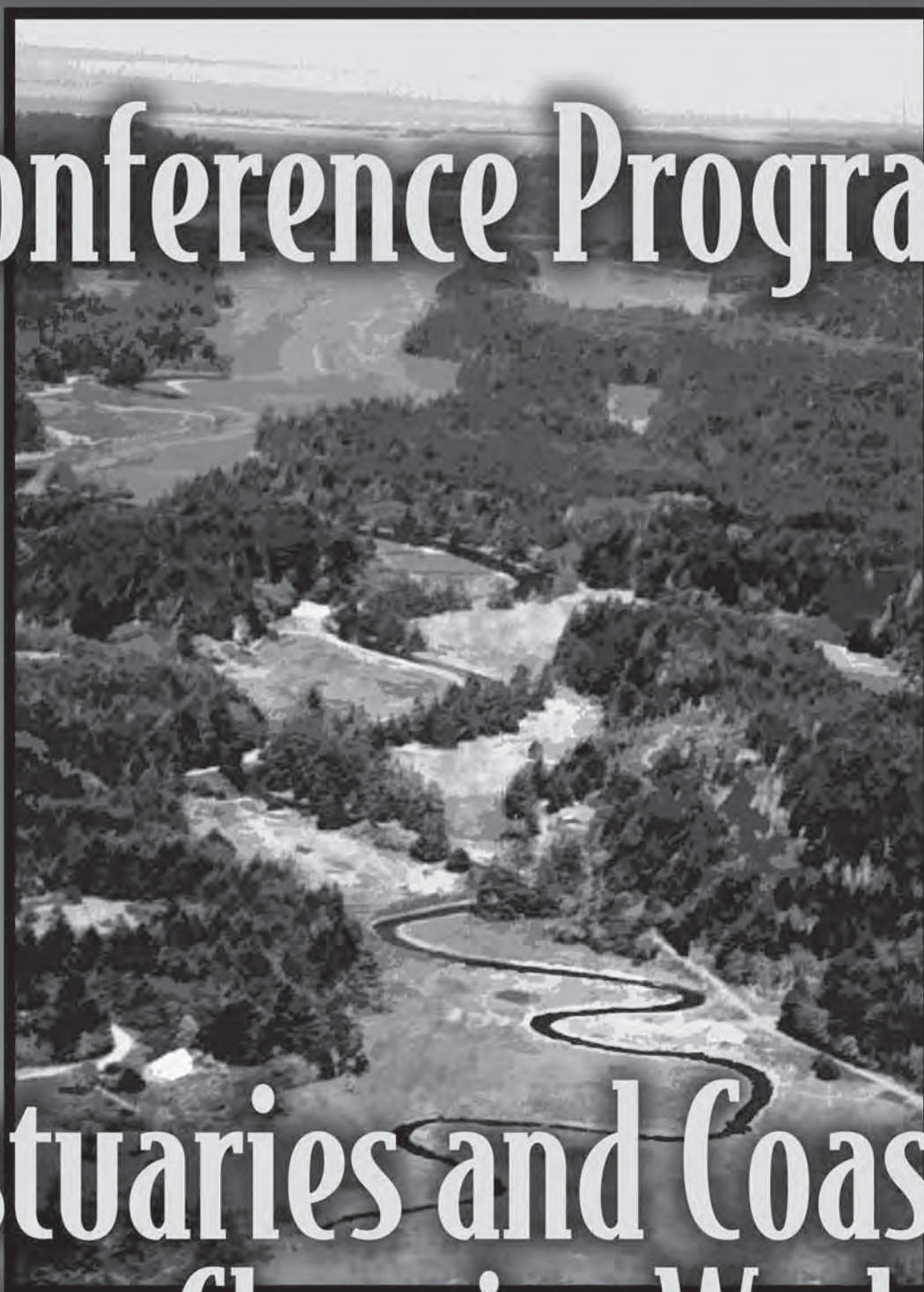


Coastal and Estuarine Research Federation 20th Biennial Conference

Conference Program



Estuaries and Coasts in a Changing World

1-5 November 2009 Portland, Oregon USA

Thank You!

TO THE CERF 2009 SPONSORS AND CONTRIBUTORS

The Coastal and Estuarine Research Foundation is grateful to the sponsors and contributors who have stepped forward to support the 2009 biennial conference through funds or significant in-kind services. Their support testifies to the importance and relevance of the conference and to the generosity of the estuarine and coastal sciences community.

MAJOR SPONSORS



OWOW, COASTAL
MANAGEMENT BRANCH



OCRM, NATIONAL MARINE
PROTECTED AREAS CENTER



NOAA FISHERIES, OFFICE OF
HABITAT CONSERVATION



CENTER FOR SPONSORED
COASTAL OCEAN RESEARCH

OTHER SPONSORS

Oregon Department of Land and Conservation
Anonymous Donor via Community Foundation of South Puget Sound
U.S. Fish and Wildlife Service - Pacific Region Coastal Program
NOAA, National Ocean Services
Western Association of Marine Laboratories
Restore America's Estuaries
Lower Columbia River Estuary Partnership
Alliance for Coastal Technologies

IN-KIND SPONSORS

OR DLCD, Coastal Program
South Slough Estuarine Reserve
NOAA, National Marine Fisheries Service
EPA, Western Ecology Division
Dauphin Island Sea Lab
New Hampshire Sea Grant
Oregon Sea Grant
Society of Wetland Scientists - Pacific Northwest Chapter

20th Biennial Conference of the Coastal and Estuarine Research Federation

PORTLAND, OREGON • 1-5 NOVEMBER 2009

Contents

Welcome to the 20th Biennial Conference of the Coastal and Estuarine Research Federation!	2
CERF 2009 Conference Leadership Committee.....	3
CERF Governing Board, Committees, Journal and Staff	4
Conference at-a-Glance.....	5
Special Events, Workshops & Social Functions-at-a-Glance.....	6
Working Towards a Carbon-Neutral Conference	7
Sustainability Efforts at the Oregon Convention Center	7
CERF Conference Recording Policy	7
Child Care.....	8
Concessions	8
Parking at the Oregon Convention Center	8
Conference Registration	8
Computer Central	8
Poster Presentations	8
Plenary Session and 2009 Scientific Awards Presentation.....	9
CERF 2009 Conference Keynote Address.....	9
Monday Oral Presentations	10-17
Tuesday Oral Presentations.....	18-23
Chautauquas (Forums)	24-27
Climate Change.....	24
Salmon (Past, Present, Future)	24
Ocean Acidification—The Other CO ₂ Problem.....	26
Puget Sound/Urban Estuaries	27
Wednesday Oral Presentations	28-35
Thursday Oral Presentations	36-43
Monday-Tuesday Poster Sessions	44-50
Wednesday-Thursday Poster Sessions	51-57
Poster Hall and Exhibit Area Map	58
CERF 2009 Workshops & Additional Workshop Discussions.....	59
Exhibitor Roster.....	60
OCC First Level	61
Special Meeting and Social Function Descriptions.....	62
Oral & Poster Author Index.....	64-75
Become a member of CERF!	82

Welcome to the 20th Biennial Conference of the Coastal and Estuarine Research Federation!

GREETINGS TO ALL CERF 2009 CONFERENCE ATTENDEES!

On behalf of the entire Conference Planning Team and the CERF Board of Directors, we are pleased to welcome you to the Coastal and Estuarine Research Federation's 20th Biennial International Conference in Portland, Oregon.

Our conference theme is "Estuaries and Coasts in a Changing World." As with all CERF meetings (and ERF meetings past), this theme is reflected in the mix of scientific and management-oriented presentations as well as a focus on regional issues of the Pacific Northwest. We are proud to present a full slate of 974 oral and 408 poster presentations in ten concurrent sessions most days and eleven on some as well as an exciting lineup of keynote presenters, a rich offering of workshops and field trips, interesting vendor and sponsor booths, and interaction areas inside an enormous poster hall. Your response to our Call for Papers was very impressive, especially considering economic constraints we all face, and you have helped to make this a robust scientific conference!

We meet in the Oregon Convention Center, a showcase venue in the middle of Portland. The center pursues sustainability and environmentally friendly practices and is ideal for spontaneous conversations and get-togethers. We have planned social activities including a Fun Run, contests, receptions, and performances to help you get acquainted or re-acquainted with friends and colleagues from far and wide. We hope you will get out and enjoy Portland and do your best to "keep Portland weird." Talk about River City! This town has two rivers, a wagon load of bridges, and an array of great restaurants and pubs as well as the biggest independent book store going.



And since you taxed your carbon budget just traveling to the meeting, you can forget the car and just hop on the MAX Light Rail and other public transit that stops right outside the Convention Center doors.

Planning this meeting has been a group venture. Our planning team has been working for over two years toward this first week of November 2009. Portland would not have been ready for you and the other participants without the tremendous efforts of the CERF 2009 steering committee, CERF headquarters staff, the Schneider Group, and each member of our excellent team of volunteers and workers. Many dedicated people have given selflessly of their time and talent to ensure that you have the best Federation conference experience possible. So thanks to them, and thanks to you for coming! We are thrilled you are here in Portland!

CERF 2009 Conference Leadership Committee

Conference Co-Chairs	Bob Bailey, OR DLCD, Coastal Program Mike Graybill, South Slough Estuarine Reserve
Scientific Program Co-Chair	Bob Emmett, NOAA, National Marine Fisheries Service
Scientific Program Co-Chair, Poster Chair	Walt Nelson, EPA, Western Ecology Division
Workshops	Ruth Carmichael, Dauphin Island Sea Lab
Team Members	Antonio Baptista, Oregon Health & Science University Francis Chan, Oregon State University Fred Prah, Oregon State University Alan Shanks, University of Oregon Laurie Weitkamp, NOAA, National Marine Fisheries Service Cheryl Brown, NOAA Oceanic and Atmospheric Research
International Program	Daniel Conley, Lund University
Abstract Database Manager	Sue Chalifoux
Computer Central Manager	Jeremy Gingell, Stumptown Tech LLC
Field Trips	Ralph Garono, Earth Design/SWS Roy Lowe, U.S. Fish & Wildlife Service Jim Good, Oregon State University
Communications/Publicity	Joe Cone, Oregon Sea Grant Patricia Andersson, Oregon Sea Grant George Cathcart, NOAA Estuarine Reserves Division Julie Curtis, Oregon Department of State Lands
Social Network Manager	Leanna Heffner, University of Rhode Island
Twitter	John Bragg
Social Events – Discover Portland	Catherine Corbett
“CERF the Turf” 5K Run/Walk	Janet Nestlerode, EPA Gulf Ecology Division
Student Activities Chair	Krista Kamer, Moss Landing Marine Lab
Student Travel Awards	Paul Carlson, Florida Marine Research Institute
Student Presentation Judging/Awards	Joel Darnell, HDR Consulting Bellevue Jason Kent, HDR Consulting Portland
Student Workers Co-Chairs	Marty Chintala, EPA Atlantic Ecology Division Dee Kreeger, Delaware Estuary Program
Student Career Event Chair	Leanna Heffner, University of Rhode Island
Advisory	Beth Hinchey-Malloy
Conference Oversight	Joy Bartholomew, CERF Headquarters Ally Doughty, CERF Headquarters
Web Master	Chris Schneider, Schneider Group
Conference Administration	Helen Schneider Lemay, Schneider Group

CERF Governing Board, Committees, Journal and Staff

2007-2009 Officers & 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, PNW National Laboratory, 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

2007-2009 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

2009-2011 Officers & Members-At-Large

President:	Susan Williams, University of California, Davis
President-Elect:	Walter Boynton, University of Maryland System, Center for Environmental Science
Past President:	Robert Howarth, Cornell University
Secretary:	Leila Hamdan, U.S. Naval Research Lab
Treasurer:	Chris Tanner, St. Mary's College of Maryland
Int'l. Member-at-Large: (2007-2011)	Dan Conley, Lund University, Sweden
Member-at-Large: (2007-2011)	Ivan Valiela, Marine Biological Laboratory

Member-at-Large: (2009-2013) Robert Diaz, College of William and Mary Virginia Institute of Marine Science

Member-at-Large: (2009-2013) Janet Nestlerode, EPA Gulf Ecology Division

2009-2011 Affiliate Society Presidents

ACCESS:	Martha Jones, Cape Breton University
AERS:	Peter Straub, Richard Stockton College
CAERS:	Peggy Fong, Dept. of Ecology and Evolutionary Biology
GERS:	Ed Buskey, Dept. of Marine Science
NEERS:	Stephen Hale, University of New England
PERS:	Steven Rumrill, South Slough National Estuarine Research Reserve
SEERS:	Denise Sanger, SC Sea Grant Consortium

Journal Officials

Co-Editor-in-Chief:	Carlos M. Duarte, Instituto Mediterraneo de Estudios Avanzados Esplorles (Islas Baleares) Spain
Co-Editor-in-Chief:	Jim Cloern, U.S. Geological Survey
Editorial Coordinator:	Taylor Bowen, Charlottesville, Virginia

CERF Committee Chairs

Education:	Leila Hamdan, U.S. Naval Research Lab
Policy and Public Outreach:	Susan Williams, University of California, Davis
Membership and International (MAIN):	Bob Christian, East Carolina University
Finance:	Carolyn Keefe, University of Maryland

CESN

Managing Editor:	Merryl Alber, University of Georgia
Science Writer:	Nancy Steinberg, Newport, Oregon
Coordinator:	Chastity Miller

CERF Staff

Executive Director:	Joy Bartholomew
Program Manager:	Alejandra (Ally) Doughty
Office Manager:	Susan Helmrich
Web Master:	Adam Haile
Membership Services:	sg Meeting and Marketing Services

Conference at-a-Glance

Saturday 31-Oct	Sunday 1-Nov			Monday 2-Nov	Tuesday 3-Nov	Wednesday 4-Nov	Thursday 5-Nov	Friday 6-Nov	
	Field Trips all day	Conference Setup		CERF Governing Board meeting	Women In Science Networking Breakfast		CESN Breakfast by invitation	CERF Governing Board Meeting 2009- 2011 Williams Admin Board Members and CERF 2009 Leaders (morning only)	
				Morning Oral Sessions 8:00 am - 9:45 am	Morning Oral Sessions 8:00 am - 9:45 am	Morning Oral Sessions 8:00 am - 9:45 am	Morning Oral Sessions 8:00 am - 9:45 am		
			Morning break - Posters and Exhibits Open 9:45 am - 10:15 am						
				Morning Oral Sessions cont. 10:15 am - 12:00 pm	Morning Oral Sessions cont. 10:15 am - 12:00 pm	Morning Oral Sessions cont. 10:15 am - 12:00 pm	Morning Oral Sessions cont. 10:15 am - 12:00 pm		
		Work- shops 1:30 PM to 5:00 PM	Registration and Computer Central Open at 1:00 pm	Poster Sessions ... Lunch Available for Purchase... Exhibits Open 12:00 pm - 2:00 pm (Posters are available for viewing for two days. Tuesday afternoon is the turn over.)					CERF 2011 Lunch (By Invitation)
					Afternoon Oral Sessions 2:00 pm - 3:30 pm	Afternoon Oral Sessions 2:00 pm - 3:30 pm	Afternoon Oral Sessions 2:00 pm - 3:30 pm	Afternoon Oral Sessions 2:00 pm - 3:30 pm	
				Afternoon break - Posters and Exhibits Open 3:30 - 4:00 pm					
					Afternoon Oral Sessions cont. 4:00-5:45 pm	4 Chautauquas (Forums)	Afternoon Oral Sessions cont.	Afternoon Oral Sessions cont.	
				Happy Hour/cash bar in poster hall		Happy Hour/cash bar in poster hall	Student Scientific Presentation Awards and Farewell Party featuring the Fabulous CERFtones! Immediately following the oral sessions		
	Opening Address and CERF Scientific Awards		Discover Portland Self-guided tours	7 Regional Affiliate Societies' Meetings	Student Career and Networking Event 7:00 pm - 9:00 pm				
				CERF Business Meeting and Town Hall	Student Pub Night and Other Events				
		Presidents' Welcome and 20th Biennial Celebration 7:30 pm	Other Events on-site & off-site						

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

“OCC” equals the Oregon Convention Center.

Sunday	Time	Location
Field Trips	Times vary	Groups depart from OCC
Student Worker Orientation and Training	11:00 am – 12:30 pm	OCC A105-106
Workshop: Scientific Writing and Publishing	1:30 – 3:00 pm	OCC B110-112
Workshop: Wireless Datalogger Well Monitoring Networks	1:30 – 3:00 pm	OCC B115-116
Workshop: RCN Denitrification	1:30 – 3:00 pm	OCC B117-119
Workshop: Climate Change	1:30 – 5:00 pm	OCC B113-114
Workshop: High resolution spatial sampling	3:30 – 5:00 pm	OCC B110-112
Workshop: Advances in Dissolved Oxygen Sensing	3:30 – 5:00 pm	OCC B117-119
Awardee and Sustaining Members Reception (Invitation Only)	4:00 – 5:30 pm	OCC Skyview Terrace
Keynote Address and Scientific Awards	6:00 – 7:30 pm	OCC Oregon Ballroom 201-202
Presidents’ Welcome Reception	7:30 – 9:00 pm	OCC Oregon Ballroom
Monday	Time	Location
CERF Governing Board Breakfast (Invitation Only)	6:00 – 8:00 am	Doubletree Oregon Room
Poster Presentations	12:30 – 1:45 pm	Exhibit Hall A, A-1
Discover Portland	5:00 pm	Off-site
CERF Happy Hour	5:30 – 6:30 pm	OCC Exhibit Hall A, A-1
Tuesday	Time	Location
Women in Science Networking Breakfast (Ticketed Event)	7:00 – 8:00 am	OCC Oregon Ballroom 204
Poster Presentations	12:30 – 1:45 pm	Exhibit Hall A, A-1
Chautauquas (Forums)		
Salmon (Past, Present, Future)	4:00 – 5:30 pm	OCC B110-112
Climate Change	4:00 – 5:30 pm	OCC B113-114
Ocean Acidification—The Other CO ₂ Problem	4:00 – 5:30 pm	OCC B115-116
Puget Sound/Urban Estuaries	4:00 – 5:30 pm	OCC B117-119
CERF Affiliate Society Meetings:		
SEERS	5:45 – 6:30 pm	A170
PERS	5:45 – 6:30 pm	A107-109
NEERS	5:45 – 6:30 pm	A106
AERS	5:45 – 6:30 pm	C125-126
GERS	5:45 – 6:30 pm	C124
CAERS	5:45 – 6:30 pm	C120-122
ACCESS	5:45 – 6:30 pm	C123
CERF Business Meeting	6:30 – 8:00 pm	OCC Oregon Ballroom 204
CERF Town Hall Meeting	8:00 – 8:30 pm	OCC Oregon Ballroom 204

Wednesday	Time	Location
President's Breakfast (Invitation Only)	7:00 – 8:00 am	Doubletree Hawthorne Room
CERF the Turf Fun Run/Walk	12:00 – 2:00 pm	Assemble in front of OCC
Roundtable Discussion: Remote Sensing of Seagrass	12:00 – 2:00 pm	OCC A105
Poster Presentations	12:30 – 1:45 pm	Exhibit Hall A, A-1
CERF Happy Hour	5:30 – 6:30 pm	OCC Exhibit Hall A, A-1
Student Career Networking Event	7:00 – 9:00 pm	OCC Oregon Ballroom 203-204

Thursday	Time	Location
CESN Breakfast (Invitation Only)	7:00 – 8:00 am	Doubletree Hawthorne Room
Roundtable Discussion: Climate Change Workshop	12:00 – 2:00 pm	OCC A105
Poster Presentations	12:30 – 1:45 pm	Exhibit Hall A, A-1
CERF 2011 Committee Lunch (Invitation Only)	12:30 – 2:00 pm	OCC VIP Suite B
Student Awards & Farewell Party with CERFtones	5:30 – 8:30 pm	OCC Oregon Ballroom 203-204

FRIDAY	Time	Location
CERF Governing Board Meeting (Invitation Only)	7:30 am – 12:00 pm	Doubletree Ross Island/Morrison Room

Working Towards a Carbon-Neutral Conference

The Coastal and Estuarine Research Federation Conference 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 CERF 2009, you are urged to donate to CERF Conference Carbon Emission Offset Fund where 100% of each contribution will support carbon sequestration projects, local to the state of Oregon. Donations can be placed with your conference registration or can be made separately by contacting the conference management office for more information at cerf2009@sgmeet.com. Thank you to those who have contributed. Carbon Neutral donation recipients will be announced during the Farewell Party on the final evening of the conference.

Sustainability Efforts at the Oregon Convention Center

The Oregon Convention Center manages an extensive material and waste recycling and recovery program for pre- and post-consumer organic waste, cardboard, newspaper, cans, plastics, glass bottles, wood pallets, cooking oil, and landscaping trimmings. The convention center's operations department continually works to improve the efficiency of managing its organic waste composting program. All public spaces inside the center have convenient, clearly marked recycling barrels for waste disposal. In addition, we encourage you to look for their staffed sustainability station in the exhibit hall.

CERF Conference Recording Policy

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

Child Care

On-site child care is not provided during the meeting. However, we encourage you to contact one of the following agencies recommended by the Portland Convention and Visitors Bureau. Please note that any arrangements made represent a contractual agreement between the individual and the child care agency/provider. CERF assumes no responsibility for the services rendered.

A Plus Childcare to You, Inc.
Phone: (971) 255-0440
Web site: www.apchildcare.com
E-mail: apluschildcaretoyou@hotmail.com

Creative Childcare Solutions, Inc.
Phone: (503) 632-2271
Web site: www.munchkincare.com
E-mail: michelle@munchkincare.com

Concessions

Cafes and concession areas at the Oregon Convention Center offer a wide variety of entrees, snacks and beverages for any time of day and for any type of appetite and will be open for breakfast and lunch. From fresh bakery goods in the morning to fresh made deli sandwiches, classic hot sandwiches and specialty sausages to fat-free frozen yogurts and assorted sweets, you will find something to your liking. For the heartier appetite, they also offer a variety of entrees and appetizers in their specialty stands, ranging from Asian stir-fry selections to pizza or Mexican dishes.

You may also visit one of two Starbucks Coffee Stores, located within the main exhibit hall and meeting room lobbies.

Parking at the Oregon Convention Center

In addition to the ample street and bus parking in the surrounding area, the Oregon Convention Center provides onsite parking in its clean and secure underground parking garage. 800 spaces are available on the garage's two levels. The maximum daily rate to park is \$8.00. Please be advised that there are other privately-owned lots operating in the vicinity charging upwards of \$10.00 per day to park. Some of these lots promote "convention center parking," but they are not affiliated with the OCC in any way.

If you will be driving to the meeting, you may enter the OCC garage via its First Avenue or Lloyd Boulevard entrances. Clearance on the P1 level is 7 feet; clearance on the P2 level is 9 feet. For a map showing the location of the Oregon Convention Center's parking garage entrances on First Avenue and Lloyd Boulevard, go to: <http://www.oregoncc.org/directionsandparking/parking/>

Conference Registration

Registration for pre-registered and on-site attendees will take place in the Oregon Convention Center in Prefunction Area A. The registration desk will be opened during the following hours from Sunday, 1 November, through Thursday, 5 November:

Sunday, 1 November	1:00 to 6:00 pm
Monday, 2 November	7:00 am to 6:00 pm
Tuesday, 3 November	7:00 am to 6:00 pm
Wednesday, 4 November	7:00 am to 6:00 pm
Thursday, 5 November	7:00 am to 6:00 pm

Computer Central

Computer Central will be located at the Oregon Convention Center in A103-104. Hours of operation are as indicated:

Sunday, 1 November	1:00 to 7:00 pm
Monday, 2 November	7:00 am to 6:00 pm
Tuesday, 3 November	7:00 am to 6:00 pm
Wednesday, 4 November	7:00 am to 6:00 pm
Thursday, 5 November	7:00 am to 5:30 pm

Poster Presentations

All posters will be on display for two days during an assigned poster session, and attendees will have both lunchtime and late afternoon viewing opportunities. The poster/exhibit hall is located in the Oregon Convention Center on the first level: Exhibit Hall sections A and A1. Please plan to mount your poster on your assigned board between **7:00 and 9:00 am on your first assigned day (either Monday or Wednesday)**. Each poster has been assigned a number, and its location corresponds to a diagram in the poster hall. A poster information table will be located near the main poster hall entrance. Please stop by to confirm your poster position, pick up pushpins and a poster hall guide, and ask questions. As a reminder, each poster will be displayed on 8-foot wide by 4-foot high board that includes a 2-inch border. Each poster must be less than 92 inches (233 cm) wide and 44 inches (112 cm) high.

Coffee breaks, lunch concessions, and happy hours will occur inside the poster/exhibit hall, and posters will be on display during these times. Presenters are requested to be at their posters from **12:30 until 1:45 pm on their assigned day**.

Please remove your poster and any associated materials between 6:00 and 7:00 pm on Tuesday or between 4:00 and 5:00 pm on Thursday, depending on your assigned session. If not removed by you, your poster will be removed by conference workers and recycled.

Plenary Session and 2009 Scientific Awards Presentation

Robert W. Howarth, CERF President 2007-2009, Presiding
Oregon Convention Center, Oregon Ballroom 201-202,
1 November 2009, 6:00 - 7:30 pm

OPENING

Portland Poet Judith Barrington: Reading from
Postcard from the Bottom of the Sea

WELCOME AND INTRODUCTIONS

CERF President Howarth's Address

2009 SCIENTIFIC AWARDS PRESENTATIONS

Linda Schaffner, CERF President 2003-2005, CERF Awards
Committee Chair

Odum Award for Lifetime Achievement

Walter Boynton, Professor, University of Maryland
System Center for Environmental Science (CES),
Chesapeake Biological Laboratory, Solomons, Maryland

Michael Kemp, Professor, University of Maryland System
Center for Environmental Science (CES), Horn Point
Laboratory, Cambridge, Maryland

William A. Neiring Award for Outstanding Educator

Scott Warren, Professor Emeritus, Connecticut College,
New London, Connecticut

Cronin Award for Early Career Achievement

Malcolm Scully, Assistant Professor, Center for Coastal
Physical Oceanography, Old Dominion University,
Norfolk, Virginia

Pritchard Award for *Estuaries and Coasts* Geophysics Paper

"Tidal and Meteorological Forcing of Suspended Flux in a
Muddy Mesotidal Estuary"

Jon French, Director, Coastal and Estuarine Research Unit,
University College London, London, United Kingdom

Helene Burningham, Coastal and Estuarine Research Unit,
University College London, London, United Kingdom

Thomas Benson, HR Wallingford Ltd., Wallingford,
Oxon, United Kingdom

Distinguished Service Award

Carolyn Keefe, Senior Faculty Research Assistant,
University of Maryland System, Center for Environmental
Science (CES), Chesapeake Biological Laboratory,
Solomons, Maryland

WELCOME AND ANNOUNCEMENTS FROM THE CERF 2009 CONFERENCE CO-CHAIRS

Bob Bailey, Oregon Department of Land Conservation
and Development

Mike Graybill, South Slough National Estuarine Reserve

PERSPECTIVE FROM THE POLICY FRONT LINES AND INTRODUCTION OF KEYNOTE SPEAKER

Representative Jules Bailey, Oregon House of
Representatives, Portland District

KEYNOTE ADDRESS

Honorable William Bradbury, Former Secretary of State,
State of Oregon

"Climate Change in Oregon and Beyond: Estuaries and
Coasts in a Changing World"

*The CERF 2009 plenary session will be followed immediately
by the Presidents' Welcome Reception from 7:30 – 9:00 pm in
the Oregon Ballroom.*

CERF 2009 Conference Keynote Address

CLIMATE CHANGE IN OREGON AND BEYOND: ESTUARIES AND COASTS IN A CHANGING WORLD

Bill Bradbury is a nationally recognized environmental advocate,
who recently served two terms as Oregon's Secretary of State.

Bradbury served on the State Land Board, which oversees
management of state-owned lands. He has been involved in the
effort to protect the nation's first estuarine research reserve, the
4,400-acre South Slough estuary on the southern Oregon Coast.

Governor Ted Kulongoski appointed Bradbury to chair the
Oregon Sustainability Board, and he also has been appointed
to Oregon's Global Warming Advisory Commission. As
one of the first 50 participants in Vice President Al Gore's
Climate Change training sessions, Bradbury has given more
than 200 climate change presentations in Oregon.

He served in the Oregon legislature for 14 years, which included
stints as senate majority leader and senate president. As a
legislator, Bradbury pursued the complementary Oregon values
of environmental protection and economic development. He
led successful efforts to establish Small Business Development
Centers at community colleges, to develop the Salmon and
Trout Enhancement Program (STEP), and to put together a
relief package for displaced timber workers. He also helped pass
measures that prevented offshore oil drilling and planned for
state-owned ocean resources, as well as legislation that enacted
the Oregon Watershed Health Program.

His long-term professional interests are protecting the
environment, creating jobs, and improving education.

Monday Early Morning Oral Presentations

	A105	A106	A107-109	BI10-112	BI13-114
	SCI-051 Partnering Scientists and Educators to Increase Coastal and Estuarine Knowledge Eric Koepfler, Laura Murray and Jan Hodder	SCI-038 The Skagit Delta: Integrating Estuarine Geomorphology, Hydrodynamics and Ecology Gregory Hood and John Rybczyk	SCI-005 Salmon Response to Natural and Anthropogenic Changes in North Pacific Estuaries Daniel Bottom, Charles Simenstad and Kurt Fresh	SCI-039 Response of Wetlands to Rising Sea Level: Past, Present and Future Zoe Hughes, Steven Pennings and Christopher Craft	SCI-108 Seagrass Physiological Stress: In sickness and in health Sven Beer and Jeffrey Gaeckle
8:00	Understanding Trends in Coastal Ecosystems through Science-Education Partnerships. Michael Kemp , Tim Carruthers, Deidre Gibson, Chris Witherspoon, Cassie Gurbisz, Laura Murray et al.	Delta Distributary Dynamics: Validating and extending avulsion theory. Gregory Hood .	Production and Protection: A Quarter-century of Salmon Science in North Pacific Estuaries. Daniel Bottom , Kurt Fresh, Charles Simenstad.	The Impact of Climate and Sea-level Change on US Gulf Coast Ecosystems: A multidisciplinary approach. Torbjörn Törnqvist , Jeffrey Chambers, Thomas Shannon, Yongxiang Li et al.	Seagrass Physiological Stress – Causes and Expressions. Sven Beer .
8:15	Learning about Coastal Trends: Why are seagrasses important? Karen McGlathery , Kelly Ksiazek, Laura Reynolds, Arthur Schwarzschild, Carissa Wilkerson, Laura Murray, Timothy Carruthers et al.	Tidal Fronts in Skagit Bay. Stephen Henderson , Julia Mullarney, Dallavis Kassondera.		Relationship between Marsh Elevation Change Measured with SETs, Sea-Level Rise and the Lunar-Nodal Cycle. Linda Blum , Patricia Wiberg, Mark Brinson, Robert Christian.	Assessing Seagrass Health at the Landscape Level Using Chlorophyll Fluorescence: Diurnal variation and maybe a way to deal with it. Michael Durako , Jennifer Kunzelman, Elizabeth Belshe, Kathryn Chartrand et al.
8:30	The Center for Ocean Science Education Excellence-Pacific Partnerships: Promoting Research Investigations in the Marine Environment, an Internship Program for Community College Students. Coral Gehrke , Itchung Cheung, Jan Hodder.	Export of Mud from the Skagit River Tidal Flats. Charles Nittrouer , Kristen Lee, Andrea Ogston et al.	Juvenile Salmonid Abundance and Size in the Lower Columbia River and Estuary. Curtis Roegner , Regan McNatt, Dan Bottom et al.	Impacts of Increased Inter-annual and Intra-annual Sea Level Variability and Eutrophication on the Stability of Low Tidal Range Marshes during a Period of Rapid Transgression. Michael Kearney , Alex Riter, J. Court Stevenson et al.	Oxidative Stress and Quantum Use Efficiency in the Intertidal Seagrass <i>Zostera noltii</i> . João Silva , Isabel Barrote, Rui Santos et al.
8:45	Partners in Discovery GK-12 Project at WSU Vancouver: Scientist-teacher partnerships bringing estuarine and coastal research into classrooms. Laura Friedenberg , Jennifer Dean, Jennifer Blaine, Jeremy Ecklund, Joel Quenette, Katy Mallett.	Sea Level Rise and Eelgrass Productivity in Padilla Bay, WA: A field and modeling study. John Rybczyk , Peter Kairis.	Salmonid Use of Intertidal Wetland Habitat in the Columbia River Estuary. Regan McNatt , Susan Hinton, David Teel, Dan Bottom.	Geomorphic Response of a Temperate Mangrove Forest to Increased Sediment Supply and Sea Level Rise. Andrew Swales, Donald Cahoon , Samuel Bentley, Catherine Lovelock et al.	UVB Promotes Anthocyanin Production and Leaf Reddening in <i>Thalassia testudinum</i> . Alyssa Novak , Frederick Short.
9:00	Bringing Real Science into the Elementary School Classroom: Three Long-Term Inquiry Projects on the Southern Oregon Coast. Katie Bennett , Georgia Weinblatt, Fred Betz, Helen Farr, Myndee McNeill, Annie Pollard, Mary Webb.	Linking Fish Abundance to Biophysical Factors Using Spatial Models in Skagit Bay, WA. Jason Hall , Correigh Greene, Casimir Rice, Zhaoqing Yang, Kurt Fresh, Jonathan Reum, Dana Rudy, Joshua Chamberlin.	Diet of Subyearling Chinook Salmon in the Columbia River Estuary during 2002-2006. Jeannette Zamon .	The Response of Salt Marshes to the Last Century of Sea Level Rise: Why comparing rates of accretion and sea level rise doesn't work. Matthew Kirwan , Glenn Guntenspergen, Stijn Temmerman et al.	Relationship between Salinity Stress and Spectral Reflectance in <i>Thalassia testudinum</i> from the Lower Laguna Madre, Texas. Thomas Whelan , Hudson DeYoe, Michael Persans, Kenneth Summy.
9:15	A Partnership Model of How to Develop an Interactive Exhibit to Present Real-Time, Estuarine Water Quality Data to the Public in an Informal Education Setting. Sarah Mikulak , Cristina Orrico, Shawn Rowe, Nancee Hunter.	Linking Widespread Nearshore Habitat Change in the Skagit Delta to Watershed Disturbance and Altered Ecosystem Functions and Services. Eric Grossman , David Finlayson, Andrew Stevens, Peter Swarzenski, Greg Hood, Aundrea McBride, Jim Gibson.	Multi-axis Resource Partitioning among Juvenile Salmonids in a Freshwater Tidal System. Christopher Eaton , Charles Simenstad.	Accretion Processes on Salt Marshes in the German Wadden Sea. Mark Schuerch , John Rapaglia, Athanasios Vafeidis, Karsten Reise et al.	Minimum Light Duration Needed to Maintain Winter and Summer Adapted Eelgrass (<i>Zostera marina</i>) as Determined by Mesocosm Experiments. Bruce Boese , Katharine Marko, Christina Folger, Steven Lynch.
9:30	SoundCitizen: Geochemical Studies of Aquatic Systems Using a Volunteer-based Sampling Network. Brittany Kimball , Jaqui Neibauer, Rick Keil et al.	Differences in Food Web Connectivity across Intertidal Gradients in Embayment and Fluvial Dominated Estuaries. Emily Howe , Charles Simenstad.	Juvenile Coho Salmon Life History Diversity and Estuarine Use in the Grays River, Washington. Bethany Craig , Charles Simenstad, Dan Bottom et al.	Responses of Dominant Marsh Macrophytes to Inundation Period, Inundation Regime and Disturbance. Christine Voss , Robert Christian, James Morris.	Seasonal Responses of <i>Thalassia testudinum</i> (Banks & Soland. ex Koenig) to the Physical-Environmental Setting in a Karst, Tropical Shallow Coastal Bay of the Western Caribbean: Implications for management and conservation. Israel Medina , Jorge Herrera.
BREAK 9:45 AM – 10:15 AM					

Monday Early Morning Oral Presentations

B115-116	B117-119	C120-122	C123	C124	
SCI-071 Biological Responses to Nutrient Enrichment in Coastal Receiving Waters Jacques Oliver, Janis Kurtz and Patricia Glibert	SCI-074 Applications of Landscape Ecology to Estuarine and Coastal Environments Simon Pittman, Ron Kneib and Charles Simenstad	SCI-099 Ecological Forecasting: Moving from Research to Management Use Nathalie Valette-Silver, David Scheurer, David Green and Elizabeth Turner	SCI-076 Assessing Ecological Integrity Using Multiple Indices and Ecosystem Components: The Sequel Ananda Ranasinghe, Angel Borja and Daniel Dauer	SCI-091 Applications, Challenges and Evolution of Moored Coastal/Estuarine Observing Systems Kimberle Stark, Cheryl Greengrove, Stephanie Moore and Julia Bos	
Specific Nutrient Criteria Based on Predicted Natural Concentrations, Threshold Effects and Tiered Uses. R. Jan Stevenson.	Seascape Ecology of Estuarine and Coastal Ecosystems: Assessing the significance of change. Christoffer Boström.	NCCOS Ecological Forecasts: A valuable tool for resources managers. Nathalie Valette-Silver , Elizabeth Turner, David Scheurer, Carol Auer, Mark Fonseca, Richard Strumpf et al.	Developing a Floristic Quality Index for Coastal Wetlands of Louisiana. Kari Cretini , Jenneke Visser, Ken Krauss, Gregory Steyer.	Introduction to Applications, Challenges and Evolution of Moored Coastal/Estuarine Observing Systems. Julia Bos , Cheryl Greengrove.	8:00
Restoring and Maintaining the Biological Integrity of America's Estuaries and Coasts: The Clean Water Act, Canaries and You. Jacques Oliver.		Transferring Understanding of Bio-physical Interactions from Research to Management: A case study of oysters in Chesapeake Bay. Elizabeth North.	A Three-tiered Regional Assessment of the Ecological Condition of Gulf of Mexico Coastal Wetlands. Janet Nestlerode , Virginia Engle, Pete Bourgeois, Paul Heitmuller.	The IOOS Data Assembly Center - Automated and Manual Data Management for Marine Observations. William Burnett.	8:15
A Nitrogen Management Strategy Based on the Quantitative Relationships between Nitrogen Loading, Algal Biomass and Seagrasses in Tampa Bay, Florida. Anthony Janicki , Holly Greening et al.	Marine Habitat Structure and Predator-prey Interactions: Using an individual-based, spatially explicit model to quantify seagrass nursery habitat effectiveness. Kevin Hovel , Helen Regan.	Forecasting Striped Bass Habitat Suitability in Chesapeake Bay: Implication for ecosystem-based fisheries management. Xinsheng Zhang , Robert Wood, Lowell Bahner, Edward Houde, Stuart Ludsins, Lindsay Chakot, Edward Martino, James Pierson, Howard Townsend.	Using a RIVPACS Model to Predict Expected Macrofaunal Species Richness in Puget Sound. Henry Lee , Frazier Melanie, Deborah Deborah, Walter Nelson, Maggie Dutch, Kathy Welch.	Chesapeake Bay Observing System: Lessons learned and prospects. William Boicourt , Elizabeth Smith et al.	8:30
Numeric Nutrient Criteria and Nitrogen Load Limits for the Great Bay Estuary in New Hampshire and Maine, USA. Philip Trowbridge , J. Ruairidh Morrison, Shachak Pe'eri, Gregg Comstock.	Linking Fish Movement Behavior to Benthic Seascape Structure in a Caribbean Coral Reef Ecosystem. Steven Hitt , Simon Pittman, Richard Nemeth, Kerry Brown, Mark Monaco.	Modeling Chesapeake Bay Striped Bass Recruitment for Ecosystem-based Fishery Management Needs. Edward Martino , Edward Houde, Robert Wood, Xinsheng Zhang, Michael Roman, James Pierson et al.	Refinement of the Sediment Quality Triad Index as an Integrative Measure of Sediment Quality in Puget Sound. Margaret Dutch , Edward Long, Valerie Partridge, Sandra Weakland, Kathy Welch et al.	Using Automated Monitoring of Hydrographic Variables in Puget Sound (WA) to Evaluate Anthropogenic Contributions to Hypoxia. Allan Devol , Wendi Ruef, Jan Newton, Jeffrey Richey.	8:45
Developing Numeric Nutrient Criteria for Florida Estuaries: Considering nutrient load and biological response relationships. Janis Kurtz , James Hagy, Jeff Jackson, George Smith, Rick Greene et al.	Linkages among Mangrove Fish Populations and Adjacent Seagrass Habitats in Biscayne Bay, Florida. Rolando Santos , Diego Lirman, Joseph Serafy.	Model Application for Management of Hypoxic Zones in the Chesapeake Bay and Gulf of Mexico: A story of two different pathways. Robert Magnien.	Sediment Profile Imagery as a Tool to Assist Benthic Assessment and Benthic Habitat Mapping. Giancarlo Cicchetti , Ananda Ranasinghe, Kerry Ritter.	High Frequency Variability in Estuaries and the Implications for Monitoring Programs. Wendi Ruef , Allan Devol, Jan Newton, Corinne Bassin.	9:00
An Approach for Estimating In-stream Total Nitrogen Loads and Flow-averaged Concentrations in Stream Reaches Supportive of Downstream Use. Rick Greene , James Hagy, Jeff Jackson, George Smith, Janis Kurtz.	A Case for a Bottom-up Approach to Habitat Classification at Fine Scales of Resolution: Determining spatial scales of ecological relevance in a shallow coastal lagoon. Marisa Guarinello , John King, Emily Shumchenia.	Coupled Hydrodynamic and Ecological Modeling: Demonstration through island restoration. Gaurav Savant , Charlie Berger, Steve Bartell et al.	Development of Nekton Indicators for Evaluating the Effects of Coastal Restoration on Nekton Communities. Bryan Piazza, Megan La Peyre.	Building and Maintaining a Small Estuarine Mooring on a Shoestring Budget. Cheryl Greengrove.	9:15
The Utility of a Phytoplankton Index of Biotic Integrity in Estuarine Systems. Richard Lacouture.	A Landscape-scale Study of the Ecology of Intermittent Estuaries along a Gradient of Connectivity to the Ocean. Adrian Lill , Gerry Closs, Marc Schallenberg, Candida Savage et al.	Event Exploration and Characterization as a Management Tool: Renewable energy resource assessment and impact analyses in the Gulf of Maine. Susan Elston , Matthew Nixon, Habib Dagher, Melissa Landon et al.	Comparing the 'One Out, All Out' Principle with Integrative Methodologies, When Using Multiple Ecosystem Components in Assessing the Ecological Status in Marine Waters. Angel Borja , Juan Bald, Joana Larreta, Iñigo Muxika, Marta Revilla, German Rodriguez, Ainhize Uriarte et al.	King County's Remote Automated Marine Water Quality Program: The Sonde and the Fury. Bob Kruger , Kimberle Stark.	9:30
BREAK 9:45 AM – 10:15 AM					

