Position 8-C)

(2717) Weber, Marisa R. Mapping Coastal Habitats for Compliance with EFH Guidelines and its Implications for Mitigation Measures. (Mon, Position 8-D)

SCI-048 – ASSESSING ECOLOGICAL INTEGRITY: USING MULTIPLE INDICES AND ECOSYSTEM COMPONENTS

(1862) Benyi, Sandra J.; Kiddon, John A.; Hollister, Jeffrey W.; Walker, Henry A. Interpreting Differences in Several Benthic Indices. (Tue, Position 35-C)

(1732) DiDonato, Guy T.; Bergquist, Derk; Holland, Fred; Sanger, Denise; Van Dolah, Robert. Tidal Creek Classification: Developing a Preliminary Framework to Characterize this Sentinel Habitat. (Tue, Position 35-B)

(2494) Lamberson, Janet O.; Lee II, Henry; Nelson, Walt G. Probabilistic Survey of Fish Tissue Contamination from the Continental Shelf of the US West Coast. (Tue, Position 35-E)

(2498) Morales-Ojeda, Sara; Herrera-Silveira, Jorge A. Coastal Condition Assessment of Yucatan (SE, Mexico) Subregions. (Tue, Position 35-F)

(2934) Pelletier, Aimee J. D.; Freedman, Bill; Wells, Peter G.; Beazley, Karen F.; McCarthy, Chris; Ure, Darien L. Selecting and Developing Measures of Coastal Ecological Integrity for the Kejimikujik National Park Seaside Adjunct, Nova Scotia, Canada. (Tue, Position 35-A)

(1878) Smith, Treda B.; Schaffner, Linda C. Responses of Benthic Macrofauna to Environmental Stressors: Is There a Characteristic Stressor Response? (Tue, Position 35-D)

SCI-049 – CAUSES AND CONSEQUENCES OF GENETIC VARIATION IN ESTUARINE SYSTEMS

(2887) Mackie, Joshua; Levinton, Jeffrey S. Rapid Fluctuations in Heavy Metal Resistance Seen in a Freshwater Worm. (Mon, Position 18-E)

(2303) Nacci, Diane; Champlin, Denise; Gomez-Chiari, Marta; Cohen, Sarah. Evolved Tolerance to Chemical Pollutants in Populations of the Non-Migratory Estuarine Fish, *Fundulus heteroclitus*. (Mon, Position 18-F)

(1971) Van Dijk, Jent Kornelis; Van Tussenbroek, Brigitta; Ouborg, Joop. High Levels of Gene Flow Related to High Dispersal Potential of the Seagrass *Thalassia testudinum*. (Mon, Position 18-A)

(2761) Wyllie-Echeverria, Sandy; Talbot, Sandy; Dowty, Pete; Takesue, Renee; Allphin, Loreen; Shoemaker, Ginger. An Interdisciplinary Approach to Evaluate Regional Stability of Seagrass Populations. (Mon, Position 18-B)

SCI-050 – LONG-TERM SHIFTS IN FAUNAL ASSEMBLAGES IN EASTERN NORTH AMERICA

(2119) Chmura, Gail L.; Van Guelpen, Lou; Pohle, Gerhard W. Climate Change and Range Shifts of Northwest Atlantic Commercial Species. (Tue, Position 2-E)

(1546) Hale, Stephen S. Biogeography of Marine Benthic Invertebrates along the Northeast U.S. Coast. (Tue, Position 2-C)

(1362) Kimmel, David G.; Newell, Roger I. E. The Influence of Climate on Eastern Oyster (*Crassostrea virginica*) Juvenile Abundance in Chesapeake Bay. (Tue, Position 2-B)

(2782) Lynch, Timothy R.; Lee, Laura M. Spatial and Temporal Trends of Species Assemblages in Narragansett Bay, Rhode Island: 1990-2006. (Tue, Position 2-F)

(1133) Wingate, Rebecca; Secor, David. Seasonal Preconditioning of a Nearshore Fish Assemblage in the Chesapeake Bay, USA. (Tue, Position 2-A)

SCI-052 – CONNECTIVITY IN ESTUARINE AND COASTAL POPULATIONS OF FISH AND INVERTEBRATES

(2038) Biermann, Jeffery L.; North, Elizabeth W.; Schlag, Zachary. The Role of Behavior in the Transport of Larvae Between Coastal and Estuarine Nursery Habitats. (Mon, Position 22-C)

(1645) Dantin, Darrin D.; Lindquist, Laurie E.; Harvey, James E.; Almario, Alejandro E. Growth and Survival of Penaeid Shrimp in Four Estuary Habitat Types in the NE Gulf. (Mon, Position 23-C)

Monday-Tuesday Poster Sessions

(2089) **Jordan, Stephen J.**; Smith, Lisa M.; Dantin, Darrin D.; Nestlerode, Janet A.; Raimondo, Sandy; Campbell, Jed. Are Gulf of Mexico Crustacean Fisheries Habitat-Dependent? Hypotheses, Scales, and Uncertainties. (Mon, Position 22-D)

(2170) **Luthy, Stacy A.**; Allen, Dennis M.; Garwood, Jason A.; Young, Robert F.; Dame, Richard F. Fine Scale Habitat Heterogeneity and Growth of Young-of-the-Year Transient Fishes. (Mon, Position 22-E)

(1625) **Pfeiffer-Herbert, Anna S.**; Kincaid, Chris; Bergondo, Deanna L.; Collie, Jeremy S.; Rogers, Justin M. Physical and Biological Processes of Estuarine-Shelf Exchange in Narragansett Bay, Rhode Island. (Mon, Position 23-B)

(1920) **Reyier, Eric A.**; Lowers, Russell H.; **Scheidt, Douglas M.**; Adams, Douglas H. Movement Patterns of Adult Red Drum (*Sciaenops ocellatus*) in a Shallow Florida Lagoon as Determined by Passive Acoustic Telemetry. (Mon, Position 22-A)

(2595) **Wilkerson, Carissa N.**; McGeachy, Courtney; Wilson, Hamani; Day, Robyn; Wooden, Eric. Comparison of Nekton Utilization of Three Intertidal Habitats in the Hampton River (Chesapeake Bay, VA). (Mon, Position 22-F)

SCI-060 – INNOVATIONS IN COLLECTION, INTERPRETATION AND APPLICATION OF MONITORING DATA

(2503) **Aurin, Dirk A.**; Dierssen, Heidi. Ocean Color Algorithms for Remote Monitoring of Bio-Optical Properties in Long Island Sound. (Tue, Position 7-C)

(2490) **Boothman, Warren**; Coiro, Laura. Molybdenum Accumulation in Marine Sediments as an Indicator of Hypoxic Water Conditions. (Tue, Position 7-B)

(1646) **Boswell, Kevin**; **McClure, Robert**; Wilson, Charles. Horizontal Hydroacoustics for Measurement of Fish Abundance and Habitat Preference in Shallow Waters. (Tue, Position 5-C)

(2815) **Calder, Matt**; Wang, Alex; Peri, Francesco; Morris, Robert. A Platform Independent Approach to Data Streaming with Community Driven Standards. (Tue, Position 7-F)

(1633) **Carlson, Paul R.**; Yarbrow, Laura A.; Sunderman, Stephanie O. Seagrass Recovery in Tampa Bay: Techniques to Assess Progress and Refine Targets. (Tue, Position 5-B)

(1851) **Condon, Elizabeth D.**; Brush, Mark J.; Moore, Kenneth A. Hurricanes and Hypoxia: Analyzing Responses of Shallow-Water Systems to Storms Using High-Frequency Data. (Tue, Position 6-A)

(2285) **Corbett, Catherine A.**; Wessel, Michael R. Assessment of the Optical Model used to Establish Water Quality Targets in Charlotte Harbor, Florida. (Tue, Position 6-C)

(2803) **Hopkins, Kate**; Halka, Jeffrey. Developing Shoreline Sediment Erosion Estimates for the Chesapeake Bay. (Tue, Position 7-E)

(2358) **Jones, Stephen**; Trowbridge, Philip R. Detecting Water Quality Trends in New Hampshire's Estuaries Using National Coastal Assessment Probabilistic Monitoring Data. (Tue, Position 6-E)

(1770) **Karrh, Renee R.**; Fisher, Thomas R.; Gustafson, Anne B.; Perry, Elgin S.; Anderson, Jon T.; Michael, Bruce M. Application of a Nutrient Limitation Model as an Assessment Tool for Increases in Algal Biomass. (Tue, Position 5-F)

(1653) **Keith, Darryl J.** Estimating Chlorophyll Condition in Southern New England Coastal Waters from their Hyperspectral Aircraft Remote Sensing. (Tue, Position 5-E)

(2145) **Kelsey, Rense H.**; Leight, Andrew K.; Wood, Robert J.; Zhang, Xinsheng. Linking Land Use to Water Quality Within an Integrated Assessment in Chesapeake Bay. (Tue, Position 6-B)

(2380) **Moesel, Sharon M.**; Boynton, Walter R.; Bailey, Eva M. Spatially Intensive Mapping for the Assessment of Water Quality and Shallow Water Habitat. (Tue, Position 6-F)

(2419) **Perry, Elgin S.**; Jacobson, Paul T. A Review of Issues with Implementation of the Cumulative Frequency Distribution for Water Quality Assessment. (Tue, Position 7-A)

(1314) **Tang, Kam W.**; Freund, Curtis S.; Parrish, Alise; Bickel, Samantha L. A Simple Staining Method for Differentiating Live and Dead Copepods in Natural Samples. (Tue, Position 5-A)

(1651) **Wang, Ping**; Linker, Lewis. Analysis of Water Clarity in the Shallow Water. (Tue, Position 5-D)

SCI-071 – SEAGRASS RESTORATION AND RECOVERY

(2678) **Carr, Lindsey**; Boyer, Katharyn E. Patterns of Epifaunal Abundance and Amphipod Grazing on Eelgrass (*Zostera marina*) in San Francisco Bay. (Tue, Position 16-D)

(1694) **Kim, Young Kyun**; Park, Jung-Im; Park, Sang Rul; Kim, Jong-Hyeob; Kim, Tae Hwan; Lee, Kun-Seop. Establishment of the Eelgrass, *Zostera marina* Transplants on the South Coast of Korea. (Tue, Position 16-B)

(1695) **Tanner, C.E.**; Hunter, S.E.; Reel, J.; Parham, T.; Naylor, M.D.; Karrh, L.; Preen, K.E.; Golden, R.; Lewandowski, M.; Rybicki, N.; Schenk, E. Evaluating Eelgrass Restoration Success in a Large Scale Project in the Lower Potomac Estuary. (Tue, Position 16-C)

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SCI-073 – SEAGRASS ECOPHYSIOLOGY

(1822) **Jordan, Terry**; Koch, Evamaria W.; Davison, Ian. Hydrodynamically Mediated Carbon Uptake in *Zostera marina* Grown in Two Sediment Types. (Tue, Position 17-C)

(1693) **Kim, Jong-Hyeob**; Park, Sang Rul; Kang, Chang-Keun; Lee, Kun-Seop. Production Dynamics of the Intertidal Seagrass, *Zostera japonica* on the South Coast of Korea. (Tue, Position 17-B)

(2706) **Kiriakopoulos, Stephanie L.**; Norden, Wendy S.; Boyer, Katharyn E. The Role of Environment and Depth in Driving Phenotypic Differences in *Zostera marina*. (Tue, Position 17-F)

(1649) **McKone, Katie L.**; Koch, Evamaria W. Going and Growing with the Flow: Linking Water-flow Induced Seagrass Morphology, Shoot Density, and Light Availability. (Tue, Position 17-A)

(2544) **Meyers, Alison C.**; Bell, Susan S.; Thomas, Florence I.M. Seagrass and Depositional Processes: Experimental Evaluation of the Influence of Flow Regimes and Shoot Density. (Tue, Position 13-D)

(2008) **Park, Sang Rul**; **Lee, Kun-Seop**. Photosynthetic Responses of the Intertidal and Subtidal Populations of *Zostera marina* Using Chlorophyll Fluorescence. (Tue, Position 17-E)

(1934) **Young, David R.**; Brown, Cheryl A.; Specht, David T.; Clinton, Patrick J.; Lee, Henry; Ozretich, Robert J.; Marko, Katharine. Relationships Among Seagrasses, Benthic Macroalgae and Nutrients in a Pacific Northwest Estuary. (Tue, Position 17-D)

Monday-Tuesday Poster Sessions

SCI-075 – MONITORING AND ASSESSMENT OF SEAGRASS

- (2650) **Hudson, Robbie**; Tuxbury, Susan. Biomass Sampling Used as a Tool to Monitor Eelgrass, *Zostera marina*, Transplant Success in Narragansett Bay. (Mon, Position 14-C)
- (2643) **Kunzelman, Jennifer I.** Monitoring of an Endangered Seagrass species, *Halophila johnsonii*, by Permanent Transects. (Mon, Position 14-B)
- (2738) **May, Christopher A.**; Cho, Hyun Jung; Watters, Christina. Short-Term Variation of Submerged Aquatic Vegetation in Grand Bay National Estuarine Research Reserve, Mississippi. (Mon, Position 14-D)
- (1423) **Park, Jung-Im**; Kim, Young Kyun; Kim, Jeong Bae; Lee, Kun-Seop. Seasonal Dynamics of Surfgrass, *Phyllospadix japonicus* on the Southeast Coast of Korea. (Mon, Position 14-A)

SCI-105 – CONTAMINANTS AND PATHOGENS

- (2505) **Gilbert, Leslie**; Brinkmeyer, Robin. Association of Virulent *Vibrio* spp. Bacteria with Hard Head and Gafftop Catfish in Galveston Bay, Texas. (Mon, Position 21-C)
- (1333) **Helming, Stacey A.**; Ho, Loong Fat; Taylor, David L.; O'Shea, Stephen K. Trace Heavy Metal Analysis of a Benthic Food Chain in Narragansett Bay, Rhode Island. (Mon, Position 20-B)
- (2010) **Johnson, Jacqueline M.**; Rhodes, Matt; Jacobs, John; Wood, Robert J. Ambient Microbial Pathogen Monitoring in Chesapeake Bay: Linking Pathogen Abundance to Ecosystem Health. (Mon, Position 20-F)
- (2870) **Meyer, Shelli L.**; Long, Richard A. Patchy Distribution of a Marine Human Pathogen, *Vibrio vulnificus*, in a Texas Bay. (Mon, Position 21-D)
- (2072) **Motelay-Massei, Anne**; Larcher-Tiphagne, Karen; Deloffre, Julien; Ollivon, Donatienne. Polycyclic Aromatic Hydrocarbons in Seine Estuary Mudflats: Contamination Levels and Links with Sedimentary Processes. (Mon, Position 21-A)
- (1336) **Payne, Eric**; Taylor, David L. Variability in the Total Mercury Concentration of Winter Flounder (*Pseudopleuronectes americanus*) and Summer Flounder (*Paralichthys dentatus*) in Narragansett Bay, Rhode Island. (Mon, Position 20-C)
- (1341) **Piraino, Maria N.**; Taylor, David L. Mercury Bioaccumulation Rates in Striped Bass and Tautog in Narragansett Bay, RI, and Potential Implications to Human Health. (Mon, Position 20-E)
- (1340) **Szczebak, Joseph T.**; Taylor, David L. Correlation Analysis of Young-of-the-Year Winter Flounder, Bluefish, and Tautog Relative to Bioavailable Mercury in Narragansett Bay, Rhode Island. (Mon, Position 20-D)
- (1331) **Taylor, David L.** Bioaccumulation of Total Mercury in Bluefish (*Pomatomus saltatrix*) from Narragansett Bay, Rhode Island. (Mon, Position 20-A)
- (2486) **Williams, Jason**; Jackson, Brian; Mayes, Brandon; Shaw, Joseph; Chen, Celia. Trophic Transfer Patterns and Bioavailability of Metals (As, Cd, Pb, Zn) in Pristine and Contaminated Estuaries. (Mon, Position 21-B)

SCI-107 – ESTUARINE RESTORATION

- (1869) **Chapman, Kelly**. A Trial of New Autonomous Underwater Vehicle in a Tidally Restricted Coastal Lagoon, Cape Cod. (Tue, Position 28-B)
- (2401) **Day, Jason N.**; Moerschbaecher, Matt; Day, John W.; Lane, Robert; Hunter, Rachael. The Impact of the Caernarvon Freshwater Diversion on Above- and Belowground Productivity in the Breton Sound Estuary After Hurricane Katrina. (Tue, Position 28-E)
- (1914) **Eberhardt, Alyson**; Burdick, David; Dionne, Michele. Response of the American Eel to Saltmarsh Restoration and Its Role in Trophic Dynamics. (Tue, Position 28-C)
- (1611) **Grablow, Katherine R.**; Walters, Linda. Recovery Rate of Seagrass from Boat Propeller Scars in Mosquito Lagoon, FL. (Tue, Position 28-A)
- (2279) **Hanks, Kelly S.**; Barber, Todd; Jadot, Catherine; Krumholz, Jason S. Oyster Restoration Project to Restore Hard Bottom Habitat, Improve Water Quality and Reduce Shoreline Erosion. (Tue, Position 28-D)