Monday Mid-Morning Oral Presentations

	A105	A106	A107-109	B110-112	B113-114
	SCI051 Partnering Scientists and Educators to Increase Coastal and Estuarine Knowledge <i>cont'd</i>	SCI010 Quantifying Management Solutions for Coastal Ecosystems Miao-Li Chang, Thomas Fisher and Peter Sheng	SCI005 Salmon Response to Natural and Anthropogenic Changes in North Pacific Estuaries <i>cont'd</i>	SCI039 Response of Wetlands to Rising Sea Level: Past, Present and Future <i>cont'd</i>	SCI108 Seagrass Physiological Stress: In sickness and in health <i>cont'd</i>
10:15	Educator-Scientist Partnerships: Examples of Ocean Literacy Activities. Mary Curran , Tara Fogleman, Krista Hoover, Terry Aultman et al.	Development of Applied Coastal Engineering and Science Capacity to Advance and Support Hurricane Protection and Ecosystem Restoration Activities in Coastal Louisiana. Richard Raynie , James Pahl, Edward Haywood.	Contemporary and Historic Life History Expression and Growth of Juvenile Chinook Salmon in the Columbia River Estuary using Otolith Microchemistry and Microstructure. Lance Campbell , Daniel Bottom, Eric Volk, Ian Fleming.	Coastal Wetland Response to Accelerating Sea Level Rise: Role of spatial interactions between vegetation, flow and sediment. Stijn Temmerman , Tjeerd Bouma, Johan Van de Koppel, Wouter Vandenbruwaene, Paul Klaassen, Mindert De Vries, Luca Van Duren, Erika Martini et al.	Trade-offs in Seagrasses Exposed to Varying Hydrodynamic Conditions: Applications for protection and restoration. Katie McKone , Evamaria Koch, Christopher Tanner.
10:30	Recipe or Discovery? Engaging students and educators in the process of science. Erin Morgan .	Science Meets Management in the Baltic. Fred Wulff , Christoph Humborg, Magnus Mörtz, Oleg Savchuk, Alexander Sokolov.	Parasitism and Habitat Use of Juvenile Chinook Salmon (<i>Oncorhynchus tshawytscha</i>) in the Columbia River Estuary. Andrew Claxton , Mary Bhuthimerthee, Kym Jacobson.	Expansion of a Marsh Tidal Creek Network in Response to Sea Level Rise. Zoe Hughes , Carol Wilson, Duncan FitzGerald, Steven Pennings, Kazimierz Wieski, Amala Mahadevan.	Impact of Hydrogen Sulfide Toxicity on Near Shore Seagrass Community Structure. Sandy Wyllie-Echeverria , Marianne Holmer, Peter Ward, Marieke van Katwijk, Loren Ballanti, Renee Takesue et al.
10:45	The GK-12 Program at Coastal Carolina University: Linking marine and wetland research with science education. Craig Gilman .	Geographic Isolation Runs for Developing Nutrient Load Allocations for the Chesapeake Bay Restoration. Jing Wu , Ping Wang, Gary Shenk, Lewis Linker.	A Virtual Estuary: Columbia River estuary and plume response to large-scale environmental change. C. Grant Law , Antonio Baptista et al.	Evaluating Sediment Accumulation Rates in San Francisco Bay Wetlands for Restoration, Sea-Level Rise, and Carbon Sequestration. John Callaway , V. Thomas Parker, Judy Drexler, R. Eugene Turner, Lisa Schile, Ellen Herbert, Evyann Borgnis.	Research on Ecological Features of <i>Enhalus acoroides</i> and its Responses to Nutrient Loadings in Xincun Bay, Hainan, China. Xiaoping Huang , Daojian Huang.
11:00	Participatory Water Quality Monitoring - A Partnership between Researchers and Homeowners in South Carolina. Sara Powell .	Combining Monitoring and Modeling to Determine Criteria Achievement Under Management Scenarios. Jeni Keisman , Gary Shenk et al.	Juvenile Salmon in the Nearshore Pelagic Habitats of Puget Sound: Scales of variability. Kurt Fresh , Casey Rice, Eric Beamer, Anna Kagle, Correigh Greene, David Teel.	What is the Effect of Increased Storm Activity on the Response of Coastal Wetlands to Sea-level Rise? Irving Mendelssohn , Shuwen Li.	Implications of the Appearance of Rhizophytic Green Algae in the Lower Laguna Madre, Texas. Joseph Kowalski , Hudson DeYoe.
11:15	The Ocean Society Education Collaborative (OSEC): A new professional society networking effort for ocean science K-16 education. Susan Cook , Gisele Muller-Parker, Eric Koepfler et al.	Assessing the Nutrient and Sediment Reductions Required to Achieve the Chesapeake Bay Submerged Aquatic Vegetation Water Quality Standard. Lewis Linker , Ping Wang, Carl Cerco, Gary Shenk.	Quantifying Changes in Juvenile Salmon Behavior Around Puget Sound Ferry Terminals in Response to Shading and Artificial Lighting: A videographic approach. Kotaro Ono , Jason Toft, Charles Simenstad et al.	Effects of Climate Change on Water Quality Improvement Functions of Tidal Forests and Marshes. Christopher Craft .	It's Not the Size of the Seagrass in the Fight: The invasion of a green seaweed in Hawaiian seagrass meadows. Kimberly Peyton .
11:30	Partners in Discovery GK-12 Project at WSU Vancouver: How scientist-teacher partnerships connect kids and community to local scientific research. Gretchen Rollwagen-Bollens , Stephen Bollens, Jennifer Duerr, Charlene Shea, Brian Tissot et al.	Simulation of Water Clarity as a Surrogate for SAV Viability using a Linked Watershed, Hydrodynamic, and Water Quality Model. Christopher Wallen , Andrew Stoddard, Paul Craig, Nathaniel Bailey, Richard Wagner.	Behavior and Movement of Juvenile Pacific Salmon along Urbanized Shorelines in Elliott Bay, WA. Sarah Heerhartz , Jason Toft, Elizabeth Armbrust, Jeffery Cordell, Charles Simenstad.	Monitoring Salt Marsh Elevation Change: Anticipating Habitat Responses to Sea-Level Rise. Charles Roman , Donald Cahoon, James Lynch, Kelly Medeiros.	Effects of <i>Sargassum muticum</i> Invasion on <i>Zostera marina</i> . Stacey DeAmicis , Andy Foggo, Martin Attrill et al.
11:45	Use of Basic Observational Buoys (BOBs) in Partnership with High School Faculty and Students. Quinton White , Lex Waters et al.	A River Runs Backwards: Understanding and managing entrainment losses from massive water diversions in a tidal freshwater estuary. Lenny Grimaldo .	Life History Diversity and the Resilience of Chinook Salmon in the Dungeness River Estuary. Nichole Sather , Kurt Fresh, Daniel Bottom et al.	Use of Geographic Information Systems and Simulation Modeling to Assess the Effects of Accelerated Sea Level Rise on Coastal Wetlands in Southern Rhode Island. Robert Hancock , Francis Golet.	Population Structure and Dynamics of Natural and Restored Eelgrass Meadows in the Virginia Coastal Bays. Laura Reynolds , Karen McGlathery, Michelle Waycott, Joseph Ziemann.
POSTER SESSIONS and LUNCH 12:00 PM – 2:00 PM					

Monday Mid-Morning Oral Presentations

B115-116	B117-119	C120-122	C123	C124	
SCI-071 Biological Responses to Nutrient Enrichment in Coastal Receiving Waters <i>cont'd</i>	SCI-074 Applications of Landscape Ecology to Estuarine and Coastal Environments <i>cont'd</i>	SCI-099 Ecological Forecasting: Moving from Research to Management Use <i>cont'd</i>	SCI-076 Assessing Ecological Integrity Using Multiple Indices and Ecosystem Components: The Sequel <i>cont'd</i>	SCI-091 Applications, Challenges and Evolution of Moored Coastal/Estuarine Observing Systems <i>cont'd</i>	
Eutrophication and Partial Recovery of Gunston Cove, a Tidal Freshwater Embayment of the Potomac River as Revealed by Long-term Monitoring. R. Jones.	Death by 1000 Docks? Linking Landscape Ecology, Habitat and Coastal Fisheries. Stephen Jordan , Timoth O'Higgins, Lisa Smith, Janet Nestlerode, Virginia Engle.	NOAA's Harmful Algal Bloom Operational Forecast System: A five-year success story in the Gulf of Mexico. Kathleen Fisher , Mark Vincent.	Novel Applications of the Chesapeake Bay Health Index. Michael Williams , Ben Longstaff, William Dennison et al.	NANOOS: Building coastal ocean observing within a historical context. Michael Kosro , Jan Newton, David Martin et al.	10:15
Whole-system Metabolism of a Shallow Lagoon that is Becoming More Eutrophic. Robert Howarth , Melanie Hayn, Ken Foreman, Peter Berg, Roxanne Marino, Karen McGlathery, Anne Giblin et al.	Challenges and Solutions for Monitoring Landscape Change at the Aquatic-Terrestrial Interface. Sarah Gergel .	Lessons Learned in Predicting the Extent and Movement of Harmful Algal Blooms on the West Florida Shelf. Richard Patchen , Timothy Wynne, John Christensen, Lyon Lanerolle, Michelle Tomlinson et al.	The Integration of Biological and Physical Ecosystem Characteristics in the BEQI Index (Benthic Ecosystem Quality Index) to Evaluate the Ecological Status of Estuarine Systems. Gert Van Hoey , Tom Ysebaert, Peter Herman, Kris Hostens.	Monitoring, Modelling and Management of Coastal Ecosystems: an Australian Perspective. Simon Allen , Karen Wild-Allen, Greg Timms.	10:30
Benthic Nutrient Fluxes in a Shallow Coastal Bay Undergoing Eutrophication. Jane Tucker , Anne Giblin, Clara Funk.	Dynamics of Seagrass Landscapes Viewed Over Long Time Periods and Large Spatial Scales. Susan Bell , Nate Stafford et al.	Developing a Forecast System for Cyanobacterial Blooms in Western Lake Erie. Timothy Wynne , Richard Stumpf, Michelle Tomlinson, David Schwab, Dyle Juli et al.	Assessing Benthic Health in Stressed Subtropical Estuaries, Eastern Florida, USA Using AMBI and M-AMBI. Bjorn Tunberg , Angel Borja, Scott Jones et al.	Novel Moored and Mobile Autonomous Systems for Coastal Marine Ecology and Management. John Ryan , Christopher Scholin, Christina Preston, Roman Marin, Dianne Greenfield, Shannon Johnson, Robert Vrijenhoek, Alana Sherman, Kanna Rajan et al.	10:45
The Effect of Nutrient Loading and the Presence of Eel Grass on Nitrate Reduction Pathways in Sediments from a Shallow Coastal Pond. Anne Giblin , Jane Tucker, Clara Funk.	Underwater Video Mosaics: A new spatial dynamics tool for coral communities. Brooke Gintert , Diego Lirman, Nuno Gracias, Thomas Szlyk, Marc Ciminello, Pamela Reid.	Beach and Shellfish Forecasts Using Integrated Data from Monitoring Programs, Remote Sensing and Observing Systems. Rense Kelsey , Dwayne Porter, Geoffrey Scott, James Hibbert, Emily MacDonald, Erica Johnson, Virginia Shervette, Dan Ramage, Jeremy Cothran.	Assessment of Marine Benthic Infaunal Community Condition on a Uniform Scale Across Four North American and European Geographies, Using Best Professional Judgement. Heliana Teixeira, Angel Borja, Stephen Weisberg, Ananda Ranasinghe et al.	Real-time Wireless Sensor Arrays in Wetland Restoration Monitoring. Joel Shinn , Nicole Athearn, John Takekawa, David Schoellhamer, Greg Shellenbarger, Arshan Poursolhi, Roger Meike.	11:00
Net Ecosystem Metabolism in the Barataria Basin as an Indicator of Stress Related to Diverted Mississippi River Water. Brenda Babin , Nancy Rabalais.	Combined Top-down and Bottom-up Analyses Improve Habitat Classification with NOAA's Coastal Marine Ecological Classification Standard (CMECS). Emily Shumchenia , John King, Marisa Guarinello.	Forecasting Returns of Coho and Chinook Salmon in the Northern California Current: A role for high-frequency long term observations. William Peterson .	Responses of Benthic Macroinvertebrates to Environmental Stressors: Are there characteristic stressor responses? Treda Grayson , Linda Schaffner.	Observing Systems for the Gulf of Finland (Baltic Sea) Environmental Monitoring, Assessment and Forecasts. Inga Lips , Urmas Lips, Kristi Altoja, Jüri Elken, Villu Kikas, Natalja Kuvaldina, Priidik Lagema, Taavi Liblik, Nelli Norit.	11:15
Estimating Historical Nitrogen Loading Rates to Great Bay Estuary, NH/ME USA. James Latimer , Philip Trowbridge, Michael Charpentier.	Habitat Mapping of Rhode Island Offshore Environments to Aid Site Selection for a Proposed Wind Farm. Monique LaFrance , John King.	Ecological Forecasting, Hindcasting and Nowcasting in the Intertidal Zone: From Weather to Body Temperatures and Demography. David Wethey , Sarah Woodin, Thomas Hilbish, Venkataraman Lakshmi, Brian Helmuth et al.	Modular Indices Improve Causality and Communication between Experts and Managers. Christopher Krembs , Julia Bos, Skip Albertson, Marissa Jones, Mya Keyzers, Simone Hoffer, Brandon Sackmann, Carol Maloy.	Year-round Autonomous Glider Observations from the Oregon Shelf. R Kipp Shearman , John Barth, Anatoli Erofeev, Laura Rubiano-Gomez, Justin Brodersen.	11:30
Origins and Fate of Inorganic-Nitrogen in Coastal Ecosystems of the Yucatan Peninsula, Mexico. Troy Mutchler , Rae Mooney, Kenneth Dunton.	Rhode Island MapCoast: Partnering across the land-water divide to map our coastal resources. John King , Peter August, Jon Boothroyd, Michael Bradley, Giancarlo Cicchetti, Marisa Guarinello, Maggie Payne, Bryan Oakley, Emily Shumchenia, Mark Stolt et al.	Forecasting Environmental Variables with Multiple Linear Regression (MLR) Models Obtained with Public-domain Software. Walter Frick , Anne Sigleo.	Getting the Measure of 'Good Environmental Status' in the Baltic Sea. Jesper Andersen , Ciarán Murray, Samuli Korpinen, Maria Laamanen et al.	VENUS: An Online Real Time Coastal Cabled Ocean Observatory. Richard Dewey , Verena Tunnichiffe et al.	11:45
POSTER SESSIONS and LUNCH 12:00 PM – 2:00 PM					

Monday Mid-Afternoon Oral Presentations

	A105	A106	A107-109	B110-112	B113-114
	SCI-064 Ecological Baselines: How Has Oregon's Ocean Changed Over Time? John Meyer	SCI-010 Quantifying Management Solutions for Coastal Ecosystems cont'd	SCI-005 Salmon Response to Natural and Anthropogenic Changes in North Pacific Estuaries cont'd	SCI-017 Jellyfish Blooms in Changing Coastal and Estuarine Ecosystems Mary Beth Decker, Jun Shoji and Richard Brodeur	SCI-106 Seagrass Ecological Health: Diagnosing the canary Kenneth Moore and Karen McGlathery
2:00	The Ecological Baselines Project. John Meyer.	Reproduction and Larval Recruitment of Oysters in the Caloosahatchee Estuary as Indicators of the Influence of Managed Freshwater Inflows. Aswani Volety, Patricia Goodman, Patricia Sime, Lesli Haynes, Lacey Smith et al.	Life History Diversity and Habitat Use By Juvenile Salmon In The Snohomish River Estuary, Puget Sound. Mindy Rowse, Kurt Fresh, Anna Kagley, Todd Zackey et al.	Can We Control Jellyfish Blooms? Lessons from jellyfish research in East Asian seas. Shin-ichi Uye.	Eutrophication Effects on Nitrogen Assimilation and Turnover in Shallow Coastal Systems. Karen McGlathery, Peter Berg, Ken Foreman, Anne Giblin, Robert Howarth, Roxanne Marino et al.
2:15	Seafloor Mapping Without Multibeam Sonar: Using historical sample data to generate interim habitat maps for Oregon and Washington State Waters. Chris Goldfinger, Melinda Agapito, Keith Karageorge, Chris Romsos, Tanya Haddad, Randy Dana et al.	Effectiveness Monitoring for Management of Fecal Coliform Bacteria in the Dungeness Watershed and Estuary. Dana Woodruff, Val Cullinan, Jill Brandenberger et al.	Otolith Microstructure Analysis Reveals Proportions of Life History Types for Ocean-Type Chinook Salmon of the Skagit River, WA. Kim Larsen, Eric Beamer, Karl Stenberg, Lisa Wetzel et al.	The Evolutionary Ecology of Mass Occurrences of Jellyfishes. Michael Dawson, William Hamner, Keith Bayha et al.	Eelgrass Restoration Response to Water Quality Conditions: A comparison of Mid-Atlantic coastal lagoon and estuarine systems. Kenneth Moore, Robert Orth.
2:30	The Oregon Coast Before the Arrival of Europeans. Roberta Hall.	Implementation of Biological Criteria to Protect Coral Reefs. Leska Fore, William Fisher, Patricia Bradley.	Evidence for the Viability of a Fry Migrant Strategy in Fall Chinook Salmon (<i>Oncorhynchus tshawytscha</i>) from the Central Valley, California. Jessica Miller, Ayesha Gray, Joseph Merz.	The Fossil Record of Jellyfish Strandings in Coastal Environments. Graham Young, James Hagadorn.	Brant as a Sentinel Species for Eelgrass Ecosystem Health in the Temperate Eastern Pacific. David Ward.
2:45	Oregon's Historical Baseline Data for Seaweeds. Gayle Hansen.	Information Solutions for Watersheds: I. An analysis workbench for simple, GIS-based, estuary analysis. Sandra Fox, Stephen Bourne, John Hampson et al.	Use of the Tidal Portions of Humboldt Bay Tributaries by Juvenile Coho Salmon. Michael Wallace, Seth Ricker et al.	To Clone or Not to Clone? Genetic analyses of clonal diversity and sexual reproduction in an invasive hydrozoan jelly in the San Francisco Estuary. Mariah Meek, Alpa Wintzer, Bernie May.	Do Green Turtles Cultivate Their "Garden" Even When Nutrients are Limiting? Kimberly Holzer, Karen McGlathery, Ross Jones.
3:00	Ecological Baselines: Charting the change in pinniped populations through recent time in the Pacific Northwest. Jan Hodder.	Information Solutions for Watersheds: II. The Northslope Decision Support System for Arctic water resources planning and management. Stephen Bourne, John Hampson et al.	Recovery of Wild Coho Salmon in Salmon River Basin, Oregon. Kim Jones, Daniel Bottom, Trevan Cornwell, David Hering, Staci Stein et al.	Population Dynamics and Predation Impact of the Introduced Ctenophore <i>Mnemiopsis leidyi</i> in the Gullmars Fjord, West Coast of Sweden. Lene Moller, Peter Tiselius et al.	Building a Framework of Perspectives: A review of seagrass maps and environmental data at multiple time and spatial scales. Kristen Kaufman.
3:15	Trends in Temperature and Dissolved Oxygen in Puget Sound: 1932-2008. C. Bassin, J. Mickett, J. Newton, M. Warner.	The Cumulative Frequency Diagram - A spatio-temporal assessment of water quality. Elgin Perry, Jeni Keisman, Paul Jacobson.	Abundance, Growth and Residence Time of Age-0 Chinook Salmon in Two Marsh Channels of the Salmon River Estuary, Oregon. David Hering, Daniel Bottom, Kim Jones, Ian Fleming.	Effects of Ultraviolet Radiation on Growth and Reproduction of <i>Mnemiopsis leidyi</i> from Chesapeake Bay and Florida Waters. Kristen Rathjen, Denise Breitburg, Patrick Neale.	Exploring the Unique Acoustic Characteristics of Seagrasses. Christopher Wilson, Preston Wilson, Kenneth Dunton et al.
BREAK 3:30 PM – 4:00 PM					

Monday Mid-Afternoon Oral Presentations

B115-116	B117-119	C120-122	C123	C124	
SCI-071 Biological Responses to Nutrient Enrichment in Coastal Receiving Waters <i>cont'd</i>	SCI-074 Applications of Landscape Ecology to Estuarine and Coastal Environments <i>cont'd</i>	SCI-046 Restoration of Eutrophic Coastal Ecosystems: Theories, Examples and Synthesis Michael Kemp, Walt Boynton and Denise Breitburg	SCI-085 Larval Dispersal, Transport and Recruitment Alan Shanks	SCI-065 Application of Stable Isotopes to Coastal and Estuarine Ecosystems Sharon Herzka	
Phytoplankton Community Dynamics and Toxic Algal Species of an Estuary Influenced by Nutrient Loaded River Water in Southeast Louisiana. Jessica Czubakowski , Sibel Bargu, Robert Twilley.	Effect of Remote Sensing Image Resolution on the Retrieval of Biomass and Productivity Estimates for Giant Kelp Forests. Tanique Rush , Richard Zimmerman.	Restoration of Eutrophic Coastal Ecosystems: An integrative introduction. William Kemp , Walter Boynton, Denise Breitburg.	Erodibility Affects Recruitment Processes of Benthic Macroinvertebrates in a Physically Dynamic Estuarine Setting. Payal Dharia , Linda Schaffner.	Do Fish Stay at Home? Brian Fry , Matthew Chumchal et al.	2:00
Spatial Variability in Eutrophication Indicators across a Tidal Gradient in Elkhorn Slough, CA. Brent Hughes , Kerstin Wasson, John Haskins et al.	Analyzing Spatial Patterns in Reefscape Ecology via Satellite Remote Sensing, Benthic Habitat Mapping and Morphometrics. Shanna Dunn , Sam Purkis.	Recalcitrance and Tipping Points in Recovery from Hypoxia in Chesapeake Bay. Jeremy Testa , Rebecca Murphy, W. Michael Kemp.	Predicting Among-estuary Connectivity Based on Population Genetics of the New Zealand Littleneck Clam <i>Austrovenus stutchburyi</i> . Phil Ross , Conrad Pilditch, Ian Hogg, Carolyn Lundquist.	Light Controls Carbon Isotope Signatures of Turtlegrass Across the Great Bahamas Bank. Xinping Hu, David Burdige, Richard Zimmerman .	2:15
Phytoplankton Primary Production Response to Nutrient Additions in Puget Sound. Rochelle Labiosa , Taeyun Kim, Tarang Khangaonkar, Zhaoqing Yang, Mindy Roberts, Ben Cope et al.	Coupling Landscape Ecology with Digital Terrain Analysis to Model and Map Fish and Coral Distributions across Complex Tropical Seascapes. Simon Pittman .	Increasing Stratification of the Chesapeake Bay: Causes and Impacts on Summertime Hypoxic Conditions. Rebecca Murphy , William Ball, Jeremy Testa, Michael Kemp.	Linking Population Connectivity and Demography to Assess Metapopulation Fitness of Coastal and Estuarine Mytilid Mussels. Henry Carson , Lisa Levin.	Terrestrial Run-off and Hydrography Influence Trophic Relationships and Pelagic Food Web Structure in the Central- and Southern North Sea. Benjamin Kürten , Karlina Soetaert, Suzanne Painting, Ulrich Struck, Swier Oosterhuis, Nicholas Polunin, Jack Middelburg.	2:30
Effects of Nutrient Addition on Seagrass Epifaunal Abundance in Nutrient Limited Conditions. Carolyn Weaver , Anna Armitage, James Fourqurean.	Quantifying Marine Landscape Structure: Extending Terrestrial Spatial Pattern Metrics to the Marine Realm. Lisa Wedding , Chris Lepczyk, Stacy Jorgensen et al.	Carbon Allocation and Sequestration in <i>Spartina alterniflora</i> in a Large-scale Chesapeake Bay Wetland restoration. Lorie Staver , J. Stevenson, Jeffrey Cornwell, Michael Owens.	Testing the Applicability of Shell Micro-chemistry to Determine Connectivity among Bivalve Populations: Quantifying spatial variations in juvenile shell composition. Conrad Pilditch , Clarisse Niemand, Carolyn Lundquist.	Going with the Flow: Food Web Response to Altered Salinity Gradient. Jill Olin , Michelle Heupel, Colin Simpfendorfer, Gregg Poulakis, Aaron Fisk.	2:45
Effluent Organic Nitrogen (EON): Bioavailability and Photochemical and Salinity Release. Deborah Bronk , Quinn Roberts, Nancy Love, Elizabeth Canuel1, Patrick Hatcher, Rajaa Mesfioui, Katherine Filippino, Margaret Mulholland.	Application of a Landscape Development Intensity Index to Predict Coral Health and Condition in St. Croix, U.S. Virgin Islands. Leah Oliver , John Lehrter, William Fisher et al.	Responses of Water Quality and Seagrass Coverage to Large-scale Reductions in Nitrogen Loads in Sarasota Bay, Florida (USA). David Tomasko , Mark Alderson, Jay Leverone et al.	Effects of the Vertical and Horizontal Position of Bivalve Larvae on Transport through a Shallow Estuarine System. Christine Mingione , Richard York, Scott Gallagher et al.	$\delta^{13}\text{C}$ - $\delta^{15}\text{N}$ Gradients along Estuaries in Washington State: Harbingers of change? Jennifer Ruesink .	3:00
Comparison of Trophic State in Different Areas of Effluent Disposal in Coastal Waters, São Paulo, Brazil. Claudia Lamparelli , Marta Lamparelli, Dario Nery.	Metapopulation Dynamics of Oyster Restoration Via Reserve Networks in Pamlico Sound, NC. David Eggleston , Brandon Puckett.	Ecological Responses to a Large and Fast Nitrogen Load Reduction in Tampa Bay, Florida: "kick-starting" recovery from eutrophic conditions. Holly Greening , Anthony Janicki, Raymond Pribble, Ed Sherwood.	Ingress, Transport Time and Growth of Chesapeake Bay Atlantic Menhaden (<i>Brevoortia tyrannus</i>) Larvae. Carlos Lozano , Edward Houde.	Spatial Variations in the Galveston Bay Estuary Indicated by Stable Isotope Analyses. Danielle Crossen , George Guillen, Glen Sutton.	3:15
BREAK 3:30 PM – 4:00 PM					

Monday Late Afternoon Oral Presentations

	A105	A106	A107-109	B110-112	B113-114
	SCI-063 Managing Tradeoffs among Coastal Ecosystem Services Karen McLeod and Mary Ruckelshaus	SCI-220 Effects of Climate/Sea Level Change on Estuarine Systems Kristin Wilson	SCI-005 Salmon Response to Natural and Anthropogenic Changes in North Pacific Estuaries <i>cont'd</i>	SCI-017 Jellyfish Blooms in Changing Coastal and Estuarine Ecosystems <i>cont'd</i>	SCI-106 Seagrass Ecological Health: Diagnosing the canary <i>cont'd</i>
4:00	The Economic Interpretation of Biophysical Gains and Losses: Measuring and managing coastal ecosystem goods and services. James Boyd.	Maine Salt Pools: Dynamic agents of coastal change. Kristin Wilson , Joseph Kelley, Daniel Belknap, Benjamin Tanner.	Tide Gate Impacts on Juvenile Salmonid Movement. Arthur Bass , Guillermo Giannico.	Factors that Influence the Timing and Intensity of the Annual Bloom of the Sea Nettle (<i>Chrysaora quinquecirrha</i>). Margaret Sexton , Raleigh Hood et al.	Global Seagrass Trajectories: Understanding multi-decadal seagrass change in relation to species, regions, habitats and processes of change. Tim Carruthers , Gary Kendrick, Robert Orth, William Dennison, Suzanne Olyarnik, Carlos Duarte, James Fourqurean, Kenneth Heck, Randall Hughes et al.
4:15	Integrated Valuation of Ecosystem Services and Tradeoffs: A modeling framework. Heather Tallis.	Sea Level Rise in a Southern California Salt Marsh: Consequences and possible solutions. Benjamin Grupe , Charles Briscoe, Aaron Hartmann, Kimberly Hoyt, Isabelle Kay, Chris Knight, Michael Navarro, Kimberly Roeland, Cali Turner-Tomaszewicz, Nellie Warner et al.	Does Size Matter: A comparison of the behavior of juvenile salmonids in large and small estuaries. Jeremy Romer , Camille LeBlanc, Carl Schreck, David Noakes, Shaun Clements.	Changes in the Biomass and Distribution of Bering Sea Jellyfish in Relation to Ocean Circulation and Environmental Conditions. Mary Beth Decker , Kung-Sik Chan, Lorenzo Ciannelli, Carol Ladd, Hai Liu et al.	Molecular Phylogeographic Survey of the Seagrass Pathogen <i>Labyrinthula</i> , with Implications for Recent Wasting-Disease Events. Daniel Martin , Timothy Sherman, Emily Boone, Sandy Wyllie-Echeverria, Kimberly Petersen, Tiffany Stephens, Chris Pickerell, Cliff Ross, Anne Boettcher.
4:30	Mapping and Valuing Marine Ecosystem Services: The Puget Sound and Beyond. Anne Guerry , Mary Ruckelshaus, Katie Arkema, Toft Judith, Choong-Ki Kim, Michael Papenfus, Yi Qi.	Outcome Driven Modelling for Predicting Changes in Inter-Tidal Habitat Futures. Mustafa Mokrech , William Sutherland, Robert Nicholls, Andrew Watkinson.	Estuarine Ecology of the Sea Trout (<i>Salmo trutta</i>) Outside of its Native Range. Colin Levings.	Distribution and Abundance of Large Medusae in Surface Waters Off the Coasts of Washington and Oregon, USA: Seasonal and interannual variability in relation to environmental conditions. Cynthia Suchman , Richard Brodeur, Robert Emmett, Elizabeth Daly.	Seagrass Recovery in Virginia's Coastal Bays: Are bay scallops next? Robert Orth , Scott Marion, Kenneth Moore, Mark Luckenbach, Barry Truitt, David Wilcox.
4:45	Using Marine Food Web Models to Identify Tradeoffs Inherent to Ecosystem-Based Management. Jameal Samhouri , Isaac Kaplan, Cameron Ainsworth, Phil Levin.	Planning for Future Sea Level Rise in the Corps of Engineers. Thomas Kendall.	Identifying the Role of an Alaskan Estuary in the Early Life History of Specific Sockeye Salmon Populations by Using Single Nucleotide Polymorphism Genetic Markers. Ryan Simmons , James Seeb, Daniel Schindler, Thomas Quinn, Ray Hilborn.	Acoustic Characterization of Scyphozoan Jellies as Prey for Leatherback Turtles (<i>Dermochelys coriacea</i>) Off Central California. Tanya Graham , James Harvey, Scott Benson, David Demer.	Are Seagrasses in Recovering Systems Resilient to Further Nutrient Addition? Marion Cambridge , Renae Hovey, Gary Kendrick et al.
5:00	Overcoming Obstacles and Creating Incentives for Integrated Ecosystem-Based Management. Mike Eng.	Planning for Climate Change on Many Geographic Scales. Lisa Beever , James Beever, Whitney Gray, Dan Trescott, Judy Ott.	A Salmon-Centric View of Climate Change Impacts on the Pacific Northwest. Nathan Mantua.	Geographic Patterns of Fish and Jellyfish in Puget Sound Surface Waters: Natural history footnotes or useful indicators of ecosystem condition? Correigh Greene , Casimir Rice, Jeffrey Duda, James Karr.	Ecological Health in the Subtropical and Tropical Western Atlantic of the Seagrasses <i>Thalassia testudinum</i> and <i>Halodule wrightii</i> Comparing Field and Laboratory Measurements of Temperature, Salinity, Light Intensity and Color. Anitra Thorhaug , Graeme Berlyn.
5:15	Panel Discussion led by Mary Ruckelshaus	The Effects of Temperature and Carbon Addition on Arctic Sediment Oxygen and Nutrient Exchanges. Eva Bailey , Maria Ceballos, Jackie Grebmeier, Walter Boynton.		Global Jellyfish Research: a Current Perspective. Jennifer Purcell.	Eelgrass Response to Light Reduction: The importance of acclimation and timing. Caroline Ochieng.

Monday Late Afternoon Oral Presentations

BI15-116	BI17-119	C120-122	C123	C124	
SCI-071 Biological Responses to Nutrient Enrichment in Coastal Receiving Waters <i>cont'd</i>	SCI-074 Applications of Landscape Ecology to Estuarine and Coastal Environments <i>cont'd</i>	SCI-046 Restoration of Eutrophic Coastal Ecosystems: Theories, Examples and Synthesis <i>cont'd</i>	SCI-085 Larval Dispersal, Transport and Recruitment <i>cont'd</i>	SCI-065 Application of Stable Isotopes to Coastal and Estuarine Ecosystems <i>cont'd</i>	
Algal Speciation Model for the Potomac River Estuary. Victor Bierman , Amanda Flynn, Scott Hinz, Joseph DePinto, Carl Cerco, Tammy Threadgill et al.	Saving Wild Places: A seascape species approach to marine conservation. Caleb McClennen, Samantha Strindberg , Karl Dider et al.	Nutrient Management Success from an Upper Trophic Level Perspective. Denise Breitburg , Richard Fulford, Karin Limburg, Aaron Adamack, Kenneth Rose, Walter Boynton, W. Michael Kemp et al.	Larval Connectivity of the Invasive Asian Mussel, <i>Musculista senhousia</i> , in Southern California. Paola Lopez-Duarte , Christina Tanner, Henry Carson, Linda Rasmussen, Lisa Levin.	Stable Isotope Ratios Reveal Shifts in Organic Matter Sources and Diet Diversity in Estuarine Ecosystems Influenced by Agricultural Run-off. Candida Savage , Matthew Hammond, Keira Heggie, Catherine Gongol et al.	4:00
Water Quality in the Indian River Lagoon, Florida: Relationship to the macroalgal community. D. Hanisak , Kristen Davis, Patrick Monaghan et al.	Landscape Ecology and Marine Protected Areas: Incorporating spatial and habitat heterogeneity into reserve evaluation. Brittany Huntington , Mandy Karnauskas, Diego Lirman.	Biogeochemical Fundamentals of the Baltic Sea Action Plan. Oleg Savchuk , Fredrik Wulff.	Paradigm Lost? Cross-shelf distributions of intertidal invertebrate larvae were unaffected by upwelling or downwelling. Alan Shanks , Kipp Shearman.	Assessment of Estuarine and Coastal Habitat Utilization by Juvenile, Subadult and Adult California Halibut Using Stable Isotope Ratios. Sharon Herzka , Francisco López-Rasgado, Anelena Campuzano H. et al.	4:15
The Use of a Hybrid Estuarine Response Model to Predict Ecosystem Responses to Climate Change in Shallow Subtropical Estuaries. Angus Ferguson , Jaimie Potts, Peter Scanes, Geoff Coade.	Small Community-based MPAs that Contain Continuous Reef Habitat Afford Reasonable Protection to Lethrinids in Fiji. Rikki Grober-Dunsmore , Victor Bonito, William Aalbersberg, Votua Village et al.	Spatial Dependency of Patterns in Streamwater Chemistry in Restored and Unrestored Urban Streams. Gwendolyn Stanko , Sujay Kaushal, Paul Mayer, Kenneth Belt, Claire Welty.	Larval Transport Modeling via Web-based Interface. C. Beegle-Krause , David Steube, Tiffany Vance, Deborah French McCay, Eoin Howlett.	Using Stable Isotopes to Better Define Nursery Habitat of a Juvenile Sportfish. Adam Brame , Carole McIvor, David Hollander, Ernst Peebles.	4:30
Plankton Community Respiration and Productivity for the Louisiana Offshore Ecosystem, July 2007 Results. Brandon Boyd , Dubravko Justic, Lixia Wang, Brian Fry.	Synthesis By Ron Kneib	Restoration of Functionality in a Tidal Flat: Lessons learned from an integrative field experiment. Carl Van Colen , Francesc Montserrat, Peter Herman, Middelburg Jack, Magda Vincx, Tom Ysebaert, Steven Degraer.	Modeling Analysis of Physical Transport and Swimming Behaviors Determining Plankton Distributions. Deborah French-McCay , Percy Donaghay et al.	Assessing Changes in Trophic Ecology of Juvenile Fish across an Estuarine-marine Ecotone: Consequences of natal habitat use. Ryan Woodland , David Secor.	4:45
The Relationships between Habitat Quality, Macrobenthic Community Structure, and Nektonic Predation of Macrobenthos in Shallow Estuarine Waters. David Gillett , Linda Schaffner et al.		Alternative Stable States of Native Oyster Reefs in Chesapeake Bay. Rom Lipcius , Leah Shaw, Junping Shi, Jian Shen et al.	Physical and Biological Factors Contributing to Changes in the Relative Importance of Recruitment to Population Dynamics. Daphne Munroe , Takashi Noda.	Measuring Dissolved Oxygen Stress in the Eastern Oyster, <i>Crassostrea virginica</i> . Heather Patterson , Anne Boettcher, Ruth Carmichael.	5:00
Phosphorus Regulates Nitrogen Cycling in Mangrove-Dominated Wetlands of Taylor River, Florida: A Nitrogen Budget. Victor Rivera-Monroy , Robert Twilley, Edward Castañeda-Moya, Stephen Davis, Beatrice Michot, Ehab Meselhe, David Rudnick, Daniel Childers, Christopher Madden et al.		Long-term Trends of Benthic Habitats Related to Reduction in Wastewater Discharge to Boston Harbor. Robert Diaz, Donald Rhoads, James Blake, Roy Kropp, Kenneth Keay, Pamela Neubert .	Discussion/Synthesis	$\delta^{15}\text{N}$ in Eastern Oyster (<i>Crassostrea virginica</i>) Tissues Indicates Nitrogen from Human and Animal Wastes at Three Spatial Scales. Benjamin Fertig , Tim B. Carruthers, William Dennison.	5:15