- (2437) **Lane, Robert**; Day, John W.; Day, Jason N. Marsh Edge Erosion and the Effectiveness of Sediment Fences in a Louisiana Estuary. (Tue, Position 29-A)
- (2714) **Mills, David**. The Economic Value in Restoration Cost Estimates. (Tue, Position 29-F)
- (2470) **Pickrell, Chris**; Schott, Stephen; Petersen, Kimberly. Eelgrass Establishment at a High Energy Site: A Case Study Along Long Island's North Shore. (Tue, Position 29-C)
- (2553) **Rafferty, Patricia S.**; James-Pirri, Mary-Jane; Roman, Charles; Mellander, M. Kathryn; Frame, George W.; Adamo, Doug A.; Foley, Mary K.; Alvarez, Melissa D. Monitoring Salt Marsh Restoration at Elders Point, Gateway National Recreation Area, New York, USA. (Tue, Position 29-E)
- (2483) **Thébault, Julien**; **Schrage, Tara**; Cloern, James. Unintended Aquaculture: Productivity in a South San Francisco Bay Salt Pond (California). (Tue, Position 29-D)
- (2432) **Venherm, Claudia**; Alexander, Clark; Robinson, Michael. Evaluating Wetland Remediation Success of an Abandoned Rice Plantation in SE Georgia. (Tue, Position 28-F)

SCI-112 – GEOMORPHOLOGY AND SEDIMENT PROCESSES - GENERAL

- (1422) **Baldwin, Jesse**; Leonard, Lynn; Snedden, Gregg. Factors Influencing Spatial and Temporal Variability in Beach Topography, Oak Island, North Carolina. (Tue, Position 32-A)
- (2687) **Buonassissi, Christopher J.**; Dierssen, Heidi. Measuring Suspended Sediments Using LISST Instruments. (Tue, Position 33-D)
- (1883) **Cowart, Lisa**; Corbett, D. Reide; Walsh, J. P. Analysis of Shoreline Change within the Albemarle-Pamlico Estuarine System, North Carolina. (Tue, Position 32-E)
- (1430) **Croft, Alex**; Leonard, Lynn; Childers, Daniel; Solo-Gabriele, Helena. Documenting the Importance of Water Flow and Sediment Transport in Upper Everglades National Park. (Tue, Position 32-B)
- (2163) **Fielder, Bryan R.**; Dellapenna, Timothy M. Anthropogenic and Natural Influences on Sediment Deposition in Naples Bay, Florida. (Tue, Position 33-A)
- (1617) **Heath, K. M.**; Kineke, G. C.; Milligan, T. G.; Law, B. A. Fluid Mud Formation in the Petitcodiac River Estuary, New Brunswick, Canada. (Tue, Position 32-C)
- (2632) **Hunsinger, Glendon**; Mitra, Siddhartha. Hydrodynamic Effects on Particulate PAH Exchange in Tivoli Bays, Hudson River Estuary, NY. (Tue, Position 33-C)
- (1771) **Kenna, Timothy C.**; Nitsche, Frank O.; Haberman, Mackenzie. Improving the Spatial Resolution of Sediment Core Studies: Rapid Down Core Metal Distributions and Inventories. (Tue, Position 32-D)
- (2292) **Lermon, M. A.**; Kineke, G. C.; Bentley, S. J.; Fredericks, J.J.; Girard, A.P.; Sisson, J.D.; Traykovski, P.A.; Trowbridge, J.H. Sediment Resuspension During Passage of Cold Fronts on the Inner Shelf, Chenier Plain Coast, Louisiana. (Tue, Position 33-B)
- (2030) **Ryu, Cheong-Ro**; **Yoon, Han-Sam**. A Study on the Characteristics of Deposition in Nakdong Estuary. (Tue, Position 32-F)

SCI-113 – HARMFUL ALGAL BLOOMS

- (2161) **Donovan, Chelsea D.** A Submersible Active Fluorometer Used to Monitor Photosynthetic Parameters and Algal Biomass. (Mon, Position 14-F)
- (1763) **Yonghui, Gao**; Zhiming, Yu; Xiuxian, Song. Clay Flocculation: A Possible Mitigation Method in Algal Bloom. (Mon, Position 14-E)

SCI-118 – LARGE SCALE NATURAL EVENTS - GENERAL

- (1884) **Orlando, Beth A.**; Robbins, Bradley D.; Conrad, Cecelia; Haunert, Kathy. Hurricane Impacts on SAV Coverage in Southwest Florida Estuarine Systems. (Tue, Position 9-D)

Monday-Tuesday Poster Sessions

(1382) **Piazza, Sarai C.**; Steyer, Gregory D.; Sasser, Charles E.; Visser, Jenneke M.; Perez, Brian C.; Holm, Guerry O.; Sapkota, Sijan. Impact and Recovery of Vegetative Structure in Coastal Louisiana Marsh Communities Following the Hurricanes of 2005. (Tue, Position 9-B)

(1264) **Weston, James J.** Short-Term Water Quality Responses to Storm Events at Two Microtidal Estuaries. (Tue, Position 9-A)

(1749) **Wilson, Monica**; Luther, Mark; Meyers, Steve; Holm, Heather; Linville, Amanda; Gilbert, Sherry; Subramanian, Vembu. Effects of Extreme Events on Residual Circulation for Tampa Bay, Florida. (Tue, Position 9-C)

SCI-121 – MODELING - GENERAL

(2346) **Alade, Larry.** Evaluating a Movement-Mortality Model Through Simulation. (Mon, Position 25-E)

(2296) **Archbald, Gavin**; Boyer, Katharyn E. Modeling Connectivity Between Eelgrass (*Zostera marina*) Populations in San Francisco Bay. (Mon, Position 25-D)

(2012) **Christian, David.** Sediment Modeling in Indian River Lagoon, FL. (Mon, Position 25-C)

(1533) **Lee, Seok**; Lie, Heung-Jae; Kim, Hong-Sun; Cho, Cheol-Ho; Song, Kyu-min. Change of Marine Environments after the Saemangeum Dike Closure, Korea. (Mon, Position 25-B)

SCI-123 – PLANKTON ECOLOGY

(2034) **Avery, David E.**; Dam, Hans G. A Novel Explanation for the Effects of Food Type and Food Concentration on Copepod Fecal Pellets. (Mon, Position 3-B)

(2384) **Burrell, Rebecca B.**; Breitburg, Denise L. Swimming Behavior and Vertical Distribution of *Chrysaora quinquecirrha* Relative to Water Currents in Shallow Systems. (Mon, Position 3-F)

(2489) **Cooney, Sean K.**; Stoecker, Diane K.; Coats, D. Wayne. Ecology of the Fish Associated Dinoflagellate *Crepidodinium cyprinodontum*. (Mon, Position 4-B)

(2664) **Evans, James**; Nelson, Jennifer; Bachelor, Bethany; Burghart, Scott; Tolley, Greg. Spatial and Temporal Distribution of Ichthyoplankton and Gelatinous Zooplankton in Estero Bay, Florida. (Mon, Position 4-C)

(2755) **Fenucci, Jorge L.**; Marcoval, Maria Alejandra; Pan, Jeronimo. Brachyuran Zoeae Obtain UV-Radiation Protection from Diatom Prey. (Mon, Position 4-E)

(2041) **Hartsig, Ann Marie**; Lacouture, Richard V.; Imirie, Amy L. Increases in Cyanobacteria During Summer in Mesohaline Chesapeake Bay, 1985-2006. (Mon, Position 3-D)

(2404) **Hunter, Rachael**; Izdepski, Caleb; Lane, Robert; Day, John W. Impact of Mississippi River Water on Aquatic Primary Productivity in the Breton Sound Estuary. (Mon, Position 4-A)

(2726) **Nelson, Jennifer L.**; Evans, James; Bachelor, Bethany; Burghart, Scott; Tolley, Greg. Influence of Freshwater Inflow on the Distribution of Decapod Zooplankton in Estero Bay, Florida. (Mon, Position 4-D)

(2781) **Rothenberger, Megan B.**; Burkholder, JoAnn; Wentworth, Thomas R. Multivariate Analysis of Phytoplankton and Environmental Factors in a Eutrophic Estuary. (Mon, Position 4-F)

(2284) **Schuman, Carrie**; Urban-Rich, Juanita. Seasonal Changes in CDOM Composition in Savin Hill Cove, Massachusetts Bay. (Mon, Position 3-E)

(1762) **Sellner, Stella G.**; Olson, Marcia M.; Lacouture, Richard V.; Jacobs, Fred; Burton, William; Sellner, Kevin G. Chesapeake Bay Zooplankton: Changes in Community Structure Over Four Decades. (Mon, Position 3-A)

(2040) **Tomasky, Gabrielle**; Olson, Robert J.; Valiela, Ivan. Temporal and Spatial Response of Size-Fractionated Phytoplankton to Nutrient Supply in Three Cape Cod Estuaries. (Mon, Position 3-C)

SCI-127 – SUBMERGED AQUATIC HABITATS

(1997) **Hosokawa, Shinya**; Nakamura, Yoshiyuki. Branching and Mortality of Eelgrass Shoots Examined by Indoor Mesocosm Experiments. (Tue, Position 13-E)

(2237) **Johansson, J.O.R.**; Avery, W.A.; Hennenfent, K.B.; Pacowta, J.J. Near-Shore Water Quality and Seagrass Depth Limits in Upper Tampa Bay, Florida. (Tue, Position 13-F)

(1607) **Kangas, Patrick.** A Life History Model of Submerged Aquatic Vegetation Community Structure in the Chesapeake Bay. (Tue, Position 13-A)

(1738) **Shields, Erin**; Moore, Kenneth A. SAV Resurgence in Chesapeake Bay, Virginia Tributaries: The Role of Environmental Conditions and Interspecific Competition. (Tue, Position 13-C)

(1613) **Zinecker, Elizabeth.** Evaluation of Substrates for SAV Nursery Growth Potential. (Tue, Position 13-B)

SCI-129 – TROPHIC DYNAMICS AND FOOD WEBS

(1644) **Loglisci, Caroline A.**; Dam, Hans G. Mass Balance Approach to Understanding Copepod Fecal Pellet Cycling in Long Island Sound. (Mon, Position 30-E)

(2746) **Pan, Jeronimo**; Cerrato, Robert M.; Lonsdale, Darcy J. Effects of Ribbed Mussel Grazing on the Planktonic Community of Long Island Bays. (Mon, Position 30-F)



Surface table elevation monitoring

(1631) **Siuda, Amy N. S.**; Dam, Hans G. Effect of an Estuarine Eutrophication Gradient on *In Situ* Plankton Trophic Interactions. (Mon, Position 33-F)

(1316) **Wrast, Jenny L.**; Simons, James; Stunz, Gregory W. Spatial and Temporal Variability in Oyster Reef Food Web Structure Compared to Other Estuarine Habitats. (Mon, Position 33-E)

SCI-131 – URBAN ESTUARIES

(2799) **Frashure, Kim**; Chen, Robert; Yong, Tian. A Remote Sensing Model for Indicators of Ecosystem Health in Urban Estuaries. (Tue, Position 1-F)

(2739) **Shaw, Meghan O.**; Stokley, Jillian M.; Tiedemann, John A.; Howson, Ursula A. Spatial and Temporal Variability in Fish Community Structure in an Urban Estuary. (Tue, Position 1-E)

Wednesday-Thursday Poster Sessions

SCI-002 – CLIMATE EFFECTS ON TIDAL WETLANDS

(2379) **Alphin, Troy D.**; Leonard, Lynn; Posey, Martin H.; Avery, Gene B.; Hackney, Courtney. Tidal Wetland Habitat Response to Changes in Tidal Amplitude, Salt Water, and Freshwater Input. (Wed, Position 7-E)

(2676) **Anisfeld, Shimon**; Orson, Richard; Linn, Jennifer. Tidal Marsh Submergence in the Quinnipiac River, Connecticut. (Wed, Position 10-B)

(2591) **Devlin, Donna J.**; Proffitt, C.E.; Middleton, Beth. Ill Winds in Louisiana: Experimental Analyses of *Uca* and *Littoraria* Effects on Salt Marsh Recovery Following Hurricane Rita. (Wed, Position 10-A)

(2415) **Fleckenstein, Erin L.**; Hackney, Courtney. Effect of Salinity on Germination and Seedling Survival of *Taxodium distichum* from Northeast Cape Fear River, NC. (Wed, Position 7-F)

(2155) Horton, Benjamin P.; **Kemp, Andrew**. Onset of Recent Rapid Sea-Level Rise. (Wed, Position 7-C)

(2044) **Miller, Douglas C.**; Dale, Ryan K. Thermal Regime in Intertidal Sediments: Pattern and Tempo of Temperature in Delaware Salt Marshes. (Wed, Position 7-B)

(2272) **Piehler, Michael F.**; Smyth, Ashley; Thompson, Suzanne. Denitrification and Sediment Nutrient Fluxes in Shallow Water Estuarine Habitats. (Wed, Position 7-D)

(1660) **Stotts, Stephanie**; Reiter, Michael. Quantifying Vegetation Changes in the St. Jones River, Delaware: An Examination of Flow, Community Structure, Sea Level Rise, and Salinity. (Wed, Position 7-A)

SCI-004 – MICROBES: A SYNTHESIS OF DIVERSITY, COMMUNITY COMPOSITION AND BIOGEOCHEMICAL FUNCTION

(2197) **Booth, Melissa**; Schoen, Brianna. Utilizing *nasA* and $^{15}\text{N-NO}_3^-$ Uptake to Characterize and Quantify Nitrate Assimilation in Estuarine Heterotrophic Bacterioplankton. (Thu, Position 2-E)

(1835) **Caffrey, Jane M.**; Bano, Nasreen; Kalanetra, Karen; Hollibaugh, James T. Ammonia Oxidation and Ammonia-Oxidizing Bacteria and Archaea Populations from Estuaries with Differing Hypoxia Histories. (Thu, Position 2-C)

(2223) **Crump, Byron**; Peranteau, Cherie; Beckingham, Barbara; Cornwell, Jeffrey C. Respiratory Succession and Community Succession of Bacterioplankton in Seasonally Anoxic Estuarine Waters. (Thu, Position 2-F)

(2743) **Fogarty, Caitlin E.**; Fulweiler, Robinson W.; Nixon, Scott W.; Jenkins, Bethany D. Environmental Change and Controls on Activities of Nitrogen Fixers and Denitrifiers in Narragansett Bay Sediments. (Thu, Position 3-F)

(1574) **Hollibaugh, James T.**; Ransom, Briana. Comparison of Fish Species Reveals Major Differences in the Composition of Gut Microflora. (Thu, Position 2-A)

(2631) **Malpezz, Michael**; Kiss, Erica; Crump, Byron C. Bacterial Production and Particulate Organic Matter Composition in the Chesapeake Bay ETM. (Thu, Position 3-B)

(1894) **Menden-Deuer, Susanne**; Fredrickson, Kerri A.; Wright, Heather Anne. The Role of Biological Drivers in the Formation of Plankton Layers. (Thu, Position 2-D)

(1752) **Murrell, Michael C.**; Vickery, Sherry S.; Stanley, Roman S. Bacterioplankton Dynamics and Community Respiration on the Louisiana Continental Shelf. (Thu, Position 2-B)

(2469) **Smith, Erik M.**; Buck, Tracy; Lakish, Ben; Willman, Amy. Microbial Heterotrophy in Tidal Creeks of a Southeastern U.S. Salt Marsh Estuary. (Thu, Position 3-A)

SCI-007 – HYDROLOGIC PROCESSES: FROM SHORELINE SEEPAGE TO SHELF DYNAMICS

(2107) **Anderson, Gordon H.**; Smith III, Thomas J. Sediment Deposition from Hurricane Wilma Altered Flooding Regimes in Everglades National Park Mangroves. (Wed, Position 1-D)

(2527) **Blair, Anne C.**; White, David L.; Holland, Fred. Modeling Stormwater Runoff in South Carolina Tidal Creek Watersheds. (Wed, Position 1-F)

(1923) **Coley, Teresa L.**; Robbins, Bradley D.; Crean, Daniel J.; Krupa, Steve L. Freshwater Flows from Groundwater Discharge into Biscayne Bay, Florida: How Many, How Much, How Far? (Wed, Position 1-C)

(1700) **Gonneea, Meagan Eagle**; Henderson, Paul; Mulligan, Ann; Charette, Matthew. Submarine Groundwater Discharge and Associated Transport of Nutrients to the Coastal Ocean Along Southwest Florida. (Wed, Position 1-A)

(2271) **Paulsen, Ronald J.** Linking Groundwater, Pesticides and Submarine Groundwater Discharge. (Wed, Position 1-E)

(1720) **Rao, Alexandra M.F.**; Charette, Matthew. Trace Element Cycling in a Subterranean Estuary (Waquoit Bay, Cape Cod, MA). (Wed, Position 1-B)

SCI-009 – THE SCIENCE AND MANAGEMENT OF NATIVE AND INTRODUCED *PHRAGMITES AUSTRALIS*

(2549) **Hays, Rebecca L.** A Decade of Distributional Changes of *Phragmites australis* in the Great Marsh, Lewes, DE (1992-2002). (Wed, Position 6-B)