Tuesday Early Morning Oral Presentations

	A105	A106	A107-109	B110-112	B113-114
	SCI-058 Forage Fish in a Changing Climate Marisa Litz and Robert Emmett	SCI-048 Anthropogenic Impacts on the Health and Survival of Tidal Wetlands Matthew Kirwan and Brian Silliman	SCI-014 Coastal and Estuarine Biomonitoring: Which data do we really need? Simon Courtenay	SCI-035 Ecosystem Engineers in the Coastal and Estuarine Environment Lora Harris and Evamaria Koch	SCI-105 Seagrass Assessment: Think globally, monitor locally Gary Kendrick and Hilary Neckles
8:00	Men and Menhaden: Fish, Fisheries and Chesapeake Bay. Edward Houde.	Potential Impacts of Elevated CO2 on Coastal Wetlands. Karen McKee.	An Overview of the Community Aquatic Monitoring Program (CAMP) in the Southern Gulf of St. Lawrence. Simon Courtenay , Marie-Hélène Thériault et al.	Understanding Autogenic Ecosystem Engineering as a Strategy: Up-scaling from individual trade-offs to self-organising landscapes. Tjeerd Bouma , Stijn Temmerman, Jasper Dijkstra, Paul Klaassen, Thorsten Balke, Mindert de Vries, Johan van de Koppel et al.	Integrating Scales of Seagrass Monitoring. Hilary Neckles , Blaine Kopp, Brad Peterson, Penelope Pooler.
8:15	The Effects of Variable Oceanographic Conditions on Forage Fish Lipid Content and Fatty Acid Composition in the Northern California Current. Marisa Litz , Richard Brodeur, Robert Emmett, Selina Heppell, Rosalee Rasmussen, Linda O'Higgins, Matthew Morris.	Global Change Facilitates the Invasion of Introduced <i>Phragmites</i> in Atlantic Coast Tidal Marshes. Thomas Mozdzer , Joseph Zieman.	Saanich Inlet Shorekeepers, Ten Years and Counting. Steve Macdonald , Sean MacConnachie et al.	Enhancing Restoration Success by Excluding Negative Ecosystem Engineering Interactions: A case study on seagrasses. Wouter Suykerbuyk , Tjeerd Bouma, Tjisse van der Heide, Wim Giesen, Dick de Jong, Marieke van Katwijk.	How Do We Integrate Spatial and Temporal Scales into Managing Future Ecological Health of Seagrasses? Gary Kendrick , Kimberly Van Niel et al.
8:30	Community and Genetic Analyses of Macroparasites from Pacific sardine (<i>Sardinops sagax</i>) Caught in the California Current System. Rebecca Baldwin , Kym Jacobson, Mattias Johansson, Michael Banks.	Consequences of Eutrophication to Coastal Marshes Belowground. R. Eugene Turner , Faith Darby, Chris Swarzenski et al.	Project U.F.O. (Unidentified Foreign Organisms): Not all aliens come from outer space! Martha Jones , Timothy Rawlings et al.	The Effects of Seagrass Restoration on Nitrogen Processing in Shallow Coastal Lagoons. Luke Cole , Karen McGlathery.	Seagrasses as Indicators of Ecosystem Change in South Florida Estuaries. Margaret Hall , Michael Durako, Manuel Merello, Donna Berns, Jennifer Kunzelman, Katie Toth.
8:45	Linking Forage Fish Distributions and Ocean Conditions Near the Columbia River Plume. Amanda Kaltenberg , Kelly Benoit-Bird, Robert Emmett et al.	Rapid Expansion of Marshes During European Settlement, Metastability, and Their Response to Temperature Warming. A. Brad Murray , Matthew Kirwan et al.	The Life and Times of Biological Monitoring Programs in Chesapeake Bay. Jacqueline Johnson , Peter Tango, Derek Orner.	Role of Feedbacks in the Survival of a Canopy-forming Submersed Estuarine Plant Bed Growing Under Sub-optimal Conditions. Renee Gruber , William Kemp.	Status and Trends in Seagrass Distributions in Bermuda - are sea turtles eating it all? James Fourqurean , Kathryn Coates, Sarah Manuel, Judson Kenworthy.
9:00	Surf Smelt (<i>Hypomesus pretiosus pretiosus</i>) and Pacific Sand Lance (<i>Ammodytes hexapterus</i>) Spawning Habitat Selection in Puget Sound, Washington. Theresa Liedtke , Collin Smith, Dennis Rondorf.	Contemporary Effects of Mosquito Ditches on Salt Marsh Ecosystem Processes in New England. Keryn Gedan .	Biomass Spectra in Narragansett Bay from Phytoplankton to Fish. Brooke Longval , Candace Oviatt.	Impacts of Macroalgae on Seagrass in the Indian River Lagoon, Florida. Robert Virnstein , Robert Chamberlain, Lori Morris, Lauren Hall, Christy Akers, Brad Furman et al.	A Seagrass Monitoring Program for Texas Coastal Waters: Integration of Landscape Features with Plant and Water Quality Indicators. Ken Duntton , Warren Pulich, Troy Mutchler et al.
9:15	Relating Forage-Fish Spawning Habitat Suitability and Sediment Size Distributions of Beaches in the Elwha, Dungeness, and Crescent Drift Cells, Central Strait of Juan de Fuca, Washington State. David Parks , Anne Shaffer, Jon Warrick, Tiffany Nabors et al.	Effects of Prescribed Burning on Marsh Elevation and Vulnerability to Sea-Level Rise. Donald Cahoon , Glenn Guntenspergen.	Timing and Placing Samplings to Optimally Calibrate a Reactive Transport Model: Exploring the potential for <i>Escherichia coli</i> in the Scheldt Estuary. Anouk de Brauwere , Fjo De Ridder, Olivier Gourgue, Jonathan Lambrechts, Richard Comblen, Rik Pintelon, Julien Passerat et al.	Will the Balance of Power Shift Among Native Eastern Pacific Estuary Ecosystem Engineers with the Introduced Bopyrid Isopod Parasite <i>Orthione griffenis</i> ? John Chapman , Theodore DeWitt, Brett Dumbauld.	Sixteen Years of Seagrass Monitoring: Discerning natural and human-induced changes in a tropical seagrass community. Brigitta van Tussenbroek , Guadalupe Barba Santos et al.
9:30	Are Eulachon at Risk of Extinction in the Northern California Current Province? Richard Gustafson .	Global Climate Changes Recorded in Coastal Wetland Sediments: Linking empirical observation to theoretical predictions. Alexander Kolker , Matt Kirwan, Steven Goodbred, Kirk Cochran.	An Assessment of Bay Clam Spatial Distribution and Associated Habitat Characteristics in Coos Bay, Oregon. Caren Braby , Alix Laferriere, Stacy Galleher, Meghan Massaua, Litzy Venturi et al.	Developing Indicators of Flooding Stress in <i>Spartina patens</i> to Improve Marsh Restoration and Management. Vanessa Tobias , J. Andrew Nyman, Ronald DeLaune, John Foret et al.	Assessment and Modeling of Seagrass Habitat at Grand Bay National Estuarine Research Reserve. Brenna Ehmen , Emily Goldman, Christopher May, Julius McIlwain, Anne Boettcher, Hugh MacIntyre.
BREAK 9:45 AM – 10:15 AM					

Tuesday Early Morning Oral Presentations

B115-116	B117-119	C120-122	C123	C124	
SCI-095 Natural and Anthropogenic Changes in Estuaries: An Historical Perspective Stefan Talke, David Jay, Christopher Sommerfield and Robert Chant	SCI-047 Zooplankton Dynamics in Estuarine and Coastal Systems David Kimmel and James Pierson	SCI-018 Estuarine Sedimentary Processes and Products Timothy Dellapenna and Carl Friedrichs	SCI-075 Human Impacts on Biogeochemical Processes along the Land-to-Sea Continuum Fredrick Prahl, Tawnya Peterson and Joe Needoba	SCI-049 Significance of River-Ocean Coherence for Fluxes and Fate of Terrestrial Material Tara Kniskern, Miguel Goni, Rob Wheatcroft and Katie Farnsworth	
An Introduction to Natural and Anthropogenic Changes in Estuaries: A Historical Perspective. Stefan Talke , Christopher Sommerfield, David Jay, Robert Chant.	Introduction to Zooplankton Dynamics in Estuaries. Wim Kimmerer .	Long-Term Measurement of Sediment Settling Velocity and Bed Erodibility Along an Estuarine Gradient. Carl Friedrichs , Patrick Dickhudt, Grace Cartwright.	Contrasting the Temporal Scales of Variability in Particulate and Dissolved Materials in Four Estuarine/Coastal Systems. Andrew Barnard , Cristina Orrico, Joseph Needoba, Scott McLean, Marlon Lewis.	Rates and Patterns of Sediment Deposition in the Salinas River Basin, Central California. Gregory Pasternack , Elizabeth Watson, Robert Wheatcroft, Andrew Gray.	8:00
Approaches to Model Observed Long-term Morphological Changes in Estuaries. Huib de Swart .	Climate Change, Phenology and Synchrony in Zooplankton Assemblages within a High Salinity Southeast US Estuary. Dennis Allen , Ginger Ogburn-Matthews.	Tidal Asymmetry of Sediment-Transport Dynamics on Intertidal Flats: Two Contrasting Examples. Andrea Ogston , Kristen Lee, Katie Boldt, Richard Hale, Charles Nittrouer.	Impacts of Stormwater Management on Carbon Biogeochemistry at the Land-Ocean Interface in South Carolina, USA. Erik Smith , Amy Willman, Ben Lakish, Jennifer Plunket et al.	Sedimentation and Organic Carbon Burial in the Urbanized Yangtze River and Lower Hudson River Estuaries and Implications for the Global Carbon Budget. Curtis Olsen, Jun Zhu et al.	8:15
Influence of Anthropogenic Measures on Hydrodynamics and Transport Characteristics in the Elbe Estuary. Holger Weilbeer .	Recruitment of Open Water Calanoid Copepods from Spatially and Temporally Varying Sources in the San Francisco Estuary. John Durand , Wim Kimmerer et al.	Rotary Sonar Analysis of Fine Grained Sediment Deposition and Bed Erodibility in the York River Sub-Estuary, VA. Lindsey Kraatz , Carl Friedrichs, Jesse McNinch, Arthur Trembanis, Patrick Dickhudt et al.	Biogeochemical Processing in the Atchafalaya River/Bay System: Implications for nutrient and organic matter export to the Gulf of Mexico hypoxic zone. Brian Roberts , Carrie Semmler, Susan Doty, Nancy Rabalais, R. Turner.	Flow Division at an Estuarine Junction. Frans Buschman , Maarten van der Vegt, anTon Hoitink, Piet Hoekstra et al.	8:30
Morphodynamic Evolution of the Dutch Wadden Sea During the Last Century: A system dictated by major human interventions. Edwin Elias .	Response of the Zooplankton Community to Restoration: The case of the Scheldt estuary (Belgium/the Netherlands). Benoit Mialet , Tom Maris, Frédéric Azémar, Marie Lionard, Els van Burm, Stefan Van Damme, Patrick Meire, Micky Tackx.	Erodibility and Sediment Trapping in a Partially Mixed Estuary: A modeling study of the York River Estuary, Virginia. Courtney Harris , J. Rinehimer, Chris Sherwood.	Tidally Influenced Nitrogen Fixation and Denitrification Rates Vary Widely across Eutrophic Southern California Estuaries. Tonya Kane , Peggy Fong.	Effects of Seasonal River-Ocean Coherence on Sediment Transport, Deposition and Reworking along the U.S. West Coast. Tara Kniskern , Jon Warrick, Julia Moriarty, Katie Farnsworth.	8:45
Human Modifications and their Effects on Morphology and Sediments of the Hudson River Estuary. Frank Nitsche .	Estimates of Winter Zooplankton Production in the Chesapeake Bay Estuarine Turbidity Maximum. James Pierson , Michael Roman, David Kimmel, Raleigh Hood, Byron Crump, David Keller, Daniel Dong-Yoon Lee, Michael Malpezzi.	A Mutli-scale Finite-element Model for the Transport of Sediments in the Scheldt Estuary. Olivier Gourgue , Benjamin de Brye, Anouk de Brauwere, Tuomas Kärnä, Eric Deleersnijder.	Linking Agriculture, Nitrogen Inputs and Ecosystem Metabolism in Elkhorn Slough on Time Scales from Hours to Years. Josh Plant , Joe Needoba, Luke Coletti, Hans Jannasch, Todd Martz, Ken Johnson et al.	A Retrospective Analysis of Conditions Leading to Wave-Supported Gravity Flows on the US West Coast. Robert Wheatcroft , Patricia Wiberg et al.	9:00
A Tale of Two Macro Tidal Estuaries: Differential Morphodynamic Response of the Intertidal Zone to Causeway Construction. Danika van Proosdij , Tim Milligan, Gary Bugden, Butler Karl et al.	Temporal and Spatial Fluctuations of Zooplankton in Padilla Bay: A monitoring project in an eelgrass dominated embayment in Northern Puget Sound. Nicole Burnett .	Erosion and Resuspension Dynamics and Contaminant Transport in Flocculated Surface Layers. Brent Law , Timothy Milligan, Paul Hill, Phil Yeats, Glen Morton et al.	A Tidal Bellows for Dissolved Methane in the Lower Columbia River and its Estuary. Fredrick Prahl , Joe Needoba, Tawnya Peterson, Matthew Wolhowe.	Characterizing Hyperpycnal Flows: An Example from Fangliao Canyon, SW Taiwan. Richard Hale , Charles Nittrouer, James Liu, Ben Sheets, Andrea Ogston.	9:15
Anthropogenic Forcing of Morphological Change in the San Francisco Estuary - The Importance of Sediment Delivery. Bruce Jaffe .	Population Dynamics of the Copepod <i>Eurytemora affinis</i> in Two Trans-Atlantic Estuaries: The Chesapeake Bay (USA) and the Seine estuary (France). David Devreker , Michael Roman, James Pierson, David Kimmel, Sami Souissi et al.	Inter-tidal Lutocline Dynamics in the Ems Estuary, Germany. Li Wang , Christian Winter, Alexander Bartholomä, Dierk Hebbeln.	Applications of Fluorescence Spectroscopy for Monitoring Water Quality in an Urban Watershed. Jami Goldman , Kenna Butler, Stewart Rounds, Tawnya Peterson, Joe Needoba et al.	Modeling the Seasonal Cycle of Dissolved Organic Carbon and Nitrogen at Station CB3.3C in the Upper Chesapeake Bay, USA. David Keller , Raleigh Hood.	9:30
BREAK 9:45 AM – 10:15 AM					

Tuesday Mid-Morning Oral Presentations

	A105	A106	A107-109	B110-112	B113-114
	SCI-031 Parameterizing Estuarine Variability Rocky Geyer, Parker MacCready, Dave Ralston and Jim Lerczak	SCI-048 Anthropogenic Impacts on the Health and Survival of Tidal Wetlands <i>cont'd</i>	SCI-062 Science Supporting an Ecosystem Approach to Management: Social-Ecological Linkages Felix Martinez and Marybeth Bauer	SCI-035 Ecosystem Engineers in the Coastal and Estuarine Environment <i>cont'd</i>	SCI-105 Seagrass Assessment: Think globally, monitor locally <i>cont'd</i>
10:15	New, Improved Dimensions in Estuarine Classification. Parker MacCready .	The Importance of Sediment Deposition from Hurricane Rita on Long-term Mineral Accumulation Rates in Southwest Louisiana. Gregory Steyer , Leigh Anne Sharp, John Meriwether, Sarai Piazza, Sijan Sapkota et al.	The Southern Resident Killer Whale Watching Industry of the Greater Puget Sound, WA - Who are they? What have we learned? Suzanne Russell , Morgan Schneider.	Musseling our way from the Headwater to the Bay: Ecosystem-Based Mussel Restoration in the Delaware Estuary. Angela Padeletti , Danielle Kreeger, Laura Whalen.	Seagrass Communities: From a phytosociological towards a biosociological classification approach. Cornelius den Hartog .
10:30	Estuarine Dispersion Resulting from Tidal Trapping: A new analytical framework. Lissa MacVean , Mark Stacey.	The Impact of Hurricanes Ike and Gustav on Marsh Elevation Change and Vertical Accretion at CRMS - Wetlands sites on the Chenier Plain, Louisiana. Dona Weifenbach , Leigh Anne Sharp, Tommy McGinnis.	Marine Resource Dependence, Resource Use Patterns and Identification of Economic Performance Criteria: Kaledupa, Indonesia. Leanne Cullen , Jules Pretty, David Smith et al.	Does Engineering Macrofauna Affect the Benthic Processing of a Settling Phytoplankton Bloom? Ulrike Braeckman , Pieter Provoost, Karlina Soetaert, Magda Vincx, Jan Vanaverbeke et al.	Local Eyes, Global Wise: the Seagrass-Watch monitoring program. Len McKenzie , Rudolf Yoshida, Jane Mellors, Michelle Waycott, Siti Yaakub, Miguel Fortes et al.
10:45	Key Parameters Defining Estuary Variability. Hubert Savenije , Marco Toffolon.	Coastal Development Reduces the Quality of Tidal Creeks as Fish Habitat. Justin Krebs , Susan Bell, Carole McIvor et al.	Integrating Divergent Interests Through Ecosystem-Based Management: The Case of the Great Bear Rainforest. Justin Page .	Coral Reef Sponges as Ecosystem Engineers: Interactions and feedbacks towards a new reef system. Patrick Gibson , Chris Martens, Niels Lindquist, Nyssa Silbiger et al.	Challenges of Seagrass Monitoring on a Global Scale: SeagrassNet. Frederick Short , Rob Coles et al.
11:00	Relationship between Hydro-morphological Classification of Estuaries and Distribution of Benthic Communities in the Southern Bay of Biscay. Cristina Galván , José Juanes, Araceli Puente.	Cumulative Impacts to Coastal Landscapes: Revisiting W.E. Odum's early warnings. Mark Peterson , Michael Lowe et al.	Ecosystem Concepts in Law: An evaluation of the employment of the term in US court cases. John Duff .	Oysters Modify Estuarine Nitrogen Cycling. Ashley Smyth , Suzanne Thompson, Wayne Gardner, Mark McCarthy, Michael Piehler.	Contribution of Seedling Recruitment to the Infilling of Gaps in a Western Australian Seagrass Meadow. David Rivers , Diana Walker, Gary Kendrick.
11:15	Connecting the Sound to the Shelf: A numerical model study of the Salish Sea and processes affecting estuarine circulation over multiple time and space scales. David Sutherland , Parker MacCready.	Landscape-level Impacts of Marsh Loss and Effects of Shoreline Development upon Chesapeake Bay Benthos and their Predators. Rochelle Seitz , Amanda Lawless, Cassie Bradley, Rom Lipcius.	Is Human Culture an Emergent Property of Mediterranean Climate Lagoons? Gian Carrada , Alberto Basset.	Seasonal Scope for Growth of Diploid <i>Crassostrea ariakensis</i> and <i>Crassostrea virginica</i> under Ambient Conditions Simulating the Mesohaline and Polyhaline Regions of Chesapeake Bay. Christopher Kelly , Roger Newell.	Evaluating New Methods for Monitoring Submersed Aquatic Vegetation in Chesapeake Bay. David Wilcox , Robert Orth, Jennifer Whiting, Anna Kenne, Amy Owens, Leah Nagey.
11:30	The Influence of Channel Curvature on Longitudinal Dispersion of Salt in Estuaries. James Lerczak , Shih-nan Chen, Rocky Geyer.	Effect of Fertilization on Soil Respiration and Belowground Macro-organic Matter in <i>Spartina alterniflora</i> Marsh Soils. Cathleen Wigand , Earl Davey, Karen Sundberg, Jim Morris, Erik Smith, Paul Kenny, Roxanne Johnson.	Examination of Conditions for Successful Common Property Management for Coastal Marine Living Resources: A case study of women divers communities in Jeju, South Korea. Jae-Young Ko , Moon-Soo Heo, Glenn Jones, Young-Su Kang, Sang-Hyuck Kang et al.	Invasive Tunicates as Ecosystem Engineers in San Francisco Bay. Elizabeth Jewett , Kristen Larson, Safra Altman, Tami Huber, Gregory Ruiz.	Nearly 20 Years of Eelgrass Monitoring in Padilla Bay, Washington (1989 to 2008). Suzanne Shull , Douglas Bulthuis.
11:45	Parameterizing Estuarine Stratification: A case for over-mixing? Rocky Geyer , Shih-Nan Chen.	Relative and Interactive Effects of Nitrogen and Salinity in Pickleweed Dominated Salt Marshes. Amelia Ryan , Katharyn Boyer.	Discussion/Synthesis	Tube Worm Reefs as Important Ecosystem Engineers in the Coastal Zone: Biological hotspots stabilizing sand bank systems. Marijn Rabaut , Magda Vincx, Steven Degraer.	Eelgrass (<i>Zostera marina</i> L.) Monitoring in Greater Puget Sound (Washington, USA): The value in tracking an indicator species at different spatial and temporal scales. Jeffrey Gaeckle , Pete Dowty, Helen Berry, Lisa Ferrier, Anja Schanz, Thomas Mumford.
POSTER SESSIONS and LUNCH 12:00 PM – 2:00 PM					

Tuesday Mid-Morning Oral Presentations

BI15-116	BI17-119	CI20-122	CI23	CI24	
SCI-095 Natural and Anthropogenic Changes in Estuaries: An Historical Perspective <i>cont'd</i>	SCI-047 Zooplankton Dynamics in Estuarine and Coastal Systems <i>cont'd</i>	SCI-018 Estuarine Sedimentary Processes and Products <i>cont'd</i>	SCI-016 Effects of Increased Salinity on Estuarine and Coastal Ecosystems Jennifer Culbertson, Courtney Hackney, Martin Posey and Maurice Crawford	SCI-012 Ballast Water - Research and Management in Coastal Waters Andrea Copping and Russell Herwig	
Human Disturbance and Sedimentary Response of the Tidal Delaware River and Estuary. Christopher Sommerfield , Robert Chant.	Development, Growth and Fecundity of the Introduced Copepod <i>Limnoithona tetraspina</i> in upper San Francisco Estuary. Alison Gould , Wim Kimmerer.	Linking Sediment Transport to Laminated Seabed Deposits in a Fine-grained Tidal Flat: Willapa Bay, WA. Katherine Boldt , Charles Nittrouer, Andrea Ogston.	Effects of Climate Change on N and P Sorption Processes in Tidal Freshwater Floodplain Forests, Georgia (USA). Mi-Hee Jun , Christopher Craft et al.	Transportation of Foreign Phytoplankton into the Ports of Houston and Galveston, Texas by Way of Ballast Water. Jamie Steichen , Elizabeth Neyland, Robin Brinkmeyer, Antonietta Quigg.	10:15
The Importance of Decadal-scale Climate Variability to Wind-driven Modulation of Hypoxia in Chesapeake Bay. Malcolm Scully .	Long-term Changes in <i>Acartia tonsa</i> in the Upper Chesapeake Bay: An indirect consequence of eutrophication. David Kimmel , Michael Roman.	Benthic Community Structure and Organism-sediment Interactions at Estuarine Sites Characterized by Contrasting Hydrodynamic Conditions and Seabed Dynamics. Linda Schaffner , Alice Brylawski, Payal Dharia, Patrick Dickhudt, Robert Diaz, Carl Friedrichs.	Interactive Effects of Drought and Salinity on Aboveground Productivity of Forests and Trees of Tidal Freshwater Forested Wetlands. Nicole Cormier , William Conner, Kenneth Krauss et al.	Spatial and Temporal Composition of Coastal Zooplankton Indicator Species in Relation to United States West Coast Domestic Ballast Water Regulations. Nissa Ferm , Jeffery Cordell, David Lawrence, Terrie Klinger, Greg Ruiz, George Smith.	10:30
Seasonal, Interannual and Longer Term Variability of the Main Mechanisms Tied with the Circulation of Patos Lagoon (30°S, Brazil). Osmar Möller , Marcos Abe, Catarina Marques, Wilian Marques.	Ecological Consequences of Niche Partitioning of a Copepod Species Complex in the St. Lawrence Estuarine Transition Zone. Gesche Winkler .	Sediment Dynamics in the Corsica River Estuary, Maryland. Cindy Palinkas , Jeffrey Cornwell, Mike Owens et al.	Effects of Drought Conditions on Remineralization Pathways in Brackish Marshes and Freshwater Tidal Swamps along the Cape Fear River, NC. Jennifer Culbertson , Brooks Avery, Jason Hall et al.	Ballast Tank Organisms: Wanted dead - not alive. Nick Welschmeyer .	10:45
The Effect of Deepening the Ems Estuary on Tidal Dynamics and Sediment Trapping. Alexander Chernetsky , H. Schuttelaars.	Summer Zooplankton Assemblages in the Southern Mid-Atlantic Bight. Julie Ambler .	Multi-element Comparisons of Natural and Anthropogenic Inputs into Pristine Estuarine Sediments, Merimbula, N.S.W., Australia. Fern Beavis , David Ellis, Andrew Christy, Stephen Eggins.	Community Resilience in Response to Fluctuation in Water Level, Flow, and Salinity in the Cape Fear River Estuary, NC. Troy Alphin , Martin Posey, Lynn Leonard, Russell Barbour, Courtney Hackney et al.	Using Vital Stains to Determine the Viability of Organisms Released in Ships' Ballast Water. Lisa Drake , Mia Steinberg, Scott Riley, Stephanie Robbins, Bruce Nelson, Edward Lemieux.	11:00
Long-Term Evolution of Columbia River Tides. David Jay , Keith Leffler, Sebastian Degens.	Seasonal Patterns of Size Structured Biomass in Scottish Coastal Zooplankton. Jens Rasmussen , Michael Heath.	Affect of Seabed Density and Sediment Pelletization on Erosion/Deposition Processes at Clay Bank, York River, Chesapeake Bay, VA. Cielomar Rodríguez-Calderón , Steven Kuehl et al.	The Evolution of Tidal Freshwater River Geomorphology: Observations of short-term processes and speculation about long-term feedbacks. Scott Ensign , Martin Doyle, Michael Piehler.	Vital and Mortal Staining of Microalgal Cells to Evaluate Ballast-Water Treatments. Ying Zhong Tang, Fred Dobbs .	11:15
The Skagit River Basin: A Crucible for Climate Change Impacts in the Pacific Northwest. Alan Hamlet .	Using Stable Isotope Analysis to Determine Zooplankton Trophic Response to the Biogeochemical Gradient in a Coastal Tributary. Joel Hoffman , Greg Peterson, Tim Corry, Anne Cotter, John Kelly.	Sedimentation Processes and Turbidities Favoring Endangered Fish, Northern Sacramento-San Joaquin River Delta. Tara Morgan , David Schoellhamer.	Tidal Wetland Restoration and Sea Level Rise Driven Changes in Creek and Wetland Salinity Structure: Observations and Predictions from the Giacomini Wetland Restoration Project. Rachel Kamman , Gregory Kamman, Lorraine Parsons, Brannon Ketcham.	Testing Ballast Water Treatments at the Great Ships Initiative Land-based Facility: Zooplankton and phytoplankton viability assessments. Euan Reavie , Mary Balcer, Allegra Cangelosi.	11:30
Dam Construction on Maine River Systems and the Consequences for River Herring: An historical ecology perspective. Carolyn Hall , Adrian Jordaan, Michael Frisk, Robert Cerrato.	Assessing Predation by an Introduced Clam on the Abundant Cyclopoid Copepod <i>Limnoithona tetraspina</i> in the San Francisco Estuary. Laurie Kara , Wim Kimmerer et al.	Shoaling Reduction Techniques in Upper Arthur Kill. Stanley Martin , Joseph Letter.	Hydrological Characteristics of Tidal Swamps. Courtney Hackney , Lynn Leonard, Jennifer Culbertson, G. Brooks Avery, Martin Posey, Troy Alphin, Maurice Crawford.	Controlling Invasive Organisms through Ballast Water Treatment. Andrea Copping , Russell Herwig.	11:45
POSTER SESSIONS and LUNCH 12:00 PM – 2:00 PM					

Tuesday Mid-Afternoon Oral Presentations

	A105	A106	A107-109	B110-112	B113-114
	SCI-104 Turbulence and Mixing in Estuaries and the Coastal Ocean Ed Zaron	SCI-029 Dredging and Construction Impacts on Critical Life Stages of Fish Kathryn Ford and Tay Evans	SCI-086 Commercially Important Decapods Alan Shanks	SCI-035 Ecosystem Engineers in the Coastal and Estuarine Environment <i>cont'd</i>	SCI-107 Seagrass Management and Policy: Proactive sustainability Bill Dennison
2:00	Introduction to Turbulence and Mixing in Estuaries and the Coastal Ocean. Ed Zaron .	An Overview of Construction Impacts on Marine Fisheries Resources. Kathryn Ford , N. Tay Evans.	Marine Stewardship Council Certification for Dungeness Crab as Example of a "Data-poor" Fishery: Easier said than done. David Armstrong , Sean McDonald et al.	Importance of Species Identity: Implications of two non-native congeneric beach grasses (<i>Ammophila arenaria</i> and <i>A. breviligulata</i>) on dune structure and coastal protection. Sally Hacker , Phoebe Zarnetske, Eric Seabloom, Peter Ruggiero.	Managing and Protecting Seagrasses in the Great Barrier Reef World Heritage Area, Australia. Robert Coles , Len McKenzie, Michael Rasheed, Alana Grech et al.
2:15	Turbulent Removal of Sediment from a Buoyant River Plume. Daniel Nowacki , Alexander Horner-Devine, Jonathan Nash, David Jay.	A Case Study of the Effects of Dredging in Narragansett Bay (RI, USA) on Winter Flounder Eggs. Walter Berry , Elizabeth Hinchey, Grace Klein-MacPhee, Douglas Clarke, Norman Rubinstein.	A Changing Climate Drives Northern Australian Mud Crab (<i>Scylla serrata</i>) Catches. Jan-Olaf Meynecke , Shing-Yip Lee, Marc Grubert et al.	Biophysical Constraints on Wetland Ecosystem Engineers in Response to Nutrient Enrichment and Sea Level Rise. Lora Harris .	Managing Seagrass in Tampa Bay, Florida: a Multi-scale Approach. Lindsay Cross , Holly Greening, Edward Sherwood.
2:30	Numerical Simulations of the Merrimack River Plume: Transition to a coastal current. Robert Hetland .	Simulations of Dredging-Induced Sedimentation on Winter Flounder Spawning Habitat in Newark Bay, New Jersey. Tahirih Lackey , Douglas Clarke, Sung-Chan Kim.	Relating Large-scale Climate Variability to Local Species Abundance: ENSO forcing and brown shrimp (<i>Farfantepenaeus aztecus</i>) in Breton Sound, Louisiana, USA. Bryan Piazza , Megan La Peyre, Barry Keim.	Unseen Engineers: the Importance of Belowground Biomass in Coastal Marsh Sustainability. Denise Reed .	Large-scale <i>Zostera marina</i> (Eelgrass) Restoration in Chesapeake Bay, Maryland, USA Part II: A comparison of large-scale restoration efforts in the Patuxent and Potomac Rivers. Rebecca Raves Golden , Kathryn Busch, Lee Karrh, Thomas Parham, Mark Lewandowski, Michael Naylor et al.
2:45	The Role of Inflow Angle in the Alongshore Momentum Balance in a Coastal River Plume. Alexander Horner-Devine , Derek Fong.	Environmental Windows and Sequencing as Alternative Management Practices to Reduce Dredging-Induced Impacts on Winter Flounder (<i>Pseudopleuronectes americanus</i>) in New York/New Jersey Harbor. Dara Wilber , Douglas Clarke, David Davis, Sarah Zappala, Catherine Mulvey, Jenine Gallo.	Conservation of the Southern Gulf of St. Lawrence Lobster: Trends in management, landings and recruitment. Michel Comeau .	Rocky Shore Algal Ecads: Overlooked ecosystem engineers of New England salt marshes. Megan Tyrrell , Michele Dionne, Sarah Eberhardt.	Conservation Status of Portuguese Seagrasses: Three levels of action for a proactive management. Alexandra Cunha , Jorge Assis, Ester Serrão et al.
3:00	Evidence for an Oceanic Forward Kinetic Energy Cascade from High-Frequency Radio Doppler Surface Current Meters. Edward Zaron , Cedric Chavanne, Pierre Flament.	Evaluation, Monitoring and Management of Dredged Material Disposal in New England Waters: An integrated approach. Charles Farris .	Fisheries-independent Estimation of American Lobster Fishing Mortality. John Mark Hanson .		A Social-ecological Approach to Seagrass Management. Maricela de la Torre Castro .
3:15	Evolution of the Spatial Structure of a Thin Phytoplankton Layer into a Turbulent Field. Zhankun Wang , Louis Goodman.	Establishment and Application of Science Based Environmental Time-of-year Restrictions as a Management Tool. Tay Evans , Kathryn Ford et al.	The Trophic Network Impact of Shrimp Trawling in North Carolina: A natural experiment. Rebecca Deehr , Joseph Luczkovich, Kevin Hart, Lisa Clough, Jeffrey Johnson, David Griffith.	Mussel Powered Living Shorelines for Salt Marsh Erosion Control. Laura Whalen , Danielle Kreeger, David Bushek, Angela Padeletti, Joshua Moody.	Closing the Coastal Charisma Gap: How to integrate seagrasses into the public dialog on coastal ecosystems. William Dennison , Tim Carruthers, Robert Orth et al.
BREAK 3:30 PM – 4:00 PM					

Tuesday Mid-Afternoon Oral Presentations

B115-116	B117-119	C120-122	C123	C124	
SCI-095 Natural and Anthropogenic Changes in Estuaries: An Historical Perspective <i>cont'd</i>	SCI-047 Zooplankton Dynamics in Estuarine and Coastal Systems <i>cont'd</i>	SCI-098 Estuarine and Marine Animal Health in a Rapidly Changing World Nathalie Valette-Silver, Gary Matlock and Shawn McLaughlin	SCI-011 Linking Land-use, Environmental Gradients and Anadromous Fish Behavior Shaun Clements, Carl Schreck and David Noakes	SCI-042 Long-term Trends in Marine Birds in Relation to Environmental Change Jamie Jahncke, Nina Karnovsky and Mark Herzog	
Lake St Lucia - Estuarine World Heritage Site at the Cross-Roads. Alan Whitfield , Ricky Taylor.	Feeding, Growth and Survival of Larval Planktivorous Fish in the San Francisco Estuary: Impacts of introduced prey. Lindsay Sullivan , Wim Kimmerer.	Estuarine and Marine Animal Health in a Rapidly Changing World. Nathalie Valette-Silver .	Humpback Whitefish Migration and Habitat Use on the Copper River Delta, Alaska. Brian Neilson , Gordon Reeves et al.	Ocean Processes Regulating Marine Birds and their Prey in the California Current System. Jennifer Roth , Jaime Jahncke, Russell Bradley, Pete Warzybok.	2:00
Estuaries of South-western Australia - SWANLAND. Anne Brearley .	Mesozooplankton, Salinity and <i>Anchoa mitchilli</i> in Florida Bay. Christopher Kelble , Peter Ortnier, Gary Hitchcock, Donald DeAngelis et al.	Impact of Global Changes on Estuarine and Marine Animal Health. Nathalie Valette-Silver, Gary Matlock et al.	Dynamics of Delta Smelt <i>Hypomesus transpacificus</i> Population Contingents in the San Francisco Bay-Delta Estuary. James Hobbs .	Changes in Non-breeding Brown Pelican Seasonal Presence in the Columbia River Estuary and Hazards of Late Southward Migration in 2008-09. Deborah Jaques , Daniel Anderson, Roy Lowe, Dave Jessup, Curt Clumpner, Jay Holcomb, Sharnelle Fee.	2:15
Paleoecologic Analyses in South Florida's Estuaries as a Source for Empirical Data on Salinity Changes Spanning Decades to Centuries. G. Wingard , J. Hudley.	Physical-biological Interactions Related to Invertebrate Prey Production for Young Estuarine-dependent Fishes in Southwest Florida. S. Tolley , David Fugate, Michael Parsons, Brooke Denkert, Megan Andresen, Kara Radabaugh, Greg Ellis, Scott Burghart, Ernst Peebles.	A Multiple Bio-indicator Approach for Assessing Estuarine Health. Shawn McLaughlin , John Jacobs, Andrew Leight, Earl Lewis, Gretchen Messick, Robert Wood.	Fish Quality Matters More than Quantity: Selective mortality in large-scale water diversions and changing climate cripple the endangered delta smelt. William Bennett , James Hobbs, Sweet Teh.	Of Plumes and Plumage: The Columbia River plume and seabird communities in the northern California Current ecosystem. Elizabeth Phillips , Jeannette Zamon.	2:30
Changing Conditions in Florida Estuaries: Decreasing pH and increasing salinity. Lisa Robbins, Ellen Raabe , Sherman Wilhelm, Joseph Boyle.	What Causes Mysid Shrimps to Segregate within an Estuary? Beate Bierschenk , Gerard Closs, Carolyn Burns, Marc Schallenberg.	Initial Impacts of Microcystis on the Aquatic Food Web in San Francisco Estuary. P. Lehman , S. Teh, G. Boyer, M. Nobriga.	Effects of Land Use on Alewife Growth Rates Using Biogeochemical Tracers in New England Estuaries. Rita Oliveira Monteiro , Ivan Valiela et al.	Spatially Explicit Resource Overlap between Seabirds and Fisheries at a Global Scale, from 1950's to Present. Daniel Pauly, Michelle Paleczny et al.	2:45
What is Ecologically More Important for the Ems Estuary: 'climate change' or 'engineering activities'? Victor de Jonge .	Shifts in Plankton Patch Intensity and Distribution in a Shallow, Coastal Fjord (East Sound, Washington State). Susanne Menden-Deuer , William Day, Kerri Fredrickson et al.	Nutritional Value of Invasive Tunicates, <i>Botrylloides violaceus</i> and <i>Didemnum vexillum</i> to Potential Consumers in the Mid-Atlantic Nearshore Ecosystem. Allison Candemo , Vincent Guida.	Linking Anadromous River Herring Migrations to Ecosystem Function. Matthew Burak , Martha Mather, John Finn, Robert Muth, John Kim et al.	Intertidal Estuarine Habitat Utilization by Birds in a Pacific Northwest Coastal Estuary. Janet Lamberson , Melanie Frazier, Walt Nelson, Henry Lee et al.	3:00
Decreasing Riverine Nutrient Input Leads to a Reduction in Wadden Sea Eutrophication. Justus van Beusekom .	The Effect of Motility and Cell-surface Properties in Resistance of <i>Synechococcus</i> to Protozooplankton Grazing. Jude Apple , Suzanne Strom, Brian Palenik, Bianca Brahamsha, Kelley Bright, Kerri Fredrickson et al.	Land to Sea Transmission of Zoonotic Pathogens: Estuarine wetland degradation and toxoplasmosis in California sea otters. Karen Shapiro , Patricia Conrad, Jonna Mazet, Wesley Wallendar, John Largier.	Feeding Dynamics of Larval Pacific Herring (<i>Clupea pallasii</i>) on Natural Assemblages of Microplankton. Laura Friedenberg , Stephen Bollens, Gretchen Rollwagen-Bollens et al.	Discussion/Synthesis	3:15
BREAK 3:30 PM – 4:00 PM					

Chautauquas (Forums)

Tuesday, 3 November, 4:00 - 5:30 pm

CLIMATE CHANGE

Location: Oregon Convention Center, B113-114

Conveners: Nathan Mantua and William Peterson

Nathan Mantua is a research associate professor, School of Aquatic and Fishery Sciences, at the University of Washington. His research focuses on climate variations, climate impacts on ecosystems and society, and the applications of climate information to resource management. His recent projects include investigations of climate impacts on recruitment of marine and anadromous fish stocks, climate impacts on harmful algal blooms in Puget Sound, and the potential applications of climate information (data, forecasts and long-term climate change scenarios) to forecasts and management of living marine resources.

William Peterson has been working at NOAA's Northwest Fisheries Science Center, Newport Field Station, since September 1995. He came to Newport from NOAA Fisheries headquarters, where he served for three years as the director of the U.S. GLOBEC Interagency Program Coordination Office. His chief research interest is studying the effects of climate variability and change on zooplankton and pelagic fish populations (particularly juvenile salmonids) in the Northern California Current region. He also leads an active research program on euphausiid (krill) ecology and biology. He uses high-frequency acoustics and long-term sampling programs to study distributions of zooplankton and fish and the spatial interactions of these taxa within the physical ocean environment.

Biographical Information:

Dr. Nathan Mantua is a research associate professor in the School of Aquatic and Fishery Sciences, adjunct faculty in Atmospheric Sciences and Marine Affairs, the co-director of the Center for Science in the Earth System at the University of Washington (UW), and a research scientist with the Pacific Northwest Station of the U.S. Forest Service. He has been a member of the UW's Climate Impacts Group since 1995. His research focuses on climate impacts on the water cycle, forests and aquatic ecosystems, and how climate information is or is not being used in resource management decisions. He received a B.S. from the University of California at Davis in 1988, and a Ph.D. from the UW's Department of Atmospheric Science in 1994. He spent one year as a postdoctoral fellow at Scripps Institute of Oceanography working on a pilot project for the International Research Institute for Climate Prediction. In April 2000 he received a Presidential Early Career Award for Scientists and Engineers for his climate impacts research and public outreach activities.