(1567) **Howard, Rebecca J.**; Travis, Steven E. Stress Tolerance in Eurasian versus U.S. Gulf of Mexico Clones of *Phragmites australis*. (Wed, Position 6-A)

(2892) **Lambert, Adam M.** Exotic Insect Herbivores Mediate Native and Exotic *Phragmites australis* Interactions. (Wed, Position 6-F)

SCI-012 – ARCTIC ESTUARINE ECOSYSTEMS: SOURCES, TRANSPORT AND FATE OF RIVERINE INPUTS

(2157) **Amon, Rainer M.W.**; Rinehart, Amanda J.; Peterson, Bruce J.; Holmes, Robert M.; McClelland, James. Biogeochemistry of Arctic River DOM - Linking our Understanding of Watershed Processes to the Arctic Ocean. (Thu, Position 32-D)

(1297) **Cooper, Lee W.**; Gibson, John; McClelland, James; Holmes, Robert M.; Peterson, Bruce J. Isotopic Indicators of Water Cycle Variability and Biogeochemical Processes in Arctic Ocean Runoff. (Thu, Position 32-A)

(1396) **Holmes, R. Max**; McClelland, James; Peterson, Bruce J.; Zhulidov, Alexander V.; Bulygina, Ekaterina; Cooper, Lee W.; Repeta, Daniel J. Fluvial DON Transport to the Arctic Ocean: Amount, Lability, and Potential Implications for Coastal Productivity. (Thu, Position 32-B)

(2193) **Raymond, Peter**; Holmes, Robert M.; McClelland, James; Peterson, Bruce J.; Aiken, George; Striegl, Rob. A Carbon Isotopic Study of the Flux of Organic Carbon to the Arctic Ocean. (Thu, Position 32-E)

(1495) **Trefry, John H.**; Trocine, Robert P.; Semmler, Carrie M.; Alkire, Matthew B.; Savoie, Mark A.; Rember, Robert D. Transport and Fate of Spring Floodwater from Rivers in the Alaskan Beaufort Sea. (Thu, Position 32-C)

SCI-014 – MARINE AQUATIC INVASIVE SPECIES AND ECOSYSTEM MANAGEMENT

(1640) **Anderson, Julie**; Epifanio, Charles. Characterizing Metamorphic Cues for the Asian Shore Crab: A Combined Laboratory and Field Approach. (Thu, Position 5-A)

(2795) **Banas, Neil S.**; **McDonald, P. Sean**; Armstrong, David A. Green Crab Larval Retention in Willapa Bay, Washington: An Intensive Lagrangian Modeling Approach. (Thu, Position 5-B)

(2723) **Drake, Lisa**. Potential Dispersal of Cholera by Biofilms in Ships' Ballast Tanks. (Thu, Position 5-E)

(2499) **Kleckner, Amy**; Wilkerson, Frances. Consequences of an Invasive Clam on the San Francisco Estuarine Nitrogen Cycle. (Thu, Position 5-C)

(2754) **Marcova, Maria Alejandra**; Pan, Jeronimo. The Effect of an Exotic Serpulid on the Planktonic Community in Estuarine Environments. (Thu, Position 5-F)

(2504) **Nañez-James, Suraida E.**; Tunnell Jr., John W.; Felder, Darryl L.; Camp, David K. An Early Warning System for Invasive Species: The Texas Marine Species List. (Thu, Position 5-D)

Wednesday-Thursday Poster Sessions

SCI-017 – FLORIDA BAY: CURRENT STATUS AND TRENDS

- (1379) **Kelly, Stephen P.**; Cunniff, Kevin M.; Madden, Christopher J.; Rudnick, David T. Analysis of Restoration Trade-Offs: a Case Study of Causeway Removal in Florida Bay. (Wed, Position 23-F)
- (2195) **Steidinger, Karen**; Neely, Merrie Beth; Richardson, Ralph W. Florida Bay Phytoplankton Dynamics, 1994-1997. (Wed, Position 23-B)
- (1794) **Vargo, Gabriel**; Neely, Merrie Beth; Hitchcock, Gary; Jurado, Jennifer. Growth Rates of Phytoplankton During Blooms in Northwestern and South Central Florida Bay. (Wed, Position 23-A)

SCI-019 – MODELING HYPOXIA: APPROACHES AND APPLICATION TO MANAGEMENT

- (1733) **Bennett, Diane C.**; O'Donnell, James. Interpreting Seasonal Patterns of Horizontal Transport in Long Island Sound. (Wed, Position 16-D)
- (1639) **Dam, Hans G.**; Siuda, Amy N.S. A Synthesis of Water Quality and Planktonic Resource Monitoring Data for Long Island Sound. (Wed, Position 16-C)
- (2134) **Geobel, Nicole**; Kremer, James N. Pelagic Respiration in Western Long Island Sound (WLIS) in Relation to Available Carbon. (Wed, Position 16-E)
- (1311) **Greene, Richard M.**; Lehrter, John C.; Hagy, Jim D. Mississippi River Flow, Nutrient Concentrations and Midsummer Hypoxia - Statistical Predictions and Error Estimation. (Wed, Position 16-A)
- (2570) **Jasinski, Dave**; Longstaff, Ben; Shenk, Gary; Perry, Elgin S.; Dennison, William C. A Suite of Models for Forecasting Summer Anoxic and Hypoxic Volume in the Chesapeake Bay. (Wed, Position 16-F)
- (1550) **Nelson, Kevin K.** Long-term Data and Web Services Facilitate Hypoxia Modeling. (Wed, Position 16-B)

SCI-032 – POPULATION GROWTH, LAND USE AND ATMOSPHERIC NITROGEN INPUTS

- (2278) **Bettez, Neil**; Howarth, Robert W.; Marino, Roxanne; Davidson, Eric A. Indications of Nitrogen Saturation in Forests Adjacent to Roadways Due to Mobile Source Emissions. (Thu, Position 9-D)
- (1511) **Dennis, Robin L.** Insights on Urban N Deposition from Atmospheric Modeling: What We Have Been Missing. (Thu, Position 9-A)
- (2042) **Marino, Roxanne**; Howarth, Robert W.; Bettez, Neil; Davidson, Eric A.; Molodovskaya, Marina. Estimating the Importance of Near-Source Deposition of Nitrogen from Vehicle Emissions to Cape Cod. (Thu, Position 9-B)
- (2130) **Poor, Noreen**; Eckenrod, Richard. Impact of Urban Growth on Atmospheric Deposition of Nitrogen to Tampa Bay. (Thu, Position 9-C)

SCI-034 – COASTAL RECORDS HELP UNDERSTAND CAUSES AND CONSEQUENCES OF CLIMATE VARIABILITY

- (1664) **Moore, Kenneth A.**; Jarvis, Jessie C. The Impact of Global Warming Events on Eelgrass (*Zostera marina* L.) Beds in the Lower Chesapeake Bay. (Wed, Position 6-D)
- (1361) **Vinhateiro, Nathan D.**; King, John W.; Robinson, Rebecca S.; Reddy, Christopher M. Holocene Stratigraphy and Environmental History of a Shallow Water Embayment in Narragansett Bay, RI. (Wed, Position 6-C)
- (2663) **Wilson, Carol A.** Wave Climate Effects on Louisiana's Eroding Marshes. (Wed, Position 6-E)

SCI-045 – RAPID ASSESSMENTS AND INDICATORS OF TIDAL WETLAND FUNCTIONS AND CONDITION

- (2757) **Hernandez-Saavedra, Raquel**; Zaldivar-Jimenez, Arturo; Herrera-Silveira, Jorge; Teutli-Hernandez, Claudia. Above and Belowground Mangrove Forest Production in Karstic Setting with Groundwater Discharge (Yucatan, SE Mexico). (Wed, Position 11-B)

- (1439) **Macaulay, John**; Nestlerode, Janet A.; Engle, Virginia; Bourgeois, Pete; Heitmuller, Tom. Gulf of Mexico Coastal Wetlands Survey: An Integrated Approach Toward Assessing Ecosystem Function and Services. (Wed, Position 11-F)

- (2712) **Millard, Koreen**; Redden, Anna; Hopkinson, Chris; Webster, Tim; Stewart, Heather. The Use of High Resolution Light Detection and Ranging (LiDAR) Data to Provide Direction for Salt Marsh Restoration Initiatives at Fort Beausejour Salt Marsh, New Brunswick. (Wed, Position 11-E)

- (2067) **Morgan, Pamela A.**; Miller, Jeremy; Dalton, Cayce. Indicators of Fringing Salt Marsh Ecological Function that are Responsive to Shoreline Development Pressures. (Wed, Position 11-A)

SCI-046 – IMPACT OF CLIMATE CHANGE ON COASTAL BIOGEOCHEMISTRY

- (1747) **Canuel, Elizabeth A.**; Waterson, Elizabeth J.; Dickhut, Rebecca M.; Kuehl, Steve A.; Bianchi, Thomas S.; Wakeham, Stuart G. Use of Sediment Records to Understand Anthropogenic Impacts on Carbon Cycling in Coastal Ecosystems. (Wed, Position 10-C)
- (2497) **Hunt, Christopher**; Salisbury, Joseph E.; Vandemark, Douglas; Campbell, Janet W.; McGillis, Wade R. Seasonal and Episodic Variability of Carbon in a Large New England Estuary and its Delivery to the Coastal Zone. (Wed, Position 10-E)
- (2025) **Moller, Osmar O.**; Vaz, Ana C.; Castello, Jorge P. The Effect of River Discharge on the Interannual Variability of Pink Shrimp Production in Patos Lagoon. (Wed, Position 10-D)
- (2578) **O'Connor, Mary**; Piehler, Michael F.; Ladwig, Laura; Violin, Christy. Temperature and Seasonality of Benthic Macro- and Microalgal Production. (Wed, Position 10-F)

SCI-055 – CHALLENGES OF COLLABORATION ACROSS SCIENCE, POLICY AND EDUCATION DISCIPLINES

- (2531) **Beem, Nora T.**; Short, Frederick T. Eelgrass in the Great Bay Estuary: Human Growth, Eelgrass Decline and the Need for Education. (Thu, Position 17-F)
- (2065) **Greene, Jennifer K.**; Grizzle, R.E.; Odell, Jay; La Valley, Ken. Developing Partnerships with the Local Community to Encourage Participation in Oyster Restoration Projects. (Thu, Position 17-D)
- (2522) **Hoskins, Dionne**. The SSU Coast Camp: A Model Ocean Literacy Camp for Youth. (Thu, Position 17-E)
- (1467) **Ott, Jacquie**; Wells, Heather; Ellin, Rebecca. Classification of Habitats of the North Carolina National Estuarine Research Reserve to Inform Coastal Management. (Thu, Position 17-A)
- (1886) **Owens, Alaina B.**; Carruthers, Tim J.B.; Dennison, Bill; Raynie, Richard C.; Reed, Denise J.; Steyer, Gregory D.; Twilley, Robert R.; Visser, Jenneke M. Using Conceptual Diagrams to Convey Scientific and Restoration Concepts to Stakeholders in Coastal Louisiana. (Thu, Position 17-B)

SCI-058 – ADVANCING BENTHIC HABITAT MAPPING

- (2800) **Cowan, Diane, F.** Mapping Lobster Nursery Habitat. (Thu, Position 18-E)
- (2020) **Kenney, Gregg**; Higgs, Amanda; Kahnle, Andy; Dufour, Mark. Linking Fish and Habitat: Habitat Utilization of Atlantic Sturgeon in the Hudson River Estuary. (Thu, Position 11-C)
- (2240) **King, John W.** BayMap: A Project to Map the Habitats and Cultural Landscape of Narragansett Bay, Rhode Island. (Thu, Position 18-A)
- (2300) **Martin, April H.**; Prell, Warren L.; Murray, David W.; Heggie, K. Benthic Foraminifers as Proxies for the Spatial and Temporal Extent of Hypoxia (Narragansett Bay CHRP). (Thu, Position 18-B)
- (2345) **Oakley, Bryan A.**; Boothroyd, Jon C. Mapping Benthic Geologic Habitats in Narragansett Bay and Block Island Sound. (Thu, Position 18-D)
- (2073) **Rocha, Kenneth**; Perez, Kenneth; Davey, Earl; Johnson, Roxanne. Using Acoustic Sediment Mapping and Computer Aided Tomography (CT) to Characterize Shallow Water Estuarine Systems. (Thu, Position 11-D)

Wednesday-Thursday Poster Sessions

SCI-077 – UMEB STUDENTS & UNDERGRADUATE POSTERS

- (2898) **Abler, Andrea M.**; Ming, L.; Zhong, Liejun. How do Hurricane Tracks Affect Storm Surges in the Chesapeake Bay? (Wed, Position 20-F)
- (2897) **Aguilera, Rene A.**; Davis, Stephen E.; Childers, Daniel. A Case for Carbon-Controlled Phosphorus Cycling in the Southern Everglades Mangrove Ecotone. (Wed, Position 20-E)
- (1409) **Burrell, Christopher**; Cerrato, Jose Manuel; Dietrich, Andrea. Managing Manganese in Water Supplies and Distribution Systems: Implications for Metals and Microbes in Tap Water. (Wed, Position 31-E)
- (2900) **Crim, Ryan N.**; Strom, S. Effects of Salinity on Growth and Toxicity of the Bloom-forming Raphidophyte, *Heterosigma akashiwo*. (Wed, Position 21-B)
- (2904) **Davis, Jeanette**; Montalvo, N.F.; Hill, R.T. Characterization of Novel Sponge-Associated Bacteria from the Giant Barrel Sponge, *Xestospongia muta*. (Wed, Position 21-E)
- (2903) **Leissing, Julia**; **Martucci, Nicole**; Green, Danielle; Donnelly, Melinda. Allelopathic Effects of the Exotic Brazilian Pepper *Schinus terebinthifolius* on Growth of Native Saltmarsh Flora. (Wed, Position 21-D)
- (2907) **Logwood, Arianne N.**; Krauss, Ken W.; Day, Richard H.; Doyle, Thomas W.; Conner, William H.; Benson, Barbara C. Patterns of Soil

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Fertility in Tidal Freshwater Forested Wetlands in the Southeastern United States. (Wed, Position 31-A)

- (2071) **Losada, Greg**. Describing Bacterial Communities in a Seasonally Flushed Ecotone Region of the Florida Everglades. (Wed, Position 20-C)
- (2899) **McDonald, Audrey A.**; Mitchelmore, Carys L. Acute and Sub-lethal Effects of Chemically and Physically Dispersed Oil on the Soft Coral *Xenia elongata*. (Wed, Position 21-A)
- (2902) **Nguluwe, Belita S.**; Johnson, A.K.; Lang, Kathy; Richards, Anne. Comparison of Two Methods of Aging Monkfish: Vertebrae vs Illica. (Wed, Position 21-C)
- (2896) **Norris, Scott A.** Identifying Economic Indicators for Ecosystem-Based Estuarine Management: A Case Study in the Elkhorn Slough. (Wed, Position 20-D)
- (1232) **Nosach, Courtney R.** Influence of Environmental Factors on the Germination of South Florida *Vallisneria americana*. (Wed, Position 20-B)
- (2908) **Rodelo, Amy D.**; Cohen, C. Sarah. Behavioral Responses of Invasive Colonial Ascidiaceans to Estuarine-like Salinity Variation. (Wed, Position 31-B)
- (2909) **Taylor, April L.** An Investigation of Sediment Transport Behind the Texas City Dike. (Wed, Position 31-C)
- (1635) **Williams, Kristina E.**; Tang, Kam W.; Gibson, Deidre M. DREAMS - Enhancing Research, Academic and Leadership Training of Underrepresented Students in Marine Science. (Wed, Position 31-F)

SCI-101 – BENTHIC ECOLOGY - GENERAL

- (2137) **Brown, Jill R.**; Miller, Douglas C. Settlement and Vertical Tube Growth of *Sabellaria vulgaris* in Delaware Bay. (Wed, Position 12-C)

- (1454) **Calabretta, Christopher J.**; Oviatt, Candace A. A Characterization of Benthic Macrofaunal Communities Present at Anthropogenically Impacted Environments Within Narragansett Bay, RI. (Wed, Position 4-D)
- (1140) **Cassidy, Katelyn M.**; Dumbauld, Brett. Age Determination and Assessment of *Neotrypaea californiensis* Using Extractable Lipofuscin as an Age Biomarker. (Wed, Position 4-A)
- (2774) **Collado-Vides, Ligia**; Fourqurean, James W. *Halimeda* Dynamics Relative to Nutrients Availability in the Florida Keys National Marine Sanctuary. (Wed, Position 13-C)
- (1841) Corona, Adriana; **Raz-Guzman, Andrea**; Soto, Luis A. Zoogeographic Patterns of Gammarid Amphipods (Amphipoda: Gammaridea) from Laguna Madre and Laguna de Tamiahua, Mexico. (Wed, Position 4-F)
- (2617) **Dumbauld, Brett**; Chapman, John. Is Estuarine Recruitment of a Burrowing Shrimp Host Population Controlled by an Invading Parasite? (Wed, Position 13-B)
- (1937) **Godinez-Dominguez, Enrique**; Flores, Juan R.; Garcia-Calvo, Beatriz; Bernardez, Cristina; Rojo-Vazquez, Jorge A.; Franco-Gordo, Carmen; Kosonoy, Daniel; Hinojosa, J. Angel; Freire, Juan. Settlement Patterns of Commercial Penaeid Shrimps in a Tropical Estuary. (Wed, Position 12-A)
- (2121) **Holzer, Kimberly K.**; McGlathery, Karen J. Consumer Control of Seagrass Productivity Along an Environmental Gradient in Bermuda. (Wed, Position 12-B)
- (2563) **Mahl, Ursula H.**; Tyler, Anna Christina; McLenaghan, Natalie A.; Howarth, Robert W.; Berg, Peter; Giblin, Anne E.; Marino, Roxanne. Linking Benthic Invertebrate Density and Diversity to Nutrient Cycling and Eutrophication in Shallow Estuaries. (Wed, Position 13-A)
- (2363) **McLennaghan, Natalie A.**; Tyler, Anna Christina; Mahl, Ursula H.; Marino, Roxanne; Howarth, Robert W. The Role of Invertebrate Functional Diversity in Regulating Benthic Algal Dynamics. (Wed, Position 12-F)
- (1195) **Norden, Wendy S.**; Martin, Lara; McNaught, Douglas C. Evaluating the Ecosystem Services of Eelgrass Habitat to Invertebrate Larval Recruitment and Adult Fish Populations. (Wed, Position 4-B)
- (1326) **Ryckman, Laura**; Montagna, Paul; Kalke, Richard. Effects of Hypoxia on Harpacticoid Copepod Reproduction in the Northern Gulf of Mexico. (Wed, Position 4-C)
- (2147) **Thornton, Daniel C.O.** Measurement of Acid Polysaccharides (APS) in Coastal Sediments. (Wed, Position 12-D)
- (1741) **Turner, Caroline B.**; Tyler, Anna Christina; Mahl, Ursula H.; Marino, Roxanne; Howarth, Robert W. Eutrophication and Benthic Macrofauna: Impacts on Porewater Chemistry in Sediments of Varying Organic Matter. (Wed, Position 4-E)
- (2241) **Tyler, Anna Christina**; Turner, Caroline B.; Mahl, Ursula H.; Berg, Peter; Marino, Roxanne; Howarth, Robert W. Feedbacks Among Benthic Invertebrates, Microalgae and Sediment Biogeochemistry in Shallow Estuarine Sediments. (Wed, Position 12-E)

SCI-102 – BIOGEOCHEMISTRY - ORGANIC AND INORGANIC - GENERAL

- (2176) **Devereux, Richard**; Kurtz, Jan; Beddick Jr., David; Yates, Diane; Eldridge, Peter. Sediment Biogeochemistry on the Louisiana Coastal Shelf Dead Zone. (Thu, Position 23-C)
- (2654) **Hume, Andrew**; Berg, Peter; McGlathery, Karen J. Oxygen Exchange Dynamics in Seagrass Meadows Measured with the New Eddy Correlation Technique. (Thu, Position 23-E)
- (1610) **Lenaker, Pete L.**; Rivera-Monroy, Victor H.; Twilley, Robert R.; Castaneda-Moya, Edward. Temperature Effects on Spatial Patterns of Denitrification During River Pulsing Events in Breton Sound, Louisiana. (Thu, Position 28-A)
- (1657) **Palomo, Laura**; Dickhudt, Patrick; Brylawski, Alice; Friedrichs, Carl; Schaffner, Linda C.; Canuel, Elizabeth A. Short-Term Degradation of Fatty Acids in Biological vs. Physical Mixing Regimes in the York River Estuary. (Thu, Position 28-B)

Wednesday-Thursday Poster Sessions

(2518) **Rellinger, Alison N.**; Heintzman, Sara; Kiene, Ronald P. Accumulation and Release of DMSP and DMS by the Ctenophore *Mnemiopsis leidyi* in Mobile Bay. (Thu, Position 23-D)

SCI-103 – CARBON, NUTRIENT AND OTHER MATERIAL BUDGETS

(1522) **Arreola, Alfredo.** Fluxes of Nutrients, Net Metabolism, and Trophic State in a Semiarid Subtropical Coastal Lagoon, Mexico. (Wed, Position 8-B)

(1400) **Hayn, Melanie**; Howarth, Robert W.; Marino, Roxanne; Berg, Peter; Foreman, Ken; Giblin, Anne; McGlathery, Karen J. Nitrogen Input-Output Dynamics in a Shallow Tidal Estuary on Cape Cod. (Wed, Position 8-A)

(2730) **Kathilankal, James C.**; Fuentes, Jose. Environmental Forcings on Ecosystem Level Fluxes of Carbon and Energy from a Salt Marsh. (Wed, Position 8-D)

(2198) **Zhao, Yong**; Raymond, Peter. Carbon Export from a New England Salt Marsh. (Wed, Position 8-C)

SCI-108 – EUTROPHICATION/WATER QUALITY

(1859) **Berman, Mark S.**; Melrose, Christopher. Annual Cycles in Narragansett Bay, Rhode Island. (Wed, Position 15-B)

(1699) **Bos, Julia**; Albertson, Storrs (Skip); Maloy, Carol; Stutes, Adrienne. Nutrient Levels in Puget Sound: Decadal Changes and Controlling Factors in Regional Basins. (Wed, Position 26-D)

(1819) **Bukaveckas, Paul**; Aufdenkampe, Anthony. Effects of Autochthonous Production on Biochemical Properties of Riverine Seston. (Wed, Position 24-D)

(1987) **Chong, Kit Yee.** Spring-Neap Tidal Cycle on Bottom DO Dynamics: Implication of Hypoxia Formation. (Wed, Position 25-E)

(2454) **Drescher, Sadie R.**; Messersmith, Mark J.; Davis, Braxton C.; Sanger, Denise M.; Rada, Melissa S. South Carolina Coastal Research Initiative: A New Focus on Stormwater Ponds. (Wed, Position 27-B)

(2352) **Ellis, Greg S.**; Hollander, David J. Stable Isotopic Composition of Shell Organic Matrix as a Means of Reconstructing Estuarine Nutrient History. (Wed, Position 26-E)

(2310) **Funk, Clara S.**; McHorney, Richard; Foreman, Kenneth; Crusius, John; Howarth, Robert W.; Marino, Roxanne; McGlathery, Karen J.; Berg, Peter. Watershed and Estuarine Processing of Groundwater Borne Nutrients. (Wed, Position 26-B)

(1575) **Guarinello, Marisa.** Characterizing Benthic Habitats and Water Quality in a Rhode Island Coastal Lagoon with Restricted Sub-Basin Circulation. (Wed, Position 15-F)

(1891) **Haas, Leonard W.**; Anderson, Iris C.; Brush, Mark J.; Kator, Howard I. Causes of Hypoxia in the York River, Virginia: Observations Using an ACROBAT Towed Undulating Vehicle. (Wed, Position 24-C)

(2430) **Hartzell, Jeanne**; Jordan, Thomas E. Differences in Sediment Burial Among Three Different Chesapeake Bay Subestuaries. (Wed, Position 24-B)

(1981) **Hayami, Yuichi**; Tsugeki, Narumi K.; Shuto, Toshio. Environmental and Biological Factors Associated with the Red Tide Increase in the Ariake Sea, Japan. (Wed, Position 25-C)

(2221) **Ivins, Katherine A.**; DiDonato, Eva M. Water Quality Monitoring at Fort Pulaski National Monument, Savannah, Georgia. (Wed, Position 26-A)

(2616) **Johnson, Chris**; Koepfler, Eric. Relationship Between Coastal Water Quality and Recreational Landings of Fishes in Long Bay, South Carolina. (Wed, Position 27-E)

(2621) **King, Laura**; Koepfler, Eric; Johnson, Chris; Lake, Sam; Bennett, Joe; Libes, Susan. Coastal Hypoxia and Pier Sampling of Water Quality Parameters in Long Bay, South Carolina. (Wed, Position 27-F)

(2629) **Koepfler, Eric**; Lake, Sam; Smith, Erik M.; Bennett, Joe; Libes, Susan. Examination of Inner Shelf Water Quality in Long Bay, South Carolina Using Dataflow. (Wed, Position 27-C)

(2605) **Lake, Sam**; Koepfler, Eric; Hunter, Amanda. Temporal-Spatial Variability of Water Quality in a Tropical Bay Ecosystem and the Surrounding Coastal Habitat. (Wed, Position 27-D)

(1711) **Lasi, Margaret A.**; Trefry, John H.; Steward, Joel S.; Tweedale, Wendy A. Turbidity in Southern Mosquito Lagoon, Florida: Composition, Sources, and Effects on Light Attenuation. (Wed, Position 25-B)

(1609) **Li, Hsiu-Ping**; Roelke, Daniel L.; Davis, Stephen E.; Liu, Kung-Jen; Gable, George M. Impacts of Freshwater Inflows on Two Subtropical Estuaries, Texas. (Wed, Position 27-A)

(2413) **Marchi, Al M.**; Dugdale, Richard C.; Parker, Alexander E.; Hogue, Victoria; Lew, Kevin; Fuller, Jim; Wilkerson, Frances. Influence of San Francisco Estuary Outflow on the Near-Shore Gulf of the Farallones Phytoplankton Communities. (Wed, Position 26-F)

(1852) **Neikirk, Betty B.**; Moore, Kenneth A. Long Term Trends in Estuarine Water Quality in the York River, Virginia Littoral Zone. (Wed, Position 24-A)

(2086) **Neu, Andrea**; Redalje, Donald; Natter, Megan; Rowe, Egan; Sawant, Pradnya; Pluhar, Ray; Schilling, Becky. Using Geographic Information System (GIS) to Model the Water Quality of the Bay of St. Louis, Mississippi. (Wed, Position 24-F)

(2479) **Poucher, Sherry**; Carey, Connie. Evaluating Dissolved Oxygen in Narragansett Bay Using New Rhode Island State Standards. (Wed, Position 15-E)

(2322) **Prell, Warren L.**; Murray, David W.; Orchard, J.; Deacutis, Christopher; Saarman, E. Episodic Summer-Time Hypoxia in Narragansett Bay (Narragansett Bay CHRP). (Wed, Position 15-D)

(1218) **Sakowicz, Gregg P.**; Haag, Scott M.; Kennish, Michael J. Videographic Imaging of Seagrass Beds to Characterize Submerged Aquatic Vegetation in a Eutrophic Coastal Bay System. (Wed, Position 25-D)

(1663) **Shumchenia, Emily**; King, John W.; Burgess, Robert M.; Rego, Steven; Pelletier, Marguerite C. Characterizing the Benthic Response to Seasonal Hypoxia in Greenwich Bay, Rhode Island, USA. (Wed, Position 15-C)

(2045) **Steward, Joel S.**; Lasi, Margaret A.; Tweedale, Wendy A. Setting Targets for Water Quality Relevant to Seagrass Recovery and Protection in the Indian River and Banana River Lagoons, Florida. (Wed, Position 26-C)

(1401) **Stoffel, Heather E.**; Codiga, Daniel L.; Deacutis, Christopher; Kiernan, Susan; Oviatt, Candace A. Characterizing Recent Hypoxic Events in Narragansett Bay, Rhode Island Using a Time-Series Approach. (Wed, Position 15-A)

(2264) **Trice, Theodore M.**; Michael, Bruce D.; Hall, Matthew R.; Trumbauer, Chris J.; Cole, Ben; Romano, William; Boynton, Walter R.; Moesel, Sharon M.; Bailey, Eva M.; Tanner, C.E.; Bush, Henry; Moore, Kenneth A.; Anderson, Britt-Anne; Neikirk, Betty B.; Tango, Peter. Monitoring the Nation's River - High Frequency Water Quality Monitoring of the Potomac River, USA. (Wed, Position 24-E)

SCI-115 – HYDRODYNAMICS AND PHYSICAL PROCESSES

(1847) **Giddings, Sarah N.**; Fong, Derek, A.; Monismith, Stephen G.; Edwards, Kathleen A. Tidal Intrusion Front Dynamics in a Shallow, Macrotidal Estuary. (Thu, Position 19-C)

(2546) **Kawase, Mitsuhiro**; Sarason, Christian P. Structure and Variability of the Exchange Circulation in Puget Sound, Washington: A Model Study. (Thu, Position 19-F)

(1205) **Li, Chunyan**; Walker, Nan D.; Hou, Aixian; Laws, Ed; Lin, Huichan. Tidal Jets and Wind Straining on Mixing in Lake Pontchartrain: Numerical Modeling Using FVCOM. (Thu, Position 19-B)

(2386) **Marques, Wilian Correa**; Monteiro, Igor Oliveira; Moraes, Bruno Correa; Flores, Eliane Gallo; Fernandes, Elisa Helena L.; Möller, Osmar Olinto. Patos Lagoon Coastal Plume Study Using Numerical Modeling and Modis Images. (Thu, Position 19-E)

(2313) **Rogers, Justin M.**; Kincaid, Chris; NOAA-CHRP Group, Narragansett Bay. Circulation in the Heart of Narragansett Bay and Exchange with the Impacted Extremities. (Thu, Position 19-D)

Wednesday-Thursday Poster Sessions

(1193) **Walker, Nan D.**; Li, Chunyan; Shaw, Richard F.; Weeks, Eddie. Mapping of 3D Flow Field in an Intersection of Tidal Channels and Calculation of Transport. (Thu, Position 19-A)

SCI-116 – INNOVATIVE TECHNOLOGICAL APPLICATIONS

(2771) **Chekalyuk, Alexander.** Advanced Laser Fluorescence Characterization of Phytoplankton Pigments, Physiology and Community in Coastal and Estuarine Waters. (Wed, Position 34-C)

(2628) **Copeland, Jane L.**; Kiddon, John A.; Walker, Henry A.; Charpentier, Michael A.; Buffum, Henry W.; Cormier, Cara A.; Cunningham, Nancy J.; Audette, Charles T. Technology Transfer of Analytical Tools to State Partners for the National Coastal Assessment. (Wed, Position 34-A)

(1815) **Faldetta, Sarah**; Robinson, David; King, John W.; Gardner, Jeffrey D. Identifying Archaeologically Sensitive Paleosols in the Offshore Environment: An Integrated Approach. (Wed, Position 29-B)

(2722) **Howe, Bill**; Baptista, Antonio M. Can 3D Visualization Play a Role in Estuary Management? (Wed, Position 34-B)

(1174) **Kessler, Ross K.**; Leschen, Alison S.; Estrella, Bruce T. Using Models as a Tool to Aid Strategic Eelgrass Restoration Efforts. (Wed, Position 29-C)

(2700) **Luczkovich, Joseph J.**; Clough, Lisa; Deehr, Rebecca; Hart, Kevin. Using Sonar and Trawls to Estimate Fish Biomass in Core Sound, NC. (Wed, Position 34-E)

(2326) **MacDonald, Daniel G.** Alternative Options for Heat Discharge in Mt. Hope Bay. (Wed, Position 29-D)

(1813) **Powell, Sara L.**; Porter, Dwayne E.; Allen, Wendy; Walker, Samuel; Hibbert, James. Using GIS/Remote Sensing to Evaluate Impervious Surfaces in Support of Coastal Land Use Planning. (Wed, Position 29-E)

(2018) **Stanhope, Jennifer W.**; Anderson, Iris C.; Brush, Mark J.; Kator, Howard I.; Haas, Leonard W.; Walker, Hunter S. ACROBAT: Modification of a Towed Undulating Vehicle for Determining Water Quality in Three-Dimensional Space. (Wed, Position 29-F)

(2586) **White, David L.**; Sanger, Denise M.; Blair, Anne C.; Felber, Jordan; Holland, Fred. Development of a Correction Factor for the National Land Cover Database 2001 Imperviousness Product in Southeastern Tidal Creek Watersheds. (Wed, Position 34-F)

SCI-120 – MARINE PROTECTED AREAS

(2092) **Clark, Randall D.**; Battista, Tim; Pittman, Simon; Costa, Bryan; Hartwell, Ian; Desch, Arthur. Biogeographic Characterization of the Stellwagen Bank National Marine Sanctuary and the Gulf of Maine. (Thu, Position 22-E)

(1650) **Sandifer, Paul A.**; Allan, J. David; Beck, Michael W.; Fautin, Daphne G.; Fogarty, Michael J.; Halpern, Benjamin S.; Ince, Lewis S.; Leong, J.A.; Norse, Elliott; Stachowicz, John J.; Wall, Diana H.; Palumbi, Stephen R. Could Conservation of Biodiversity be a Unifying Goal for Marine Ecosystem-Based Management? (Thu, Position 22-A)

(2464) **Scheidt, Douglas M.**; **Garreau, Carla M.**; Holloway-Adkins, Karen G. Watercraft Use Patterns Within the Federally Managed Waters of Mosquito Lagoon, East-Central Florida. (Thu, Position 22-F)

(1773) **Ward, Krystin M.**; Grizzle, R.E.; Abeels, Holly A.; Greene, Jennifer K. Effects of the Western Gulf of Maine Closure Area on Groundfish Populations in Rocky Habitats. (Thu, Position 22-C)