Dr. William Peterson has worked at NOAA's Northwest Fisheries Science Center, Newport Oregon Field Station, since September 1995. He came to Newport from NOAA Fisheries headquarters, where he served for three years as the director of the U.S. GLOBEC Interagency Program Coordination Office. Prior to that, he worked in Monterey, California, with the National Ocean Service as a supervisory physical scientist. In that role, he supervised the activities of 15 scientists associated with the Center for Ocean Analysis and Prediction. Other areas where he has worked include the University of Cape Town in South Africa and as an assistant professor at the State University of New York at Stony Brook on Long Island, New York. Dr. Peterson currently studies the effects of climate variability and change on zooplankton and juvenile salmonids in the Northern California Current region. He also leads an active research program on euphausiid (krill) and copepod ecology and biology. This program is based on bi-weekly sampling of hydrography and plankton. This program is now in its 14th year. Dr. Peterson is active in the North Pacific Marine Science Organization (PICES) program, and he is co-chairman of the Working Group 23 – Comparative Ecology of Krill in Coastal and Oceanic Waters Around the Pacific Rim. He serves on the editorial board of the *Journal of Plankton Research* and is a contributing editor for Marine Ecology Progress Series. He is an adjunct professor of oceanography at the College of Oceanographic and Atmospheric Sciences at Oregon State University, and he serves on several Ph.D. and M.S. graduate student committees.

SALMON (PAST, PRESENT, FUTURE)

Location: Oregon Convention Center, B110-112

Conveners: John Ferguson, Robin Waples, Michael Ford, John Williams, and Thomas Quinn

The Salmon Data Access Working Group will have a joint session available for all CERF 2009 attendees. This group is a research/data working group formed under State of the Salmon, a joint program of the Wild Salmon Center and Ecotrust. Their task is to synthesize data and facilitate dialogue in support of sound salmon management and conservation at ever finer geographic scales. A comprehensive set of goals and principles underlies the key initiatives through which they strive to ensure that wild salmon populations thrive long into the future. Many of the scientists who will be attending CERF 2009 have been or will be working with this group. We believe the methods of this group may be transferable to other regions/species.

Biographical Information:

Dr. John Ferguson is the director of the Fish Ecology Division at NOAA's Northwest Fisheries Science Center in Seattle, Washington. He oversees research conducted by more than 70 staff on the freshwater, estuarine, and ocean

ecology of numerous fish species and the ecosystems they depend on. His primary research interests include evaluating the impacts of anthropogenic structures on the condition and survival of anadromous salmonids in regulated rivers. He received a B.S. in fish and wildlife biology from the University of California, Davis, an M.S. in aquatic ecology from the University of California, Davis, and a Ph.D. from the Swedish University of Agricultural Sciences, Umeå, Sweden. He has published extensively on movements and migrations of salmonids in and around hydroelectric dams and other structures.

Dr. Robin Waples works for NOAA Fisheries, Northwest Fisheries Science Center. His graduate training was in population genetics and systematics of marine fish, but since coming to Seattle he has worked primarily on salmon. For over a decade, Robin headed a group charged with developing the scientific basis for listing determinations and recovery planning for Pacific salmon and steelhead under the U.S. Endangered Species Act. His research interests focus on both theoretical and empirical methods to apply evolutionary principles to management and conservation of natural populations. Current research projects include evaluating evolutionary responses by salmon to major anthropogenic changes to their environments, and assessing the capacity of salmon and steelhead to adaptively respond to climate change through evolution and/or phenotypic plasticity.

Dr. Michael Ford is the director of the Conservation Biology Program at the NOAA's Northwest Fisheries Science Center (NWFSC). He joined the NWFSC in 1995 as a National Research Council research associate, where he worked on using molecular genetic data to study local adaptation in Chinook salmon, after completing his graduate work on speciation in fruit flies. Subsequently, he has worked a variety of projects related to marine conservation. Dr. Ford's current research projects include: estimating the relative reproductive success of hatchery and naturally produced salmon; developing and applying mathematical models to predict rates of domestication; using molecular markers to study natural selection, gene flow, and population structure; applying population viability concepts to salmon harvest management; and using molecular markers to study marine mammal prey preferences and killer whale breeding structure. He received his B.S. in biological sciences from Stanford University and his Ph.D. in population genetics from Cornell University.

Dr. John Williams has a Ph.D. from the University of Washington, School of Fisheries and has worked on salmon passage issues in the Columbia River basin for over 28 years, primarily as head of the Riverine Ecology Group in the Fish Ecology Division of NOAA's Northwest Fisheries Science Center in Seattle. The group has approximately 35 scientists working on multi-pronged investigations to assess the effects and influence of the Columbia River hydropower system on the long-term viability of salmon stocks listed as threatened or endangered under the Endangered Species Act (ESA). Field research efforts cover a broad suite of studies including

developing and testing components for passage structures at dams, analyzing or developing operations at dams designed to guide juvenile fish toward safe passage routes or divert them away from hazardous conditions, evaluating transportation of juvenile fish as a means to alleviate direct mortality, evaluating survival of juvenile and adult fish passing dams under different structural and operational conditions, determining timing of fish arriving at and through the hydropower system as related to hydrographic influences, and studying juvenile fish behavior related to changes in velocity to provide a better foundation for development of effective passage structures. Analytical efforts include evaluating adult returns of salmonids PIT-tagged as juveniles to determine the extent of influences of habitat, hatcheries, hydropower, and ocean conditions on return rates. The overall goal of the research is to determine the extent to which the hydropower system affects the salmonid life cycle and influences spawner to spawner and spawner to recruit relationships. Dr. Williams has published numerous peer-reviewed papers/book chapters and technical reports detailing results of research related to the subject. He has been invited to present information on fish passage issues at conferences around the world, and in recent years he has worked extensively with scientists in Sweden and Finland to improve or install fish passage at dams on rivers with hydropower dams. He has served on numerous graduate student committees in his capacity as an affiliate faculty at the School of Aquatic and Fishery Sciences at the University of Washington.

Dr. Thomas Quinn has been a professor at the University of Washington since 1986. His general interest is in fish behavior and ecology, particularly migratory behavior, habitat requirements, and spawning behavior. His research blends a variety of field techniques including tagging, telemetry and direct observations, with appropriate laboratory experiments. Most, but not all, of his research deals with salmon and trout biology, particularly the patterns of spawning site selection and reproductive behavior of salmon, the effects of habitat alteration from logging on salmon and trout populations, the evolutionary adaptations of salmon to their environments, and the patterns of olfactory imprinting and homing by salmon. He presently has a broad research program focused primarily on salmonidae (salmon, trout and charr). His research projects are divided geographically between those conducted in western Alaska, at the University of Washington's field camps on the Chignik, Iliamna, and Wood River systems, and those conducted in western Washington. Dr. Quinn has published extensively on various aspects of salmonid biology including population structure and homing, the relationship between stream entry date, body size, and population density, energetics and longevity of adult sockeye salmon in small streams. His 2005 publication "The behavior and ecology of Pacific salmon and trout" is highly referenced. Dr. Quinn received a B.A. with distinction in biology from Swarthmore College, and his M.S. and Ph.D. in fisheries from the University of Washington.

OCEAN ACIDIFICATION— THE OTHER CO₂ PROBLEM

Location: Oregon Convention Center, B115-116

Conveners: Richard A. Feely and Burke Hales

Carbon dioxide (CO₂) is one of the most important “greenhouse” gases in the atmosphere; it effects the radiative heat balance of the earth. As a direct result of the industrial and agricultural activities of humans over the past two centuries, atmospheric CO₂ concentrations have increased by about 100 ppm. The atmospheric concentration of CO₂ is now higher than experienced on Earth for at least the last 800,000 years, and is expected to continue to rise, leading to significant temperature increases in the atmosphere and oceans by the end of this century. The global oceans are the largest natural long-term reservoir for this excess heat and CO₂, absorbing

approximately 85% of the heat and 30% of the anthropogenic carbon released into the atmosphere since the beginning of the industrial era. Recent studies have demonstrated that both the temperature increases and the increased concentrations of CO₂ in the oceans are causing significant changes in marine ecosystems. Many marine organisms are already affected by these anthropogenic stresses, including impacts due to ocean acidification. Recent studies have provided new findings that organisms growing in estuaries or in coastal upwelling zones, such as those living near river mouths or along the continental shelf of the west coast of North America from Canada to Mexico, may already be experiencing significant biological impacts resulting from the combined effects of freshwater input, coastal upwelling and ocean acidification. This Chautauqua will focus on present and future implications of increased CO₂ levels on the health of our ocean ecosystems and related ocean-based economies.

Biographical Information:

Dr. Richard A. Feely is a supervisory oceanographer at the NOAA Pacific Marine Environmental Laboratory in Seattle. He also holds an affiliate full professor faculty position at University of Washington School of Oceanography. His major research areas are carbon cycling in the oceans and ocean acidification processes. He received a B.A. in chemistry from the University of St. Thomas, in St Paul, Minnesota, in 1969. He then went onto Texas A&M University where he received both an M.S. degree in 1971 and a Ph.D. degree in 1974. Both of his post-graduate degrees were in chemical oceanography. Dr. Feely is the co-chair of the U.S. CLIVAR/CO₂ Repeat Hydrography Program. He is also a member of the U.S. Science Steering Committees for the U.S. Carbon Cycle Science Program, the U.S. Ocean Carbon and Climate Change Program, and the U.S. Carbon and Biochemistry Program. He is a member of the American Geophysical Union, the American Association for the Advancement of Science and the Oceanography Society. Dr. Feely has authored more than 160 refereed research publications. He was awarded the Department of Commerce Gold Award in 2006 for his pioneering research on ocean acidification. In 2007, Dr. Feely was elected a fellow of the American Geophysical Union.

Dr. Burke Hales is an associate professor of oceanography at Oregon State University, Corvallis, Oregon. He received his Ph.D. from the University of Washington in 1995. His primary research interests are mesoscale dynamics and distributions of nutrients and carbon in the surface ocean; rates of degradation and preservation of carbon in seafloor sediments; and production of dimethyl sulfide in the surface ocean. He is currently studying mesoscale distributions of nutrients and carbon during the initiation of the phytoplankton bloom in the Ross Sea polynya, species dependence of the photosynthetic nitrogen/phosphorus uptake ratio, interpretation of the calcite content and age of the seafloor sediment mixed layer, and making high-resolution measurements of surface-ocean dimethyl sulfide.



PUGET SOUND/URBAN ESTUARIES

Location: Oregon Convention Center, B117-119

Convener: David Dicks

David Dicks is executive director of The Puget Sound Partnership (<http://www.psp.wa.gov/aboutthepartnership.php>) and is helping to co-ordinate a large-scale initiative to tackle some of the foremost habitat restoration needs in Washington State's Puget Sound basin. A recent PBS Frontline, *Poisoned Waters*, highlighted some of Puget Sound's issues. (<http://www.pbs.org/wgbh/pages/frontline/poisonedwaters/view/>)

The Puget Sound Partnership represents a partnership between the U.S. Army Corps of Engineers, state, local, and federal government organizations, tribes, industries, and environmental organizations. The Puget Sound Nearshore Project goals are to identify significant ecosystem problems, evaluate potential solutions, and restore and preserve critical nearshore habitat. The two biggest threats to the environment of Puget Sound and many other urban estuaries around the world are more people and climate change. In Puget Sound these threats will have a huge impact on salmon and other biological resources. The Puget Sound region is expected to have a 35% increase in the number of people by 2020. Currently 70,000 acres a year are developed annually. At that level, with today's land use and transportation policies, Puget Sound could be biologically dead by 2020.

According to a study, 54 million pounds of toxic chemicals are still going into Puget Sound each year, 150,000 pounds a day. Of that, only 10% comes from industrial point sources. It is clear that as a result of the permitting processes, single-point industrial sources have been reasonably controlled. The remaining 90% of the toxic wastes flowing into the Sound comes from runoff. Earlier this year the Washington State Pollution Control Board ruled that developers need to use LID (low impact development) wherever feasible, particularly in regard to storm water management. If LID is mandated, developers will have to get engineers, architects, and landscape architects trained in the many good techniques for preventing runoff.

Biographical Information:

David Dicks was appointed by Washington's Governor, Chris Gregoire, to serve as the first executive director of the new Puget Sound Partnership agency in August 2007. The Partnership is a new entity charged with restoring Puget Sound to health by 2020. To do this the Partnership is mobilizing communities, agencies, and organizations throughout the Puget Sound region to work together to create a comprehensive action agenda to restore Puget Sound. The action agenda under development is ecosystem based and will serve as a roadmap for Puget Sound cleanup and protection efforts for years to come. Prior to his appointment to the Partnership, Dr. Dicks was a partner at

Cascadia Law Group PLLC in Seattle. His practice focused on Puget Sound, salmon recovery, and other natural resource projects. He played a significant role in the creation and deliberations of the original Puget Sound Partnership blue-ribbon commission, and he worked extensively with the legislature and governor to pass the new Partnership's enabling legislation, which took effect July 1, 2007. Dr. Dicks' dedication to environmental law has earned him national recognition as one of The Best Lawyers in America (2007 and 2008). He has also been recognized as one of Seattle Metropolitan's 2007 Best Lawyers and has been named a Rising Star by the readers of Washington Law & Politics magazine every year since 2005. Dr. Dicks received his Bachelor of Arts with honors from Stanford University and received his J.D. and the Environmental Law Certificate from University of California Berkeley's Boalt Hall School of Law.



Wednesday Early Morning Oral Presentations

	A105	A106	A107-109	B110-112	B113-114
	SCI-021 Exploring the Linkages between Nearshore Oceanography and Onshore Benthic Environments Sarah Dudas and Brock Woodson	SCI-001 Coastal and Estuarine Tipping Points Susan Adamowicz and David Burdick	SCI-093 Nutrient Budgets and Nutrient Accounting for Coastal Waters Dennis Swaney and G. v. Gupta	SCI-087 Oceans and Human Health Kristi Shaw and Mark Strom	SCI-013 Emerging Science and Restoration Practices in Pacific Northwest Estuaries Catherine Corbett, Ronald Thom and Steven Rumrill
8:00	Linking Larval Supply and Intertidal Settlement Patterns. Sarah Dudas, Gil Rilov, Joe Tyburczy, Bruce Menge.	Introduction to Coastal And Estuarine Tipping Points. David Burdick , John Brawley, Susan Adamowicz.	A Toolbox for Calculating Net Anthropogenic Nitrogen Inputs (NANI). Bongghi Hong , Dennis Swaney, Robert Howarth.	Diversity of <i>Vibrio parahaemolyticus</i> in the Aquatic Environment of the U.S. Pacific Northwest and Relationship with Environmental Parameters. Rohinee Paranjpye , William Nilsson, Benjamin Sandford, Eric Landis, Mark Strom.	Emerging Science and Restoration Practices in Pacific Northwest Estuaries: An introduction. Catherine Corbett , Ronald Thom, Steven Rumrill.
8:15	Hydrodynamic Modeling and Particle Tracking to Simulate the Effects of Proposed Hurricane Protection Structures on the Transport of Larval Fish into Lake Pontchartrain. Jennifer Tate , Tahirih Lackey.	Effects of Sudden Salt Marsh Dieback and <i>Spartina alterniflora</i> Stem Density on Ecosystem Services in Tidal Salt Marshes of Georgia and Louisiana, USA. Mark Hester , Irving Mendelsohn, Merryl Alber, Samantha Joye.	Using the USGS SPARROW Model to Identify Important Landscape Factors Affecting Nitrogen Delivery to Coastal Waters of the Pacific Northwest. Daniel Wise , Hank Johnson, Stephen Sobieszczk.	Suppressive Subtractive Hybridization Reveals Differences between <i>Vibrio parahaemolyticus</i> Isolates from the Puget Sound Region and the Pandemic Strain. Eric Landis , Mark Strom et al.	
8:30	Flow Separation and Buoyant Plume Dynamics on the Inner Shelf: Implications for larval transport and settlement. Clifton Woodson , Libe Washburn, Joe Tyburczy, Sarah Dudas, Margaret McManus, John Barth et al.	Assessment of Hydrology and Herbivory as Factors in the Decline of <i>Spartina patens</i> (aiton) muhl. in Salt Marshes of Outer Cape Cod. Stephen Smith , Kelly Medeiros, Megan Tyrrell et al.	Developing a Nitrogen Budget for a Shallow Tidal Estuary on Cape Cod. Melanie Hayn , Robert Howarth, Roxanne Marino, Anne Giblin, Kenneth Foreman, Peter Berg, Karen McGlathery, Jane Tucker.	The Role of Organic Aggregates in the Prevalence and Persistence of Aquatic Pathogens. M. Maille Lyons , J. Evan Ward, Holly Gaff, Jin Wang, Shu Liao, Martha Stokes, Fred Dobbs.	Ecological Periodic Tables for US Pacific Northwest Estuarine Habitats. Steven Ferraro , Faith Cole.
8:45	Combining Circulation Modeling, Microchemistry and Metrics in the Study of Mytilus Mussel Connectivity. Linda Rasmussen , Lisa Levin.	Surprising Vegetation Responses to Marsh Fertilization. Gail Chmura .	Nitrogen Loading to Great South Bay, NY: Land use, sources, retention, and transport from land to Bay. Erin Kinney , Ivan Valiela.	Marine Aggregates Facilitate Ingestion of Nanoparticles by Suspension-feeding Bivalves. J. Evan Ward , Dustin Kach, John Doyle.	Multi-scale Analysis of Restoration Priorities for Marine and Estuarine Shoreline Planning. Ronald Thom , Heida Diefenderfer, Kathryn Sobocinski, Christopher May, Amy Borde, Susan Southard, John Vavrinec, Nichole Sather et al.
9:00	Hydrodynamic Conditions Influence Behavioral Response of the Dogwhelk (<i>Nucella lapillus</i>) to a Common Predator. Scott Large , Delbert Smee.	Major Ecosystem Changes in the Coastal Everglades: Causes and consequences. Thomas Smith , Gordon Anderson, Karen Balentine, Ginger Tiling et al.	Fate of Nutrients Derived from Hurricane Dolly in Oso Bay, Texas, U.S.A. Sandra Arismendez , Hae-Cheol Kim, Paul Montagna, John Tunnell.	Large-scale Climate Modulation of Local Environmental Conditions Favoring the Accumulation of Toxins in Puget Sound Shellfish. Stephanie Moore , Nathan Mantua, Barbara Hickey, Vera Trainer.	Using Invertebrate Communities to Characterize Tidal Wetland Reference Sites. Ayesha Gray , Craig Cornu, Laura Brophy, Paul Adamus, John Christy, Craig Young.
9:15	Thin Layer Formation and Vertical Migration Behavior of the Dinoflagellate <i>Akashiwo sanguinea</i> : Responses to light, nutrients and predators. Joel Quenette , Stephen Bollens, Alexander Bochdansk, Gretchen Rollwagen-Bollens.	Thresholds of Change for Nekton and Vegetation Communities of Northeastern US Salt Marshes. Mary-Jane James-Pirri , Jeffrey Swanson, Charles Roman, Howard Ginsburg, James Heltshe.	A Tale of Two Islands: Land Use, Submarine Groundwater Discharge, and Nutrient Additions to Coastal Waters on Hawai'i and Kaua'i. Karen Kneee , Joseph Street, Eric Grossman, Alexandria Boehm, Adina Paytan.	The Immunomodulatory Effects of Harmful Algal Bloom Toxins on Marine Mammal Health. Milton Levin , Erika Gephard, Dhanashree Joshi, Andrew Draghi II, David Jessup, Frances Gulland, Sylvain De Guise.	Toxic Contaminants: A Threat To Salmon Recovery in the Lower Columbia River and Estuary. Lyndal Johnson , Kate Macneale, O. Paul Olson, Sean Sol, Julann Spromberg, David Teel, Gina Ylitalo, Jennifer Morace, Krista Jones.
9:30	Fish Productivity and Trophic Transfer in Created and Naturally Occurring Gulf of Maine Salt Marsh Pools. Robert Vincent , Michele Dionne, David Burdick.	The Pettaquamscutt Estuary Overturn (Ventilation) of October, 2007: Response & Recovery. Veronica Berounsky , Sarah Hayes, David Borkman, Linda Green, Sheldon Pratt, Richard Bell, Lucie Maranada, Rosemary Smith et al.	Discussion/Synthesis	The Microbial Profile of the Sea Surface Microlayer and Killer Whale Breath. Linda Rhodes , Pete Schroeder, Stephen Raverty, Caroline Cameron, David Bain, Erin Zabeck, Azad Eshghi, Robert Wood, Brad Hanson.	Emerging Contaminants in Wastewater-Treatment-Plant Effluent and Stormwater Runoff Entering the Columbia River. Jennifer Morace .
BREAK 9:45 AM – 10:15 AM					

Wednesday Early Morning Oral Presentations

B115-116	B117-119	C120-122	C123	C124	C125-126	
SCI-044 Exploring Impacts of Hypoxia on Coastal Ecosystems Libby Jewett and David Kidwell	SCI-202 Climate Impacts on Coastal Ecosystems: Observations and Predictions Raymond Najjar	SCI-024 Adaptive Management and System-wide Monitoring in Restoration Programs Gretchen Ehlinger and Jennifer Stiner	SCI-083 Linking Sea and Society: Long-term Perspectives on Coastal Environmental Change David Ryves, Sherri Cooper and Peter Rasmussen	SCI-070 Hydrologic Prediction in Estuaries and Coastal Ecosystems William Nuttle and Jaye Cable	SCI-400 Maximizing Your Data: what can informatics do for you? (Co-sponsor: Salmon Data Access Working Group) Cathy Kellon and Anne Thessen	
The State of Hypoxia in United States Estuarine and Coastal Waters. Robert Diaz , Suzanne Bricker, Nancy Rabalais et al.	Potential Climate-change Impacts on the Chesapeake Bay. Raymond Najjar , Christopher Pyke, Denise Wardrop, Mary Beth Adams, Margaret Mulholland, Carl Hershner, Kevin Sellner, Michael Paolisso et al.	Designing and Implementing a Monitoring and Assessment Plan (MAP) within the Adaptive Management Framework of the Comprehensive Everglades Restoration Plan (CERP). Jennifer Stiner , Gretchen Ehlinger et al.	Environmental Change along the Danish Baltic Coast during the Roman Warm Period. David Ryves , Peter Rasmussen, Annemarie Clarke, Karen Knudsen, Kaj Petersen, Rolf Vinebrooke.	Influence of Salinity and Hydroperiod Variability on Marsh Vegetation Community Composition as Determined by an Extensive Coastwide Monitoring Network in Louisiana. Gregg Snedden , Gregory Steyer et al.	8:00 – 8:25 The Push for Open Source Governance and its Implications for Natural Resource Management Agencies. Deborah Bryant .	8:00
Dissolved Oxygen in Two Oregon Estuaries: Importance of the Ocean-Estuary Connection. Cheryl Brown , Jeffrey McPherson, T Chris Mochon Collura, Hilmar Stecher.	Nitrous Oxide Emissions from the Northern Gulf of Mexico Hypoxic Zone. Craig Stow , John Walker, Chris Geron et al.	Adaptive Management and System-wide Monitoring for the Comprehensive Everglades Restoration Plan (CERP). Gretchen Ehlinger , Greg Graves, Eliza Hines, Patti Sime, Jennifer Stiner, Steve Traxler.	Proxies for Eutrophication in Long Island Sound. Ellen Thomas , Joop Varekamp, Sherri Cooper, Francesca Sangiorgi, Timme Donders et al.	Water, Carbon and Nitrogen Fluxes in a Deltaic Estuary: The Outwelling Hypothesis Revisited. Anindita Das , Dubravko Justic, Erick Swenson, Asif Hoda, Masamichi Inoue, Dongho Park et al.	8:25 – 8:50 Open Science and Data Sharing. Kaitlin Thaney .	8:15
Seasonal, Interannual and Spatial Variations in Hypoxia in the Coastal Upwelling Region off Washington and Oregon. Jay Peterson , William Peterson et al.	Sea Level Variability and Rise, Storminess and Event and Multi-Decadal Inundation Implications for United States Estuaries. Len Pietrafesa .	Assessing the Effects of Removing Excess Freshwater Inflow to the Lower Myakka River Estuary. Michael Flannery , Ernst Peebles, Xinjian Chen, Kellie Dixon, Tim MacDonald, Ernest Estevez, John Loper.	Hypoxia in Long Island Sound -Since When and Why? Johan Varekamp , Mark Altabet, Ellen Thomas, Marilyn Buchholtz ten brink, Ellen Mecray.	Classification Analysis of Estuarine Eutrophic Response Using the National Estuarine Eutrophication Assessment (NEEA) Dataset. Emad Habib , William K. Nuttle, Nasrin Nasrollahi, Sara Ghazizadeh.	8:50 – 9:15 Developing Information Systems for Salmon Science, Management and Marketing. Peter Lawson et al.	8:30
Application of Unstructured-Grid Finite Volume Coastal Ocean Model (FVCOM) to the Gulf of Mexico Hypoxic Zone. Dubravko Justic , Lixia Wang et al.		Linking Comprehensive Modeling and Monitoring Frameworks for Effective Management of the Louisiana Coastal Zone. James Pahl , Robert Twilley, Alaina Owens, Darin Lee, Richard Raynie, Barbara Kleiss et al.	Agriculture and the Estuarine Economy. Grace Brush .	Exploratory Simulation Modeling Study of Florida Bay Ecosystem Response to Changing Water and Nutrient Regimes. Christopher Madden , Amanda McDonald et al.		8:45
Monsoon-driven Hypoxia along the Northern Coast of Oman, Gulf of Oman. Steven DiMarco , Lubna al-Kharusi, Leila Belabbassi, Marion Stoessel, M. Howard, A. Jochens.	Effects of Seasonal Stratification by Salinity in a Hypereutrophic Coastal Lagoon. Mary Cousins , Mark Stacey.	Using an Intensive Multi-temporal Remote Sensing Approach to Quantify Landscape Change in a Highly Dynamic Mississippi River Subdelta. Yvonne Allen , Greg Steyer, John Barras, Brady Couvillion, Gregg Snedden.	Can Sediments Distinguish between Eutrophication and Hypoxia and among Degrees of Oxygen Depletion? Evidence from the northern Gulf of Mexico. Nancy Rabalais , R Eugene Turner, Barun Sen Gupta, Jennifer Lasseigne.	Coupling Paleoecology and Statistical Models to Estimate the Historical Hydrology and Salinity in Everglades National Park, Florida. Frank Marshall , Lynn Wingard.		9:00
Expanding the Word on Hypoxia. Laura Murray , W. Kemp, Jeremy Testa, Jennifer Bosch, Cassie Gurbisz, Tim Caruthers.	Modeling the Effects of Future Freshwater Flow on the Abiotic Habitat of an Imperiled Estuarine Fish. Frederick Feyrer .	Effects of Hurricanes Katrina and Rita on Coastal Louisiana Marsh Communities. Sarai Piazza , Gregory Steyer, Charles Sasser, Jenneke Visser, Guerry Holm et al.	Linking Historical Land Use Changes and Federal Farm Policies to Nutrient Enrichment in Upper Watersheds and Coastal Systems. Whitney Broussard , Robert Turner.	An In-depth Look at Alternating Effects of Climate Signals on Freshwater Delivery to Coastal Georgia, U.S.A. Joan Sheldon , Adrian Burd.		9:15
Region-wide Reproductive Impairment and Gonadal Intersex in Atlantic Croaker Collected from the Northern Gulf of Mexico Hypoxic Dead Zone. Peter Thomas , Saydur Rahman et al.	Implications of Freshwater Inflow to Benthic Ecosystem Dynamics along the Texas Gulf Coast: A Modeling Study. Hae-Cheol Kim , Paul Montagna.	Assessing the Effectiveness of Maryland's Corsica River Watershed Targeted Restoration Effort. Bruce Michael , Theodore Trice et al.	Phytate as a Novel Phosphorus-specific Paleo-indicator in Coastal Sediments. Kaarina Weckström , Benjamin Turner et al.	The Influence of Physical Forcing on Bottom-water Dissolved Oxygen within the Caloosahatchee River Estuary, FL. Meng Xia , Paul Craig, Christopher Wallen, Andrew Stoddard.	Discussion Panel: Open Access and Data Publication	9:30
BREAK 9:45 AM – 10:15 AM						

Wednesday Mid-Morning Oral Presentations

	A105	A106	A107-109	B110-112	B113-114
	SCI-054 Effects of Variation in Physicochemical Parameters on Biological Productivity Megan La Peyre and Shannon Martin	SCI-101 Sea Grant Focus on Healthy Coastal Ecosystems: Restoration Judith Weis, Dorn Carlson and Barry Costa-Pierce	SCI-205 Eutrophication: Regional Issues Autumn Oczkowski	SCI-209 Novel Approaches to Coastal Management Sarah Carr	SCI-013 Emerging Science and Restoration Practices in Pacific Northwest Estuaries <i>cont'd</i>
10:15	Session Introduction. Megan La Peyre.	Impacts of in situ Treatment of Contaminated Sediments on Benthic Community Structure. Wan-Jean Lee , Deana Aulisio, Scott Greenwood, Kevin Gardner et al.	Primary Production in the St. Lucie Estuary, Florida. Peter Doering , Tom Gallo, Clifton Bell et al.	An Estimate of the U.S. Population Living in 100-Year Coastal Flood Hazard Areas. Kevin Coulton , Mark Crowell et al.	The Use of Otolith Microstructure to Examine Estuarine Utilization and Life History Diversity of Juvenile Chinook Salmon as Related to Restoration Efforts on the Nisqually River. Angie Lind-Null , Kim Larsen, Christopher Ellings, Sayre Hodgson.
10:30	Environmental Water Requirements of Estuaries: the Little Swanport in Tasmania, Australia. Jeff Ross , Christine Crawford, Beth Fulton et al.	Effects of Watershed Organic Carbon Sources on Denitrification in Forested, Restored and Urbanized Streams. Tamara Newcomer , Sujay Kaushal, Paul Mayer, Amy Shields, Peter Groffman.	Comparisons of Zooplankton Assemblages in Spring-fed versus Surface-fed Estuaries on Florida's West Coast. Scott Burghart , Ernst Peebles.	Incorporating Ecosystem Considerations into U.S. West Coast Management through Tools Training. Sarah Carr , Brian Smith, Nancy Cofer-Shabica, Patrick Crist, Rebecca Pollock, Rebecca Smyth.	Elevation and Inundation of Tidal Channels and Wetland Plant Communities in the Columbia River Estuary. Amy Borde , Heida Diefenderfer, Shon Zimmerman, Nichole Sather, Ronald Thom.
10:45	The Effect of Hydrology on Ecological Functioning and Material Exchange between Salt Marshes and Water Bodies. Joe Baustian , Irv Mendelsohn, Jaye Cable, John White et al.	Mycorrhizal Fungi Associations with Four Salt Marsh Species. Melissa Pratt-Zossoungbo , Patrick Biber.	Environmental Controls on the Formation and Transport of <i>Cochlodinium polykrikoides</i> Blooms in Lower Chesapeake Bay and its Tributaries. Ryan Morse , Jose Blanco, Jian Shen, Will Hunley, Margaret Mulholland.	Massachusetts In-Lieu Fee Mitigation Program - The First of its Kind. Vincent Malkoski, Kathryn Ford et al.	A Spatially Based Area-Time Inundation Index Model Applied in Tidal Wetlands of the Lower Columbia River and Estuary. Andre Coleman , Heida Diefenderfer, Amy Borde et al.
11:00	Baltic Proper Food Web Dynamics in Response to Environmental Drivers - linking time series analysis with modeling. Susa Niiranen , Maciej Tomczak, Thorsten Blenckner, Olle Hjerne.	Linking Emergent Marshes and Aquatic Habitats in Wetland Restoration. Anna Armitage , Chuan-Kai Ho, Michael Bell, Amanda Thronson, Eric Madrid, Antonietta Quigg.	On the Distribution and Transfer of Anthropogenic Nitrogen to Food Webs in a Sewage Enriched Estuary. Autumn Oczkowski , Scott Nixon.	Inlet Management Practices on Florida's East Coast Have Had a Cumulative Impact on Beach Erosion that Eliminated Dune Ecosystems in Southeastern Florida. Clay Montague .	<i>Picea sitchensis</i> (Sitka spruce) Swamps of the Lower Columbia River and Estuary: Ecosystem and salmon habitat attributes. Heida Diefenderfer , Amy Borde, Kathryn Sobocinski, Ronald Thom, Shon Zimmerman, Andre Coleman.
11:15	Bayesian-based Bioenergetics Model for Brown Shrimp (<i>Farfantepenaeus aztecus</i>) and the Potential Effects of Freshwater Diversions on Shrimp Production. Aaron Adamack , Craig Stow, Doran Mason, Lawrence Rozas, Thomas Minello.	Surface Elevation Change and Sediment Accretion at a Sudden Marsh Dieback Site Restored with Hydraulically Conveyed Sediment. Sean Graham , Irv Mendelsohn et al.	Interactions between Water Column Primary Productivity, pH and Sediment Phosphorus Flux in the Upper Potomac River Estuary. James Fitzpatrick , Jeffrey Cornwell, Walter Boynton, Eva Bailey et al.	Place Attachment and its Implications for NC Coastal Reserve Management. Anthony Snider , Jeff Hill, Bob Buerger, Jim Herstine.	Juvenile Salmonid Prey in the Lower Columbia River: Diversity, availability and consumption of invertebrate prey across multiple sites. Kate Macneale , Lyndal Johnson, Sean Sol, O Paul Olson, Julann Spromberg, Maryjean Willis, Dan Lomax et al.
11:30	Shrimp Growth Rates Vary Along the Estuarine Salinity Gradient: Implications for the influence of river diversions on production. Lawrence Rozas , Thomas Minello.	Sustaining Ecological and Economic Services of Coastal Land Resources During Sea Level Rise. Denise Seliskar , Jennifer Halchak, John Gallagher.	The Isotope Pairing Technique: The influence of water temperature on denitrification estimates across different habitats of a transgressive Mississippi River delta complex. Pete Lenaker , Victor Rivera-Monroy, Edward Castañeda-Moya, Robert Twilley et al.	Parametrization of Hurricane Surge for Galveston and Matagorda Bays. Rajat Katyal et al.	Residence Times and Migration Pathways of Acoustic-Tagged Juvenile Salmon in Shallow Tidal Freshwater Habitats in the Vicinity of the Sandy River Delta, Lower Columbia River, 2008. Gary Johnson , Gene Ploskey.
11:45	Marine Soft-bottom Macrofauna in Narragansett Bay, RI: Temporal dynamics and co-variation with environmental conditions. Christopher Calabretta , Candace Oviatt.	The Impact of Exotic Mangroves and their Removal on Benthic Ecosystem Functioning in the Hawaiian Coastal Zone. Andrew Sweetman , Anja Berle, Jack Middelburg, Craig Smith et al.	Ecosystem Responses to Anthropogenic Impacts: A case study from Cochin Estuary, India. K. K.Balachander, G. V.M.Gupta , S. D.Thottahil, Shanta Nair et al.	Creating New Opportunities for Adaptive Management: Partnerships between government agencies and watershed organizations. Caroline Wicks , Jana Davis, William Dennison, Heath Kelsey, Benjamin Longstaff, Emily Nauman, Brent Walls.	Considering Rearing Requirements of Juvenile Salmon in Columbia River Estuary Habitat Restoration. Craig Haskell , Kenneth Tiffan.
POSTER SESSIONS and LUNCH 12:00 PM – 2:00 PM					

Wednesday Mid-Morning Oral Presentations

BI15-116	BI17-119	CI20-122	CI23	CI24	CI25-126	
SCI-044 Exploring Impacts of Hypoxia on Coastal Ecosystems <i>cont'd</i>	SCI-003 Interactive Effects of Climate Change and Other Stressors on Coastal Ecosystems Carol Auer and Alan Lewitus	SCI-028 Urbanized Tidal Rivers in a Changing World Paul Fishman and Stanley Gregory	SCI-208 Invasive Plant Biology Ralph Garono	SCI-056 Physical, Biological and Chemical Interactions of Estuaries, Bays and Shelves Chunyan Li, Rubao Ji, Changsheng Chen and Nancy Rabalais	SCI-400 Maximizing Your Data: what can informatics do for you? (Co-sponsor: Salmon Data Access Working Group) <i>cont'd</i>	
Validating Macrobenthic Process Indicators of Organic Enrichment and Hypoxia. Chet Rakocinski .	Climate Change Effects on Seagrass Multiple Stressors, Nutrient Cycling and Reproduction: A perfect storm in Florida Bay? Marguerite Koch .	Tampa Bay Tidal Tributary Habitat Initiative Project. Edward Sherwood , Ernst Peebles, Marin Greenwood, Elon Malkin, Holly Greening, Robert McMichael, Lindsay Cross, Justin Krebs, Dave Karlen et al.	Annual versus Perennial? Comparisons of the life history of an invasive eelgrass (<i>Zostera japonica</i>) across an estuarine gradient in Oregon. Jeremy Henderson , Margot Hessing Lewis, Sally Hacker et al.	The Influence of Straining and Mixing on Hypoxia in Long Island Sound. James O'Donnell .	The Semantic Web, Linked Data and How It Can Help. Peter DeVries , Daniel Young et al.	10:15
Effects of Seasonal Hypoxia on Harpacticoid Copepod Community Structure in the Northern Gulf of Mexico. Laura Ryckman , Edward Buskey, Paul Montagna.	Implications of Sea Level Rise to Seagrasses in Charlotte Harbor. Judith Ott .	Fish Community Response to Inflow Variation in Two Impounded and One Unimpounded Tidal Tributary to Tampa Bay, Florida. Michael Wessel , Anthony Janicki, Robert McConnell et al.	Evaluating the Potential for Spread of an Invasive Forb, <i>Limonium ramosissimum</i> , in San Francisco Bay Salt Marshes. Gavin Archbald , Katharyn Boyer.	Effects of Vertical Mixing on Phytoplankton Community Composition in a Shallow, Lagoonal Estuary. Nathan Hall , Hans Paerl.	The Scientific Observations Network and Semantic Tools for Ecological Data Management. Michael Schildhauer .	10:30
Hypoxia Impacts on the Growth and Distribution of the Pelagic Fish in the Northern Gulf of Mexico. Hongyan Zhang , Doran Mason, Stuart Ludsins, Stephen Brandt, Aaron Adamack, Craig Stow, Michael Roman et al.	Less Charismatic but More Resilient: How would seagrasses cope with global climate change? Giuseppe Di Carlo , William Kenworthy, Emily Pidgeon.	Residential Canal Estates: Fish habitat, fish health and fish edibility. Nathan Waltham , Rod Connolly.	Tidal Restriction as a Facilitator of Invasibility: Plant invasions and community structure in tidally restricted salt marsh communities in Elkhorn Slough, CA. Carla Fresquez .	Simulation of Seasonal Bloom Dynamics and Hypoxia Onset Using a Coupled Physical-Biogeochemical Model of Chesapeake Bay. Jerry Wiggert , Wen Long, M. Bala Krishna Prasad, Jiangtao Xu et al.	The HUBzero Platform for Scientific Collaboration. Michael McLennan .	10:45
Evidence for Nitrogen Limitation of Microbial Dynamics in the Northern Gulf of Mexico Hypoxic Region. Wayne Gardner , Lijun Hou, Mark McCarthy.	Interactive Effects of Large-scale Disturbances on Biophysical Processes in Coastal Wetlands. Julia Cherry .	Ecosystem Classification of Tidal Freshwater Reaches of the Columbia River Estuary USA. Charles Simenstad , Jennifer Burke, Jim O'Connor, Mary Ramirez, Krista Jones, Ian Waite, Timothy Counihan et al.	Dispersal of Purple Loosestrife Biocontrol Agents via Passive Water Dispersal in the Columbia River Estuary. Elise Ferrarese , Ralph Garono.	Sensitivity of Hypoxia in a Fjord Estuary to Terrestrial Input of Fresh Water and Nitrogen. Bohyun Bahng , Mitsuhiro Kawase, Jan Newton.	Data Conservancy: A Library-based Data Cyberinfrastructure Paradigm. Melissa Cragin .	11:00
Regional Patterns of Habitat Use by Red Snapper (<i>Lutjanus campechanus</i>) in the Northern Gulf of Mexico: Ontogeny, seasonality, and the effects of hypoxia. Theodore Switzer , Edward Chesney, Donald Baltz et al	Short-term Responses of Intertidal Macrobenthic Communities in Pacific Northwest Estuaries to River Flood Sedimentation Disturbance. Anthony D'Andrea , Robert Wheatcroft, Rhea Sanders.	Benthic Invertebrates in Contaminated Sediments of an Urbanized Large River. Steve Novotny, Leyla Arsan , Kim Gould et al.	Biological Control of Purple Loosestrife (<i>Lythrum salicaria</i>) in the Columbia River Estuary. Ralph Garono , Elise Ferrarese, Fritz Grevstad, Peter McEvoy, Shon Schooler et al.	Phytoplankton and Nutrient Dynamics Related to a Coastal Upwelling Event in the Gulf of Finland (Baltic Sea) in August 2006: Observational results. Natalja Kuvaldina , Urmas Lips, Inga Lips, Taavi Liblik.	Information Solutions for Watersheds: III. A service-oriented solution for managing and analyzing data across the Mississippi Atchafalaya River Basin and Northern Gulf of Mexico. Amanda Parker , Stephen Bourne et al.	11:15
Broad- and Fine-scale Effects of Hypoxia on Pelagic Fish in the Northern Gulf of Mexico. Stephen Brandt , Aaron Adamack, Hongyan Zhang, Kevin Boswell, Stuart Ludsins, Doran Mason, Michael Roman et al.	Synchronized Legacies of Tropical Storms on Solute Concentrations and Primary Production from Uplands to Coast in an Expansive Subtropical Watershed. Evelyn Gaiser .	The Lower Columbia River Aquatic Non-indigenous Species Survey 2001-2004: Snapshot of an Invaded River System. Mark Sytsma , Robyn Draheim, Jeffery Cordell, John Chapman.	Ecology and Control of <i>Spartina densiflora</i> , and Restoration of Native Salt Marshes in Humboldt County, California. Andrea Pickart , Trevor Goodman.	The Role of Physical and Chemical Processes in the Formation of Turbidity Maxima in Estuaries in South Queensland, Australia. Phillip Ford , Nicky Grigg, Andy Steven, Simon Lee.	Discussion Panel: Web 3.0	11:30
Spatial Patterns in Hypoxia and Mesozooplankton in the Northern Gulf of Mexico. Michael Roman , William Boicourt, Jamie Pierson, Dave Kimmel, Xinsheng Zhang et al.	Climate Change Implications for the Chesapeake Bay Ecosystem: What does a quarter century of water quality and living resource monitoring tell us? Robert Wood , Jackie Johnson, Edward Martino, James Pierson et al	Trajectories of Change in an Urban Tidal River, 1850-2050: the Willamette River, Portland, Oregon. Stan Gregory, Paul Fishman et al.	<i>Caulerpa</i> and the Aquarium Hobby Industry: Are we making progress? Linda Walters , Susan Zaleski et al.	Phytoplankton Production and Species Composition Patterns in the Chesapeake Bay ETM. Raleigh Hood , David Keller, Dong-Yoon Lee.		11:45
POSTER SESSIONS and LUNCH 12:00 PM – 2:00 PM						