SCI-122 – MONITORING AND INDICATORS

(2569) **Delgado, Patricia**; Hall, Matthew R.; Swarth, Chris; Trice, Theodore M.; Zimmerelli, John; Trumbauer, Chris J.; Thompson, Stephanie. Land Use and Water Quality Trends Within the Maryland Chesapeake Bay National Estuarine Research Reserve. (Thu, Position 14-F)

(1603) **Hollister, Jeffrey W.**; Morzillo, Anita T.; Weissberger, Eric J.; Nestlerode, Janet A.; Paul, John F. Comparing Apples to Apples: Generating a Nationally Consistent Index of Benthic Biology in Estuarine Waters. (Thu, Position 13-E)

(2500) **Langtimm, Catherine A.**; Beck, Cathy A.; Bonde, Robert K.; Teague, Amy L.; Curtin, Kathryn; Reid, James P.; Meigs-Friend, Gaia; Krohn, M. Dennis. Comparing Annual Adult Survival Rates of Florida Manatees with Unusual Mortality Events of Dolphins. (Thu, Position 14-D)

(2554) **Lee, Wen Y.**; Hamlin, Lynne A. Habitat Utilization by Selected Fish and Shellfish in Galveston Bay System, Texas. (Thu, Position 14-E)

(1789) **Llewellyn, Chris**; La Peyre, Megan K. Application of Stable Isotopes in the Assessment of Functional Equivalency of Beneficial Dredge Use Marshes. (Thu, Position 13-F)

(1455) **Longval, Brooke**; Oviatt, Candace A. Fish Biomass Size Spectra in Narragansett Bay, Rhode Island. (Thu, Position 13-D)

(2475) **Messick, Gretchen**; Jacobs, John; McLaughlin, Shawn M.; Leight, Andrew K.; Lewis, Jay. Bio-indicators of Ecosystem Stress: Using Pathobiology to Assess Environmental Health. (Thu, Position 14-C)

(2391) **Murray, David W.**; Prell, Warren L.; Rincon, C.E. Grain Size Patterns and Elemental Composition of Surface Sediments from Narragansett Bay. (Thu, Position 14-A)

(2407) **Richardson, Donnia L.**; **Shervette, Virginia R.**; Bobo, M. Yvonne; Hadley, Nancy; Hollis, Andrew O.; Keppler, Chuck; Gooch, Jan; Thompson, Brian; Coen, Loren D.; Van Dolah, Robert. SCECAP Monitoring of Oyster Diseases, Cellular Responses, and Oyster Tissue Contaminants Along Coastal South Carolina. (Thu, Position 14-B)

SCI-126 – SHELLFISH ECOLOGY AND MANAGEMENT

(1385) **Hubner, Matt**; Withers, Kim. Status of Bay Scallops (*Argopecten irradians*) in the Upper Laguna Madre, TX. (Wed, Position 3-C)

(2460) **Markwith, Anne L.**; Posey, Martin H.; Alphin, Troy D. Distribution of *Ostreola equestris* in Southeastern North Carolina. (Wed, Position 3-D)

(2623) **Thomas, Roger L.**; Kreeger, Danielle A. Spatial and Temporal Variation of Oyster (*Crassostrea virginica*) Spat Dynamics in San Antonio Bay, Texas. (Wed, Position 3-E)

SCI-128 – TIDAL EMERGENT WETLANDS

(2501) **Buchsbaum, Robert N.**; Hines, Mark; Brace, Greg. The Effects of Salt Marsh Haying on the Ecology of Plum Island Sound, MA Marshes. (Thu, Position 28-E)

(2341) **Creemers, Jorik H.M.**; Van Wingerden, Marius M.; Vandenbruwaene, W.; Temmerman, Stijn; Smith III, Thomas J. Sediment Elevation Changes in Wetlands of the Scheldt (Belgium) and Shark River (USA) Estuaries. (Thu, Position 35-E)

(2319) **Halchak, Jennifer L.**; Seliskar, Denise; Gallagher, John L. Transition from Agricultural Lands to Wetlands During Sea Level Rise: Managing the Ecology and Economics. (Thu, Position 35-D)

(1873) **Haramis, G. Michael**; Kearns, Gregory D. Herbivory by Resident Geese: The Loss and Recovery of Wild Rice Along the Tidal Patuxent River. (Thu, Position 35-A)

(2390) **Hoskins, Dionne**; **Allen, LaTrisha.** An Evaluation of the Use of Benthic Infauna to Assess Marsh Health and Recovery. (Thu, Position 35-F)

(2445) **McFarlin, Caroline R.**; Kenemer, Bernard; Alber, Merry; Hester, Mark W.; Bishop, Dale. A Comparison of Dieback Effects on Salt Marsh Invertebrates in Georgia and Louisiana. (Thu, Position 28-C)

(2455) **Neubauer, Scott.** Vertical Accretion in Tidal Freshwater Marshes Supported by Both Organic and Inorganic Contributions. (Thu, Position 28-D)

(1990) **Park, Sang Rul**; Kim, Jong-Hyeob; An, Soonmo; Kang, Chang-Keun; Chung, Ik Kyo; Lee, Tongsup; Lee, Kun-Seop. Growth Dynamics of Three Major Primary Producers at Nakdong River Estuary in Korea. (Thu, Position 35-B)

Wednesday-Thursday Poster Sessions

- (2691) **Warren, R. Scott**; Hoover, Maegan. Response of Salt Marsh Vegetation to Chronic Nutrient Enrichment. (Thu, Position 28-F)
- (2220) **Yu, Olivia T.**; Chmura, Gail L. Sheep Grazing on a St. Lawrence Estuary Salt Marsh. (Thu, Position 35-C)

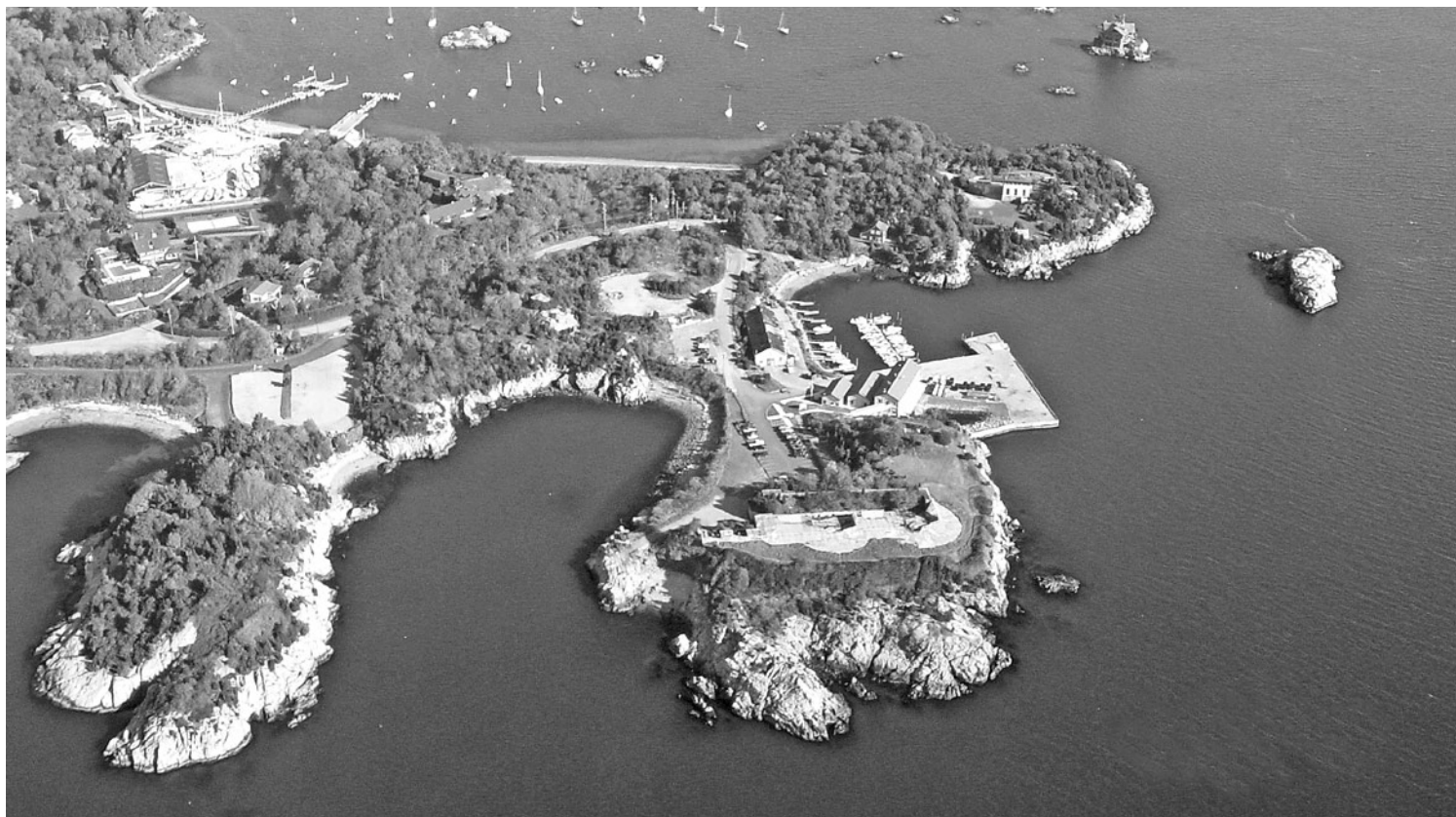
SCI-130 – TROPICAL SYSTEMS

- (2845) **Aronson, Richard B.**; Precht, William F. Rapid Range Expansion of Acroporid Corals in Response to Climatic Warming. (Thu, Position 30-F)
- (1254) **Chartrand, Kathryn M.**; Durako, Michael. *Siderastrea* in Florida Bay: Photophysiological Response to Hyposaline Stress in a Marginal Coral Habitat. (Thu, Position 32-F)
- (1413) **Harwell, Linda C.**; Smith, Lisa M.; Nelson, Walt G. National Coastal Assessment: Island Style. (Thu, Position 33-A)
- (1696) **Hughes, Adam D.**; Grottoli, Andrea G.; Pease, Tamara K. Thermally Induced Bleaching Alters Carbon Flow Between Host, Symbiont and Skeleton in Two Hawaiian Corals. (Thu, Position 33-E)
- (1871) **Hurley, Leah**; Hughes, Adam D.; Grottoli, Andrea G.; Pease, Tamara K. Spatial Variability of ^{15}N and ^{13}C in Tissues of the Hawaiian Coral *Porites compressa*. (Thu, Position 33-F)
- (1494) **Knoppers, Bastiaan Adriaan**; Medeiros, Paulo P.; Souza, Weber F.; Oliveira, Eduardo N.; Lorenzetti, João; Jennerjahn, Tim C. The São Francisco River Estuary and Coastal Plume, Brazil: Dam Impacts upon Material Transport. (Thu, Position 33-B)

- (1685) **Lin, Hsing-Juh**; Liu, Pi-Jen; Fan, Tung-Yung; Lin, Shiue-Ming. Response of Corals, Macroalgae, and Sea Anemones to Nutrient Enrichment – A Mesocosm Experiment. (Thu, Position 33-D)
- (1679) **Ramanathan, Alagappan**; Balakrishna, Prasad; Sabarathinam, Chidambaram. Human Disturbances on Biogeochemical Processes in the South Asia Mangrove Ecosystem: Case Study from India. (Thu, Position 33-C)

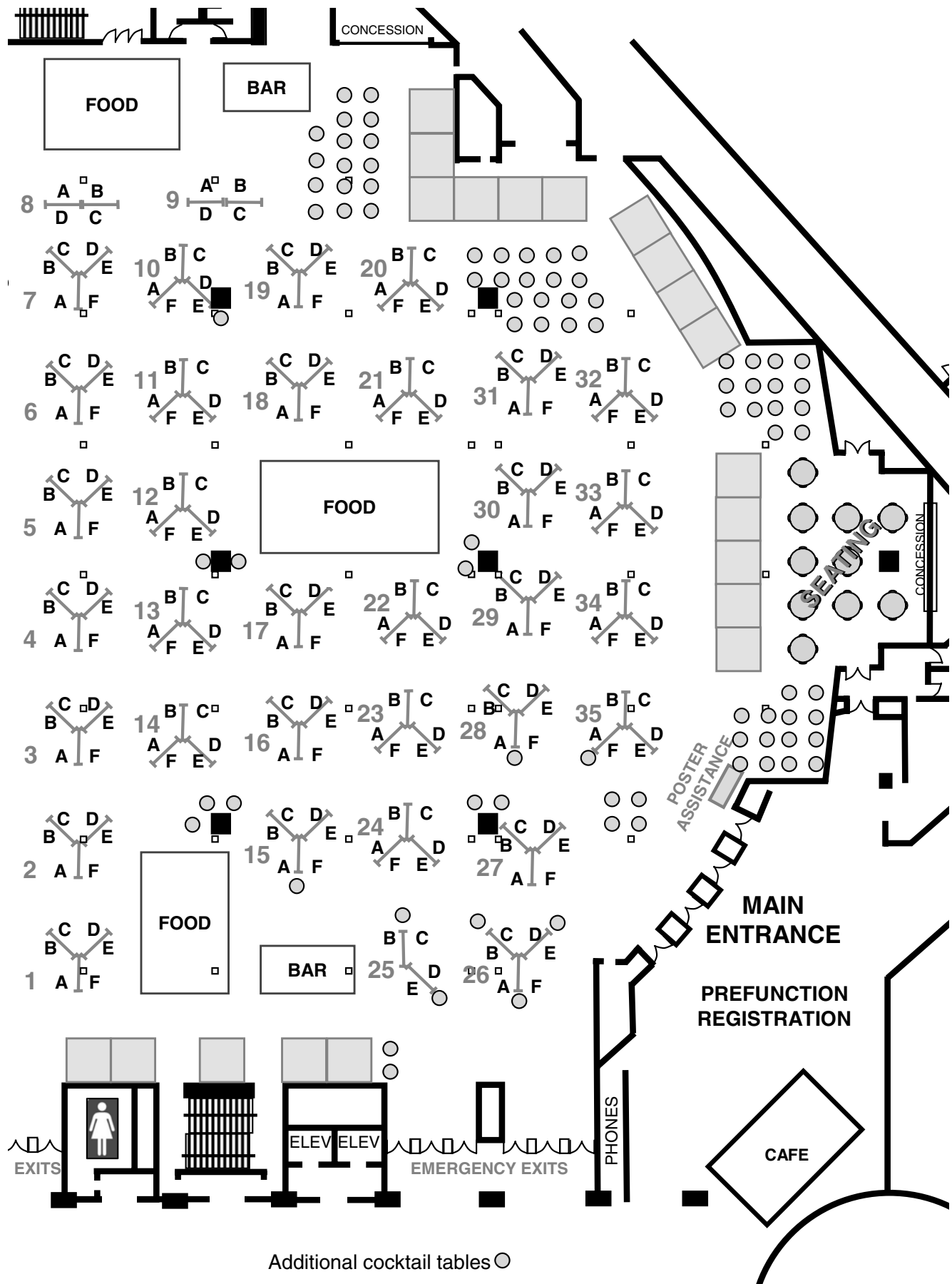
SCI-139 – MANGROVE SYSTEMS

- (1624) **Balentine, Karen M.**; Butler, Megan; Tiling, Ginger; Whelan, Kevin R.T.; Smith III, Thomas J. Crab Burrows and Sediment Elevation in Mangroves of Tampa Bay and the Everglades of Florida. (Thu, Position 30-A)
- (2085) **Chapman, Samantha K.**; Feller, Ilka C. How Does Biodiversity Impact Mangrove Litter Decomposition and Plant Productivity? (Thu, Position 30-B)
- (2238) **Krumholz, Jason S.**; Barber, Todd; Jadot, Catherine. Designing a “Reef-Safe” Slow Release Fertilizer for Mangrove Restoration Projects. (Thu, Position 30-C)
- (2868) **Liu, Kung-Jen**; Li, Hsiu-Ping; Davis, Stephen E.; Rivera, Victor; Twilley, Robert R.; Childers, Daniel L. Seasonal Nutrient Dynamics in the Mangrove Ecotone of Taylor River, Florida. (Thu, Position 30-E)
- (2581) **Zaldivar-Jimenez, Arturo**; Perez-Ceballos, Rosela; Herrera-Silveira, Jorge; Euan-Avila, Jorge; Pacheco-Avila, Julia. Mangrove Wetland and Ground Water Discharge (GW) in Karst Hydrogeological Setting (SE Mexico). (Thu, Position 30-D)



Jamestown, Rhode Island

Poster Hall Map



Notes



ERF 2007 Conference Workshops and Panel

OVERVIEW

The ERF 2007 conference offers an excellent selection of workshops with topics including coastal planning, ecosystem based management, science writing and instrument applications. Six of the workshops, will convene at various times on Sunday, November 4, 2007 between 1:00 pm to 5:00 pm. Turner Designs will convene 2 instrument workshops on Monday and a co-sponsored workshop/panel on urban coastal planning will convene on Wednesday afternoon. We look forward to the best workshop attendance yet!

SUNDAY, NOVEMBER 4, 2007

1. A Brief Guide to Scientific Writing and Publishing (Emerging Leader Workshop for Graduate Students)

Date and Time: Sunday, November 4, 2007, **1:00 pm – 3:00 pm**
Location: Rhode Island Convention Center,
Meeting rooms 552AB
Chair: **Jim Cloern**, U.S. Geological Survey, Menlo Park, jecloern@usgs.gov

To inform graduate students about the challenges of writing, publishing, and editing high-impact papers, this relaxed and informal workshop will include presentation and discussion of the four key attributes of well written scientific articles. Discussion will focus on the following paper: Kling et al. 1987. The 1986 Lake Nyos Gas Disaster in Cameroon, West Africa. Science 236, No. 4798 (April 10, 1987): 169-175, **which participants should read in advance.**

2. Application of Computer-Aided Tomography (CT) to Marine Ecological Investigations

Date and Time: Sunday, November 4, 2007, **1:00 pm – 5:00 pm**
Location: Rhode Island Convention Center,
Meeting rooms 556AB
Chair: **Earl Davey**, US EPA, davey.earl@epa.gov

This workshop demonstrates the application of Computer-aided Tomography to various marine benthic and wetland investigations, including analysis of environmental CT image data.

3. The Coastal Manager's Toolkit for Ecosystem-Based Management (EBM)

Date and Time: Sunday, November 4, 2007, **1:00 pm – 5:00 pm**
Location: Rhode Island Convention Center,
Meeting rooms 551AB
Chairs: **Sarah Carr**, NatureServe, Sarah_Carr@natureserve.org; **Dan Dorfman**, Intelligent Marine Planning; **Susan Crow**, Place Matters

This training workshop provides an overview of tools that can be used to help implement ecosystem-based management (EBM) in coastal-marine environments and their watersheds, describes projects that have used these tools, provides initial guidance on how to use tools effectively, and points managers in the direction of additional resources for using EBM tools.

If you plan to attend this seminar, please contact Sarah Carr via email (see above) so she can send you introductory information.

4. High Speed Data Collection for Spatial Characterization of Coastal Waters

Date and Time: Sunday, November 4, 2007, **3:00 pm – 5:00 pm**
Location: Rhode Island Convention Center,
Meeting rooms 555AB
Chair: **Chris Madden**, South Florida Watershed Management District, cmadden@sfwmd.gov

A continuation of the successful session convened at ERF 2005, focusing on use of multiparameter sensor arrays for spatial sampling. This workshop moves forward to address improvements and upgrades in hardware technology, techniques for data analysis, and software development.

5. Can We Talk? Building Bridges Between Scientists and Managers (Emerging Leader Workshop for All Audiences)

Date and Time: Sunday, November 4, 2007, **3:00 pm – 5:00 pm**
Location: Rhode Island Convention Center,
Meeting rooms 552AB
Chairs: **Merryl Alber**, University of Georgia, malber@uga.edu and **Geno Olmi**, NOAA Coastal Services Center

This interactive workshop includes a combination of skits, role-playing, and lively discussion to explore options for communication between scientists and managers. Topics will encompass translation of science, the management context of research, and improved understanding of relevant management and policy issues.

6. The Missing Link: Flow Measurement and Monitoring in Estuarine Applications

Date and Time: Sunday, November 4, 2007, **3:00 pm – 5:00 pm**
Location: Rhode Island Convention Center,
Meeting rooms 550AB
Chair: **Dave Velasco**, dvelasko@sontek.com (YSI/Sontek)

Often times chemical and biological data abound in estuarine studies, but flow data is lacking, making accurate calculations of load/flux impractical and difficult. This workshop will introduce the key principles of flow measurement and monitoring as applied to estuarine applications, from traditional velocity profiling to volumetric discharge measurements.

MONDAY, NOVEMBER 5, 2007

1. Workshop/Demo of Turner Designs C6 Multi-Sensor Platform

Date and Time: Monday, November 5, 2007, **10:15 am – 11:30 am**
Location: Rhode Island Convention Center, Room 550AB
Chair: **Chelsea Donovan**, cdonovan@turnerdesigns.com

A hands-on demonstration for the C6 Multi-Sensor Platform, designed for extended or short-term deployments. The C6 can be configured with up to 6 interchangeable Turner Designs' Cyclops fluorescence and turbidity sensors. Each C6 has a factory installed temperature and pressure sensor. The C6 Windows-based user interface is easy to use

for various functions such as logging, calibration, and downloading data. An optional dual-armed mechanical wiper is also available that will eliminate bio-fouling on the sensors ensuring accurate measurements during long-term deployments.

2. Workshop/Demo of Turner Designs PhytoFlash Submersible Active Fluorometer

Date and Time: Monday, November 5, 2007, 4:00 pm – 5:30 pm
Location: Rhode Island Convention Center, Room 550AB
Chair: **Chelsea Donovan**, cdonovan@turnerdesigns.com

A hands-on demonstration for the PhytoFlash Submersible Active Fluorometer, the first solid state in situ variable fluorescence system that will detect the quantum efficiency of phytoplankton in both oligotrophic and mesotrophic environments. Researchers can determine real-time in situ physiological parameters of phytoplankton in low chlorophyll systems. PhytoFlash's increased sensitivity allows users to obtain physiological parameters in coastal, open ocean and freshwater systems.

WEDNESDAY, NOVEMBER 7, 2007

Panel: Water Dependent Use Management in Urban Coastal Planning: Special Area Management Plans

Co-Sponsored by The Coastal Society (**Lauriston King**, East Carolina University, **Paul C. Ticco**, Coastal States Organization/NOAA MPA Center; **Kristen M. Fletcher**, Marine Affairs Institute, Rhode Island Sea Grant Legal Program

Date and Time: Wednesday, November 7, 2007, 2:00 pm – 3:30 pm
Location: Rhode Island Convention Center, Meeting Rooms 550AB
Moderator: **Tony MacDonald**, Urban Coast Institute, Monmouth University, amacdona@monmouth.edu

Working waterfronts like those in and around Providence, Rhode Island, contain not only important elements of maritime heritage and economy but also recreational opportunities and critical marine resources and habitat. Almost all coastal communities face difficult decisions about how to allocate the limited developed shoreline and waters among competing uses. This panel will offer insights into planning for and promoting water-dependent development without compromising the quality of marine ecosystems.

Speakers

- **Megan Higgins**, Roger Williams University School of Law, Rhode Island Sea Grant, Legal Mechanisms for Development and Protection of Coastal Shorelines
- **Jennifer McCann**, Rhode Island Sea Grant, Urban Greenway Policy in the Metro Bay SAMP
- **Dr. Dennis Ducsik**, Massachusetts Coastal Zone Management, Habitat Protection under Tidelands Law in Massachusetts
- **Susan E. Love**, Delaware Coastal Programs, The South Wilmington SAMP: Engaging and Empowering an Environmental Justice Community

Conference Exhibitors

As of September 2007

AQUATIC INFORMATICS INC.

Vancouver, BC, Canada
<http://www.aquaticinformatics.com>

ASTORIA-PACIFIC INTERNATIONAL

Kingston, RI
<http://www.astoria-pacific.com>

BIOSONICS, INC.

Seattle, WA
<http://www.biosonicsinc.com>

EUREKA ENVIRONMENTAL

Austin, TX
<http://www.eurekaenvironmental.com>

HACH ENVIRONMENTAL/HYDROLAB

Stoughton, MA
<http://www.hach.com>

IN-SITU, INC.

Fort Collins, CO
<http://www.in-situ.com>

NORTEK USA

Annapolis, MD
<http://www.nortekusa.com>

SEA SCIENCES, INC.

Arlington, MA
<http://www.seasciences.com>

SEA-BIRD ELECTRONICS, INC.

Bellevue, WA
<http://www.seabird.com>

TURNER DESIGNS

Sunnyvale, CA
<http://www.turnerdesigns.com>

WET LABS INC.

Philomath, OR
<http://www.wetlabs.com>

WETSAT

Philomath, OR
<http://www.wetsat.com>

YSI INC.

Yellow Springs, OH
<https://www.ysi.com>

Special Meeting and Social Function Descriptions

Please see page 7 for the complete schedule. Workshop descriptions are on page 60.

SUNDAY, NOVEMBER 4, 2007

ERF Sustaining Members Reception with the Scientific Awardees and Keynote Speaker

Date and Time: Sunday, November 4, 4:00 pm – 5:30 pm
Location: Westin Providence Hotel, third floor,
Blackstone Room

ERF invites our sustaining members to attend a special reception to thank you for your support of the Federation, congratulate our 2007 scientific awardees and speak with the keynote speaker, Rosina Bierbaum prior to the opening plenary.

Opening Plenary - Keynote Address and ERF Awards

Date and Time: Sunday, November 4, 6:00 pm – 7:30 pm
Location: Westin Providence Hotel,
Narragansett Ballrooms

Plan to attend to congratulate the winners of the 2007 ERF awards and to hear keynote speaker Rosina Bierbaum speak about *The Impact of Climate Change on Estuarine and Coastal Environments*.

President's Welcome Reception

Date and Time: Sunday, November 4, 7:30 pm - 9:00 pm
Location: Biltmore Hotel, Grande Ballroom

On behalf of the Federation Presidents, we invite you to the Biltmore Hotel's Grand Ballroom to greet old friends and new. Celebrate the opening of the 19th biennial conference of the Estuarine Research Federation. (Drink ticket and hors d'oeuvres provided.)



The Seekonk River is a tidal extension of the Blackstone River. Most historical scholars agree that the name is derived from two Native American words, sucki (meaning black) and honc (meaning goose).

MONDAY, NOVEMBER 5, 2007

IOOS Regional Associations Poster Room

Date and Time: Monday and Tuesday, November 5 & 6,
8:00 am - 6:00 pm
Location: Rhode Island Convention Center, fifth floor,
Meeting Rooms 553 A & B

Observing systems represent a new and extremely significant contribution to our abilities to understand and manage natural resources and the interrelationships between humans and their environment. Coastal ecosystems are receiving particular attention as these systems are designed and implemented. The design and implementation are occurring rapidly and at local, national, regional and global scales. We have invited observing systems within the United States and internationally and related organizations to display posters, provide informational materials and make available representatives to discuss their efforts. You are welcome to stop by and learn more about what is happening in this exciting arena.

ERF Happy Hour

Co-sponsored by YSI Environmental and Turner Designs

Date and Time: Monday, November 5, 5:30 pm
Location: Rhode Island Convention Center, third floor,
Exhibit Hall C & D

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

Happy hour drink tickets sponsored by SeaBird and WetLabs.

Affiliate Society Meetings

Date and Time: Monday, November 5, 5:45 pm – 6:30 pm
Location: Rhode Island Convention Center,
fifth floor meeting rooms

This year we have set aside a specific time for all of the affiliate society meetings. Plan to grab some munchies at the Happy Hour, then attend your region's meeting to learn what is happening!

ERF Student Pizza Social and Career "Speed Dating"

Sponsored by the ERF Affiliate Societies

Date and Time: Monday, November 5, 6:30 pm - 8:30 pm
Location: Rhode Island Convention Center, fifth floor,
Ballroom A

New, more interactive format for ERF 2007, with your hosts, Randy Chambers and Amanda Kahn

ALL undergraduate and graduate students are invited to attend the ERF Student Career Event & Pizza Social. 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 internship and employment opportunities, and job search tools and skills that worked successfully for them. And did we mention FREE pizza and drinks?!

Panelists representing different careers (academia, federal agencies, state agencies, NGOs, consulting, sensor development, and more!) will be situated around the room. Students will receive "date" cards that indicate what tables they are to start with and what tables to go to next. MCs Randy Chambers and Amanda Kahn will announce when

students will need to move on to their next “date”. This event is a great way to start the week of networking at ERF 2007, so come on down!

The networking continues afterward at...

ERF Unplugged

Date and Time: Monday, November 5, 8:30 pm – until??
Location: McFadden’s Saloon, www.mcfaddensprovidence.com, 5 minutes from the RICC. See street map on page 88.
Cost: \$5.00 cover charge to help defray costs

Join fellow ERFlings at McFadden’s Saloon for an evening of music and fun with talented ERF musicians and singers. The *ERFtones* band, assembled from various coastal and environmental programs, will kick off the evening, performing a wide variety of songs (blues, folk, rock, etc.). Then, ERFlings can participate by playing an instrument and/or sing your favorite song with the band as your backup! This is too good to miss!!

TUESDAY, NOVEMBER 6, 2007

Women’s Aquatic Network Breakfast - Science Communications and Gender

Date and Time: Tuesday, November 6, 7:00 am - 8:00 am
Location: Rhode Island Convention Center, fifth floor, Rotunda

Seven in the morning may sound early to some ERF attendees, but Tuesday’s Women’s Aquatic Network (WAN) breakfast will reward early risers with a compelling and fun program, and an excellent opportunity to network with current and soon-to-be colleagues and friends.

This year’s event will present a speaker who straddles the worlds of science and communications, perhaps uniquely. University of Rhode Island Communications Studies and Theater Professor **Dr. Judith Swift** will speak on “Communicating Science Through the Filter of Gender.” Dr. Swift specializes in the direction and development of new scripts, has written and developed scripts for film and video which have aired on several PBS affiliates, and has constructed, authored or co-authored over 40 productions based on historical events or science. She also regularly coaches political candidates, corporate officers, and civic officials regarding communication and presentation skills.

Professor Swift joined URI in 1972. Her teaching interests include humor in communication, nonverbal and subtextual communication, as well as presentation skills. She has taught extensively in acting styles, improvisation, nonverbal acting, and directing for the theatre. She is the Associate Director of the Coastal Institute at URI, whose mission is to advance knowledge and develop solutions to environmental problems in coastal ecosystems. Swift has also written and directed a series of “science cabarets,” musical shows with science themes, including *Science and Glitz: A Differential Equation*, a musical performance about coastal issues. The production included such musical numbers as “Estuarine Benefits,” “Song of the Nile,” “The Water Cycle Boogie,” and “Advance,” a song about the frustrations women face in advancing their careers in the science and mathematics disciplines.

In addition to Dr. Swift’s presentation, ample time will be left for networking and informal discussions.

Three Thematic Plenaries

Date and Time: Tuesday, November 6, 4:00 pm - 5:30 pm
Location: Rhode Island Convention Center, fifth floor, Ballroom B and Ballroom D, and in the Westin Hotel, street level, Narragansett Ballroom A

Plenary session will replace the concurrent oral session on Tuesday afternoon. See page 28 for details.

ERF Happy Hour

Date and Time: Tuesday, November 6, 5:30 pm
Location: Rhode Island Convention Center, third floor, Exhibit Hall C & D

Cash bar and munchies. Check out the posters; visit the exhibitors; rendezvous with friends and colleagues for this evening’s activities. Team formation area for Club ERF pool and dance competitions.

Club ERF

Date and Time: Tuesday, November 6, 6:00 pm until...
Location: Snooker’s Lounge (www.snookerspooillounge.com).
Cost: Ticketed Event - \$29.00 per person
Transportation: Bus service will run between the Convention Center and Snookers from 6:00 pm – 10:00 pm

Dinner, drink ticket, pool tables, dancing, special ERF activities, Affiliate Society challenges including pool and dance competitions.

Yes, it’s 6 pm and time to get out into Providence and head over to 145 Clifford St. – ERF is taking it over for the night!

There you will find a **buffet** of sandwiches, pizza, veggies and other delicious foods. Use your **drink coupon** for a beer or glass of wine. Check out what ERF surprises you might find showing on the big projection screens over the main bar. Mingle with fellow ERF attendees in the spacious nightclub, which even has an outside deck (sometimes it IS warm in early November in Providence!). Find a quiet spot to catch up with friends by one of the windows or at the second bar.

But don’t just talk – play pool. Yes, we will have **14 pool tables** where you can challenge your friends and impress your colleagues. Whether you have never played pool or if you hone your skills at every opportunity, there will be plenty of tables for everyone. Gather past and present members of your lab to play together. Get federal employees and academics together and see what happens. There will be at least one challenge – the home team, the New England Estuarine Research Society, will take on any or all ERF affiliates for bragging rights until ERF 2009.

At 8 pm, you can keep playing pool, or move to the other end of the Club for dancing or just to listen to the music. And not just any dancing, but **dancing to the Outlyers**. A New England-based band, the *Outlyers*, took their name from the scientific term related to something apart from the norm – that is a good way to describe the diverse songlist the band has built and the way it interacts with audiences. This five-piece band with three vocalists easily switches from swinging blues to rock to alt-country and everything in between. The *Outlyers* play many songs by familiar artists but keep it interesting by selecting songs that you may have rarely heard played live but are perfect for a dancing and fun-seeking crowd.

The *Outlyers* have a natural connection to ERF - band member Richard Ribb manages the National Estuary Program for Narragansett Bay when he is not playing. You may have danced

to the music of Richard and others at the 2004 Coastal Society meeting or the recent Association of National Estuary Programs meeting, both in Newport, RI. The *Outlyers* like to get the audience involved and to create an atmosphere of fun and enjoyment even if you don't want to dance – **so watch for special ERF activities** along with the music – right up until midnight.