Wednesday Mid-Afternoon Oral Presentations

	A105	A106	A107-109	B110-112	B113-114
	SCI-217 Ecology of Marine Invasives Roberto Llanso	SCI-057 Synthesis of Estuarine Shallow Water Research, Modeling and Monitoring Lewis Linker, Carl Cerco, Ping Wang and Richard Batiuk	SCI-007 Eutrophication and Aquaculture Suzanne Bricker and Joao Ferreira	SCI-022 Long-term Perturbations in Nutrients and Productivity - Clues to Causal Processes Richard Dugdale and Patricia Glibert	SCI-013 Emerging Science and Restoration Practices in Pacific Northwest Estuaries <i>cont'd</i>
2:00	Hull Biofouling of Obsolete Vessels: Effects of hull cleaning and transit on the potential for species transfers and introductions. Roberto Llanso , Kristine Sillett, Carolyn Junemann.	Combining Monitoring and Modeling for SAV Restoration. Carl Cerco , Mark Noel, Sung-Chan Kim et al.	Microbial Response to Mussel Farm Biodeposition in Coastal Sediments of the Northern Adriatic Sea. Paola Del Negro , Bruno Cataletto, Mauro Celussi, Tamara Cibic, Cinzia Comici, Erika Crevatin, Cinzia De Vittor, Cinzia Fabbro, Claus Falconi, Simone Libralato, Marina Lipizer, Cosimo Solidoro.	Introduction to Long-term Perturbations in Nutrients and Productivity - Clues to Causal Processes. Richard Dugdale , Patricia Glibert.	Assessing Restoration Progress: Comparing restored and unrestored shore communities along the industrial Duwamish River. Lindsay Whitlow , Anna Vanha.
2:15	An Assessment of the Invasive Snail <i>Assiminea parasitologica</i> 's Spatial Distribution and Associated Habitat Characteristics in Coos Bay, Oregon. Alix Laferriere , Mike Graybill, Steve Rumrill, John Schaefer.	Insights from Long-term Trends in Secchi Depth and Light Attenuation in Shallow Systems of Chesapeake Bay. Chuck Gallegos .	Dinoflagellate Cysts in Recent Estuarine Sediments from Southern South Korea. Vera Pospelova , Sung-Jae Kim et al.	Nutrient and Climate Perturbations in the Northern California Coastal Ecosystem of the Gulf of the Farallones. Frances Wilkerson , Al Marchi, Richard Dugdale, James Fuller, Alex Parker.	Restoration Effectiveness Monitoring in the Lower Columbia River Estuary. Krista Jones , Evan Haas, Rita Beaton, April Cameron, Chris Collins, Lyndal Johnson, George Kral, Sean Sol, Melissa Rowe Soll, Janelle St. Pierre.
2:30	Habitat Preferences and Interactions with Benthos of the Invasive Asian Clam, <i>Corbicula fluminea</i> , in a Restoring Freshwater Tidal Marsh, Sacramento River Delta. Errin Kramer-Wilt , Charles Simenstad.	The Utility of Automated Water Quality Monitoring Data for Estimating Inherent Optical Properties and Light Attenuation in Shallow Estuarine Waters. Kevin Geyer , Charles Gallegos.	Managing Sustainable Bivalve Mollusk Fisheries and Aquaculture in a Puget Sound Estuary With Virtual Population Analysis and Numerical Aquaculture Farm Models. Peter Becker , Daniel Cheney et al.	Understanding Historical Perturbations Using a Retrospective Modeling Analysis of the 1987 Phytoplankton Crash in Northern San Francisco Estuary. Richard Dugdale , Fei Chai.	Restoration Effectiveness Monitoring at Mirror Lake Wetland Complex at Rooster Rock State Park, Oregon. Sean Sol , O. Paul Olson, Lyndal Johnson, Christopher Collins, Krista Jones et al.
2:45	Grazing Impact of the Overbite Clam on the Microzooplankton Assemblage of the San Francisco Estuary. Valerie Greene , Lindsay Sullivan, Wim Kimmerer, Jan Thompson et al.	Verification of Water Quality Model in Shallow Water Clarity. Ping Wang , Lewis Linker.	The Influence of Geoduck Clam Culture and Harvest in Puget Sound on Sediment Nutrient Biogeochemistry. Jeffrey Cornwell , Roger Newell, Michael Owens.	Transport and Fate of Ammonium Supply from a Major Urban Wastewater Treatment Facility in the Sacramento River, CA. Alexander Parker , Richard Dugdale, Frances Wilkerson, Al Marchi, Jan Davidson-Drexel, Sarah Blaser, Jim Fuller, Chris Foe et al.	Identification of Reference Sites for Restoration Effectiveness Monitoring in the Lower Columbia River and Estuary. Evan Haas , Amy Borde, Ron Thom, Heida Diefenderfer, Shon Zimmerman, Krista Jones et al.
3:00	Metabolic Responses to Environmental Salinity in the Invasive Asian Clam <i>Corbula amurensis</i> . Adam Paganini , Jonathon Stillman et al.	Erosion of Fine-grained Shores and Contributions to Nearshore Turbidity in mid-Chesapeake Bay. Jeffrey Halka , Lawrence Sanford.	Coastal Eutrophication and Offshore Shellfish Aquaculture - a modeling case study. Joao Ferreira , Roberto Pastres, Camille Saurel, Carlos Vale, Suzanne Bricker.	Pelagic Organism Decline in the San Francisco Estuary: Is there a link to nutrient perturbations? Anke Mueller-Solger .	Preliminary Meta-Analysis of Data from Multiple Monitoring Programs—Effectiveness Monitoring, Reference Sites and Ecosystem Condition. Catherine Corbett , Heida Diefenderfer, Blaine Ebberts, Gary Johnson, Krista Jones, Amy Borde, Ron Thom.
3:15	Does Evolutionary History Influence Recognition of the European Green Crab (<i>Carcinus maenas</i>)? Aaren Freeman , Jeffrey Wright, Kaylene Szeto, Chad Hewitt, Marnie Campbell.	Effects of pH on Sediment Nutrient Fluxes and Coupled Nitrification - Denitrification in a Shallow Water System. Yonghui Gao , Jeffrey Cornwell, Michael Owens, Diane Stoecker.	Ecological Impact, Economic Value and Sustainability of Mussel Farming in the Gulf of Trieste. Cosimo Solidoro , Vinko Bandelj, Alfred Beran, Gianpiero Cossarini, Paola Del Negro, Simone Libralato, Donata Melaku Canu, Anna Sustersic et al.	Has Productivity Declined in Response to Invasive Bivalves in the Shallow San Francisco Estuary? It Depends on When and Where You Look. Janet Thompson .	Ecosystem Restoration in the Columbia River Estuary - Cumulative Effects of Multiple Projects. Blaine Ebberts , Gary Johnson, Heida Diefenderfer, Ron Thom, Curtis Roegner, John Skalski et al.
BREAK 3:30 PM - 4:00 PM					

Wednesday Mid-Afternoon Oral Presentations

B115-116	B117-119	C120-122	C123	C124	C125-126	
SCI-044 Exploring Impacts of Hypoxia on Coastal Ecosystems <i>cont'd</i>	SCI-003 Interactive Effects of Climate Change and Other Stressors on Coastal Ecosystems <i>cont'd</i>	SCI-102 Ecology of Salmon in Changing Coastal Waters Laurie Weitkamp	SCI-050 The Role of Sediments in Seagrass Ecology, Management and Restoration Evamaria Koch and Deborah Shafer	SCI-040 The Response of Deltas and Coastal Wetlands to Global Change Carles Ibáñez and John Day	SCI-400 Maximizing Your Data: what can informatics do for you? (Co-sponsor: Salmon Data Access Working Group) <i>cont'd</i>	
Hypoxia-Responsive Genes in the Grass Shrimp: Differences Between the Laboratory and the Field. Nancy Brown-Peterson , Steve Manning, Nancy Denslow, Marius Brouwer et al.	Thresholds Dynamics in Coastal Habitats: Interacting effects of climate change, land-use and invasive species. Richard Osman , Robert Whitlatch, Pablo Munguia, Roman Zajac, John Hamilton.	Distributions of Chinook and Coho Salmon in the North Pacific Ocean Inferred From Coded Wire Tags: How dynamic is it? Laurie Weitkamp .	Environmental Controls on the Abundance and Distribution of Eelgrass (<i>Zostera marina</i> L.) in a Virginia Coastal Lagoon. Stephanie Toro , Richard Zimmerman.	Climate Change and Coastal Wetland Adaptation: A decision-support tool for managers. Roger Fuller , Jonathan Clough.	The Chesapeake Bay Program's Chesapeake Information Management System (CIMS). Gary Shenk , Brian Burch.	2:00
The Relationship between Hypoxia, Nitrification Rates and Resulting Nitrogen and Oxygen Dynamics in the Northern Gulf of Mexico. Stephen Carini , Wayne Gardner.	Climate Change and Proliferation of Exotic Species Threaten Coastal Ecosystems. Loretta Battaglia , Shishir Paudel, Marc Foster, Mark Woodrey.	Influence of Migration Timing on the Spatial Distribution of Juvenile Salmon in the Columbia River Plume. Brian Burke .	Relating Pore Water Sulfide, Redox and Biomass Partitioning in Eelgrass <i>Zostera marina</i> , Puget Sound, Washington, USA. Renee Takesue , Anja Schanz, Sandy Wyllie-Echeverria.	Mega Deltas in Latin America: Environmental framework in LME regions. Alejandro Yáñez-Arancibia .	Dynamic Mapping and Data Access to Salmonid Data. Jeff Cowen .	2:15
Economic Impacts of Hypoxia on North Carolina Brown Shrimp. Martin Smith , Ling Huang et al.	Shift in Non-native Species Dominance Triggered by a Simulated Heat Wave. Cascade Sorte , Adam Fuller, Matthew Bracken.	Atlantic Salmon Ecology in Gulf of Maine Estuaries and Coastal Ecosystems of West Greenland. John Kocik , Timothy Sheehan, James Hawkes, Mark Renkawitz, Graham Goulette et al.	Effects of Bioturbation on Seagrasses: Implications for management and restoration. Theodore DeWitt , Sandy Wyllie-Echeverria et al.	Evaluating Ecological Effects of Global Warming on Coastal Carolina. Enrique Reyes , Mark Brinson, Robert Chrisitian.	Vision for Unified Alaskan State Commercial Fishing Data. Tracy Olson .	2:30
Hypoxia Effects on the Bioenergetics and Growth of Subadult Brown Shrimp. Kevin Craig , Jeremy Leonard.	Modeling the Mussels <i>Mytilus</i> : climate change, survival, and distribution. Sierra Jones , David Wethey.	Atlantic Salmon Postsmolt and Adult Diets in Coastal Waters: Variations in forage base across temporal and spatial scales. Mark Renkawitz, Timothy Sheehan .	Seagrass and Sediment in New York Waters: Trends in loss of natural meadows and success of restoration efforts. Chris Pickerell , Stephen Schott, Kimberly Petersen Manzo.	Critical Rates of Sea-level Rise for Vegetated Marshes: Relationships among vegetation, relative elevation and sediment accretion rates. James Morris , Karen Sundberg.	Information Management in LTER: Moving beyond site-based approaches to accommodate network-scale interdisciplinary research. Don Henshaw .	2:45
Movement of Juvenile Weakfish (<i>Cynoscion regalis</i>) and Spot (<i>Leiostomus xanthurus</i>) in Relation to Diel-cycling Hypoxia in an Estuarine Tributary: Assessment using acoustic telemetry. Damian Brady , Timothy Targett.	Modeling the Influence of Tidal Range on the Stability of Coastal Marshland. Glenn Guntenspergen , Matthew Kirwan.	Prey Quality Affect the Production of Wild Pacific Salmon in the Northern California Current Ecosystem. Marc Trudel , Dave Mackas, Asit Mazumder.	The Role of Sediment in the Dispersal of SAV Seeds. Evamaria Koch , Dale Booth, Stephen Ailstock, Deborah Shafer.	Danube Delta Under Human Control (1850s to Present). Liviu Giosan .	Discussion Panel: Data Access	3:00
Spatial Patterns of Net 24-Hour Water Column Ecosystem Production in Narragansett Bay, RI. Leslie Smith , Candace Oviatt.		Changing Trophic Habits of Juvenile Chinook Salmon in Coastal Marine Waters: An interdecadal perspective. Elizabeth Daly , Rick Brodeur.	Opening the Cold Black Box: Wintertime Sediment Processes Limiting Seed-based Seagrass Recolonization. Scott Marion , Robert Orth.	The Response of Deltas to Sea Level Rise under Natural- and Human-impacted Conditions. Carles Ibáñez , Liviu Giosan, Enrique Reyes, John Day et al.		3:15
BREAK 3:30 PM – 4:00 PM						

Wednesday Late Afternoon Oral Presentations

	A105	A106	A107-109	B110-112	B113-114
	SCI-033 The Ecology of Marine Reserves: Acknowledging the Land-Sea Connection Kirsten Grorud-Colvert and Elise Granek	SCI-057 Synthesis of Estuarine Shallow Water Research, Modeling and Monitoring <i>cont'd</i>	SCI-007 Eutrophication and Aquaculture <i>cont'd</i>	SCI-022 Long-term Perturbations in Nutrients and Productivity - Clues to Causal Processes <i>cont'd</i>	SCI-013 Emerging Science and Restoration Practices in Pacific Northwest Estuaries <i>cont'd</i>
4:00	Marine Reserves and Mangroves: The land sea connection between tropical coral reefs and the coast. Elise Granek .	Coupling between Intertidal Wetlands and Adjacent Tidal Creeks. Charles Hopkinson , R. Hap Garritt, Emily Davenport.	Shrimp Farming with IMTA in South China: A positive way of doing aquaculture with regards to water quality management. Changbo Zhu , Zhuojia Li, Joao Ferreira, Yucheng Cao, Guoliang Wen.	Long-term Trends in Nutrient and Chlorophyll Concentrations in the San Francisco Estuary, CA: Interannual perturbations in freshwater flow. Al Marchi , Alex Parker, Richard Dugdale, Jim Fuller.	Restoring the Nisqually Delta: A coordinated science approach for adaptive management. Kelley Turner , Isa Woo, John Takekawa, Christopher Ellings, Florian Leischner, Eric Grossman, Jesse Barham, Jean Takekawa et al.
4:15	Connectivity between the Land and the Sea in the Giant Kelp Forests of Big Sur, California. Melissa Foley , Pete Raimondi, Paul Koch, Kenneth Bruland.	Implementation and Calibration of a Complex Marine Biogeochemical Flux Model in Benthos of Gulf of Trieste. Leslie Aveytua-Alcazar , Paola Del Negro, Cosimo Solidoro.	Quantifying Nutrient Filtering and Nitrogen Sequestering by Bivalve Shellfish. Peter Steinberg , Julie Hampden, Jonathan Davis, Daniel Cheney et al.	A Cautionary Tale of Two Light Sensors (and their Attenuation Coefficients). Tara Schraga , James Cloern, Raphael Kudela et al.	Restoring the Southern Sea Otter to their Oregon Range. Dave Hatch .
4:30	Tidal Creek Delivery and Surf-zone Dynamics of Fecal Coliform Bacteria within Sunset Bay, Oregon. Steven Rumrill , Ben Grupe.	Responses of Florida Bay Ecosystem to a Range of Flows and Phosphorus Loads from the Everglades: Linked wetland and estuarine models. H. Fitz , Chris Madden.	Effects on Water Quality and Submerged Aquatic Vegetation of an Explosion of Dark (or Conrad's) False Mussels, <i>Mytilopsis leucophaeata</i> , in a Small Tidal Tributary of Chesapeake Bay in 2004. Peter Bergstrom .	Increasing Ammonium in Eutrophic Estuaries, and its Potential Importance in Governing Phytoplankton Assemblages. JoAnn Burkholder , Meghan Rothenberger, Carol Kinder, Elle Allen, Kimberly Null, Robert Reed.	Innovative Techniques for Eelgrass Restoration in the Columbia River Estuary. Chaeli Judd , Amy Borde, Ron Thom, Dana Woodruff, Zhaoqing Yang, Curtis Roegner, Joseph Zhang, John Vavrinek.
4:45	Coastal Resilience: Using marine spatial planning to support management decisions that address the needs of natural and human communities. Zach Ferdana , Mike Beck, Sarah Newkirk et al.	Spectral Algorithm for Improved Submerged Aquatic Vegetation Signals. Hyun Jung Cho , Duanjun Lu.	Impacts of Shrimp and Fish Pond Effluents on Coastal Waters of Hainan, Tropical China, Traced by Water Quality and Bio-indicators. Lucia Krupp , Daniela Unger, Tim Jennerjahn.	Decadal Nitrogen Trends in Maryland Coastal Lagoons. Patricia Glibert , Catherine Wazniak, Brian Sturgis.	Removal or Enhancement of Pilings and Pile Dikes as Potential Habitat Restoration Techniques for Pacific Salmon Recovery. Christopher Collins , Catherine Corbett, Blaine Ebberts, Tracey Yerxa, Phil Trask et al.
5:00	Integrating Land Use Planning and Estuarine Reserve Management through Interoperating Decision Support Systems. Kiersten Madden, Patrick Crist .	Synthesis/Discussion led by Richard Batiuk	Optimizing Culture of Chesapeake Bay Oysters for Provisioning and Environmental Service Benefits. Douglas Lipton , Geret DePiper.	Ten Years of Phytoplankton Species Abundance Patterns in Narragansett Bay, Rhode Island: 1999-2008. Laura Windecker , Scott Nixon, Jan Rines et al.	Enhancing Habitat of Urban Seawalls in Seattle, Washington. Maureen Goff , Jeff Cordell, Jason Toft, Si Simenstad, John Arnesen.
5:15	Making the Most of Water Quality Data in National Parks. Eva DiDonato .		Mussel Farming and Nutrient Trading in Sweden. Odd Lindahl .	Chlorophyll Measurements are Significantly Influenced by Extraction Methods; Protocol Comparisons from a Long-term Monitoring Program and Implications for Assessing Change in Marine Ecosystems. Jason Graff , Tatiana Rynearson.	Marine Bird and Waterfowl Assemblage Composition Along Natural and Urban Gradients in Greater Puget Sound. Casimir Rice , Kristofer Kloehe, James Karr et al.

Wednesday Late Afternoon Oral Presentations

BI15-116	BI17-119	C120-122	C123	C124	C125-126	
SCI-044 Exploring Impacts of Hypoxia on Coastal Ecosystems <i>cont'd</i>	SCI-210 Ecology of Coastal Marshes Rui Santos	SCI-102 Ecology of Salmon in Changing Coastal Waters <i>cont'd</i>	SCI-218 Invasive Fish Biology Valance Brenneis	SCI-040 The Response of Deltas and Coastal Wetlands to Global Change <i>cont'd</i>	SCI-400 Maximizing Your Data: what can informatics do for you? (Co-sponsor: Salmon Data Access Working Group) <i>cont'd</i>	
Dead Zones Can Enhance Fisheries Species by Providing a Predation Refuge. Andrew Altieri .	<i>Spartina maritima</i> Community Production in Southern Europe. Rui Santos , João Silva et al.	Parasite Species Richness as a Metric to Assess the Trophic Interactions and Habitat Quality of Pacific Salmon in the Freshwater and Marine Environment. James Losee , Kym Jacobson, Rebecca Baldwin.	A Comparative Study of Fish Diets in the Columbia River Estuary: Introduced invertebrates in the food web. Valance Brenneis .	Climate Change, Energy Scarcity, and Mississippi Delta Restoration. Jame Cowan, Paul Kemp, John Day et al.	4:00 – 4:20 Capitalizing on Data Visualization Technologies: An introduction to Tableau software. Josh Vitello .	4:00
Mortality of <i>Balanus glandula</i> Larvae Exposed to Hypoxic Water in a Laboratory Setting. Dafne Erkes-Medrano , Christine Sislak, Amanda Amstutz, Chris Langdon, Bruce Menge.	A New Approach for Quantifying Losses and Gains in <i>Spartina</i> Marshes. James Browne .	Variation in Growth of Salmon Smolts from the Columbia River Estuary and off the Oregon/Washington Coast as Indexed by Insulin-like Growth Factor 1. Brian Beckman , Kathy Cooper, Deb Harstad, Dina Spangenberg.	Phylogeography and Population Genetics of the Monkey Goby (<i>Neogobius fluviatilis</i>) across Eurasia. Matthew Neilson , Carol Stepien.	Wetland Sediment Deposition of an Active Mississippi River Subdelta: The importance of river floods and hurricanes to sustainable wetland landscapes. Guerrey Holm , Azure Bevington, Charles Sasser, Robert Twilley.	4:20 – 4:40 Behind the Scenes of the Sockeye IUCN Visualization. Kim Rees .	4:15
The Rise of Shelf Hypoxia in the Northern California Current: Climatic influences and ecological consequences. Francis Chan , John Barth, Stephen Pierce, Michael Donnellan, Bruce Menge et al.	Variation in Marsh Benthic Invertebrate Presence and Abundance Related to Altered <i>Spartina alterniflora</i> Density. Caroline McFarlin , T. Dale Bishop, Merryl Alber, Mark Hester et al.	Survival of Mid-upper Columbia River Spring Chinook Salmon: The effects of size and growth during juvenile emigration. Londi Tomaro , Jessica Miller.	Impacts of Exotic Mangroves on Tidepool Fish Assemblages on the Island of Hawai'i. Caitlin Kryss , Richard MacKenzie.	Hydrodynamic Response to Pulsing River Diversion in Breton Sound Estuary, Louisiana. Haosheng Huang , Dubravko Justic.	4:40 – 5:00 A Web-based Data Serving and Visualization Tool for Oregon Coastal Coho Salmon and Aquatic Habitat Information. Jeff Rodgers .	4:30
Comparative Hypoxia Drivers and Impacts in Adjacent Riverine and Lagoonal Estuaries in North Carolina. Michael Mallin , Matthew McIver, Scott Ensign.	Assessment of Individual Growth Rates of Grass Shrimp <i>Palaemonetes pugio</i> Using Coded Wire Tags. Krystle Ludwig , Mary Curran, Paul Pennington.	Multi-trophic Impacts of Shifting Climate Regimes: Modeling size-dependent ocean survival of Columbia River Chinook salmon. Kirstin Holsman , Mark Scheuerell, Robert Emmett, Ed Casillas et al.	Impacts of Invasive Fish in Hawaiian Wetlands. Richard MacKenzie , Greg Bruland, Caitlin Kryss et al.	Salinity Effects of the Morganza to the Gulf of Mexico Levee System South of Houma, Louisiana. Tate McAlpin , Joseph Letter, Fulton Carson.		4:45
Hypoxia, Benthic Macrofauna and Nitrogen Cycling in Chesapeake Bay. Jennifer Bosch , W. Michael Kemp.	Seeking Generalities in Salt Stress Effects on Herbivores: A multi-species approach. Christy Foust , Cliff Ross, Anthony Rossi, Jamie Moon, Dan Moon.	Climate Effects on Juvenile Salmonid Consumption by an Estuarine Predator. Donald Lyons , Daniel Roby, Jessica Adkins, Peter Loschl, Ken Collis.	Survival, Growth and Reproduction of Nile Tilapia in Saline Waters: Projected effects of climate change and sea level rise on the distribution of an invasive species. Michael Lowe , Mark Peterson, Pamela Schofield, William Slack et al.	Ecologic Response to Climate-Change Induced Water Temperature Changes in the Sacramento-San Joaquin Delta. Wayne Wagner , Mark Stacey, Larry Brown.		5:00
Bioturbation in a Declining Oxygen Environment, <i>in situ</i> Observations. Samuel Sturdivant , Robert Diaz.	Marsh Hammocks: Isolated uplands in the marsh environment. Merryl Alber , Clark Alexander, Christine Hladik, Steve Pennings et al.	Bar Built Estuary and Lagoon Use by Central California Salmonids: Pre-ocean purgatory or lost paradise? Sean Hayes , Morgan Bond, Alison Collins, Danielle Frechette, Osterback Ann-Marie, Jeff Harding, Arnold Ammann, Bruce MacFarlane et al.	Synthesis/Discussion	Physical Drivers of Biological Productivity Following Levee Breaches on Islands in the Sacramento-San Joaquin Delta. Laura Doyle , John Durand, William Fleenor.	Discussion Panel: Turning Data into Information	5:15

Thursday Early Morning Oral Presentations

	A105	A106	A107-109	B110-112	B113-114
	SCI-015 Microbes: A Synthesis of Diversity, Gene Expression and Ecological Function Byron Crump, Jude Apple and Jennifer Bowen	SCI-002 Shallow Photoc Systems in a Changing World: Vulnerability and resilience to disturbance I. Anderson, M. Brush, C. Currin, M. Piehler, K. Sundback and K. McGlathery	SCI-215 San Francisco Bay Restoration Katharyn Boyer	SCI-036 Phytoplankton Time Series: Evaluating Environmental Changes and Anthropogenic Impacts Paul Harrison, James Cloern, Tom Malone and Kedong Yin	SCI-080 Geographic Variability in the Nursery Function of Coastal Salt Marshes Lawrence Rozas, Cuizhang Fu and Ronnie Baker
8:00	An Overview of Microbial Communities Across Estuarine and Coastal Environmental Gradients. Byron Crump , Jennifer Bowen, Jude Apple.	Vulnerability and Resilience of Shallow Coastal Systems to Natural and Anthropogenic Disturbances. Iris Anderson , Carolyn Currin, Mark Brush, Michael Piehler.	Assessing Temporal and Spatial Changes in Benthic Invertebrates in the San Francisco Bay. Isa Woo , John Takekawa, Nicole Athearn, Bruce Jaffe, Robert Kayen, Greg Shellenbarger, David Schoellhamer.	Patterns of Phytoplankton Biomass Variability in Estuarine-Coastal Ecosystems. James Cloern , Alan Jassby.	Where in the World do Tidal Marshes Have a Role as Critical Nursery Habitat? Ronald Kneib .
8:15	Tracking Metabolism of an Important Terrestrial Carbon Source by Marine Bacterioplankton. Mary Doherty , Rachel Poretsky, Mario Muscarella, Mary Moran, Melissa Booth.	Denitrification and Disturbance: Resilience through the estuarine gradient. Michael Piehler , Iris Anderson, Ashley Smyth, Rebecca Schwartz, Mark Brush, Carolyn Currin et al.	Shorebird Response to Temporal Changes on a San Francisco Bay Estuary Mud Flat. Nicole Athearn , John Takekawa, Stacy Moskal, Isa Woo, Joel Shinn, Bruce Jaffe, Robert Kayen, Greg Shellenbarger, David Schoellhamer.		Australian Saltmarsh as Fish Real Estate: location, location, location. Rod Connolly .
8:30	Microarray Analysis of Microbial Gene Expression in Columbia River Estuary, Plume and Coastal Ocean. Mariya Smit , Lydie Herfort, Victoria Campbell, Kaitlin Tyrol, Byron Crump, Peter Zuber, Holly Simon et al.	The Importance of Nitrogen Fixation as a New N Input to a Shallow Estuarine System and Feedbacks with Eutrophication. Roxanne Marino , Karen McGlathery, Robert Howarth, Anne Giblin, Ken Foreman, Peter Berg et al.	The Importance of Estuarine Shoals for Wildlife in San Francisco Bay: Seasonal Changes and Effects of Large-scale Restoration. John Takekawa , Nicole Athearn, David Schoellhamer, Gregory Shellenbarger, Bruce Jaffe, Robert Kayen et al.	Does the Terrestrial Phenology Concept Apply in Water? Monika Winder , James Cloern.	Spatio-Temporal Patterns of Fish Utilizations in Intertidal Marsh Creeks of the Yangtze River Estuary in China. Cuizhang Fu , Binsong Jin, Li Guo, Haiming Qin, Shimin Tang.
8:45	Spatial and Temporal Variability of Microbial Communities in the Columbia River, its Estuary, and the Adjacent Coastal Ocean Assessed with Tag Pyrosequencing. Caroline Fortunato , Byron Crump.	Macroalgal Blooms Change the Sediment Microbial Community of a Shallow Coastal Lagoon. Amber Hardison , Elizabeth Canuel, Iris Anderson, Craig Tobias et al.	Field Experiments to Evaluate Eelgrass (<i>Zostera marina</i>) Restoration Techniques, Donor Selection and Maintenance of Genetic Diversity. Katharyn Boyer , Sandy Wyllie-Echeverria, Laura Reynolds, Lindsey Carr, Brian Ort, Sarah Cohen et al.	Insights on Phytoplankton Dynamics from High-resolution Timeseries Observations. Jan Newton , Allan Devol, Wendi Ruef.	Fish Zonation and Trophic Functioning in Warm Temperate South African Salt Marshes. Angus Paterson , Alan Whitfield.
9:00	Impact of an Estuarine Turbidity Maxima on Microbial Assemblages in the Columbia River Estuary. Lydie Herfort , Lee Ann McCue, Mikaela Selby, Victoria Campbell, Byron Crump, Tawnya Peterson, Peter Zuber.	Disparate Impacts of Eutrophication in Shallow Coastal Systems of the Northern Gulf of Mexico. Just Cebrian , Bart Christiaen, John Lehrter, Jason Stutes, Andrea Anton.	Rapid Sediment Accumulation in a Restoring Tidal Salt Marsh in the San Francisco Bay Estuary. Lisa Schile , John Callaway, V. Thomas Parker, Ellen Herbert.	Ecological Responses of the Pamlico Sound, North Carolina, USA to Human and Climatic Disturbances, Determined by Phytoplankton Group-specific Analysis. Hans Paerl , Karen Rossignol, Nathan Hall, Benjamin Peierls, Michael Wetz.	The Guadalquivir Estuary as a Nursery Ground for Marine Fish and Crustacean Decapods of the Gulf of Cadiz (SW Spain). Jose Cuesta , Enrique Gonzalez Ortegon, Cesar Vilas, Alberto Arias, Carlos Fernandez Delgado, Pilar Drake et al.
9:15	Composition and Dynamics of Suspended Organic Matter in the Estuarine Turbidity Maximum of Chesapeake Bay. Michael Malpezzi , Byron Crump, Erica Kiss, Joanna Green.	Metabolic Responses to Nutrient Enrichment in Temperate Shallow Coastal Lagoons. Juliette Giordano , Mark Brush, Iris Anderson et al.	Modelling Community-based Restoration of Estuarine Systems. Darcie Goodman Collins , Laura Wainer et al.	Climate Driven Changes in Water Quality and an Attempt to Quantify Hurricane Impact on Phytoplankton Biomass, Biscayne Bay, Florida. Henry Briceño , Joseph Boyer, Joffre Castro, Peter Harlem, Frank Marshall, William Nuttle et al.	Geographic Variability in Tidal Inundation Patterns of Southeastern U.S. Salt Marshes. Thomas Minello , Lawrence Rozas, Ronald Baker.
9:30	The Influence of Environmental Gradients on the Abundance and Distribution of <i>Mycobacterium</i> spp. in the Chesapeake Region. John Jacobs , Matt Rhodes, Brian Sturgis, Lindsay Chakot, Bob Wood et al.	Benthic Metabolism in Florida Bay is Controlled by Phosphorus Availability. Darrell Herbert , James Fourqurean et al.	Technical Evaluation of an Aquatic Transfer Facility (ATF) for Handling Dredged Sediment in Hamilton Wetland Restoration Project, San Pablo Bay, California. David Cacchione , Peter Mull.	Coastal Eutrophication Process In Hong Kong Waters: Anthropogenic Influence vs Climate Change. Kedong Yin , Paul Harrison.	Marsh Flooding Patterns and Geographic Variability in the Trophic Support of Juvenile Nekton. Ronald Baker , Brian Fry, Lawrence Rozas, Tom Minello.
BREAK 9:45 AM – 10:15 AM					

Thursday Early Morning Oral Presentations

BI15-116	BI17-119	CI20-122	CI23	CI24	CI25-126	
SCI-068 The Linkage between Biodiversity and Ecosystem Functions: Regional Perspectives Masahiro Nakaoka and Masakazu Hori	SCI-103 Shifting Baselines: Environmental Sentinels of Changing Coastal Conditions Susan White and Whitley Saumweber	SCI-081 Large-scale estuarine and coastal restoration: integrating science and management J. Carstensen, D. Rudnick, C. Madden, J. Andersen, R. Batiuk	SCI-090 Poorly Understood Physical Processes in Estuaries and Coasts Alejandro Souza and Arnoldo Valle-Levinson	SCI-045 Macroalgae: The Good, the Bad and the Ugly Krista Kamer, Peggy Fong, Karen McGlathery and Christy Tyler	SCI-400 Maximizing Your Data: what can informatics do for you? (Co-sponsor: Salmon Data Access Working Group) Cathy Kellon and Anne Thessen	
Introduction to The Linkage between Biodiversity and Ecosystem Functions: Regional Perspectives. Masahiro Nakaoka, Masakazu Hori.	Establishing a Network of Sentinel Sites in the National Estuarine Research Reserve System: Building partnerships to detect, monitor and respond to the impacts of climate change in coastal regions. Marie Bundy et al.	The Baltic Sea - An ecosystem in its infancy? Daniel Conley.	Quantifying the Contributions of Tidal Straining and Gravitational Circulation to Residual Circulation in Partially Mixed Tidal Estuaries. Hans Burchard, Robert Hetland.	Realistic Biodiversity Changes Alter Nitrogen Uptake by Seaweed Assemblages in an Open-coast Marine Ecosystem. Matthew Bracken, Susan Williams.	OPEN	8:00
Investigating the Linkage between Biodiversity and Ecosystem Functions: A broad-scale analysis of the rocky coast of Japan. Masahiro Nakaoka, Akihito Aizawa, Takehiro Okuda, Masakazu Hori, Tomoko Yamamoto, Takashi Noda.	Assessing the Status of Ecological Condition at National Estuarine Research Reserve System Protected Areas: Two Case Studies. Cynthia Cooksey, Jeff Hyland, Marie Bundy, John Fear, Dorset Hurley et al.	Nitrogen and Phosphorus Dynamics in the Baltic Sea: Sources, sinks and redox-dependent transformations. Caroline Slomp, Bo Gustafsson, Haydon Mort, Daniel Reed.	Interactions of Tidal and Buoyancy-Driven Processes Influencing Subtidal Exchange in Eastern Long Island Sound. Michael Whitney.	Have Eutrophic Southern California Estuaries Lost Ecosystem Function? Rachel Kennison, Peggy Fong.		8:15
Herbivory, Intertidal Stress and Nutrients Combine to Determine Algal Species Diversity. Susan Williams, Matthew Bracken, Emily Jones, Albert Carranza.	Tidal Creek Ecosystems: Sentinel Habitats for Assessing the Consequences of Rapid Coastal Development. Denise Sanger, Fred Holland, Derk Bergquist, Anne Blair, Susan White, George Riekerk.	The Vicious Circle of the Baltic Sea. Emil Vahtera, Daniel Conley, Bo Gustafsson, Harri Kuosa, Heikki Pitkänen, Oleg Savchuk, Timo Tamminen, Markku Viitasalo et al.	Estimates of the Turbulent Kinetic Energy (TKE) Balance in Shelf Seas. Alejandro Souza, Kyle Betteridge.	Macroalgal Blooms in Temperate and Tropical Coastal Waters: Nutrient enrichment and grazing field experiments. Mirta Teichberg, Sophia Fox, Ivan Valiela.	Kepler: A scientific workflow support tool. Mark Schildhauer.	8:30
Landscape Diversity Enhances Secondary Production of the Associated Community in Seagrass/Algal Beds. Masakazu Hori, Yoshiyuki Tanaka, Toshihiro Miyajima, Goro Yoshida, Masami Hamaguchi.	Geospatial Infrastructure for Change Monitoring within NOAA Sentinel Sites. Galen Scott, Kendall Fancher, Dennis Lokken, Steven Breidenbach, Charles Geoghegan et al.	Changing Biodiversity of Baltic Sea Macrofauna: Implications for ecosystem functioning. Alf Norkko.	Dissecting the Pressure Field in Tidal Flow Past a Headland: When is form drag "real?" Sally Warner, Parker MacCready.	Positive and Negative Impacts of Herbivores on Bloom-forming Macroalgal Community Dynamics. Carol Thornber, Michele Guidone, Emily Field et al.	Approaches to Data Integration and Fusion for Integrated Ecosystem Assessments. Julie Bosch, Scott Cross, Eric Roby, Arthur Parsons.	8:45
Habitat Uses and Trophic Guilds of Juvenile Reef Fish in Two Tropical Seagrass Beds, Southern Taiwan. Chen-Lu Lee, Hsing-Juh Lin.	Variability in Salinity and Temperature Drive Benthic Community Structure in the Lavaca-Colorado Estuary, Texas, USA. Jennifer Beseres Pollack, Paul Montagna et al.	Reorganization of Central Baltic Sea Foodweb Structure and Function Due to Multiple External Stressors. Christian Moellmann, Michele Casini.	The Implications of Tidal Processes for the Subtidal Estuarine Circulation. Mark Stacey.	Benthic Macroinvertebrate Diversity Controls Algal Dynamics in a Shallow Estuary. Natalie McLenaghan, Christy Tyler, Ursula Mahl, Robert Howarth, Anne Giblin, Jeff Barnette.	Informatic Tools to Assess Habitat Restoration in the Pacific Northwest. David Hamm, Katie Barnas et al.	9:00
Current Status of the Seagrass Habitats on the Coasts of the Korean Peninsula. Kun-Seop Lee.	Observed Changes in Nutrient Standing Stock in Narragansett Bay, RI, with Tertiary Sewage Treatment. Jason Krumholz, Candace Oviatt, Leslie Smith et al.	An International Management Plan for a Healthy Baltic Sea. Maria Laamanen.	Turbulent Mixing in a Macrotidal Salt-wedge Estuarine System. Sarah Giddings, Derek Fong, Mark Stacey, Stephen Monismith.	Macroalgal Mats Alter Prey Availability and Foraging Behavior of Shorebirds in a Southern California Estuary. Lauri Green, Peggy Fong.	Use of a Non-Supervised Neural Network and Hierarchical Clustering to Study Spatial Patterns of Fish Assemblages in Southeast Alaska. Katharine Miller, Norcross Brenda, Mitch Lorenz.	9:15
Status of Coral Reefs in Thailand: The linkage between human activities, climate change, resilience and introduced species. Suchana Chavanich, Voranop Viyakarn, Pataporn Kuanui et al.	Oyster Reefs at Risk: A Globally Imperiled Ecosystem and Recommendations for Revitalization. Michael Beck, Robert Brumbaugh, Caitlyn Toropova, Loren Coen, Omar Defeo, Mark Luckenbach et al.	Adaptive Nutrient Management for Restoration of Danish Coastal Ecosystems. Jacob Carstensen, Peter Henriksen, Dorte Krause-Jensen, Karsten Dahl et al.	Stratification Dynamics in a Tidal River. Stephen Monismith, James Hench, Nicholas Nidzieko, Derek Fong, William Fleenor, Laura Doyle, Geoffrey Schladow.	Importance of Residence Time as a Control on Nitrogen Cycling in Four Southern California Coastal Lagoons, USA. Martha Sutula, Karen McLaughlin, Jaye Cable, Peggy Fong, Lauri Green.	Ecosystem Informatics for Natural History Data: Developing an integrated framework for biological and geographic data. Deborah Reusser, Henry Lee.	9:30
BREAK 9:45 AM – 10:15 AM						