WEDNESDAY, NOVEMBER 7, 2007

(C) ERF International Forum: Reaching Out

Date and Time: Wednesday, November 7, 1:00 pm – 2:00 pm
Location: Rhode Island Convention Center, Ballroom B

Plan to attend this forum to brainstorm with other ERF members on ways to reach out to the international community.

ERF Happy Hour

Date and Time: Wednesday, November 7, 5:30 pm
Location: Rhode Island Convention Center, third floor, Exhibit Hall C & D

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

ERF International Reception plus ERF Business Meeting and Administration Change

Date and Time: Wednesday, November 7, 6:00 pm - 7:30 pm
Location: Westin Hotel, Narragansett Ballrooms

Please stop by to welcome our international members and visitors. Munchies provided. This reception is followed by:

Business Meeting Agenda

- Robert R. Christian, Federation President, presiding
- Welcome
- Retiring Officer's recognition and service awards
- Introduction of the Howarth administration
- Changing of the Guard – Robert Howarth, President, 2007-2009
- Treasurer's Report - Carolyn Keefe
- Estuaries and Coast's Journal Report - Carlos Duarte and James Cloern, Co-Editors-in-Chief
- Membership Report - Joy A. Bartholomew, Executive Director

NERRS Graduate Research Fellows 10-year Celebration

Date and Time: Wednesday, November 7, 6:30 pm - 8:00 pm
Location: Check the conference web site under Events

We are celebrating 10 years of the NERRS Graduate Research Fellows (GRF) program. Current and past GRF's are invited to chat together and network with NERRS researchers while enjoying food and beverages. An inspirational presentation will cap off the evening.

For more information please visit their website at <http://nerrs.noaa.gov/Fellowship/welcome.html>

URI-GSO Reunion

Date and Time: Wednesday, November 7, 7:30 pm – until...
Location: Westin Hotel, Newport/Washington Rooms

This is a reunion of the Alumni of the Graduate School of Oceanography and the University of Rhode Island. Contact Veronica Berounsky for details at vberounsky@gso.uri.edu.

Student Pub Night

Date and Time: Wednesday, November 7, 9:00 pm – until...
Location: Ri Ra Irish Pub, <http://www.rira.com>. See street map on page 88. For walking directions, go to the conference web site.

Students, undergrad and graduate alike: a grand gathering at Ri Ra Irish Pub has been reserved for those of you anxious to steal away for an evening of food, drinks, live music, good company, and late night conversation with your peers. In honor of your efforts as a diligent and enthusiastic ERF 2007 attendee, all students (and any others who wish to join) can enjoy unlimited \$3 pints (in any flavor of delicious beer served by Ri Ra) and 1/2-priced burgers (veggie burgers included)!

Student pub night is your chance to give your brain a break, enjoy some Providence nightlife, and best of all, network and socialize with your peers. And for those of us too tired to make a long trek out into the city, Ri Ra is conveniently located less than a block away from the Westin Hotel at 50 Exchange Terrace.

THURSDAY, NOVEMBER 8, 2007

Three Thematic Plenaries

Date and Time: Thursday, November 8, 8:00 am - 9:45 am
Location: Rhode Island Convention Center, fifth floor, Ballroom B and Ballroom D, and in the Westin Hotel, street level, Narragansett Ballroom A

Plenary session will replace the concurrent oral session on Thursday morning. See page 38 for details.

Student Awards & ERF 2007 Farewell Party... Come to the Coastal Cabaret!

Co-sponsored by National Sea Grant

Date and Time: Thursday, November 8, 5:30 pm - 7:30 pm
Location: Rhode Island Convention Center, fifth floor, Ballroom A and the Rotunda

Light hors d'oeuvres and bar (drink ticket provided). Student Presentation Awards. Affiliate Challenge Prizes. Carbon Neutral check presentations.

Throughout this week our volunteer judges (three per presentation) 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, watch the cabaret, say farewell until ERF 2009 in Portland, Oregon and of course, eat, drink and be merry!

It's a Shore Thing: Coastal Cabaret

Lyrics Judith Swift and Charles Cofone
Music and Arrangements Charles Cofone
Director Judith Swift
Keyboard and Vocals Charles Cofone
Vocals Casey Seymour-Kim

Swift has written and directed a series of "science cabarets," musical shows with science themes, including *Science and Glitz: A Differential Equation*, a musical performance about coastal issues. That production included such musical numbers as "Estuarine Benefits," "Song of the Nile," and "The Water Cycle Boogie."

Local, Hotel and Transportation Information

WEATHER

Rhode Island's average temperature for the entire year is near 50 degrees, with April through June and September through mid-November the most delightfully moderate seasons. The average temperatures during November are 54 degrees Fahrenheit for an average high with an average low of 34 degrees Fahrenheit.

Rhode Island has no regular "rainy" or "dry" season, with precipitation fairly evenly distributed throughout the year. The first measurable snowfall of winter generally comes toward the end of November.

BUSINESS OFFICE SERVICES

The UPS Store # 4185

Located just a block down from the Biltmore Hotel.

68 Dorrance Street

Phone: (401)521-8200

Fax: (401) 521-8201

E-mail: store4185@theupsstore.com

Kinko's/FedEx

Located 1.73 miles from the convention center.

236 Meeting Street

Phone: 401-273-1200

Fax: 401-861-6447

E-mail: usa3593@fedexkinkos.com

DAY CARE SERVICES

Newport Nannies

Web: <http://www.newportnannies.com>

Phone: 401-270-7247

CONFERENCE HOTELS

The Westin Providence (connected to the convention center)

1 West Exchange Street, Providence RI 02903

Phone: 401-598-8000, Fax: 401-598-8290

Downtown Providence Courtyard by Marriott

32 Exchange Terrace, Providence, RI 02903

Phone: 401-272-1191, Fax: 401-272-1416

Providence Biltmore

11 Dorrance Street, Providence, RI 02903

Phone: 401-455-3160, Fax: 401-455-3040

Hilton Providence

21 Atwells Avenue, Providence, RI 02903

Phone: 401-831-3900, Fax: 401-751-0007

Marriott Providence Downtown

One Orms Street, Providence, RI 02904

Phone: 401-272-2400

Radisson Hotel Providence Harbor

220 India St, Providence, RI 02903

Phone: 401-272-5577, Fax: 401-272-0251

CAB COMPANIES

(All area codes are 401)

Hank Turgeon (Bridge Taxi)	465-2731
Yellow	941-1122
Corporate	231-2228
Checker	944-2000
Big Daddy	274-1101
Red & White	521-4200

CAR RENTAL

Avis has been selected as the "official" car rental agency for the 2007 ERF meeting. The Avis Worldwide Discount (AWD) Number for the meeting is: J998420. Please call Avis direct at 1-800-331-1600 to receive the best car rental rates available and specify the AWD #J998420 when making your reservation.

Other Car Rental Services: (All area codes are 401)

Airport Taxi & Limo	737-2868
Bonanza Bus Lines	751-8800
Alamo	739-0696
Budget	739-8986
Dollar	739-8450
Enterprise	739-1005
Hertz	738-3550
National	732-0907
Payless	736-8503
Thrifty	739-8660

TRAIN SERVICE

Providence is located on Amtrak's Northeast Corridor between Washington DC/New York City and Boston. High speed Acela Express train service transports passengers from New York City to Providence in about two and a half hours. For tickets call 1-800-USA-RAIL or visit www.amtrak.com.

The Massachusetts Bay Transit Authority (MBTA) runs low cost commuter trains to Providence from Boston and other points in Massachusetts. Call 1-800-392-6100 or visit www.MBTA.com for schedules and fares.

BUS SERVICE

Bonanza (888-751-8800 or www.bonanzabus.com) and Greyhound (800-231-2222 or www.greyhound.com) have stations in the ProvidenFce area. For local public transportation, the Rhode Island Public Transit Authority (RIPTA) runs buses and trolleys statewide (800-244-0444 or www.ripta.com).

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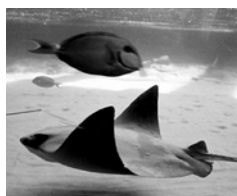
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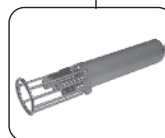


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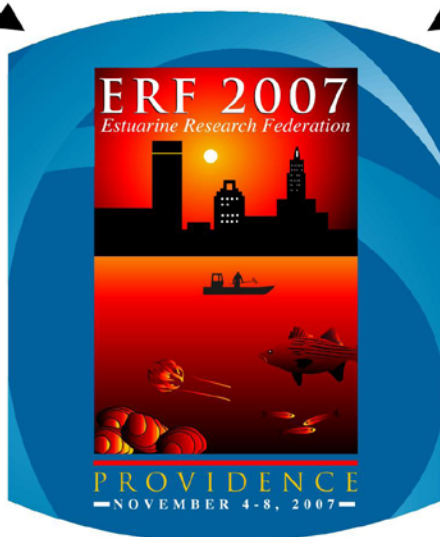
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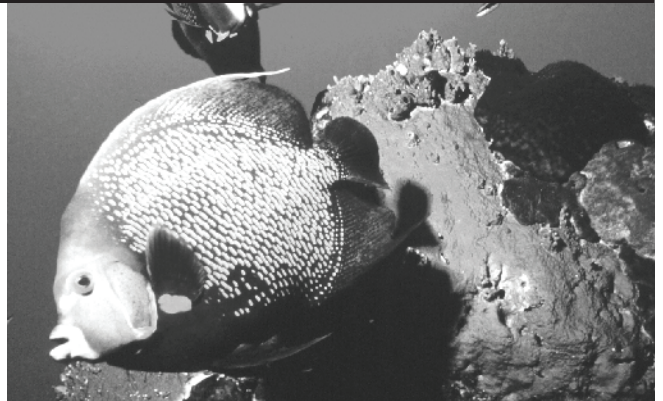
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CSCOR utilizes a competitive process to support long-term, regional research and interagency initiatives in areas such as coastal eutrophication, harmful algal blooms, cumulative coastal impacts, coral reef health, and fisheries ecosystems.

CSCOR also supports efforts to translate the results of its investments and other scientific findings into accessible and useful information for coastal managers, planners, lawmakers, and the public to help balance the needs of economic growth with those of conserving our Nation's Great Lakes, estuarine, and coastal ocean resources.



CSCOR is proud to be a sponsor of the ERF 2007 Conference

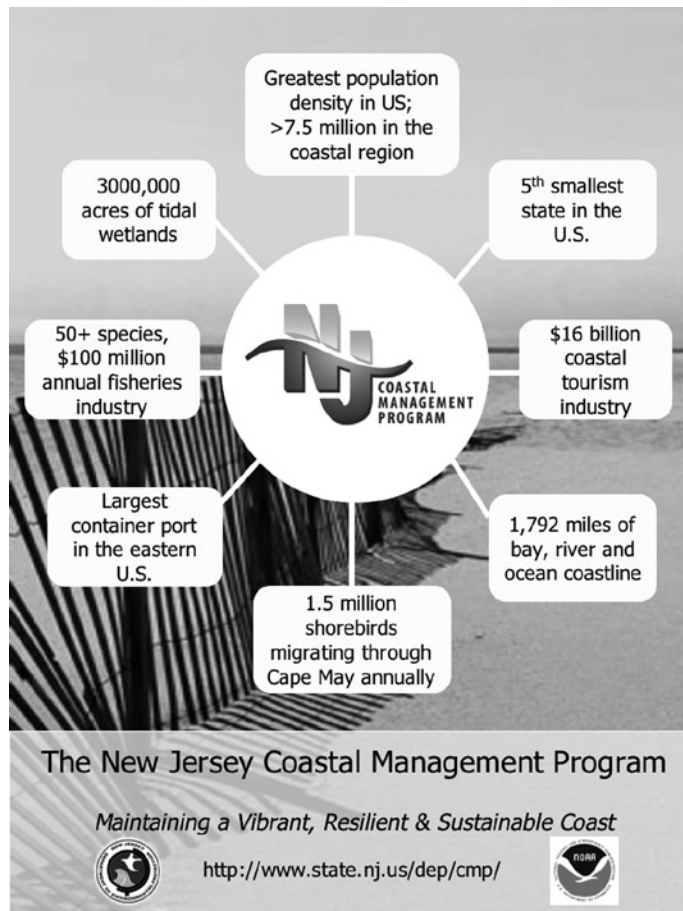
<http://www.cop.noaa.gov>

Study ...get Muddy!

- Conduct your masters or doctoral research at a National Estuarine Research Reserve while gaining hands on experience.
- Award amount is \$20,000/year.
- Students must be enrolled in an accredited U.S. college or university and may apply for up to 3 years of funding.
- Up to 25 fellowships available.
- Deadline for applications: November 1, 2007
Apply via www.grants.gov.



For more information visit: www.nerrs.noaa.gov/fellowship



Serving the Nation's Coastal Resource Management Programs by Linking People, Information, and Technology

Specializing in

- Geographic information systems
- Remote sensing
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www.csc.noaa.gov

NOAA Coastal Services Center
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The Estuarine Research Federation would like to recognize

The Atlantic Ecology Division of the U.S. EPA

Office of Research and Development

National Health and Environmental Effects Research Lab

for their contributions towards the ERF 2007 Conference.



NOAA FISHERIES

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VISIT OUR WEBSITE @ WWW.NMFS.NOAA.GOV/HABITAT/



NOAA Sea Grant College Programs

<http://www.seagrants.noaa.gov/colleges/index.html>

The National Sea Grant College Program engages a network of the nation's top universities in conducting scientific research, education, training, and extension projects designed to foster science-based decisions about the use and conservation of our aquatic resources.

**The Sea Grant Colleges listed below are sponsoring the
ERF 2007 conference in Providence, Rhode Island**

Alaska	http://seagrants.uaf.edu/
California -UCSD	http://www-csgc.ucsd.edu/
Connecticut	http://www.seagrants.uconn.edu/
Delaware	http://www.ocean.udel.edu/seagrants/
Georgia	http://www.marsci.uga.edu/gaseagrants/
Hawaii	http://www.soest.hawaii.edu/SEAGRANT/index.php
Louisiana	http://www.laseagrants.org/
Maine	http://www.seagrants.umaine.edu/
Maryland	http://www.mdsg.umd.edu/
Massachusetts Institute of Technology	http://web.mit.edu/seagrants/
Mississippi-Alabama	http://www.masgc.org/
New Jersey	http://www.njmsc.org/Sea_Grant/SeaGrant.html
New York	http://www.seagrants.sunysb.edu/
North Carolina	http://www.ncseagrants.org/
Oregon	http://seagrants.oregonstate.edu/
Rhode Island	http://seagrants.gso.uri.edu/
South Carolina	http://www.scseagrants.org/
Virginia	http://www2.vims.edu/seagrants/
Woods Hole Oceanographic Institution	http://www.whoi.edu/seagrants/

RESEARCH NOW, FOR THE FUTURE

Problem driven, solution oriented—the University of New Hampshire is committed to providing the knowledge and tools that coastal resource managers need to protect and manage our nation's coasts for the future.

UNH's collaborative research and outreach programs are helping to advance ecosystem-based management; develop tools and techniques to monitor, restore, and protect coastal habitats; and help managers cope with the impacts of climate change, extreme weather, and intense development pressures.

A strong partnership with the National Oceanic and Atmospheric Administration has helped UNH establish programs like New Hampshire Sea Grant, which

sponsors and delivers critical science to our local community, and the Cooperative Institute for Coastal and Estuarine Environmental Technology, which develops tools for clean water and healthy coasts nationwide. And as one of the few land, sea, and space grant universities in the nation, UNH is uniquely suited to provide the hands-on research and experiential learning essential to training the next generation of coastal researchers and resource managers.



UNIVERSITY of NEW HAMPSHIRE

The UNH Marine Program, New Hampshire Sea Grant, and the UNH Jackson Estuarine Laboratory are proud sponsors of ERF 2007 and the Estuarine Research Federation's commitment to the stewardship of our estuarine and coastal resources.

❖ **University of New Hampshire marine programs:** New Hampshire Sea Grant College Program; Jackson Estuarine Laboratory; UNH/NOAA Cooperative Institute for Coastal & Estuarine Environmental Technology; Coastal Marine Laboratory; Center for Coastal & Ocean Mapping; Joint Hydrographic Center; Coastal Response Research Center; Shoals Marine Laboratory; Atlantic Marine Aquaculture Center; Large Pelagics Research Center; Northeast Consortium; UNH Stormwater Center; and the Coastal Observing Center.

www.unh.edu

Getting to Know Southern New England

ERF 2007 CONFERENCE FIELD TRIPS

Welcome to Southern New England and especially to Rhode Island!! As you know, many lasting impressions of ERF conferences happen on the field trips! ERF 2007 is offering both guided and self-guided field trips and tours, ranging from a half day to a full day. Come and explore! We know that you will have fun!!