Thursday Mid-Morning Oral Presentations

	A105	A106	A107-109	B110-112	B113-114
	SCI-015 Microbes: A Synthesis of Diversity, Gene Expression and Ecological Function <i>cont'd</i>	SCI-002 Shallow Photoc Systems in a Changing World: Vulnerability and resilience to disturbance <i>cont'd</i>	SCI-219 Wetland Restoration Tony Bowron	SCI-036 Phytoplankton Time Series: Evaluating Environmental Changes and Anthropogenic Impacts <i>cont'd</i>	SCI-027 Dynamics of Mangrove-Saltmarsh Ecosystems in the Face of Climate Change Ilka Feller and Samantha Chapman
10:15	The Biogeography of Salt Marsh Ammonia-oxidizing Bacteria across Geographic Scales. Jennifer Martiny , Jonathan Eisen, Kevin Penn, M. Claire Horner-Devine.	Benthic, Pelagic and System Metabolism in an Optically Diverse Estuary: Results from measurements and simulation modeling. Mark Brush , Iris Anderson, Carolyn Currin, Michael Piehler.	Macro-tidal Salt Marsh Ecosystem Response to Culvert Expansion. Tony Bowron , Nancy Neatt, Danika van Proosdij, Jeremy Lundholm, Jennie Graham et al.	Interactions between Anthropogenic Nutrient Loading and Climate Change in a Bay Adjacent to the Pearl River Estuary. Paul Harrison , Jie Xu, Kedong Yin et al.	Does Increased Nutrient Load Facilitate Mangrove Invasion of Coastal Saltmarsh in Australia? Todd Minchinton , Sharon Robinson.
10:30	Drifter Studies: Diel patterns in bacterioplankton community composition and gene expression in the Columbia River plume and coastal ocean. Byron Crump , Caroline Fortunato, Mariya Smit, Holly Simon, Lydie Herfort, Yinglong Zhang, Grant Law, Antonio Baptista, Peter Zuber.	Benthic Primary Producers on the Eutrophic Northern Gulf of Mexico Continental Shelf. Melissa Baustian , Nancy Rabalais et al.	Gooseneck Cove Salt Marsh, Newport, RI: Restoring an important coastal ecosystem. Rich Pfingsten , Lee Becker, Sam Whitin et al.	Changes in the Phytoplankton Community Structure in the North East of Scotland: Observations since 1997. Eileen Bresnan , Sarah Hughes, Sheila Fraser, Ana Amorim, Kerry Smith, Malcolm Rose, George Slesser, Steve Hay, Jens Rasmussen, Mike Heath et al.	Biogeochemical Signatures and Microbial Activity in Sediments Recovering from Salt Marsh Dieback. Samantha Joye , Peter Baas, Christelle Hyacinthe, Vladimir Samarkin, Mark Hester.
10:45	Unexpectedly High Rates of N ₂ Fixation and nifH Gene Diversity in the Coastal mid-Atlantic Ocean. Margaret Mulholland , Peter Bernhardt, Katherine Filippino, Jose Blanco-Garcia, Elizabeth Mondragon, Pia Moisaner, Jonathan Zehr.	A Simple Model Capturing the Range of Phytoplankton Responses to Changes in Transport Time. Lisa Lucas , Janet Thompson, Larry Brown.	Quantifying Sediment Retention Within a Restored Headwater Floodplain in the Delaware Bay Watershed. David Osgood , Stephanie Harper, Brian Benusa.	Spatial and Temporal Trends in Phytoplankton in the Bay of Fundy, eastern Canada. Jennifer Martin , Murielle LeGresley, Alex Hanke et al.	Altered Mangrove Species Composition Can Have Cascading Impacts on Soil-Plant Feedbacks. Samantha Chapman , Anne Chamberlain, Ilka Feller.
11:00	Nitrification and Denitrification along Environmental Gradients in the San Francisco Bay Estuary. Annika Mosier , Chris Francis.	Effects of Increased Temperature on a Shallow-water Sediment System: A spring situation in a cool microtidal area. Christian Alsterberg , Kristina Sundback.	When Sound Coastal Engineering and Wetlands Protections Regulations Collide. Lee Weishar , Peter Markunas et al.	Variations in Primary Production in Southeast Queensland Estuaries Under Drought and Non-drought Conditions. Andy Steven , Phillip Ford, Nicola Grigg, Simon Lee et al.	The Shifting Competitive Balance of Marsh Plant Communities Exposed to Elevated CO ₂ and Nitrogen. Adam Langley , Patrick Megoñigal et al.
11:15	Ecosystem Effects of Invasive Eelgrass (<i>Zostera japonica</i>) on Sediment Microbial Communities and Processes. Claire Horner-Devine , Jessica Silver.	Consumers Rule: The Primacy of Top-down Effects in Shallow Benthic Ecosystems. Ken Heck , John Valentine et al.	Restoration Ecology of Black Mangroves in Coastal Louisiana: Coupling population dynamics with ecophysiology. Lauren Alleman , Mark Hester.	Long-term (1992-2009) Variability in the Frequency, Magnitude and Duration of <i>Phaeocystis pouchetii</i> Blooms in Massachusetts Bay, USA. David Borkman, Phillip Libby , Jefferson Turner.	Climate-induced Increase in Mangrove Abundance in Coastal Louisiana. Thomas Michot , Richard Day, Christopher Wells, Thomas Doyle.
11:30	Bacterial Biodiversity Associated to Mediterranean Seagrass <i>Posidonia oceanica</i> . Neus Garcias-Bonet , Jesús Arrieta, Carlos Duarte, Nùria Marbà.	Stability, Disturbance and Resilience in Two Alternate Soft-sediment Communities. Christy Bowles , Edwin Grosholz.	Improving Water Quality in Tomales Bay through Large-Scale Restoration. Lorraine Parsons , Rachel Kamman, Greg Kamman, Braannon Ketcham et al.	The Impact of a Changing Climate on Phytoplankton and Benthic-Pelagic Coupling in a Northern Temperate Estuary. Robinson Fulweiler , Scott Nixon.	Drought Impacts on Biogeochemistry and Microbial Processes in Salt Marsh Sediments. Laura Palomo , Christelle Hyacinthe, Samantha Joye.
11:45	Relationship between Bacterial Diversity and Sedimentary Organic Matter Characteristics in a Deltaic Environment: the Rhône prodelta (France). Solveig Bourgeois , Jean-François Ghiglione, François Charles, Audrey Pruski, François Lantoiné et al.	Vulnerability and Resilience of Seagrasses to Hurricane Impacts Along Florida's West Coast. Paul Carlson , Laura Yarbro, Kristen Kaufman, Rob Mattson.	Assessment, Mitigation and Monitoring of Eelgrass Beds (<i>Zostera marina</i>) Impacted by Replacement of the North Fork Siuslaw River Bridge on Highway 126 near Florence, Oregon. Irene Ulm , Steven Rumrill et al.	Changes in Genetic Structure Through Time: The sediment archive of <i>Skeletonema</i> . Karolina Härnström , Anna Godhe, Marianne Ellegaard et al.	Getting Below the Surface: Impacts of elevated CO ₂ and nitrogen supply on mangrove-marsh associations. Christine Pickens , Karen McKee, Mark Hester.
POSTER SESSIONS and LUNCH 12:00 PM – 2:00 PM					

Thursday Mid-Morning Oral Presentations

BI15-116	BI17-119	CI20-122	CI23	CI24	CI25-126	
SCI-084 Geospatial Infrastructure and Tools for Monitoring Coastal Environmental Change Galen Scott and Allison Allen	SCI-078 Applying Innovative Land Use Technology in Coastal Communities Dwight Trueblood	SCI-081 Large-scale Estuarine and Coastal Restoration: integrating science and management <i>cont'd</i>	SCI-090 Poorly Understood Physical Processes in Estuaries and Coasts <i>cont'd</i>	SCI-045 Macroalgae: The Good, the Bad and the Ugly <i>cont'd</i>	SCI-400 Maximizing Your Data: what can informatics do for you? (Co-sponsor: Salmon Data Access Working Group) <i>cont'd</i>	
Three Aspects of Sea Level Rise: Water Levels, Sediment Deficit and Subsidence. Eric Van Dyke.	Overcoming Barriers to the Application of Land Use Planning Tools. Dwight Trueblood , Cory Riley, Richard Langan, Kalle Matso.	Everglades and Florida Bay Restoration: Bridging the winding paths of science and management. David Rudnick , Christopher Madden, Amanda McDonald, Robin Bennett.	Influence of Sediment Distribution and Rectification Processes on the Formation of Estuarine Turbidity Maxima: an idealized model approach. Henk Schuttelaars.	Do Coral Reefs Exist as Alternate Stable States? Preliminary evidence from two contrasting reef systems. Ranjan Muthukrishnan , Peggy Fong.	Concepts for Bringing Land and Marine Data Together. Mark MacKenzie.	10:15
Building a Blueprint for Restoration: Using high-accuracy land surface elevation survey, electronic sensors, and tidal inundation regime modeling. Laura Brophy , Paul Adamus, John Christy, Craig Cornu et al.	Adapting and Transferring Effective Watershed Planning Tools to Protect the Coastal Plain. Deb Caraco , Karen Capiella, Neely Law et al.	Screening Configurations for Everglades Restoration: Hydrologic underpinnings that go beyond CERP and support the purchase of US Sugar land. Fred Sklar , Walter Wilcox, Christopher McVoy, David Rudnick, Cal Neidrauer et al.	Hydrographic Patterns at the Transition between a Subterranean Estuary and the Coastal Ocean. Arnoldo Valle-Levinson , Ismael Mariño, Cecilia Enriquez.	Marine Nutrient Inputs Shape Macroalgae (<i>Ulvoid</i> spp.) and Seagrass (<i>Zostera marina</i>) Interactions Along the South Slough NERR Estuarine Gradient. Margot Hessing-Lewis , Sally Hacker, Steve Rumrill, Bruce Menge et al.	The Utility of Data Dictionaries in Reconciling and Analyzing Salmon Management Action Data. Katie Barnas , David Hamm et al.	10:30
Monitoring Coastal Environmental Change Using a Novel Combination of Airborne and Terrestrial Lidar. Nishanthi Wijekoon , Philippe Hensel, Galen Scott, Christopher Parrish, Keil Schmid et al.	A Watershed Planning Support System. Brian Deal , Arnab Chakraborty et al.	Changes in Catchment to the Coast: Tradeoffs in eutrophication and ecosystem restoration. Robert Twilley , Guerry Holm, Azure Bevington, Victor Rivera-Monroy, Randolph Chambers.	Tidal Modulation of the Surface Coastal Thermohaline Structure Associated with Intense Submarine Groundwater Discharges (SGD). Cecilia Enriquez , Ismael Mariño-Tapia, Emanuel Uc, Arnoldo Valle-Levinson.	Macroalgae, the "Good" Side: Part I. The relative roles of seagrass and macroalgae as habitat and food in estuaries with different nutrient loading rates. Sophia Fox , Ylva Olsen, Mirta Teichberg, Ivan Valiela.	The Aquatic Resources Schema. Steve Rentmeester.	10:45
Connecting Wetland Surface Elevation Trajectories to Local Water Levels through a Common Vertical Datum Provides New Insights. Glenn Guntenspergen, Donald Cahoon, Philippe Hensel , Allison Allen, Galen Scott.	Building SWAMPS in Coastal Oregon Communities. Derek Godwin , Michael Wing, Desiree Tullos et al.	The CALFED Bay-Delta Program: Status and Lessons Learned. Lauren Hastings.	Use of Water-Salinity Budget Models to Estimate Groundwater Fluxes and Assess Future Ecological Conditions in Hydrologically Altered Coastal Lagoons. Gregory Kamman , Shawn Higgins.	Macroalgae, the "Good" Side: Part II. The relative roles of seagrass and macroalgae as habitat and food in a low nutrient estuary. Ylva Olsen , Sophia Fox, Ivan Valiela.	The Realist Approach to Building Ontologies for Science. Alan Ruttenberg.	11:00
Monitoring Marsh Sustainability Using Geodetically Connected Low Altitude Remote Sensing, in situ Vegetation Characteristics, Surface Elevation and Sea Level Change. David Nemerson , Nishanthi Wijekoon.	Coastal Water Quality Enhancement Through the Use of an Internet-based Geospatial Tools for Planning Stormwater Management Systems. Richard Lathrop , Scott Haag, Lisa Auermuller et al.	Seesaws and Tipping Points: Historic oscillations and current restoration challenges at Drakes Island, Wells, Maine. Susan Adamowicz , Kate O'Brien.	Observations of Wave Driven Dispersion Over Coral Reefs. Liv Walter , James Hench, Stephen Monismith.	Can the Introduced Macroalgae <i>Codium fragile</i> Serve as a Suitable Habitat for the Native Bay Scallop <i>Argopecten irradians</i> . John Carroll , Stephen Tettelbach, Bradley Peterson et al.	Discussion Panel: Data Use and Reuse	11:15
A System to Monitor Subsidence in South Louisiana. Roy Dokka , J. Cavell, Randy Osborne.	Tools for Land Use and Estuarine Restoration Planning: hydrodynamic modeling and fish tracking. Andrea Copping, Simon Geerlofs , Tarang Khangaonkar, Douglas Bulthuis.	Can Pinocchio Save Ecosystem Restoration from Frankenstein's Monster? William Nuttle.	The Temporal and Spatial Evolution of Unstable Lee Waves Downstream of a Shallow Sill. Stefan Talke , Alex Horner-Devine, Chris Chickadel, Andy Jessup et al.	Community Level Effects of <i>Caulerpa taxifolia</i> Expansion. Dana Burfeind , Ian Tibbetts, James Udy.		11:30
Applying Height Modernization to Surface Elevation Tables: Geographic Variation in the Elevation of Southeast Louisiana Marshes. Ann Commagere , Charlie Geoghegan, Steve Breidenbach et al.	Synthesis/Discussion	Science and Baltic Sea Restoration: Insights from the outside. Donald Boesch.	Synthesis/Discussion	Using Macroalgal $\delta^{15}\text{N}$ Bioassay to Detect Cruise Ship Waste Water Effluent Inputs in Skagway, AK. James Kaldy.	Closing Remarks	11:45
POSTER SESSIONS and LUNCH 12:00 PM – 2:00 PM						

Thursday Mid-Afternoon Oral Presentations

	A105	A106	A107-109	B110-112	B113-114
	SCI-055 Arid and Seasonally Arid Estuaries John Largier, Sharon Herzka, Xose Alvarez-Salgado and Paul Montagna	SCI-023 Ecology of Estuarine Bivalves: Merging Science with Mariculture and Restoration Brett Dumbauld and Steven Rumrill	SCI-201 Watershed and Climate Change Effects on Coastal Ecosystems William Benson	SCI-212 Detecting Change with Estuarine Monitoring Katie Foreman	SCI-094 Tidal Freshwater Marshes: Impacts and Response to a Changing Environment Chris Swarth and Patricia Delgado
2:00	Being More Inclusive: A Modern Definition of "Estuary." John Largier , CAERS Working Group et al.	Patterns of Olympia Oyster Recruitment, Growth and Survival Along Physical and Biological Gradients in a Central California Estuary. Anna Deck , Edwin Grosholz.	Evaluating the Effects of Projected Sea-level Rise on Endemic Tidal Marsh Species in San Francisco Bay Estuary. Karen Thorne , Nicole Athearn, John Takekawa, Deborah Elliott-Fisk, Susan Ustin, Glenn Wylie, William Perry.	A Chesapeake Bay Basin-wide Benthic Index of Biotic Integrity. Katie Foreman , Claire Buchanan, Andrea Nagel.	Tidal Freshwater Wetlands: How environment and ecology are linked. Aat Barendregt .
2:15	Facilitation of Vegetation into Salt Marsh Salt Pannes. Sarah Bryson , Peggy Fong.	Culture Practices and Structure Effects of Intertidal Geoduck Aquaculture Operations in Puget Sound: An evaluation of influence on mobile macrofauna. Aaron Galloway , P. McDonald, J. Toft, P. Stevick, J. Price, G. VanBlaricom.	How Does Catchment Land Use Affect Estuarine Ecosystems? Antje Bierschenk , Christoph Matthaei, Candida Savage, Colin Townsend.	Land Use Effects on Surface Water Quality of Some Maryland Lower Eastern Shore Watersheds. Isoke Aigheui , Osarodion Nosakhare.	Effects of Hydroregulation on the Freshwater Tidal Forested Wetlands of the Columbia River Estuary. Laura Johnson , Charles Simenstad.
2:30	Food Web Structure of Two Negative Estuaries in the Northern Gulf of California, Mexico. Sofia Lopez-Alvirde, Jenna Spackeen , Hem Nalini Morzaria-Luna.	Settlement, Recruitment and Resuspension of Softshell Clam Larvae and Post-larvae Exposed to Various Organically Rich Soft Bottom Habitats. Marie-Josée Abgrall , Heather Hunt, Gilles Miron.	South San Francisco Bay Shoreline Study: Salt pond restoration and flood protection. Robert McAdory et al.	Tampa Bay (Florida) Water Quality and Biology during Six Years of Desalination Facility Operation. Kristin Maki Jenkins , Robert Woithe, Allan Willis, Robert McConnell, Michael Wessel, Keith Hackett, Anthony Janicki.	Salt-water Intrusion and Ecosystem-level Carbon Exchanges in an Organic-rich Tidal Freshwater Marsh. Scott Neubauer .
2:45	Ecology of Temporarily Open/Closed Estuaries in South Africa, with Particular Emphasis on the Ichthyofauna. Paul Cowley, Alan Whitfield , Nikki James et al.	Linking Structural Complexity in Created Oyster Reefs to Nekton Use and Provision of Refuge. Austin Humphries , Megan La Peyre.	Regional Adaptation Strategies for the German Baltic Sea Coast (RADOST). Grit Martinez .	A Comparison of Water Quality and Biological Monitoring Indicators for Detecting the Effects of Freshwater Diversions from Florida Gulf Coast Rivers. Robert Woithe , Ralph Montgomery, Kristin Maki Jenkins, Allan Willis, Douglas Robison, Anthony Janicki, Robert McConnell et al.	Sea Level Rise and Salt-Water Intrusion Limit Vertical Accretion Potential in Tidal Freshwater Marshes of the Delaware River Estuary. Nathaniel Weston , Melanie Vile, Scott Neubauer, David Velinsky.
3:00	Do Arid South Texas Estuaries Export Nutrients or Phytoplankton to the Gulf of Mexico? Edward Buskey , Cammie Hyatt, Tracy Villareal.	The Growth of Estuarine Resources (<i>Zostera marina</i> , <i>Mercenaria mercenaria</i> , <i>Crassostrea virginica</i> , <i>Argopecten irradians</i> , <i>Crepidula fornicata</i>) across a Naturally-occurring Eutrophication Gradient. Charles Wall , Christopher Gobler, Bradley Peterson et al.	Cause and Effect Monitoring of Dynamic Marine Environments, Naturally- versus Anthropogenically-induced Variability, Belgian Part of the North Sea. Vera Van Lancker , Steven Degraer, Michael Fettweis, Jaak Monbaliu, Toon Verwaest, Job Janssens, Magda Vincx, Jean-Sébastien Houziaux et al.	A Comparison of Automated Recorder Stations and Discrete Water Column Profile Measurements Used to Characterize Salinity Regimes in Tidal Rivers and Bays. Allan Willis , Robert Woithe, Kristin Maki Jenkins, Ralph Montgomery, Robert McConnell, Sam Stone.	Rates of Sediment Accumulation and Marsh Accretion in Tidal Wetlands of the Delaware River Estuary. David Velinsky , Christopher Sommerfield.
3:15	Role of Science-Based and Adaptive Management in Allocating Environmental Flows to the Nueces Estuary. Paul Montagna .	Effects of Intertidal Exposure on Disease in the Eastern Oyster, <i>Crassostrea virginica</i> , and Implications under Climate Change. Jennafer Malek , Denise Breitburg et al.	Development of Biofuels: Challenges for Coastal Ecosystems. William Benson , Stephen Jordan.	The Development of a Multimetric Index of Ecosystem Health for the Swan Estuary, Western Australia. Christopher Hallett , Fiona Valesini et al.	How Do Marsh Elevation Dynamics Vary Across Estuarine Salinity Gradients? A Chesapeake Bay example. Andrew Baldwin , Leah Beckett, Michael Kearney, Brian Needelman.
BREAK 3:30 PM – 4:00 PM					

Thursday Mid-Afternoon Oral Presentations

B115-116	B117-119	C120-122	C123	C124	C125-126	
SCI-059 Ecosystem Based Management in Practice: Coastal Case Studies Kiersten Madden and Brian Smith	SCI-019 Decision-Support Tools for Nutrient Management Naomi Detenbeck and Edward Dettmann	SCI-067 Innovative Monitoring Methods for Estuarine Resource Management and Habitat Restoration William Rodney and Robert Murphy	SCI-214 Pollutants: Processes Affecting Concentrations Carrie Semmler	SCI-069 Forecasting Ecosystem Services from Function and Condition Assessments J. Nestlerode, M. Scozzafava, M. Kentula, C. Lane, M. Russell, D. Dantin and S. Jordan	SCI-400 Maximizing Your Data: what can informatics do for you? (Co-sponsor: Salmon Data Access Working Group) <i>cont'd</i>	
Introduction to Ecosystem Based Management in Practice: Coastal Case Studies. John Hansen.	Numeric Nutrient Criteria: Bridging the gap between nutrient science and nutrient management. Tiffany Crawford.	Temperature Loggers as a Low Cost Alternative for Measuring Tidal Inundation Regime. Laura Brophy, Paul Adamus, John Christy, Craig Cornu, Julie Doumbia , Rebecca Tully, Craig Young.	Chemical and Physical Factors Influencing the Distribution of Arsenic along the Freshwater-Seawater Mixing Zone of the Sagavanirktok River and in the Coastal Beaufort Sea, Alaska. Carrie Semmler , John Trefry.	Synthesis of Existing Development and Climate Change Scenarios With Links to Ecosystem Services. Marc Russell , John Rogers.		2:00
Port Orford, Oregon: A Community Approach to Ecosystem-Based Management. Leesa Cobb , Pete Stauffer.	Developing the Ultimate Nutrient/Sediment Diet for Chesapeake Bay with a Side Order of Regulations. Richard Batiuk , Robert Koroncai, Lewis Linker, Gary Shenk et al.	Defining Ecologically Characteristic Communities: An Alternative Approach to Addressing Estuarine Freshwater Inflow Needs. Lisa Gonzalez , Larry Lester et al.	Spatial Variability of Metals and Organic Carbon in Salt Marsh Sediment. Si Chen , Raymond Torres, Goni Miguel.	Linking Ecological Condition of Coastal Wetlands to Ecosystem Services. Virginia Engle , Janet Nestlerode, Mary Kentula, Steve Jordan, Michael Lewis et al.		2:15
Ecosystem Based Management in Practice: Coastal Case Studies Humboldt Bay Initiative: Adaptive Management in a Changing World. Mark Wheatley.	The Massachusetts Estuaries Project: Embayment Restoration Using a Linked Watershed-Embayment Nitrogen Management Modeling Approach. Brian Howes.	Diadromous Fish Passage Assessment and Evaluation in New England Dam Removals. James Turek.	Polybrominated Diphenyl Ethers (PBDEs) in Biota Representing Different Trophic Levels of the Hudson River, New York: From 1999 to 2005. Kang Xia, Kevin Armbrust, Gale Hagoood , Lawrence Skinner.	The National Atlas of Ecosystem Services: Spatially explicit characterization of ecosystem services. Anne Neale , Ricardo Lopez.	Salmon Data Access Working Group By invitation only	2:30
Pacific Northwest Marine Ecoregional Assessment: Identifying potential biodiversity conservation areas on the continental shelf and slope. Dick Vander Schaaf, Ken Popper, Dan Kelly, Jo Smith , Jacques White.	Relationships between Concentrations of Phytoplankton Chlorophyll <i>a</i> and Total Nitrogen in Estuaries: Implications for Development of Nutrient Criteria. Edward Dettmann.	Environmental Attributes and Secondary Processing Affect Stable Isotope and Microbial Tracers of Wastewater Influence on Coastal Ecosystems. Ruth Carmichael , Peter Biancani, Joshua Daskin, Kevin Calci, William Burkhardt, Allen Aven et al	Metal Concentrations in Oyster <i>Crassostrea virginica</i> and Sediments of Coastal South Carolina and Implications for Oyster and Human Health. Virginia Shervette , Robert Van Dolah, C. Keppler.	Dynamic Simile-Based Unit Model for Predicting the Effects of Changes in Water Quality on the Growth of <i>Thalassia testudinum</i> in Tampa Bay. John Rogers , Marc Russell.	Please e-mail Cathy Kellon for information at cathy@ecotrust.org	2:45
The Puget Sound Ecosystem Portfolio Model (PSEPM): Evaluating alternative futures for Puget Sound. William Labiosa , Kristin Byrd, Jason Kreidler, John Bolte et al.	Lessons Learned: Eutrophication assessment and management in coastal waters. Suzanne Bricker , Joao Ferreira, Jesper Andersen, Angel Borja, Jordi Camp, Anna-Stina Heiskanen, Christophe Humborg, Lydia Ignatiades, Christiane Lancelot et al.	The Effects of Life History Strategy on the Distribution of Fishes and their Use of Estuarine Habitats. David Meyer , Martin Posey.	Land Based Sources of Pollution to Jobos Bay, Puerto Rico. David Whittall , Adam Zitello, Thomas Potter, Angel Dieppa, Dennis Apeti, Anthony Pait.	An Integrated Approach to Assessing Economic, Ecosystem Service and Biodiversity Trade-offs in Ridge-to-Reef System. Grace Wong , James Butler.		3:00
Improving Coastal Land-use Planning Through the Application and Interoperation of Three Decision Support Tools in the Mission-Aransas NERR. Kiersten Madden , Sally Morehead, Patrick Crist, Doug Walker, Dave Eslinger, John Jacob et al.	Decision Support System Baltic Nest to Combat Eutrophication in the Baltic Sea. Alexander Sokolov , Christoph Humborg, Magnus Mörtz, Miguel Rodriguez Medina, Oleg Savchuk, Fredrik Wulff.	Impacts of Shoreline Stabilization Structures on Nearshore Fish Populations. Robert Murphy , Leslie Orzetti et al.	Synthesis/Discussion	Panel Discussion led by Stephen Jordan		3:15
BREAK 3:30 PM – 4:00 PM						

Thursday Late-Afternoon Oral Presentations

	A105	A106	A107-109	B110-112	B113-114
	SCI-055 Arid and Seasonally Arid Estuaries <i>cont'd</i>	SCI-023 Ecology of Estuarine Bivalves: Merging Science with Mariculture and Restoration <i>cont'd</i>	SCI-004 Climate Change Adaptation: Research to Inform Managing for Resilience Amanda Babson, Jordan West and John Wilson	SCI-212 Detecting Change with Estuarine Monitoring <i>cont'd</i>	SCI-094 Tidal Freshwater Marshes: Impacts and Response to a Changing Environment <i>cont'd</i>
4:00	Biogeochemical Cycling in the Galician Rias (NW Iberian Peninsula), a System of Coastal Embayments Affected by Seasonal Upwelling. Xose Anton Alvarez Salgado.	Assessing the Impacts of Geoduck Aquaculture Harvest Practices on Benthic Infaunal Communities. Jennifer Price , Sean McDonald, Jeff Cordell, Megan Dethier, Tim Essington, David Armstrong, Glenn VanBlaricom.	Climate Change Adaptation Planning for Estuaries Using Scenario-Based Risk Assessment. Paul Kirshen , Norman Richardson, Amanda Maxemchuk, Corey Wisneski, Carlton Hunt, Ronald Thom, Tom Gulbransen.	Coast Salish Tribal Journey Water Quality Project. Sarah Akin , Eric Grossman.	Longterm Vegetation and Sedimentation Patterns in a Jug Bay Freshwater Tidal Marsh: Responses to a changing environment. Patricia Delgado , Chris Swarth, Philippe Hensel.
4:15	Control of Upwelling Events on Net Ecosystem Metabolism in a Hypersaline Coastal Lagoon. Victor Camacho-Ibar , Mabilia Urquidi-Gaume, Jose Hernandez-Ayon, Eduardo Ortiz-Campos.	Habitat Changes Associated with the Addition of Pacific Oyster Shell for Olympia Oyster Population Enhancement in Liberty Bay, Washington State. Jonathan Davis , Brian Allen, Betsy Peabody et al.	Vulnerability Assessments to Inform Management Adaptation to Climate Change. Amanda Babson , Jordan West et al.	Species Diversity and Juvenile Salmonid Occurrence at LCREP Ecosystem Monitoring Study Sites on the Lower Columbia River and Estuary. Paul Olson , Sean Sol, David Teel, Lyndal Johnson, Kate Macneale, Paul Chittaro, Krista Jones.	Diatom-based Reconstruction of Past Environmental Changes in the Delaware River Tidal Region along a North-South Transect. Mihaela Enache , David Velinsky, Don Charles, Christopher Sommerfield et al.
4:30	Historical Ecology of Coastal Wetlands in the Northern Gulf of California. Hem Nalini Morzaria Luna , Mabilia Urquidi Gaume, Cameron Ainsworth.	Trophic Implications of Complex Littoral Habitats: Comparison of aquaculture structure, natural structure and unstructured habitat. P. Sean McDonald , Kirstin Holsman, Rachel Smith, Robyn Redekopp, David Armstrong, Glenn VanBlaricom et al.	Climate Adaptation in the Delaware Estuary: Risks, Opportunities and Tough Choices. Danielle Kreeger , Priscilla Cole.	Limiting Uncertainty in an Uncertain Environment: Accounting for spatial variability in habitat use by juvenile salmon in tidal freshwater reaches of the lower Columbia River and estuary. Adam Storch , Nichole Sather, Tucker Jones, John Skalski.	Benthic Invertebrate Communities of Tidal Freshwater Wetlands. David Yozzo .
4:45	Long Term Qualitative Changes in Fish Communities in San Mateo Creek Lagoon and Nearby Coastal Lagoons in Southern California. Camm Swift , Melissa Booker, Rachael Woodfield, Dan Holland, Brian Lohstroh, Eric Bailey, Steve Howard, Joel Mulder et al.	Evaluating the Influence of Oysters as Estuarine Habitat at the Landscape Scale in Willapa Bay, Washington. Brett Dumbauld .	Climate Change Adaptation in a Coastal New Hampshire Watershed: Improving Culvert Infrastructure for Increased Storm Frequency and Intensity. Derek Sowers , Michael Simpson, Latham Stack, Thomas Crosslin, Colin Lawson.	The Effects of Seasonal and Long-Term Ocean Cycles on Water Quality Dynamics within the South Slough Estuary, OR. Alicia Helms , Tim O'Higgins, Steve Rumrill, Adam DeMarzo.	Assessment of Nitrogen Retention in a Restored Tidal Freshwater Stream-wetland Complex Following Dam Removal. Paul Bukaveckas , Joseph Wood.
5:00	Dry Season Suspended Particles in a Southern California Urban Estuary. Drew Ackerman, Nikolay Nezlin .	Long-term Carbon Fixation by Mollusk Aquaculture. Patrick Baker .	Managing for Resilience: Including community research and engagement. Joseph Cone .	Estuarine Macroinvertebrate Pollution Indicator Species in the Virginian Biogeographic Province. Marguerite Pelletier , Arthur Gold, James Helshe, Henry Buffum.	Invasive Vascular Plants in East Coast Fresh-tidal Marshes. Erik Kiviat .
5:15	Spatio-Temporal Dynamics of SAV Abundance in a Seasonally Arid Estuary: Relationships to salinity, phosphorus and water clarity. Thomas Frankovich , James Fourqurean, Douglas Morrison.	Oyster Restoration Parameters for NY Coastal Waters: Physiological performance, metapopulation structure and habitat value. Jeffrey Levinton, Michael Doall, Adam Starke , Patrick Lyons, Shauna Kuhn, Bassam Allam et al.	Integrating Climate Change into Conservation Plans: A case study from the Hood Canal. Kara Nelson , Melisa Holman.	Insights Gained from Monitoring and Modeling Pollution Runoff into Sinclair and Dyes Inlets, Puget Sound, WA. Robert Johnston , P. Wang, Woohee Choi.	Effects of a Restored Freshwater Tidal Wetland Complex on Habitat for Imperiled Native Fish. Gina Benigno , Ted Sommer et al.

Thursday Late-Afternoon Oral Presentations

BI15-116	BI17-119	CI20-122	CI23	CI24	CI25-126	
SCI-059 Ecosystem Based Management in Practice: Coastal Case Studies <i>cont'd</i>	SCI-019 Decision-Support Tools for Nutrient Management <i>cont'd</i>	SCI-067 Innovative Monitoring Methods for Estuarine Resource Management and Habitat Restoration <i>cont'd</i>	SCI-053 Fate and Effects of Modern Pesticides in Coastal Estuaries Kathryn Kuivila, Michael Fulton and Marie DeLorenzo	SCI-020 Ecosystem Services and Human Well Being: Theoretical and Practical Challenges James Summers, Tim O'Higgins, Joel Hoffman, Paul Sandifer and Ted DeWitt	SCI-400 Maximizing Your Data: what can informatics do for you? (Co-sponsor: Salmon Data Access Working Group) <i>cont'd</i>	
	BALTSEM - A computationally efficient model of the eutrophication of the Baltic Sea designed for decision support purposes. Bo Gustafsson , Oleg Savchuk.	Evaluating Hydrologic Restoration of Coastal Marshes: A plant centric approach. Jenneke Visser .	Properties of Seawater Impacting Chemical Fate in Marine Ecosystems. Kevin Armbrust .	Ecosystem Services and Human Well Being. James Summers , Rick Linthurst, Lisa Smith et al.		4:00
Managing Large Marine Ecosystems: Creating Observing Products at Scales Appropriate to Understanding Drivers of Change. Paul Siri , Sheila Semans.	E-Estuary: Evolution of a decision-support system for coastal management in the conterminous United States. Naomi Detenbeck , Marguerite Pelletier, Mohamed Abdelrhman, Steven Rego, Marilyn ten Brink.	Using Acoustic Imaging to Examine the Effect of Marsh Management Structures on Salt Marsh Nekton Migration Patterns. Matthew Kimball , Lawrence Rozas, Kevin Boswell, James Cowan.	Occurrence, Flux and Distribution of Pesticides in Rivers Flowing to the Coastal Areas of the Continental United States. Richard Coupe , Brent Aulenbach.	Coastal Land Use, Estuarine Impacts and Potential Effects on Human Well-Being. Geoffrey Scott , Paul Sandifer, Fred Holland, Michael Fulton, Jill Stewart, Jan Gooch.		4:15
Visualization of Spatially Explicit Habitat and Species Data in Support of Renewable Energy Project Proposal Evaluation: Intra-agency collaboration working toward integrated decision making. Brian Smith , David Stein, Adam Bode, David White et al.	Robust Segmentation of Embayments to Encompass Changes in Constituent Loads and Exposure to Risk. Mohamed Abdelrhman .	A New Gear for Sampling Nekton Over Deep Oyster Reef: A comparison of nekton abundance in intertidal vs. sub-tidal oyster reefs. Gregory Stunz , Megan Reese, Jason Slocum, James Simons.	Increasing Concentrations of Several Pesticides Entering an Estuary in South Carolina and Their Effects on Grass Shrimp. Richard Lee , Keith Maruya, Michael Fulton.	The Good, the Bad and the Algae: Ecosystem services and disservices generated by invasive zebra and quagga mussels. Karin Limburg , Valerie Luzadis, Molly Ramsey, Christine Mayer, Kimberly Schulz.	Salmon Data Access Working Group By invitation only	4:30
Ecosystem Based Management in the Chesapeake Bay Watershed. Kevin Sellner , Carl Hershner.	Seagrasses Under Stress: Linkages With Epiphytic Biofilms And Eutrophication? Kirk Cammarata , Jennifer Sweatman, Valerie Chilton, Erik Helander, Stephanie Devalina, Venis Graham.	Automated Passive Acoustic Monitoring of Sound-producing Estuarine Fishes. Joseph Luczkovich , Cecilia Krahforst, Mark Sprague, John Walsh, D. Reide Corbett et al.	Pesticides and Pacific Salmon: A matter of mixtures. Nat Scholz , David Baldwin, Cathy Laetz, Julann Spromberg, John Stark, Tracy Collier et al.	Consider the Ecosystem Services of the Oyster. David Yoskowitz , Hae-Cheol Kim, Jennifer Pollack.	Please e-mail Cathy Kellon for information at cathy@ecotrust.org	4:45
Institutional Change Towards Increased Participation and Integration: Stories of success and stress from Swedish coastal and maritime management. Andrea Morf .	Panel Discussion led by Naomi Detenbeck and Edward Dettmann	The Effects of Ditch Plugging on a Tidal Salt Marsh, Isle of Wight, Maryland. Leslie Orzetti , Robert Murphy.	Pesticides and Endangered Salmon: A call for targeted estuarine research. Scott Hecht .	Quantifying the Environmental Benefits and Costs of Shellfish Production and Restoration: Stakeholder Perceptions. Katharine Wellman , Betsy Peabody, Susan Burke, Daniel Cheney et al.		5:00
River Unbound: Ecological Restoration of Narragansett Bay, R.I., through Science-based Dam Removal. Thomas Ardito , Sam Whiting.		Estimation of Hurricane Ike's Impacts to Oyster Reefs in Galveston Bay, Texas Using Video Supervised Classification Analysis of Side Scan Sonar Imagery and an Experimental Benthic Sled Sampler. William Rodney , J. Sandberg Rohrer et al.	The Effects of a Synthetic Pyrethroid Pesticide on Two Estuarine Fish Species. Marie DeLorenzo , Lindsey Parent, Michael Fulton et al.	Conserving Marine Biodiversity to Sustain Ecosystem Services, Increase Resiliency, and Enhance Human Well-Being. Paul Sandifer .		5:15

Monday-Tuesday Poster Sessions

Each posters will be displayed for two days and displayed on a poster board (8-ft long by 4-ft high) with tacks. Each poster presentation includes a day (e.g. Mon, Position x-x) that is the assigned lunch-time period. This indicates the time that poster presenters should be available at their poster.

SCI005 SALMON RESPONSE TO NATURAL AND ANTHROPOGENIC CHANGES IN NORTH PACIFIC ESTUARIES

Cornwell, Trevan J.; Volk, Eric C.; Jones, Kim K.; Bottom, Daniel L.; Simenstad, Charles A. Diversity of Chinook Salmon Life Histories in the Salmon River Basin, Oregon. (Mon, Pos. 1-E)

Hinton, Susan A.; Bottom, Daniel; Teel, David. Use of Lower Columbia River Wetland Habitats by Juvenile Chinook Salmon: Filling in a data gap. (Mon, Pos. 1-C)

Kagley, Anna N.; Greene, Correigh; Fresh, Kurt; Spilsbury-Pucci, Dawn; Chamberlin, Joshua; Goetz, Fred; Quinn, Tom. A Summary of Acoustic Tagging Programs for Puget Sound Chinook Salmon. (Mon, Pos. 1-A)

Meagher, Loren; Jay, David. Long-term Changes in Shallow-Water Habitat Area in the Lower Columbia River. (Mon, Pos. 1-D)

Routledge, Rick; Ainsworth, Laurie; Buchanan, Seana; Cao, Jiguo; Springford, Aaron; Tanasichuk, Ron; Tommasi, Desiree. Oweekeno Lake Sockeye Salmon: Evidence of critical habitat in the downstream fjord. (Mon, Pos. 1-B)

SCI014 COASTAL AND ESTUARINE BIOMONITORING: WHICH DATA DO WE REALLY NEED?

Bayley, Holly K. Measuring Chlorophyll a in Estuaries: Correlating in vitro and in vivo data. (Tue, Pos. 2-B)

Hamlin, Lynne; Lee, Wen. Comparisons of Biotic Assemblages from the Shoreline Habitats of Three Texas Estuaries. (Tue, Pos. 3-B)

Harris, Patricia M.; Neff, Darcie A.; Johnson, Scott W.; Thedinga, John F. Monitoring Eelgrass (*Zostera marina*) Meadows in Southeastern Alaska. (Tue, Pos. 3-E)

Hermosilla, Zuriñe; Romero, Inma; Gonzalez Del Rio, Julio; Pachés, María; Martínez-Guijarro, Remedios; Martí, Carmen María. Chlorophyll a Monitoring for the Coastal Characterization in the European Water Framework Directive: Sampling network location influence. (Tue, Pos. 2-A)

King, Ian; De Ley, Paul. The Importance of Including Nematode Community Analyses in Californian Coastal and Estuarine Monitoring Programs: A case study of the Bolsa Chica Wetlands Restoration Project. (Tue, Pos. 3-A)

Lee, Krista. Estuarine Habitat Monitoring at Cape Cod National Seashore: Connecting Local, Regional and National Monitoring Goals. (Tue, Pos. 2-C)

Macauley, John; Harwell, Linda; Harvey, James; Smith, Lisa; Nelson, Walt; Engle, Virginia; Walker, Hal. EPA's National Coastal Assessment: Still monitoring after all of these years. (Tue, Pos. 1-F)

Mackey, Katherine R.; Paytan, Adina. Atmospheric Deposition and Primary Production in Coastal California: Findings from MODIS and in situ monitoring. (Tue, Pos. 3-F)

Mallonee, Michael; Batiuk, Rich; Buchanan, Claire; Burch, Brian; Foreman, Katie; Johnson, Jackie; Lane, Mark; Tango, Peter. Chesapeake Information Management System: Ten Years Later. (Tue, Pos. 2-F)

Plunket, Jennifer S.; Smith, Erik; Kiesling, John. Secretive Marsh Bird Sampling: What's the secret? (Tue, Pos. 2-D)

Yarbro, Laura A.; Carlson, Paul R. Nitrogen and Phosphorus in Seagrass and Macroalgal Tissues: What can these measurements tell us about seagrass ecosystems in Florida's Big Bend? (Tue, Pos. 3-C)

SCI017 JELLYFISH BLOOMS IN CHANGING COASTAL AND ESTUARINE ECOSYSTEMS

Aoki, Kaoru; Yamada, Satoshi; Yasuda, Akira; Toyokawa, Masaya; Kikuchi, Tomohiko. Occurrence, Growth and Horizontal Distribution of Moon Jelly *Aurelia aurita* in Mikawa Bay, Japan. (Mon, Pos. 4-C)

Burrell, Rebecca B.; Breitburg, Denise L.; Rathjen, Kristen A. Long-term and Interannual Variability in the Abundance of Sea Nettles, *Chrysaora quinquecirrha*, in a Chesapeake Bay Tributary. (Mon, Pos. 4-E)

Toyokawa, Masaya; Yasuda, Akira; Murata, Yusuke. Seasonal Changes in the Colonies of *Aurelia* Polyps in Mikawa Bay, Japan. (Mon, Pos. 4-B)

Wintzer, Alpa P.; Meek, Mariah H.; Moyle, Peter B.; May, Bernie P. Ecological Insights into the Polyp Stage of Non-native Hydrozoa in the Upper San Francisco Estuary. (Mon, Pos. 4-D)

SCI018 ESTUARINE SEDIMENTARY PROCESSES AND PRODUCTS

Brown, Gary L.; Savant, Gaurav; Tate, Jennifer N. SEDLIB - A Robust Mixed Sediment Process Library. (Tue, Pos. 6-B)

Freeman, Angelina M.; Jose, Felix; Roberts, Harry H.; Stone, Gregory W. Hurricane Induced Sediment Transport Modeling in a Shallow Coastal Bay: South Central Louisiana. (Tue, Pos. 5-F)

Ha, Ho Kyung; Park, Kyeong. Observation of Sediment Resuspension in a Shallow, Micro-tidal, Highly-stratified Estuary: Mobile Bay, Alabama. (Tue, Pos. 6-A)

Kim, Sung-Chan; Cerco, Carl F.; Gailani, Joseph Z. Modeling of Sediment Transport in the Chesapeake Bay. (Tue, Pos. 5-A)

Lacy, Jessica R.; Stevens, Andrew W. Relating Wave-induced Sediment Mobility to Seagrass Distribution. (Tue, Pos. 6-D)

Lane, Andrew; Souza, Alejandro J. Modelling Sediment Transport Responses to River Flows in Liverpool Bay, UK. (Tue, Pos. 4-F)

Lee, Darin M.; Khalil, Syed; Pahl, James W. Barrier Island Comprehensive Monitoring Program - Data, Products and Links to Sediment Management in the Louisiana Coastal Zone. (Tue, Pos. 6-C)

Monday-Tuesday Poster Sessions

O'Laughlin, Casey; van Proosdij, Danika. Comparison of Vertical and Temporal Variations in Hydrodynamics on a Macro-Tidal Mudflat and Salt Marsh Surface. (Tue, Pos. 5-C)

Silver, Amber; van Proosdij, Danika. The Influence of Vegetation on Sedimentary Processes in a Macro-tidal Salt Marsh. (Tue, Pos. 5-E)

Weaver, Erin; Herbort, Marie; Dellapenna, Timothy; Simons, James. Geologic Controls on the Distribution of Oyster Reefs in Copano Bay, Texas. (Tue, Pos. 5-B)

SCI-035 ECOSYSTEM ENGINEERS IN THE COASTAL AND ESTUARINE ENVIRONMENT

Dumbauld, Brett; Cassidy, Katelyn. Estimation of Population Age Structure for Burrowing Shrimps in West Coast Estuaries Using Lipofuscin as an Age Biomarker. (Tue, Pos. 7-C)

Cole, Faith A.; Ferraro, Steven P. Dwarf Eelgrass, *Zostera japonica*: A malevolent, benevolent or benign invasive ecosystem engineer? (Tue, Pos. 6-E)

Cummings, Keala; Harris, Lora. Investigation of the Impact of Vegetation on Sedimentation Rates in a Freshwater Tidal Wetland, Jug Bay, Maryland, USA. (Tue, Pos. 7-B)

Freed, Sarah. Role of Reef Value in Maintaining Reef Health in Comoros, Western Indian Ocean. (Tue, Pos. 7-E)

Heggie, Keira; Savage, Candida. Influence of Salinity, Flow and Population Structure on the Clearance Rates of Two Bivalves. (Tue, Pos. 6-F)

Moulton, Orissa M.; Hacker, Sally D. Does Ocean Upwelling Drive Asymmetry in a Positive Interaction? A test of the interaction between surfgrass and infaunal worms at a meta-ecosystem scale. (Tue, Pos. 7-D)

Segelsky, Shannon; Walters, Linda. Emergent Plant Recruitment on Oyster Reefs Severely Damaged by Recreational Boating. (Tue, Pos. 7-A)

SCI-038 THE SKAGIT DELTA: INTEGRATING ESTUARINE GEOMORPHOLOGY, HYDRODYNAMICS AND ECOLOGY

Chen, Shih-Nan; Geyer, W. Rockwell; Sherwood, Christopher R.; Ralston, David K. Structure and Residence Time of Sediment Deposits from a Discharge Event on an Idealized Tidal Flat. (Mon, Pos. 8-D)

Cowles, Geoffrey W.; Jung, Yeonkil. Application of Open Loop H-Adaptation to an Unstructured Grid Circulation Model of the Skagit Delta. (Mon, Pos. 8-B)

Ralston, David K. Sediment Transport and Trapping on the Skagit Tidal Flats. (Mon, Pos. 8-C)

Rinehimer, Jeffrey P.; Thomson, Jim; Chickadel, Chris. Thermal Remote Sensing of Tidal Flat Hydrodynamics. (Mon, Pos. 8-A)

Rubin, Steve; Hayes, Mike; Grossman, Eric; Reisenbichler, Reg; Liedtke, Theresa; Smith, Collin; Stenberg, Karl; Wetzel, Lisa. Use of Different Skagit Bay Eelgrass Habitats by Juvenile Chinook Salmon, Herring and Smelt. (Mon, Pos. 8-E)

Khangaonkar, Tarang; Yang, Zhaoqing; Lee, Cheegwan; Copping, Andrea. Development of a Nearshore Habitat Restoration and Fish Migration Pathway Modeling Tool. (Mon, Pos. 7-F)

SCI-047 ZOOPLANKTON DYNAMICS IN ESTUARINE AND COASTAL SYSTEMS

Aulenbach, Donielle L.; Ambler, Julie W. Seasonal and Depth Distributions of Pelagic Tunicates Along a 30km Transect off the Coast of Wallops Island, Virginia. (Tue, Pos. 9-E)

Bright, Kelley; Sparrow, Margaret; Prah, Fredrick; Strom, Suzanne. Toxicity of Polyunsaturated Aldehyde-containing Diatoms to their Microzooplankton Predators. (Tue, Pos. 9-A)

Denkert, Brooke A.; Burghart, Scott E.; Peebles, Ernst B.; Tolley, S. G. Responses of Zooplankton to Variable Freshwater Inflow in the Caloosahatchee River and Estuary, Florida. (Tue, Pos. 9-C)

Ignoffo, Toni; Kimmerer, Wim. The Growth and Development of Calanoid Copepods in the Food Limited San Francisco Estuary. (Tue, Pos. 9-F)

Ludt, William B.; Pierson, James J.; Kimmel, David G.; Roman, Michael R. Determining Egg Development Rates of *Acartia tonsa* in the Chesapeake Bay Using a DAPI Staining Technique and its Significance. (Tue, Pos. 8-F)

Slaughter, Anne M.; Kimmerer, Wim J. Copepod Abundance, Composition and Reproductive Rates in a Food-limited Estuary. (Tue, Pos. 10-A)

Yoder, Naomi J.; McElhany, Paul E.; Keister, Julie E. Zooplankton Biogeography in Puget Sound, Washington. (Tue, Pos. 10-B)

SCI-049 SIGNIFICANCE OF RIVER-OCEAN COHERENCE FOR FLUXES AND FATE OF TERRESTRIAL MATERIAL

Liu, Kung-Jen; Davis, Stephen E. Seasonal Dynamics in Materials Exchange along the Mangrove Ecotone of the Florida Everglades. (Tue, Pos. 11-C)

Farnsworth, Katherine; Kniskern, Tara; Warrick, Jonathan. Synchronized Flooding of West Coast Rivers over Multiple Temporal and Spatial Scales. (Tue, Pos. 11-B)

Gelfenbaum, Guy; Stevens, Andrew W.; Warrick, Jonathan A.; Elias, Edwin. Progress Toward Predicting Sediment Dispersal after Dam Removal on the Elwha River, Washington State. (Tue, Pos. 10-D)

Goni, Miguel A.; Hatten, Jeff; Mulroney, Erik; Wheatcroft, Rob; Borgeld, Jeff; Williamson, Anne; Padgett, Jason; Pasternack, Greg; Gray, Andrew; Watson, Elizabeth. Discharge-related Trends in Concentration and Composition of Particulate Organic Matter in Rivers Draining the Coastal Ranges of Oregon and California: Implications for river-ocean coherence. (Tue, Pos. 11-A)

Hastings, Roxanne H.; Goni, Miguel; Wheatcroft, Rob. Particulate Organic Carbon Characterization in Coastal Shelf Sediments Adjacent to Small, Mountainous Rivers. (Tue, Pos. 10-E)

Reese, Rebecca; Gohbrial, Sherif; McKee, Brent. Sediment Transport in a Highly Responsive Piedmont River. (Tue, Pos. 10-C)

Warrick, Jonathan; Kniskern, Tara; Noble, Marlene. Dispersal of Terrestrial Materials in the Southern California Bight: The importance of river-ocean coherence. (Tue, Pos. 10-F)

Monday-Tuesday Poster Sessions

SCI-051 PARTNERING SCIENTISTS AND EDUCATORS TO INCREASE COASTAL AND ESTUARINE KNOWLEDGE

Ambler, Jennifer B.; Baker, Ross; Ganesan, Rajesh; Sterling, Donna. Bringing Marine Science to the Classroom: Lessons shared with fifth graders in Herndon, Virginia. (Mon, Pos. 11-D)

Carruthers, Tim; Ksiazek, Kelly; McGlathery, Karen; Reynolds, Laura; Schwarzschild, Arthur; Wilkerson, Carissa; Gurbisz, Cassie; Woerner, Joanna; Murray, Laura. Learning About Coastal Trends: A scientist-educator perspective on “what is the story with seagrass?” (Mon, Pos. 11-F)

Green, Vanessa L.; Baptista, Antonio M. Research Undergraduate Experiences in Coastal Margins: An experiment in bi-directional mentoring. (Mon, Pos. 12-C)

Hinchey, Elizabeth K.; Lichtkoppler, Frank R.; Domske, Helen; Hart, David A.; Hagley, Cindy. Education and Outreach for a Client-driven Great Lakes Observing System. (Mon, Pos. 12-A)

Hodder, Jan; Rowe, Shawn; Boehlert, George; Carlin-Morgan, Kerry; Gehrke, Coral; Cheung, Itchung. The Center for Ocean Science Education Excellence (COSEE) - Pacific Partnerships: Providing opportunities for coastal and estuarine scientists to fulfill broader impacts. (Mon, Pos. 11-E)

Lessmann, Jeannine M. Lab Reports: Quality exchanged for quantity. (Mon, Pos. 12-D)

Nyman, John A.; Scaroni, Amy E.; Tobias, Vanessa D. Wetland Graduate Training at Louisiana State University Spans Eight Decades and 17 Academic Programs. (Mon, Pos. 12-B)

SCI-058 FORAGE FISH IN A CHANGING CLIMATE

Bentley, Paul; Weitkamp, Laurie; Litz, Marisa; Emmett, Robert; Claiborne, Andrew. Comparisons between the Pelagic Fish Community in the Columbia River Estuary and the Adjacent Nearshore Ocean. (Tue, Pos. 12-F)

Claiborne, Andrew; Emmett, Robert; Weitkamp, Laurie; Litz, Marisa; Bentley, Paul. A Comparison of Estuarine and Marine Age Structure and Habitat Associations of Pacific Herring (*Clupea pallasii*). (Tue, Pos. 13-A)

Emmett, Robert; Bentley, Paul; Litz, Marisa; Claiborne, Andrew; Peterson, William. The Relationship between Changing Oceanographic Conditions and the Abundance of Coastal Forage Fishes in the Northern California Current. (Tue, Pos. 12-E)

SCI-061 SANDY BEACHES AND THEIR SURF-ZONES: MARINE DESERTS OR COASTAL OASES

Dugan, Jenifer; Hubbard, David; Schroeter, Steve; Rodil, Ivan. Life in the Shadows of Seawalls: Ecological responses of sandy beach ecosystems to coastal armoring. (Mon, Pos. 13-F)

Gormally, Cara; Donovan, Lisa. Responses of *Uniola paniculata*, an Essential Dune-building Grass, to Complex Changing Environmental Gradients on the Coastal Dunes. (Mon, Pos. 13-D)

Marín Jarrín, José R.; Shanks, Alan L.; Miller, Jessica A. Ecology of the Surf-zone Macro-fauna of a Sandy Beach in Southern Oregon. (Mon, Pos. 13-E)

Reynolds-Fleming, Janelle; Luettich, Rick; Rodriguez, Antonio B. Sequential Storm Effects on Barrier Island Morphology. (Mon, Pos. 13-C)

Saini, Sherestha; Jackson, Nancy L.; Nordstrom, Karl F. Spatial and Temporal Analysis of Horseshoe Crab Eggs and Sediment Transport in the Swash Zone of a Sandy Foreshore in Delaware Bay, New Jersey. (Mon, Pos. 13-B)

SCI-065 APPLICATION OF STABLE ISOTOPES TO COASTAL AND ESTUARINE ECOSYSTEMS

Anderson, Angelle; La Peyre, Megan. Evaluating the Use of $\delta^{13}\text{C}$ and $\delta^{15}\text{N}$ to Detect Differences in Habitat Specific Trophic Support of Estuarine-dependent Nekton in Southwest Louisiana. (Mon, Pos. 14-A)

Chandler, Allison R.; Houde, Edward D. Diet, Stable Isotope Composition and Growth of Larval Striped Bass in Chesapeake Bay. (Mon, Pos. 14-C)

Choy, Eun Jung; Richard, Pierre; Kim, Kyung-Ryul; Kang, Chang-Keun. Quantifying the Trophic Base for Benthic Secondary Production in a Controlled Estuarine System of Korea Using Stable C and N Isotopes. (Mon, Pos. 14-B)

SCI-071 BIOLOGICAL RESPONSES TO NUTRIENT ENRICHMENT IN COASTAL RECEIVING WATERS

Banas, Neil S. Controls on Primary Production in a New, Mid-complexity, Biophysical Model of Hood Canal. (Mon, Pos. 16-B)

Barnette, Jeff; McLenaghan, Natalie; Kozlowski, Megan; Yarrington, Charles; Bourdon, Brittany; Scheiner, Chris; Tyler, Christy. Distribution of Benthic Macroinvertebrates in West Falmouth Harbor, MA: Relationship to primary producer abundance and sediment oxygen consumption. (Mon, Pos. 16-D)

Boneillo, George E.; Mulholland, Margaret R. Interannual, Seasonal and Diel Differences in Nutrient Dynamics During Brown Tide Blooms (*Aureococcus anophagefferens*). (Mon, Pos. 15-D)

Bourdon, Brittany; Mahl, Ursula; McLenaghan, Natalie; Scheiner, Chris; Tyler, Christy. Does *Mercenaria mercenaria* Influence Benthic Denitrification? Effects of sediment manipulation and bivalves in microcosms. (Mon, Pos. 15-E)

Brush, Julianna; Councilman, James; Jacobs, John. Variations in Abundance, Growth Potential and Condition of White Perch (*Morone americana*) in Three Chesapeake Bay Watersheds: Linking land-use to fish condition. (Mon, Pos. 15-C)

Foreman, Kenneth H.; Berg, Peter; Crusius, John; Giblin, Anne E.; Howarth, Robert W.; Marino, Roxanne; McHorney, Richard; McGlathery, Karen. Estimating Past, Current and Future N-Loads to West Falmouth Harbor Based on Groundwater Sampling of Up-gradient and Shoreline Wells. (Mon, Pos. 16-E)

Kelsey, Samuel; Tucker, Jane; Giblin, Anne; Hopkinson, Charles. Long Term Responses of Sediments in Massachusetts Bay to Changes in Sewage Treatment. (Mon, Pos. 15-F)

Monday-Tuesday Poster Sessions

Kiesling, Richard L.; Garono, Ralph J. Functional Linkages between Nutrient Supply and Periphyton Production in Nutrient-enriched Coastal Watersheds: Implications for coastal stream restoration. (Mon, Pos. 16-C)

Lapointe, Brian E.; Bedford, Bradley J.; Yentsch, Charles S.; Littler, Diane S.; Littler, Mark M. Decadal Trends in Nutrients, Chlorophyll a, and Benthic Algae at Looe Key, Lower Florida Keys, USA. (Mon, Pos. 17-A)

Mintz, Molly M.; Major, Clinton S.; Major, Kelly M.; Sherman, Timothy D. Environmental Variation and its Influences on Aquatic Plant Abundance and Plant Community Structure in a National Estuarine Reserve. (Mon, Pos. 15-A)

Parnell, Allison; Ko, Jae-Young; Schwerh, Kathleen A.; Armitage, Anna R. Effects of Anthropogenic Nutrient Enrichment on Restored and Exotic Aquatic Vegetation in Armand Bayou, Texas. (Mon, Pos. 14-D)

Sklarew, Dann; Lacouture, Richard V.; Jones, R. Christian. A Retrospective Analysis of Nitrogen Removal Eutrophication Risk for the Freshwater Potomac Estuary. (Mon, Pos. 16-A)

Thomas, Jane; Cain, Carol J.; Carruthers, Tim J.; Dennison, William C.; Fisher, Thomas R.; Jesien, Roman V.; Longstaff, Ben J.; Radcliffe, Greg; Sturgis, Brian; Wazniak, Catherine E.; Wicks, Caroline; Williams, Michael R. Assessing the Coastal Bays of Maryland and Virginia - a comparison of approaches. (Mon, Pos. 16-F)

Warren, R Scott; Johnson, David; Deegan, Linda. Salt Marsh Vegetation Responses to Six Years of Artificial Eutrophication. (Mon, Pos. 15-B)

Ziombra, Katherine; Harris, Lora. Primary Productivity, Respiration and Nutrient Cycling in the Potomac River Estuary. (Mon, Pos. 14-F)

SCI-075 HUMAN IMPACTS ON BIOGEOCHEMICAL PROCESSES ALONG THE LAND-TO-SEA CONTINUUM

Anthony, Sara; Prahl, Fredrick G. Seasonal Variation in Willamette River Dissolved Methane Concentrations. (Tue, Pos. 17-F)

Hatten, Jeff A.; Goñi, Miguel. Effect of Wildfire on the Delivery of Particulate Organic Carbon to the Salinas River. (Tue, Pos. 18-A)

Keil, Rick; Neibauer, Jaqui; Kimball, Brittany. The Most Abundant Cooking Spice in Puget Sound is Artificial Vanilla. (Tue, Pos. 18-C)

Koch, Corey; Wetzel, Cale; Rhoades, Bruce; Derr, Alex; Ingle, James; Zanevald, Ron; Moore, Casey; Barnard, Andrew. Long-term in-situ Monitoring of Phosphate in Yaquina Bay, OR, Using the CYCLE-PO₄³⁻. (Tue, Pos. 17-E)

Lane, Jenny Q.; Kudela, Raphael M. Description of Freshwater Eutrophic Sources to Monterey Bay, California, with Categorization According to Nutrient Ratio Characteristics. (Tue, Pos. 17-B)

Nidzieko, Nicholas J.; Smith, Jason M.; Monismith, Stephen G.; Francis, Christopher A. Examining the Link between Tidal Currents and Microbially-mediated Nitrogen Removal in an Intertidal Channel. (Tue, Pos. 18-D)

Pregall, Marshall; Cunningham, Mary Ann; O'Reilly, Catherine; Menking, Kirsten; Gillikin, David; Belli, Stuart; Schlessman, Mark; Foley, Catherine. Suburban Stream Syndrome: Watershed development impacts on the Hudson River estuary. (Tue, Pos. 17-C)

Schmidt, Courtney; Heikes, Brian; Berounsky, Veronica. Carbon Monoxide Biogeochemical Cycling in the Pettaquamscutt River. (Tue, Pos. 17-D)

Schwartz, Rebecca; Thompson, Suzanne P.; Piehler, Michael F. Land Use Impacts on Nutrient and Suspended Solid Loading from Coastal Sub-watersheds through the Estuarine Gradient. (Tue, Pos. 18-B)

SCI-076 ASSESSING ECOLOGICAL INTEGRITY USING MULTIPLE INDICES AND ECOSYSTEM COMPONENTS: THE SEQUEL

Bos, Julia K.; Krembs, Christopher; Albertson, Skip; Sackmann, Brandon; Partridge, Valerie. Using In-Situ Calibrated Dissolved Oxygen as an Index Component to Assess and Communicate Long-Term Trends in Puget Sound Water Quality. (Mon, Pos. 19-D)

Hartsig, Ann M.; Lacouture, Richard V.; Wohlford, Tristan D. Phytoplankton Dynamics and Taxonomic Shifts in Maryland Mesohaline Chesapeake Bay and Tributaries, 1985-2008. (Mon, Pos. 19-C)

Morales-Ojeda, Sara M.; **Herrera-Silveira, Jorge A.** Health Status and Vulnerability of Gulf and Caribbean Coastal Lagoons in the Southwest of Mexico. (Mon, Pos. 19-A)

Johnson, R.; Wigand, C.; Carlisle, B.; Smith, J.; Carullo, M.; Fillis, D.; Charpentier, M.; McKinney, R. Development and Validation of Rapid Assessment Indices of Condition for Coastal Wetlands in Southern New England, USA. (Mon, Pos. 19-B)

Mico, Cara; **Mico, Lindsay.** 2007-2009 Tillamook Bay Watershed (TBW) Physical Habitat and Sediment Study: Demeter Design for the Tillamook Estuary Partnership. (Mon, Pos. 18-E)

Pulich, Warren M.; DeYoe, Hudson; Kowalski, Joseph. Hydrographic and Ecological Characterization of the Rio Grande Estuary of Texas. (Mon, Pos. 18-F)

SCI-091 APPLICATIONS, CHALLENGES AND EVOLUTION OF MOORED COASTAL/ESTUARINE OBSERVING SYSTEMS

Buchanan, Claire. Quantifying Recovery in the Tidal Potomac River Using High Frequency Buoy Data. (Mon, Pos. 21-C)

Milbrandt, Eric; **Coen, Loren;** Martignette, A.; Thompson, Mark; Siwicke, Jeff; Rybak, Alex; Bartleson, Richard. Monitoring Changes in Coastal Habitats with RECON: River, Estuary, and Coastal Observing Network. (Mon, Pos. 21-B)

Holser, Rachel R.; Goni, Miguel; Hales, Burke. Use of a Semi-automated Filtration System to Investigate the Dynamics of Particulate Organic Carbon within a Coastal Upwelling System. (Mon, Pos. 20-D)

Kamer, Krista. Ocean Observing in California Through the California State University COAST Program. (Mon, Pos. 20-A)

Monday-Tuesday Poster Sessions

Leonard, Lynn; Dorton, Jennifer; Porter, Dwayne; Fletcher, Madilyn; Crout, Richard. Carolinas Regional Coastal Ocean Observing System: Working with Partners to Improve Automated Monitoring Systems. (Mon, Pos. 20-E)

Masura, Julie; Greengrove, Cheryl. Results from a Small Estuarine Mooring in Quartermaster Harbor, Puget Sound Washington. (Mon, Pos. 20-C)

Medeiros, Kelly C. Improving Water Level Time Series Data Accuracy through Post Processing of Barometric Pressure Effects. (Mon, Pos. 19-F)

Neikirk, Betty B.; Parrish, David B.; Moore, Kenneth A. Water Quality Monitoring of Virginia's Potomac Embayments. (Mon, Pos. 20-B)

Orrico, Cristina M.; McLean, Scott; Barnard, Andrew H.; Lewis, Marlon; Moore, Casey. Long-term Monitoring of Biological, Physical and Chemical Properties in Two Estuaries Using the LOBO Mooring System. (Mon, Pos. 21-A)

Stark, Kimberle; Kruger, Bob. Sondes and "Sondes-ability": A Tale of Puget Sound Automated Water Quality Monitoring. (Mon, Pos. 19-E)

SCI-095 NATURAL AND ANTHROPOGENIC CHANGES IN ESTUARIES: AN HISTORICAL PERSPECTIVE

Arreola, Alfredo; Mendez, Lia; Padilla, Gustavo; Lopez, Maria; Burrola, Maria; Elizalde, Carlos; Hernandez, Andres; Acosta, Baudilio. Observations about Water Quality Changes by Humans Activities Changes of Guaymas Bay, Mexico. (Tue, Pos. 23-A)

Möller, Osmar O.; **Cavalcanti, Augusto;** Möller, Bruno A.; Almeida, Roberto. The Impact of Two Jetties in the Sedimentation Processes in the Entrance Area of Patos Lagoon (30°S, Brazil) through the Analysis of Bathymetric Charts. (Tue, Pos. 21-E)

Chant, Robert; Sommerfield, Chris; Guo, Dove. The Response of Estuarine Flows to Channel Deepening. (Tue, Pos. 22-E)

Cooper, Sherri; Lichter, John; Lea, Peter; Reblin, Jaret; Nurse, Andrea. Environmental History of the Kennebec Estuary, Maine. (Tue, Pos. 21-D)

Fuller, Jim; Wilkerson, Frances; Dugdale, Richard; Parker, Alex; Marchi, Al. Anomalously Low CO₂ Measured in the San Francisco Estuary. (Tue, Pos. 22-F)

Halpin, Eoin. Origins and Development of Machair Landscapes on the West Coast of Ireland. (Tue, Pos. 21-F)

Thomas, Roger L.; Velinsky, David J.; Charles, Don; Sommerfield, Christopher K. Tidal Marshes in the Delaware Estuary: Historical reconstruction of chemical loadings and ecosystem effects. (Tue, Pos. 22-D)

Tippery, Amy; McRoy, C. Peter. Thirty Years Later at Izembek Lagoon: Assessing eelgrass (*Zostera marina*) food web shifts with stable isotopes. (Tue, Pos. 22-A)

Tweel, Andrew W.; Turner, R. E. Historical Changes in Wetland Area and Suspended Sediments in the Mississippi River Birdsfoot Delta. (Tue, Pos. 22-C)

SCI-104 TURBULENCE AND MIXING IN ESTUARIES AND THE COASTAL OCEAN

Styles, Richard. Flow and Turbulence Over an Oyster Reef Bank. (Tue, Pos. 23-C)

Tian, Jiwei; Yang, Qingxuan. Mixing on the Continental Shelf and Slope of the Northern South China Sea. (Tue, Pos. 23-B)

SCI-105 SEAGRASS ASSESSMENT: THINK GLOBALLY, MONITOR LOCALLY

Carter, Jacoby; Merino, Joy; Merino, Sergio. A Mesohaline Submerged Aquatic Vegetation Survey of the U.S. Gulf of Mexico Coast. (Mon, Pos. 23-E)

Chee Kuang, Choo; Elise, Granek F.; Jaw Chun, Yong; Wan Roshairry, Wan Ismail. Seagrass Losses at the Pulau River Estuary: Eliciting the Burden of Proof from Satellite Imageries and Water Quality Data. (Mon, Pos. 25-D)

Herrera-Silveira, Jorge A.; Ramirez, Javier R.; López-Herrera, Mercy N. Base Line Survey of Morphometric Characteristics and Leaf Nutrient Content in *Thalassia testudinum* for Monitoring Eutrophication in Near-shore Yucatan Coasts. (Mon, Pos. 24-D)

Hosokawa, Shinya. A New Model for Estimating Leaf Growth Rate in Eelgrass. (Mon, Pos. 24-F)

Kahn, Amanda E.; Beal, Jeffrey L.; Durako, Michael J. Diurnal and Tidal Variations in the Physiological Responses of the Seagrass *Halophila johnsonii* in a Riverine versus Marine Influenced Habitat. (Mon, Pos. 23-F)

Kim, Jeong B.; Park, Jung-Im; Suh, Young-Sang; Lee, Kun-Seop. Growth Dynamics of the Newly Introduced Seagrass Species, *Halophila nipponica* on the Southern Coast of Korea. (Mon, Pos. 24-A)

Kim, Seung Hyeon; Park, Sang Rul; Kim, Young Kyun; Kim, Jong-Hyeob; Lee, Kun-Seop. Change in Reproductive Strategy of Eelgrass, *Zostera marina* L. with Water Depth in Jindong Bay on the Southern Coast of Korea. (Mon, Pos. 24-C)

Kim, Young Kyun; Kim, Jong-Hyeob; Kim, Seung Hyeon; Lee, Kun-Seop. Assessment of Genetic Diversity in the Seagrass, *Zostera marina* on the South Coast of Korea Using RAPD Analysis. (Mon, Pos. 24-B)

Kiriakopolos, Stephanie L.; Boyer, Katharyn E. The Role of Herbivory by *Branta canadensis* (Canada Geese) in the Annual Life Cycle of a San Francisco Bay *Zostera marina* (Eelgrass) Population. (Mon, Pos. 25-B)

Schaub, Ron; **Scheidt, Douglas M.;** Garreau, Carla M.; Hall, Carlton R. Quantitative Assessment of Seagrass Scarring in Southern Mosquito Lagoon and Northern Indian River, East Central, Florida. (Mon, Pos. 25-C)

Sowl, Kristine; Ward, David; Lindstrom, Sandra. Eelgrass Ecosystem Assessments at Izembek and Kinzarof Lagoons on the Lower Alaska Peninsula. (Mon, Pos. 25-A)

Young, David R.; Clinton, Patrick J.; Specht, David T.; Mochon-Collura, TChris; Lee, Henry. Distribution of Intertidal Eelgrass (*Zostera marina* L.) with Bathymetry. (Mon, Pos. 24-E)

Monday-Tuesday Poster Sessions

SCI-106 SEAGRASS ECOLOGICAL HEALTH: DIAGNOSING THE CANARY

Blake, Rachael; Duffy, J. Emmett E. Assessing the Influence of Local Shoreline Development on the Eelgrass (*Zostera marina*) Community of Lower Chesapeake Bay, VA. (Mon, Pos. 26-D)

Bulthuis, Douglas A.; Margerum, Paula; Burnett, Nicole M.; Bohlmann, Heath E. Nutrients in an Eelgrass Dominated Bay in the Pacific Northwest: Seasonal and Diurnal Patterns in Dissolved Inorganic Nitrogen and Phosphorus. (Mon, Pos. 26-A)

Schanz, Anja; Pete, Dowty; Ferrier, Lisa; Berry, Helen; Gaeckle, Jeffrey; Mumford, Thomas. Assessing Eelgrass (*Zostera marina* L.) Stressors and Related Eelgrass Response in the San Juan Island Archipelago, Washington (USA). (Mon, Pos. 27-A)

Sherman, Timothy D.; Yadav, Simmi. Ultrastructural Changes Associated with Seagrass Cell Wall Structure Early in the Infection by the Pathogen *Labyrinthula*. (Mon, Pos. 26-F)

Shields, Erin; Moore, Ken. Influences of Salinity and Light Availability on Submerged Aquatic Vegetation Development in the Chickahominy River, Virginia. (Mon, Pos. 26-C)

Specht, David T. Annual and Seasonal Temperature Variance along an Inter-tidal Eelgrass Habitat Sediment Transect Bin Yaquina Bay, Oregon, 1999 - 2006. (Mon, Pos. 26-B)

Stevens, Andrew W.; Lacy, Jessica R. Investigating Hydrodynamic Controls on the Spatial Distribution of Seagrass along a High Energy Shoreline. (Mon, Pos. 25-F)

Szoboszalai, Amber I.; Williams, Susan L.; Grosholz, Edwin D. Oyster Mariculture-Eelgrass Interactions: Scientific criteria for managing eelgrass persistence. (Mon, Pos. 26-E)

SCI-107 SEAGRASS MANAGEMENT AND POLICY: PROACTIVE SUSTAINABILITY

Busch, Kathryn E.; Raves Golden, Rebecca; Parham, Thomas; Karrh, Lee; Lewandowski, Mark; Naylor, Michael. Large-scale *Zostera marina* (eelgrass) Restoration in Chesapeake Bay, Maryland, USA Part I: A Comparison of Seed Collection, Processing, Storage and Dispersal Techniques. (Mon, Pos. 27-D)

Ferrier, Lisa; Berry, Helen; Gaeckle, Jeffrey. Integrating Long-Term Eelgrass (*Zostera marina* L.) Monitoring with Resource Management: A Multi-Collaborative Approach. (Mon, Pos. 27-E)

Park, Jung-Im; Lee, Kun-Seop. Transplantation of Surfgrass, *Phyllospadix japonicus*, on Exposed Rocky Shore Using an Artificial Underwater Structure. (Mon, Pos. 27-B)

Sorgini, Crystal A. Characterization of Invasive Plant Evolution; Isolation, extraction, sequencing and bioinformatics analytical comparison of GAPC genes in *Spartina anglica*. (Mon, Pos. 27-C)

SCI-108 SEAGRASS PHYSIOLOGICAL STRESS: IN SICKNESS AND IN HEALTH

Persans, Michael; **DeYoe, Hudson;** Mejia, Natali; Ortiz, Ammie. Stress Detection in the Seagrass, *Thalassia testudinum*. (Mon, Pos. 28-A)

Lauer, Nathan T.; Ross, Cliff. The Use of Cellular Biomarkers to Assess the Impact of Saltwater Intrusion on the Aquatic Plant *Vallisneria americana*. (Mon, Pos. 27-F)

McDonald, Ashley; Major, Kelly; Christiaen, Bart; Cebrian, Just. Light Adaptation in *Halodule wrightii* During Seagrass Restoration: The importance of donor site and depth at planting. (Mon, Pos. 28-B)

SCI-213 PHYSICAL MODELING OF COASTAL SYSTEMS

Brown, Jenny; Souza, Alejandro; Wolf, Judith. Long-term Tide-Surge-Wave Modelling in the Eastern Irish Sea: Validation and present-day flood risk. (Mon, Pos. 28-C)

Chisholm, Tom. An Iterative Prediction Method for Bonneville Dam Tailwater Elevations. (Mon, Pos. 28-D)

Savenije, Hubert; **Toffolon, Marco.** Explicit Analytical Solution of Tidal Dynamics in Estuaries. (Mon, Pos. 28-E)

SCI-221 LATE-BREAKING POSTERS I A

Li, Chunyan; Weeks, Eddie; Rego, Joao. Saltwater Flux through Tidal Passes of Lake Pontchartrain Estuary by Hurricanes Gustav and Ike. (Mon, Pos. 29-A)

McConville, Sea-oh K.; Hessing-Lewis, Margot; Gehrke, Coral; Hacker, Sally. Shoots and Blooms: A controlled mesocosm experiment assessing the effects of ulvoid macroalgae blooms on eelgrass (*Zostera marina*) in Pacific Northwest estuaries. (Mon, Pos. 29-E)

Rasheed, Michael A.; Unsworth, Richard. Climate Driven Dynamics of a Tropical Australian Seagrass Meadow: Implications for the future. (Mon, Pos. 28-F)

Robinson, Cliff. The Short Term Persistence and Stability of Fish Assemblages Found in British Columbia Eelgrass Meadows. (Mon, Pos. 29-B)

Wallace, Sarah C.; Jackson, Kimberley; Schoenberg, Susan; Dunton, Kenneth. Amplification of Wastewater ¹⁵N Signatures in an Estuarine Food Web Under Drought Conditions in a Subtropical Marsh Ecosystem. (Mon, Pos. 29-C)

Willis, Jonathan M.; Gambrell, Robert P.; Hester, Mark W. Impacts of Altered Surface Water Nutrients on Sediment Methyl Mercury Concentration as Well as Related Biogeochemical and Microbial Indicators. (Mon, Pos. 29-D)

SCI-221 LATE-BREAKING POSTERS I B

Almodovar Acevedo, Laura; Harris, Lora. Sediment Dynamics at the Jug Bay Wetland Sanctuary, Maryland, USA. (Tue, Pos. 33-C)

Arnold, Thomas M. Using Free-Ocean-Carbon-Enrichment (F.O.C.E.) to Assess the Impact of Ocean Acidification on Seagrass Communities. (Tue, Pos. 31-A)

Boswell, Kevin M.; Taylor, Christopher J.; Cowan, James H. Observations at the "Scale of Action": Insights to ecological processes from hydroacoustic applications in shallow estuaries. (Tue, Pos. 32-D)

Monday-Tuesday Poster Sessions

Chambers, Randolph; Russell, Timothy; Cornell, Allison; Rordam, Landon; Morris, Scott. Does More Carbonate Mean More Phosphorus? Spatial and temporal trends in soil nutrients and organic matter in south Florida wetlands. (Tue, Pos. 29-F)

Coble, Joel L.; Winsor, Michelle A.; Ambler, Julie W. Comparison of the Contribution of Copepods, Tunicates and Cladocerans to the Biomass of Summer Herbivores in the Southern Mid-Atlantic Bight. (Tue, Pos. 32-B)

Feng, Yang; Jackson, George; DiMarco, Steve; Fennel, Katja; Hetland, Rob. Numerical Scenario Testing of Nutrient, Freshwater and Wind Limitations and their Effect on the Louisiana Deadzone. (Tue, Pos. 32-C)

Fennel, Katja; Harris, Courtney K.; Hetland, Robert; Kaihatu, James; Xu, Kehui. A Coupled Physical-Biogeochemical-Sediment Model for the TX-LA Shelf in the Northern Gulf of Mexico. (Tue, Pos. 32-F)

Garcia Neto, Edgard V.; Guerra, Josefa; Vinzon, Susana; Vilela, Carla. Observation of Fluid Mud Formation along the Northern Channel of the Amazon River, Brazil. (Tue, Pos. 33-F)

Guthrie, Carla G.; Pothina, Dharhas; Matsumoto, Junji. Connecting Wetland Salinity Levels to Freshwater Inflows. (Tue, Pos. 31-B)

Haehn, Rebecca; Fulford, Richard S. Season Abundance and Size Distribution of Adult American Horseshoe Crabs (*Limulus polyphemus*) on Mississippi Barrier Islands. (Tue, Pos. 33-B)

Wahle, Charles; Morgan, Lance; D'Iorio, Mimi; **Hayden, Nicholas;** Gass, Jordan; Guinotte, John. California Ocean Uses Atlas Project: Using technology to incorporate traditional knowledge into ocean management. (Tue, Pos. 30-D)

Holleman, Rusty; Stacey, Mark. Hydrodynamic Simulations of Salt Pond Restoration Activities in South San Francisco Bay. (Tue, Pos. 34-A)

Kanapaux, William. Assessing Visitor Impact on Coastal Habitats in South Carolina's ACE Basin. (Tue, Pos. 30-C)

Kuykendall, Jennifer I.; Brunner, Charlotte. A Paleoenvironmental History of the Pearl River Marsh. (Tue, Pos. 32-E)

Lane, Steven J.; Kelly, Christopher J.; Newell, Roger I. The Use of Structure by Grass Shrimp *Palaemonetes pugio* as a Refuge Against Predators. (Tue, Pos. 30-A)

Lara, Miguel; Peralta, Gloria; Bouma, Tjeerd; Perez Llorens, Jose Lucas. Influence of Micro Topography on Hydrodynamics within Patchiness of Marine Macrophytes: Testing feed-backs by a "proxy" flume study. (Tue, Pos. 33-D)

Maher, Benjamin F.; Hurley, Dorset; Bishop, T. Dale; Curran, Mary Carla. Development of an Appropriate Rapid Assessment Method (RAM) for Health Indexing of Emergent Vegetation Communities in Salt Marshes of the Southeastern Bight. (Tue, Pos. 32-A)

Olyarnik, Suzanne; Jones, Andrea. Coastal Habitat Restoration in San Francisco Bay. (Tue, Pos. 31-F)

Osland, Michael J.; Gonzalez, Eugenio; Richardson, Curtis J. Coastal Wetland Plant Community Response to Seasonal Drought

and Flooding in Northwestern Costa Rica: The role of the seed bank, plant life forms and environmental filters. (Tue, Pos. 31-C)

Raymond, Peter A.; Post, David M.; **Peich, Brent E.** Using *Mytilus edulis* ¹⁵N/¹⁴N Isotope Ratios as Tracers of Sewage Discharge in the Long Island Sound. (Tue, Pos. 33-E)

Rohrer, Jennie; Rodney, William; Bauer, Jennifer; Robinson, Lance; Carlin, Joseph; Baker, Austin; Dellapenna, Timothy M. Assessing the Impact of Hurricane Ike on Oyster Reefs Using Acoustic Techniques to Direct On-going Restoration Efforts in Galveston Bay, Texas. (Tue, Pos. 33-A)

Sabal, Megan. Diet Analysis of Juvenile Salmonids in Relation to Water Flow in the Columbia River Estuary. (Tue, Pos. 30-F)

Seward, Shaya M.; Louchouart, Patrick; Brinkmeyer, Robin; Cornelissen, Gerard; Yeager, Kevin M.; Santschi, Peter H. Black Carbon and Amorphous Organic Carbon Distribution in Sediments of the Houston Ship Channel: Implications for PAH and dioxin speciation and bioavailability. (Tue, Pos. 31-E)

Souza, Afonso C.; Gardner, Wayne S.; Lijun, Hou; McCarthy, Mark M.; Stephen, Carini A. Measurement of Extracellular Enzyme Activity in the "Dead Zone" Region of the Northern Gulf of Mexico (NGOMEX). (Tue, Pos. 30-E)

Volson, Barry. Zooplankton Biochemistry in Two Rhode Island Estuaries and its Effects on Habitat Quality for Silverside Spawning. (Tue, Pos. 31-D)

Wiegner, Tracy N.; Mead, Lucas H. Storm Effects on Water Quality and Productivity of a Tropical Hawaiian Estuary. (Tue, Pos. 30-B)

SCI-401 ELECTRONIC POSTERS - SESSION ONE

Argow, Brittina A.; Millette, Thomas L.; Marciano, Eugenio; Hopkinson, Charles S.; Valentine, Vinton. New England Salt Marsh Eco-geomorphological Analyses using GIS and Multi-temporal Multispectral Remote Sensing with LIDAR. (Mon, Pos. E-5)

Bandolin, Nirzwan; Wilkin, Michael; Rathmell, Katie J.; Baptista, Antonio M. Towards Long-term Time Series of Sediment Concentrations in the Columbia River. (Mon, Pos. E-3)

Hyde, Nathaniel; Turner, Paul J.; Law, Charles G.; Zhang, Yinglong J.; Baptista, Antonio M. A Virtual Estuary: Columbia River climatology and anomalies. (Mon, Pos. E-1)

Jones, Adrian B.; Carruthers, Timothy J.; Dennison, William C. Effective Science Communication through Graphic-rich, Data-driven, Interactive Web Sites. (Mon, Pos. E-4)

Seaton, Charles M.; Wilkin, Michael; Rathmell, Katie J.; Hyde, Nathaniel; Zhang, Yinglong J.; Peterson, Tawnya D.; Prah, Fredrick G.; Needoba, Joseph A.; Baptista, Antonio M. Salinity Intrusion in Estuaries: Lessons learned from a vertical profiler. (Mon, Pos. E-2)

Wednesday–Thursday Poster Sessions

Each posters will be displayed for two days and displayed on a poster board (8-ft long by 4-ft high) with tacks. Each poster presentation includes a day (e.g. Mon, Position x-x) that is the assigned lunch-time period. This indicates the time that poster presenters should be available at their poster.