GUIDED TOURS

1. Providence Walking Tour with the Rhode Island Historical Society: Saturday, Nov 3 and Sunday, Nov 4, 1:30 pm – 3:00 pm
2. Historic Seaport of Newport, Rhode Island: Saturday, November 3, 9:00 am – 2:00 pm
3. Mystic Aquarium & Institute for Exploration: Sunday, November 4, 8:00 am – 2:00 pm
4. Boat Tour: Prudence Island Reserve/ Save the Bay: Sunday, November 4, 8:00 am – 5:00 pm
5. Buzzards Bay Estuary: Sunday, November 4, 8:00 am – 5:00 pm
6. Woods Hole and Waquoit Bay Research Reserve: Sunday, November 4, 8:00 am – 5:00 pm
7. Round-the-Bay: Habitat Restoration in Narragansett Bay: Sunday, November 4, 8:00 am – 5:00 pm
8. Mystic Aquarium & Institute for Exploration plus Mystic Seaport: Sunday, November 4, 8:00 am – 5:00 pm

SELF-GUIDED TOURS

Information can also be obtained at the Visitors Center located on the street-level floor of the Rhode Island Convention Center in Providence.

1. Boston, Massachusetts: <http://www.searchboston.com/dir/Boston/Attractions/> and <http://www.bostonusa.com/index.htm>
2. Providence, Rhode Island: <http://www.pwcvb.com/subsites/ERF/>

As of 2008 Springer is proud to publish

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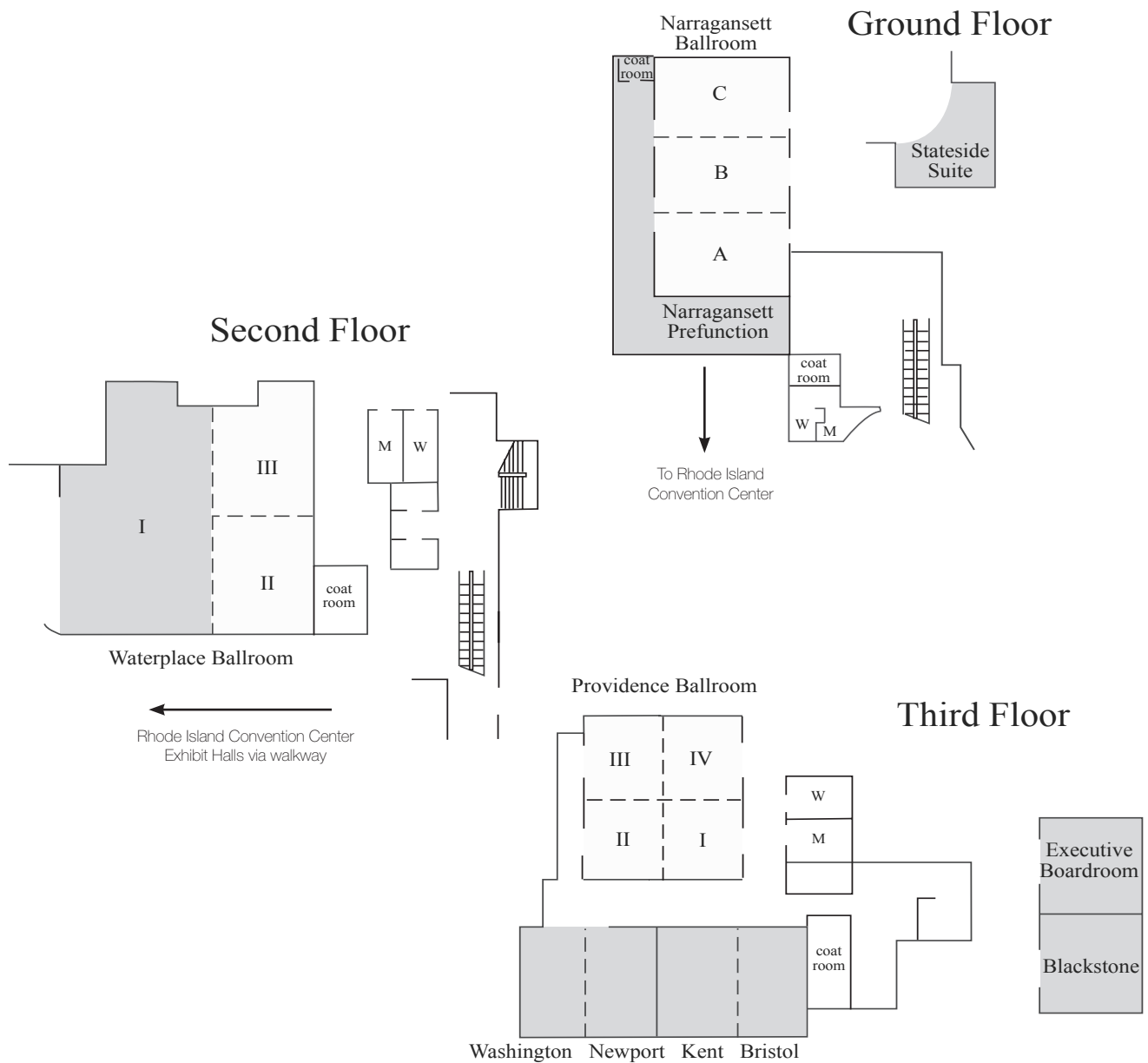
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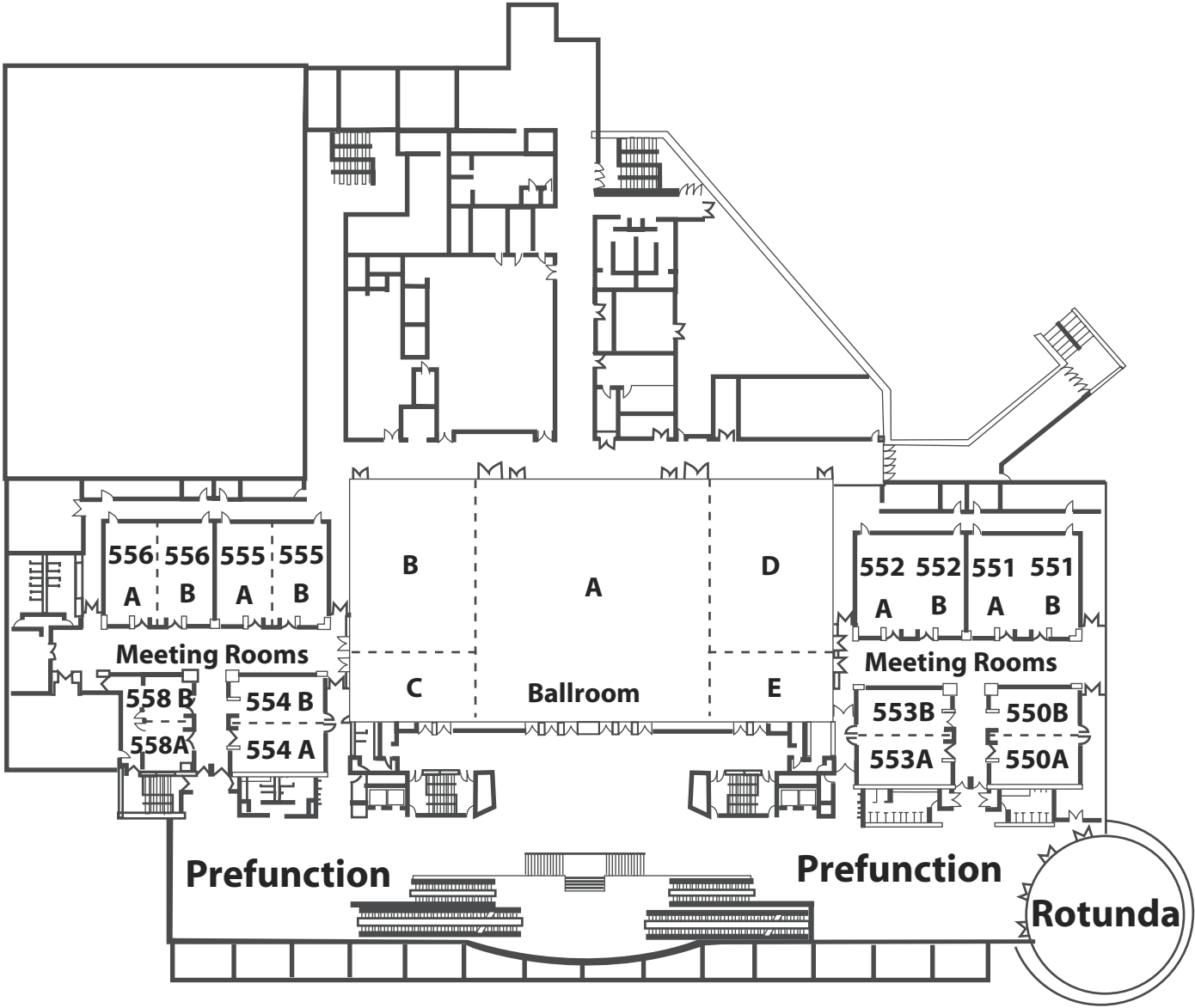
397 Washington Street Duxbury, MA 02332 781.934.0571

The Westin Providence Meeting Rooms Maps



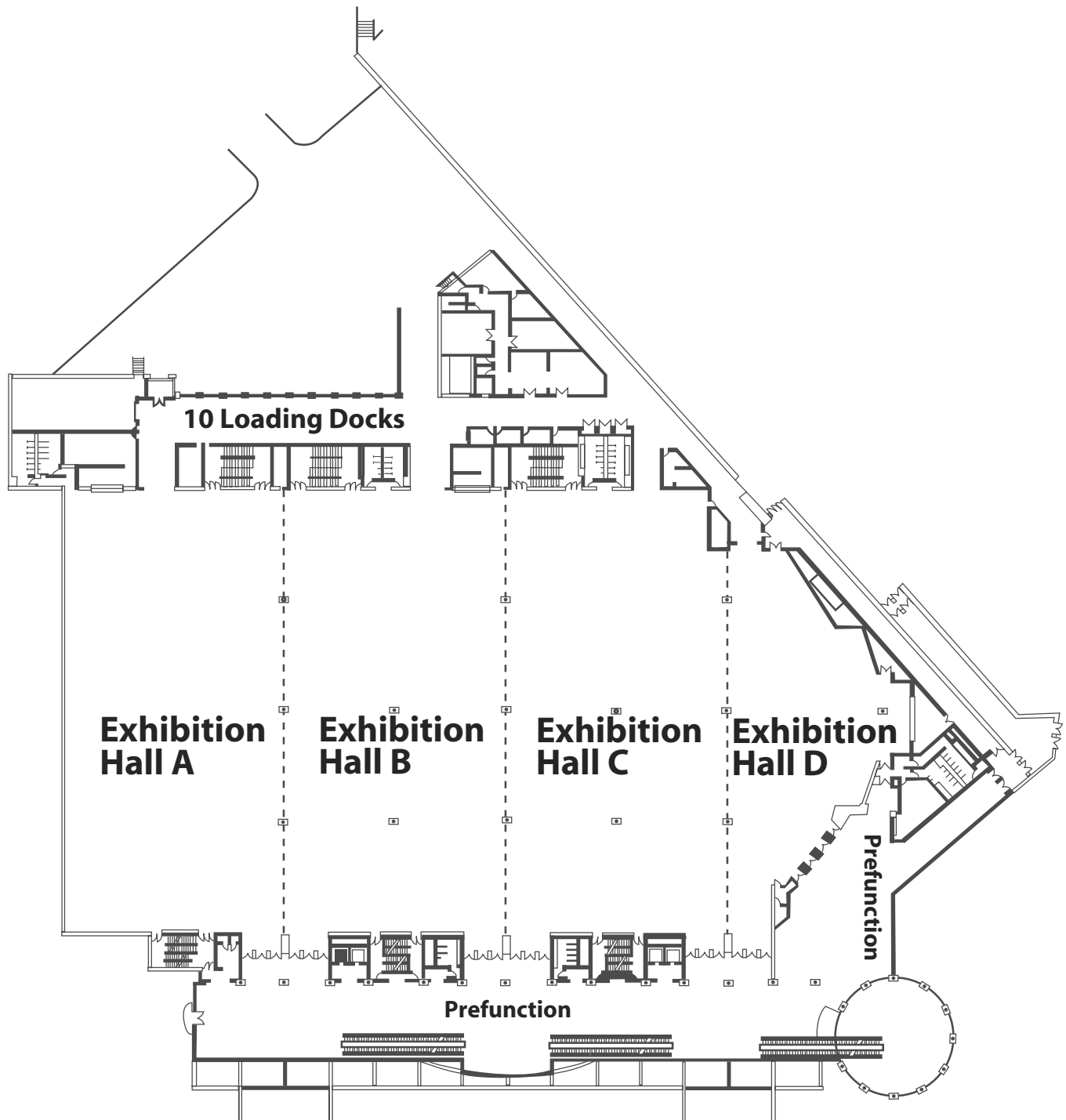
RICC - Ballroom & Meeting Rooms Map

FIFTH LEVEL



RICC - Exhibit Floor Map

THIRD LEVEL(SAME AS WATERPLACE BALLROOM)

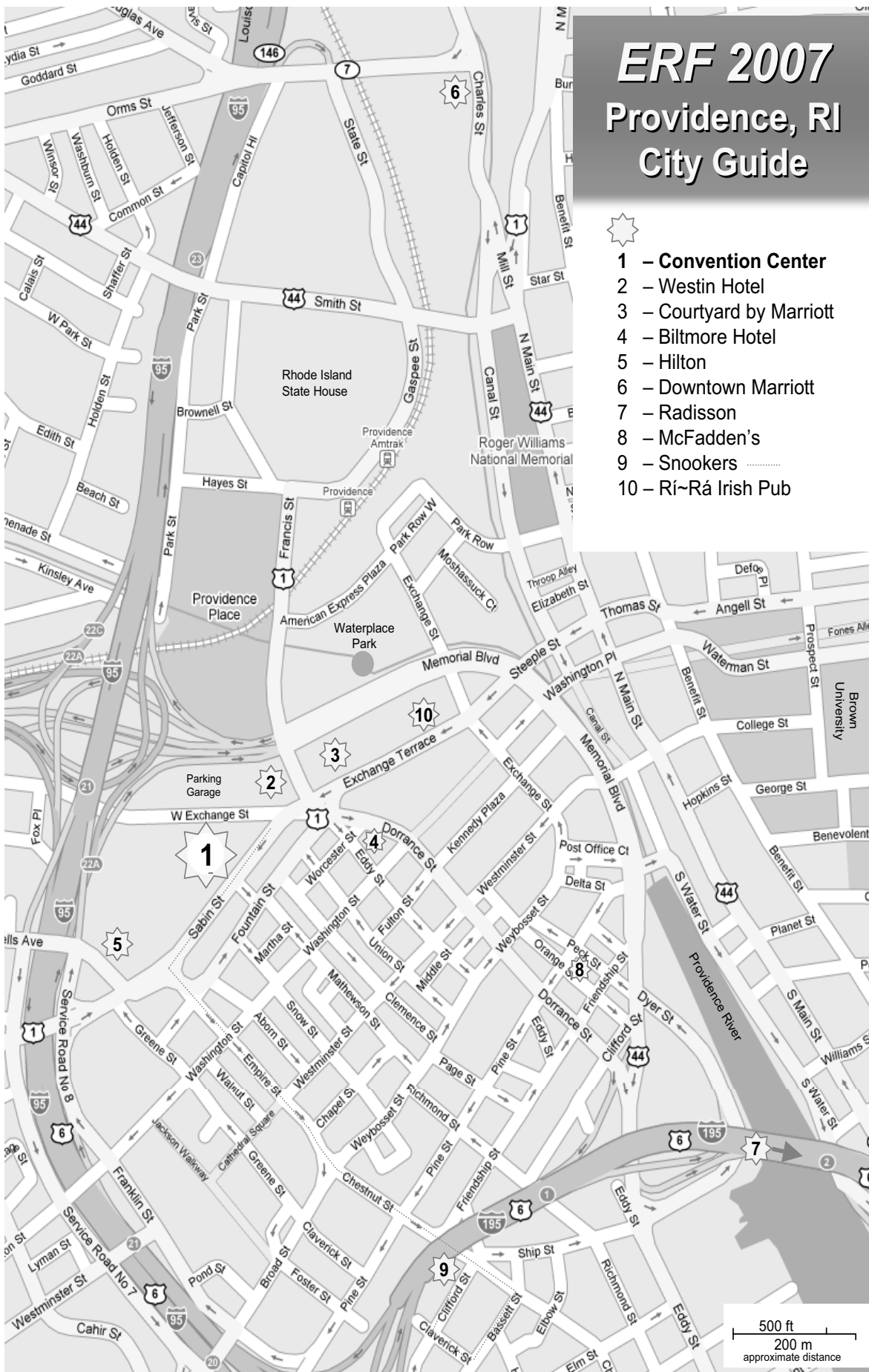


ERF 2007

Providence, RI City Guide



- 1 – Convention Center
- 2 – Westin Hotel
- 3 – Courtyard by Marriott
- 4 – Biltmore Hotel
- 5 – Hilton
- 6 – Downtown Marriott
- 7 – Radisson
- 8 – McFadden's
- 9 – Snookers
- 10 – Rí-Rá Irish Pub



500 ft
200 m
approximate distance