SCI-002 SHALLOW PHOTIC SYSTEMS IN A CHANGING WORLD: VULNERABILITY AND RESILIENCE TO DISTURBANCE

Bevington, Azure E.; Twilley, Robert R.; Rivera-Monroy, Victor H.; Holm, Guerry O. Relative Denitrification Rates across Wetland Age and Organic Matter Gradients in an Active Mississippi River Subdelta. (Thu, Pos. 1-D)

Koch, Gregory R.; Staehr, Peter A.; Childers, Daniel L. Monitoring Aquatic Metabolism in an Oligotrophic, Subtropical Estuary. (Thu, Pos. 1-A)

Stanhope, Jennifer W.; Anderson, Iris C.; McGlathery, Karen J.; Hardison, Amber K. Construction of a Nitrogen Budget for a Temperate Coastal Lagoon. (Thu, Pos. 1-B)

Yarrington, Charles; McLenaghan, Natalie; Scheiner, Chris; Tyler, Christy. Does Benthic Macroinvertebrate Biodiversity Enhance Nutrient Transformation and Removal? (Thu, Pos. 1-C)

SCI-003 INTERACTIVE EFFECTS OF CLIMATE CHANGE AND OTHER STRESSORS ON COASTAL ECOSYSTEMS

Flitcroft, Rebecca L.; Burnett, Kelly M.; Christiansen, Kelly. From Estuaries to Headwaters: The effect of climate change on coastal salmonid habitat. (Wed, Pos. 2-A)

Howson, Ursula A.; Starinsky, Nicole S.; Simon, Emma R.; Opatovsky, Sarah J. Effects of Ocean Acidification on Larval *Fundulus heteroclitus*. (Wed, Pos. 1-F)

Mohlin, Malin; Pattanaik, Bagmi; Roleda, Michael Y.; Garde, Kristine; Wulff, Angela. Production of the Cyanotoxin Nodularin - a multifactorial approach. (Wed, Pos. 1-E)

Ozmon, Ivy M.; Bernhardt, P. W.; Mulholland, M. R. Effects of CO₂ and Nutrient Enhancement on Planktonic Estuarine Communities. (Wed, Pos. 2-B)

Sanders, Rhea D.; D'Andrea, Anthony F.; Wheatcroft, Rob A. Impact of Rapid Flood Deposition on Benthic Microalgal Availability in Netarts Bay, Oregon. (Wed, Pos. 2-C)

SCI-013 EMERGING SCIENCE AND RESTORATION PRACTICES IN PACIFIC NORTHWEST ESTUARIES

Nilsen, Elena; Zaugg, Steve. Investigating Bioaccumulation of Emerging Contaminants in Resident Fish of the Columbia River. (Wed, Pos. 2-D)

Toft, Jason; Johannessen, Jim. Invertebrate Response of Seawall Removal and Beach Restoration at Seahurst Park, WA. (Wed, Pos. 2-E)

Zimmerman, Shon A.; Borde, Amy B.; Diefenderfer, Heida L.; Sather, Nichole K. Some Assembly Required: Methods for Collecting and Applying Elevation Data from Sediment and Water Surfaces in Tidal Wetlands of the Lower Columbia River and Estuary. (Wed, Pos. 2-F)

SCI-015 MICROBES: A SYNTHESIS OF DIVERSITY, GENE EXPRESSION AND ECOLOGICAL FUNCTION

Booth, Melissa; Muscarella, Mario; Doherty, Mary. Factors Influencing Bacteriophage Activities in Estuaries near Sapelo Island, GA. (Thu, Pos. 3-F)

DeLorenzo, Suzanne; Tebo, Bradley M.; Brauer, Suzanna L.; Herfort, Lydie; Needoba, Joseph A.; Zuber, Peter. Seasonal Shifts in Active Microbial Assemblages Involved in Inorganic Carbon Fixation in the Pacific Northwest Coastal Margin. (Thu, Pos. 3-C)

Field, Cara L.; Higgins, Jennifer; Dunn, J. Lawrence; Romano, Tracy. Intracellular Cytopathic Effects of Marine *Brucella* on Beluga and Human Monocytes. (Thu, Pos. 3-E)

Hamdan, Leila J.; Sikaroodi, Masoumeh; Coffin, Richard B.; Plummer, Rebecca E.; Gillevet, Patrick M. Diversity and Biogeochemical Structuring of Sediment Microbial Communities across the Porangahau Ridge, New Zealand. (Thu, Pos. 3-B)

Irvine, Irina C.; Vivanco, Lucia; Martiny, Jennifer. Effects of Nitrogen Enrichment on the Functioning of Microbial Communities in California Salt Marshes. (Thu, Pos. 4-E)

Johnston, Michelle A.; Porter, Dwayne E.; Scott, Geoffrey I.; Norman, R. S.; Kelsey, R. H.; Biers, Erin J. Evaluation of Repetitive Extragenic Palindromic-PCR for Discrimination of Fecal Coliform Bacteria from American Alligators in South Carolina. (Thu, Pos. 4-C)

Kahn, Peter; Herfort, Lydie; Zuber, Peter; Peterson, Tawnya. Diversity of Eukaryotic Microbial Assemblages Across a River-to-Ocean Gradient Using Molecular and Traditional Tools. (Thu, Pos. 3-A)

Myers, Monique R.; Ambrose, Richard F.; Holden, Trish; Secru, Bram; Estes, Steven. Attenuation of Fecal Indicator Bacteria and Human-Specific Bacteriodes by a Natural Southern California Coastal Wetland. (Thu, Pos. 4-B)

Smith, Jason M.; Francis, Christopher A. Spatiotemporal Dynamics of Microbial Nitrogen Transformations in Elkhorn Slough, CA. (Thu, Pos. 4-D)

Wear, Emma K.; Koepfler, Eric T.; Smith, Erik M. Interaction of Dissolved Organic Carbon and Heterotrophic Microbial Community Structure and Function in Winyah Bay, SC. (Thu, Pos. 4-A)

SCI-023 ECOLOGY OF ESTUARINE BIVALVES: MERGING SCIENCE WITH MARICULTURE AND RESTORATION

Dusek, Eva; Simenstad, Charles; Parker, Micaela; Punt, Andre. Uptake and Depuration of Domoic Acid, a Phytotoxin, by Washington Clams. (Thu, Pos. 5-A)

Goodwiin, Jacob; Liddel, Michael; Paynter, Kennedy. A GIS Based Habitat Suitability Growth Model for *Crassostrea virginica* in Chesapeake Bay. (Thu, Pos. 5-B)

Wednesday–Thursday Poster Sessions

Lee, Yong-Woo; Kwak, Jung-Hyun; Lim, Myung-Shin; Kim, Nam-Jung; Kang, Chang-Keun. Quantity and Quality of Particulate Organic Matter as Available Food to Suspension Feeders in Two Aquaculture-dominated Systems in the Southern Sea of Korea. (Thu, Pos. 4-F)

SCI-024 ADAPTIVE MANAGEMENT AND SYSTEM-WIDE MONITORING IN RESTORATION PROGRAMS

Ginger, Tiling; Smith, Thomas J.; Karen, Balentine; Anderson, Gordon; Foster, Ann; Ward, Greg. Development of a Geodatabase to Preserve and Manage Historic and Recent Information for the Coastal Everglades and Assess Scenarios of Future Climate Change Impacts. (Wed, Pos. 6-A)

Lane, Robert R. The Bayou Boeuf Basin Water Quality Improvement Project. (Wed, Pos. 6-B)

Merrell, William; Ko, Jae-Young. Citizen's Involvement in Formulating Recovery Plans through Participating in Community Recovery Committee in Galveston Island, Texas After Hurricane Ike Hit: A case study of collaborative coastal disaster management. (Wed, Pos. 5-F)

O'Hara, Nanette; Greening, Holly S.; Sherwood, Edward T.; Cross, Lindsay M. Development of a Residential Fertilizer Ordinance for the Tampa Bay, Florida Region. (Wed, Pos. 5-E)

Owens, Alaina B.; Couvillion, Brady R.; Hossain, Imtiaz; Kaiser, Carola; Raynie, Richard C.; Steyer, Gregory D.; Twilley, Robert R.; Visser, Jenneke M. Coastal Louisiana Ecosystem Assessment & Restoration (CLEAR) Program: Providing Scientific Evaluation for Restoration Management. (Wed, Pos. 5-C)

Vandiver, Lisa; Porter, Dwayne E. The Implementation of Low Impact Development Practices (LIDs) for Coastal South Carolina: A Case Study of Oak Terrace Preserve. (Wed, Pos. 5-D)

SCI-027 DYNAMICS OF MANGROVE-SALTMARSH ECOSYSTEMS IN THE FACE OF CLIMATE CHANGE

Anderson, Gordon H.; Balentine, Karen M.; Smith, Thomas J. Biotic Factors Contributing to Hurricane Wilma Storm Sediment Stabilization in the Shark River Mangrove Estuary, Everglades National Park, FL USA. (Thu, Pos. 7-A)

Balentine, Karen M.; Anderson, G.H.; Smith III, Thomas J. Influence of Tidal Flooding on Propagule Dispersal of the Red Mangrove (*Rhizophora mangle*) in Everglades National Park, FL, USA. (Thu, Pos. 6-E)

Barreto, Maria B.; Barreto, Eduardo M.; Sánchez, Luz E. Massive *Avicennia germinans* Mortality Induce Mangrove Soil Degradation. (Thu, Pos. 7-F)

Castaneda, Edward; Rivera-Monroy, Victor H.; Marx, Brian; Coronado-Molina, Carlos; Ewe, Sharon; Twilley, Robert R. Nutrient Availability Controls Root Dynamics in Florida Coastal Everglades Mangroves. (Thu, Pos. 7-C)

Feller, Ilka C.; Lovelock, Catherine E.; Piou, Cyril; Chamberlain, Anne H. Nutrient Over-enrichment Alters Community Structure and Herbivory in Mangrove Forests Over Latitudinal and Tidal Gradients. (Thu, Pos. 6-F)

Henry, Kelly M.; Twilley, R.R.; Castañeda-Moya, Edward. Exploring the Effects of Black Mangrove (*Avicennia germinans*) Expansions on Nutrient Accumulation in Smooth Cordgrass (*Spartina alterniflora*) Marsh Sediments of Southern Louisiana, USA. (Thu, Pos. 7-D)

Needelman, Brian A.; Poffenbarger, Hanna; Geatz, George. Methane Emission and Carbon Sequestration Balance in Brackish Marshes. (Thu, Pos. 7-B)

Watson, Elizabeth B.; Hinojosa-Corona, Alejandro. Resilience of Baja California Tidal Wetlands to Accelerated Sea Level Rise. (Thu, Pos. 7-E)

Zhao, Yong; Raymond, Peter. Processes Controlling Carbon Export from a New England Salt Marsh. (Thu, Pos. 6-C)

SCI-044 EXPLORING IMPACTS OF HYPOXIA ON COASTAL ECOSYSTEMS

Boothman, Warren S. Field Validation of Molybdenum Accumulation in Sediments as an Indicator of Hypoxic Water Conditions. (Wed, Pos. 8-A)

Hondorp, Darryl W.; Breitburg, Denise L.; **Davias, Lori A.;** Burrell, Rebecca B. Effects of Diel-cycling Hypoxia on Susceptibility to Disease in Oyster *Crassostrea virginica*. (Wed, Pos. 8-F)

Lake, Samuel J.; Brush, Mark J. Extent of the Spring-Neap Tidal Influence on York River Water Quality and Metabolism. (Wed, Pos. 9-A)

Menke, Daneen P.; Rakocinski, Chet F. Characterizing the Demise and Recovery of the Macrobenthic Community at a Key Site Located in the Center of the 2008 Coastal Mississippi Hypoxic Zone. (Wed, Pos. 8-E)

Nelson, Kevin K.; Montagna, Paul A. Cause and Extent of Hypoxia in Corpus Christi Bay. (Wed, Pos. 8-C)

Owens, Michael; Cornwell, Jeffrey. Short-Term Recovery from Anoxia: Reestablishing sedimentary denitrification. (Wed, Pos. 9-B)

Poirrier, Michael A.; Howard, Ann C. Enhanced Blue Crab Predation after Common Rangia Clams Were Exposed to Hypoxia. (Wed, Pos. 8-B)

To, Ernest S.; Hodges, Ben R.; Montagna, Paul A.; Maidment, David R.; Kulis, Paula S. Modeling the Effects of Wind on Hypoxia in Southeast Corpus Christi Bay. (Wed, Pos. 8-D)

SCI-045 MACROALGAE: THE GOOD, THE BAD AND THE UGLY

Clausing, Rachel J.; Fong, Peggy. Nutrient Limitation in Tropical Macroalgae Depends on Life History Strategies and Watershed Influences. (Thu, Pos. 10-A)

Conahan, Gwen C.; Boyer, Katharyn E. Epiphytic and Benthic Macroalgal Surveys across Four San Francisco Bay Eelgrass Beds: Implications for species interactions and trophic dynamics. (Thu, Pos. 10-B)

Delp, Tim; **Deacutis, Christopher;** Morgan, Jessica; Lambert, Lesley; Cicchetti, Giancarlo. Seasonal Macroalgae Distribution Analysis of Narragansett Bay, RI. (Thu, Pos. 9-C)

Wednesday–Thursday Poster Sessions

Garcia-Robledo, Emilio; Revsbech, Niels Peter; Risgaard-Petersen, Nils; Corzo, Alfonso. Application of NO_x Microsensors to the Study of N-cycling During Degradation of Macroalgal Detritus. (Thu, Pos. 9-D)

Milbrandt, Eric C.; Coen, Loren; Grizzle, Ray; Foster, Greg; Parsons, Mike; Klement, Brad; Rybak, Alex. Determining the Habitats and Locations for Attached and Drifting Macroalgae in Southwest Florida. (Thu, Pos. 9-E)

Odom, Rachel L.; Walters, Linda J. The “Safe” Alternative to *Caulerpa*? Hitchhikers, fragment generation and fragment survivorship of aquarium strains of *Chaetomorpha linum* and *C. crassa*. (Thu, Pos. 9-F)

SCI-050 THE ROLE OF SEDIMENTS IN SEAGRASS ECOLOGY, MANAGEMENT AND RESTORATION

Bedinger, Laura A.; Bell, Susan S. Holdfasts of Rhizophytic Algae Regenerate New Aboveground Tissue and Quickly Bind Sediments. (Wed, Pos. 10-E)

Christiaen, Bart; Ortmann, Alice; Lehrter, John; McDonald, Ashley; Cebrian, Just. Can Seagrass Restoration Increase Nitrification in Shallow Marine Sediments? (Wed, Pos. 11-B)

Felch, Jonathan H.; Short, Fred T. SET Assessment of Sediment Accumulation and Erosion in *Zostera marina* Beds. (Wed, Pos. 11-A)

Gommermann, Luke W.; Ellis, Larry R.; Osborne, Todd Z.; Frazer, Thomas K. Assessment of Engineered Carbonate and Potential Submerged Substrates on *Halodule wrightii* Transplant Success in a South Florida Ecosystem. (Wed, Pos. 10-D)

Grablow, Katherine R.; Walters, Linda J.; Jenkins, David G.; Virnstein, Robert W. *Halodule wrightii* Seagrass Restoration and Recovery After Boat Propeller Scar Damage in a Shallow Water Estuary. (Wed, Pos. 10-C)

Jarvis, Jessie C.; Moore, Kenneth A. Viability of *Zostera marina* L. Annual and Perennial Seeds in the Sediment Seed Bank. (Wed, Pos. 10-F)

SCI-053 FATE AND EFFECTS OF MODERN PESTICIDES IN COASTAL ESTUARIES

Kuivila, Kathryn M.; Smalling, Kelly L.; Orlando, James L.; Moon, G. E. Occurrence, Persistence and Bioavailability of Modern Pesticides in California Estuaries. (Thu, Pos. 11-C)

Neira, Carlos; Mendoza, Guillermo; Delgadillo-Hinojosa, Francisco; Levin, Lisa A.; Zirino, Alberto; Porrachia, Magali; Deheyn, Dimitri. Copper Distributions and Biotic Community Responses in a San Diego Bay Marina. (Thu, Pos. 11-E)

Stair, Charissa; Granek, Elise; Sylvester, Steve. Methods for Pesticide Monitoring and Community Participation to Address Watershed-Based Sources of Pesticide Contamination in Intertidal Marine Organisms. (Thu, Pos. 11-D)

Straub, Peter F.; Madensky, Nicole. Isolation, Cloning and Expression Analysis of Winter Flounder Cytochrome P450 1A in Fish from Contaminated Estuaries. (Thu, Pos. 11-F)

SCI-056 PHYSICAL, BIOLOGICAL AND CHEMICAL INTERACTIONS OF ESTUARIES, BAYS AND SHELVES

Chua, Vivien P.; Fringer, Oliver. An Investigation on the Role of a Tidal Eddy on Exchange at an Estuarine Mouth. (Wed, Pos. 12-F)

Fugate, David C.; Tolley, Greg; Andresen, Megan; Denkert, Brooke. Suspended Sediment Dynamics in the Caloosahatchee River, Florida, USA. (Wed, Pos. 13-A)

Jahn, Ginger L.; North, Elizabeth W. Do Striped Bass (*Morone saxatilis*) Spawn in Response to High River Flow Events? (Wed, Pos. 13-B)

Leffler, Keith E.; Jay, David A. Analysis of Changes in the Onset and Duration of Coastal Upwelling of the Northeast Pacific Ocean. (Wed, Pos. 12-B)

Power, James H. Ordination of the Estuarine Environment: What the organism experiences. (Wed, Pos. 12-E)

Suanda, Ata; Barth, John A. Observations and Modeling of Diurnal Period Wind-Driven Flows in Northern Monterey Bay. (Wed, Pos. 13-C)

Thessen, Anne E.; Codispoti, Louis; Hill, Victoria; Pickart, Robert S.; Kelly, Vince. Barrow Canyon: A Hot Spot For Subsurface Primary Productivity Adjacent to the Canada Basin. (Wed, Pos. 12-D)

Williams, Joel; Swearer, Steve; Jenkins, Greg; Hindell, Jeremy. Climate-driven Impacts on Prey Production and Larval Fish Survival within a Salt-wedge Estuary in South-eastern Australia. (Wed, Pos. 12-C)

Yang, Zhaoqing; Khangaonkar, Tarang. Study of Circulation Variability in Puget Sound Using a High Resolution Cross-scale Coastal Ocean Model. (Wed, Pos. 12-A)

SCI-068 THE LINKAGE BETWEEN BIODIVERSITY AND ECOSYSTEM FUNCTIONS: REGIONAL PERSPECTIVES

Brewton, Rachel A.; Stunz, Gregory W.; Gain, Isis E.; Reese, Megan M. The Role of Intertidal Oyster Reefs as Habitat in Estuarine Ecosystems. (Thu, Pos. 13-E)

Carvalho, Russell G.; Schulze, Anja. Diversity Patterns in Deep-sea Macrofauna at the Sigsbee Abyssal Plain, Gulf of Mexico. (Thu, Pos. 15-A)

Fukumori, Kayoko; Sakai, Yoichiro; Tayasu, Ichiro; Okuda, Noboru. Body Size Structure and Ecosystem Metabolism in Lake Mesocosms: Trophic cascading effects of predator functional diversity. (Thu, Pos. 13-D)

Hsueh, Mei-Li; Lin, Hsing-Juh. Litterfall Production and Nutrient Contents in the Mangrove Forest of Chung-Kang Estuary in Northwestern Taiwan. (Wed, Pos. 14-F)

Lee, Dong-Yoon; Hood, Raleigh R.; Keller, David P.; Crump, Byron C. Assessing the Role of Mixotrophic Dinoflagellates in the Food Web of the Chesapeake Bay Estuarine Turbidity Maximum. (Thu, Pos. 14-C)

Lee, Lih-huwa; Lin, Hsing-Juh. Benthic Metabolism During Low Tide in the Intertidal Sandflat of the Kaomei Wetlands in Subtropical Taiwan. (Wed, Pos. 13-F)

Maci, Stefano; Basset, Alberto; Vizzini, Salvatrice; Tramati, Cecilia; Mazzola, Antonio. Biodiversity and Functional Diversity of Fish Fauna in a Small Lagoon Ecosystem: Variation and covariation patterns. (Thu, Pos. 14-A)

Wednesday-Thursday Poster Sessions

Shoji, Jun; Kamimura, Yasuhiro; Mizuno, Ken-ichiro; Kinoshita, Hikari; Mohri, Kie. Ecosystem Functions of Vegetated Areas as Fish Nursery in Temperate Waters: Phenology of seagrass, macro-algae and early growth of rockfish. (Thu, Pos. 14-D)

Whanpetch, Napakhwan; Yamakita, Takehisa; Watanabe, Kentaro; Nakaoka, Masahiro. Effect of Spatial Structure of Seagrass Vegetation on Macrofaunal Benthic Community in Futtsu, Tokyo Bay, Japan: An integrated approach using field sampling and remote sensing analysis. (Thu, Pos. 14-E)

SCI-069 FORECASTING ECOSYSTEM SERVICES FROM FUNCTION AND CONDITION ASSESSMENTS

Byrd, Kristin; Labiosa, William; Kreidler, Jason; Bolte, John. A Landscape Approach to Modeling Human Well-being Metrics of Puget Sound Nearshore Change in an Alternative Futures Framework. (Thu, Pos. 15-D)

Cole, Priscilla R.; Kreeger, Danielle. Ecosystem Service Valuation in the Delaware Estuary. (Thu, Pos. 15-E)

Dantin, Darrin D.; Russell, Marc J.; Quarles, Robert L. Mapping Ecosystem Services in the Tampa, Fla., Watershed. (Thu, Pos. 15-C)

O'Higgins, Tim G.; **Dantin, Darrin D.;** Jordan, Stephen J. Habitat-Specific Estimates of Fisheries Ecosystem Services in Weeks Bay Alabama. (Thu, Pos. 15-B)

SCI-084 GEOSPATIAL INFRASTRUCTURE AND TOOLS FOR MONITORING COASTAL ENVIRONMENTAL CHANGE

Alexander, Jill; Rumrill, Steve; Helms, Alicia; **DeMarzo, Adam.** Estuary Atlas: A visual tool to illustrate spatial and temporal variability in water parameters along the estuarine gradient of the South Slough, Oregon. (Thu, Pos. 16-B)

Hendrickson, Jacob; Ferrarese, Elise; Garono, Ralph J. Tidal Influence on Light Detection and Ranging (LiDAR) Digital Elevation Model (DEM) for the Lower Columbia River Estuary. (Thu, Pos. 16-D)

Hladik, Christine; Alber, Merryl; Schalles, John; Lynes, Alana; Pennings, Steve. Salt Marsh Habitat Mapping on Sapelo Island, GA, Using LIDAR and Hyperspectral Imagery. (Thu, Pos. 15-F)

Moller, Chris; Williamson, Kathleen J.; Arsan, Leyla. Characterizing Nearshore Marine Habitat Using Interpolation of Limited Field Data and Aerial Photo Interpretation. (Thu, Pos. 16-C)

Schalles, John F.; Hladik, Christine M.; Altrichter, Adam E.; Seminara, Drew N.; Merani, Paul B. Geospatial Partitioning of Ecosystem Components in Coastal Wetlands Using Masking and Classification Techniques with High Resolution Imagery. (Thu, Pos. 16-F)

SCI-087 OCEANS AND HUMAN HEALTH

Baxter, Anne E.; Strom, Mark S. Influence of Total Microbial Community Structure and Environmental Factors on the Presence of *Vibrio parahaemolyticus* in Puget Sound. (Wed, Pos. 17-E)

Fredrickson, Kerri A.; Crim, Ryan; Graham, Sylvia L.; Menden-Deuer, Susanne; Strom, Suzanne L. Toxicity Effects of Four Northern Puget Sound *Heterosigma akashiwo* Isolates on Microzooplankton Grazers. (Wed, Pos. 17-B)

Nilsson, William B.; Paranjpye, Rohinee N.; Strom, Mark S.; Trainer, Vera L.; Baugh, Keri A.; Bill, Brian D. Linking Changes in *Vibrio parahaemolyticus* Populations to Plankton Biodiversity in the U.S. Pacific Northwest. (Wed, Pos. 17-D)

Skelton, Hayley M.; Wikfors, Gary H.; Dam, Hans G. A New Mechanism of Toxicity to Microzooplankton in the Dinoflagellate *Alexandrium* spp. (Wed, Pos. 17-C)

Warner, Robert A.; Fan, Chunlei; Hartsig, Ann Marie; Lacouture, Richard V. Characterization of Reflectance Spectra of Phytoplankton Cultures: Implication of Remote Sensing of HABs. (Wed, Pos. 17-A)

SCI-093 NUTRIENT BUDGETS AND NUTRIENT ACCOUNTING FOR COASTAL WATERS

Gongol, Catherine L.; Savage, Candida; Frew, Russell; Probert, Keith. Quantifying Rates of Sediment Denitrification in Southern New Zealand Estuaries. (Wed, Pos. 17-F)

Schaefer, Sylvia C.; Alber, Merryl. A MATLAB-based Program to Simplify the Calculation of Watershed Nitrogen Budgets. (Wed, Pos. 18-A)

Swaney, Dennis. Nutrient Accounting in Coastal Waters and Watersheds: Linkages and Applications. (Wed, Pos. 18-B)

SCI-202 CLIMATE CHANGE AND COASTAL SYSTEMS

Butcher, Kristen A.; Kolker, Alexander S. The Impacts of Storm Surge on Sulfur Dynamics in Louisiana Marshes. (Wed, Pos. 18-D)

Parker, V. Thomas; Callaway, John C.; **Herbert, Ellen R.;** Schile, Lisa M.; Vredenberg, Vance T.; Vasey, Michael C.; Borgnis, Eryan L.; Talley, Drew M. Modeling the Impacts of Climate Change on San Francisco Bay-Delta Wetlands and Links to Pelagic Food Webs. (Wed, Pos. 18-C)

SCI-206 FISH AND FISHERIES

Johnson, Steve R.; Novotny, Steve P.; Gould, Kim; Fehm-Sullivan, Elif. Monitoring the Effects of Channel Maintenance Dredging on Delta Fishes from 2006 to 2008. (Wed, Pos. 19-E)

Mateo, Ivan; Durbin, Edward; Appeldoorn, Richard; Adams, Aaron; Swart, Peter; Kingsley, Richard. Variation in Elemental Fingerprints of French Grunt (*Haemulon flavolineatum*) and Schoolmaster (*Lutjanus apodus*) in Nursery Habitats in Puerto Rico and St. Croix (USVI). (Wed, Pos. 18-F)

Moser, Mary; Corbett, Steve; Williams, Greg; Lindley, Steve. Temporal and Spatial Patterns of Estuary Occupation by Green Sturgeon in Washington. (Wed, Pos. 19-D)

Nealer, Samantha L.; Howson, Ursula A. Condition of Larval *Fundulus heteroclitus* Exposed to Sub-Lethal Levels of Methylmercury: RNA/DNA and Morphometric Analyses. (Wed, Pos. 20-A)

Rudershausen, Paul J.; Buckel, Jeffrey A. Refining the Discard Mortality Rate of Black Sea Bass (*Centropristis striata*) with a Novel Tagging Approach. (Wed, Pos. 19-B)

Wednesday–Thursday Poster Sessions

Sommer, Ted; Benigno, Gina; Dubois, Jason; Gingras, Marty; Loboschewsky, Erik. The Paradox of Striped Bass in the San Francisco Estuary: Why Have Young Striped Bass Collapsed Despite Relatively Strong Adult Populations? (Wed, Pos. 19-A)

Sullivan, Mark C.; Pollock, Elizabeth C.; Able, Kenneth W. Rates and Routes of American Eel Swim Bladder Parasite (*Anguillicola crassus*) Infection in Southern New Jersey Estuaries: Implications for eel early life history. (Wed, Pos. 19-C)

Townsend, Howard. Incorporating Estuarine Food Web and Habitat Interactions for Early Life Stages of Forage Fish into Fisheries Stock Assessments. (Wed, Pos. 19-F)

SCI-208 INVASIVE SPECIES IN ESTUARIES

Brodsky, Sasha; Walters, Linda; Hoffman, Eric; Schneider, Kimberly. Effects of Temperature on Byssal Thread Production by the Native Mussel *Geukensia demissa* Versus the Non-Native Mussel *Perna viridis*. (Wed, Pos. 21-D)

Cordell, Jeffery; Bollens, Stephen; Tear, Lucinda. Modelling Physico-chemical Factors Affecting Occurrences of a Non-indigenous Planktonic Copepod in Northeast Pacific Estuaries. (Wed, Pos. 21-C)

Davidson, Timothy M.; de Rivera, Catherine E. Factors Influencing the Colonization of a Non-native Bioeroding Isopod (*Sphaeroma quoianum*) in a Temperate Estuary. (Wed, Pos. 20-F)

Furota, Toshio; Oki, Shinpei. New New England Clam Chowder in Tokyo Bay, Japan, Made from Introduced Population of the Hard Clam, *Mercenaria mercenaria*. (Wed, Pos. 20-E)

Hoffman, Razy. The New Red Lessepsian Macroalga, *Galaxaura rugosa*, Overtakes the Infralittoral Zone at the Western Edges of Haifa Bay (Northern Israeli Mediterranean). (Wed, Pos. 21-A)

Kyte, Michael A. The Invasion of the Cherry Point Shoreline by *Sargassum muticum*. (Wed, Pos. 20-B)

Marshak, Anthony; Heck, Ken. Regional Warming and Increased Abundance of Tropical Snappers and Groupers in the northern Gulf of Mexico: Could resident reef fishes be in hot water? (Wed, Pos. 20-C)

Newsom, Amanda J.; Williams, Susan L. You Might Think it's Supper, but it's Snot: Crabs Eat Less in the Presence of the Introduced Sea Slug, *Philine orientalis*. (Wed, Pos. 20-D)

Yuan, Wei; Walters, Linda; Hoffman, Eric; Schneider, Kimberly. Where do we go from here? Abiotic factors affecting range limits of two introduced marine bivalves, the Asian green mussel (*Perna viridis*) and the charru mussel (*Mytella charruana*). (Wed, Pos. 21-B)

SCI-210 SALT MARSH ECOLOGY

Bickford, Wesley A.; Needelman, Brian A.; Baldwin, Andrew H.; Weil, Raymond R.; Megonigal, J. Patrick. Above and Below-ground Biomass Response to Prescribed Fire in Mid-Atlantic Brackish Marshes. (Wed, Pos. 23-C)

Ciappetta, Jonathan; Brown, James; Christensen, Beth. Quantifying Alterations in Marshland Area within the South Shore Estuary Reserve, Long Island, NY Throughout the Past Century. (Wed, Pos. 23-D)

Corman, Sarah S.; Roman, Charles T. The Ecological Role, Physical Impact and Filling Rate of Salt Marsh Mosquito Ditches Under Consideration for Restoration. (Wed, Pos. 22-A)

Elsey-Quirk, Tracy; Seliskar, Denise M.; Gallagher, John L. Ecotypic Variation in *Spartina alterniflora*: Growth, Nutrient, and Carbon Dynamics. (Wed, Pos. 22-F)

Geatz, George W.; Needelman, Brian A.; Weil, Raymond R.; Baldwin, Andrew H.; Megonigal, Patrick. Organic Matter Decomposition Response to Prescribed Fire in Mid-Atlantic Brackish Marshes. (Wed, Pos. 23-B)

Gordon, John; La Peyre, Megan. Habitat Measures Associated with Fish Species Assemblages and Non-game Fish Species of Conservation Concern in Natural and Managed Submerged Aquatic Vegetation and Marsh Edge Habitats in Coastal Louisiana. (Wed, Pos. 21-E)

Guillen, George J.; Haskett, Kelli; Ramirez, Dianna. Short-term Movement and Habitat Utilization of Texas Diamondback Terrapin and Associated Observations on the Influence of Hurricane Ike. (Wed, Pos. 24-A)

Jin, Binsong; Fu, Cuizhang; Guo, Li; Qin, Haiming; Xu, Wang. Fish Use of Intertidal Oligohaline Marsh Creeks in the Yangtze River Estuary of China: Temporal variations and effects of creek geomorphological features. (Wed, Pos. 22-C)

Kiehn, Whitney M.; Morris, James T. Relationships between *Spartina alterniflora* and *Littoraria irrorata* in a South Carolina Salt Marsh. (Wed, Pos. 22-B)

Land, Lauren; Gambrell, Robert; Zhang, Gregg. The Impact of Polymers on Effective Aggregation and Microbial Activity in Coastal Louisiana Wetland Sediments. (Wed, Pos. 22-E)

Lemieux, Ben; van Proosdij, Danika. The Influence of Soil Seed Bank on the Colonization and Restoration of a Macro Tidal Marsh. (Wed, Pos. 22-D)

Roberts, Jennifer C.; Reed, Denise J. Vegetative Response to Hurricane Sedimentation. (Wed, Pos. 23-E)

Stamatiou, Lia A.; Simenstad, Charles A.; Lott, Mary Austill A.; Spilseth, Sarah; Ramirez, Mary F. Spatial and Temporal Patterns in the Composition and Abundance of Macroinvertebrates Available to Juvenile Salmonids Foraging in Tidal Wetland Habitats of the Columbia River Estuary. (Wed, Pos. 23-F)

Tulipani, Diane C.; Lipcius, Romuald N. Prey Selection of Diamondback Terrapin in the Lower Chesapeake Bay. (Wed, Pos. 23-A)

SCI-212 ADVANCES IN ESTUARINE MONITORING

Bailey, Eva M.; Ceballos, Maria C.; Anderson, Jon T.; Boynton, Walter R. Use of YSI's Blue-green Algae (BGA) Sensors as Part of High Speed Spatial Water Quality Mapping of the Potomac River Estuary. (Thu, Pos. 24-C)

Wednesday–Thursday Poster Sessions

Foster, Sarah Q.; Phillips, Caitrin E.; Schraga, Tara S.; Cloern, James E. Water Quality in San Francisco Bay: Lessons learned from four decades of research. (Thu, Pos. 24-B)

Hubbard, Maxwell F. Drifter Verification and Harmonic Analysis of Central San Francisco Bay Surface Currents Utilizing High-frequency Radar. (Thu, Pos. 25-B)

Johnson, York. E. coli Status, Trends, and Source Assessment in the Tillamook Bay Watershed. (Thu, Pos. 24-E)

Kim, Nam Jung; Choy, Eun Jung; Lim, Myung Shin; Park, Hyun-Je; Kwak, Jung-Hyun; Kang, Chang-Keun. Growth and Seasonal Energetics of the Ascidian *Styela clava* in Jindong Bay, Korea. (Thu, Pos. 24-D)

Russell, David E.; Kreeger, Danielle; Padeletti, Angela; Whalen, Laura; Searfoss, Renee; Howell, Amie; Strobel, Charles; Walker, Henry A.; Wilson, Bart; Miller, Douglas C.; Purdy, Irene. The Delaware Estuary Benthic Inventory: Soft-Bottom sampling. (Thu, Pos. 24-F)

Younan, Lawrence. In Situ Measurements: Versatility of the C3 Submersible Fluorometer. (Thu, Pos. 25-A)

SCI-215 ESTUARINE RESTORATION IN ACTION

Bell, Michael; Armitage, Anna. Restoration of a Brackish Marsh: Construction design influences aquatic community composition. (Thu, Pos. 26-B)

Benusa, Brian; Harper, Stephanie; Osgood, David. Impacts of a Headwater Floodplain Restoration on Sediment Loading within the Delaware Bay Watershed. (Thu, Pos. 27-D)

Day, Jason N.; Hunter, Montgomery G.; Day, John W.; Lane, Robert R.; Hunter, Rachael G.; Lindsey, Joel. Characterization of Two Mangrove Ecosystems on the Pacific Coast of Mexico and Potential Impacts of Freshwater Introduction. (Thu, Pos. 26-D)

Dupuis, Mike J.; Hester, Mark W. Effects of Burial Depth, Precipitation Regime and Sediment Organic Matter on *Baccharis halimifolia* (Groundsel Bush) Germination Response. (Thu, Pos. 27-B)

Burner, Jason; Krahforst, Christian; **Grady, Sara P.** Water Quality Dynamics in a Tidally-restricted Embayment, Inner Little Harbor, Cohasset, MA, and Implications for Management. (Thu, Pos. 29-A)

Graham, Jennie M.; van Proosdij, Danika; Bowron, Tony M.; Neatt, Nancy C.; Silver, Amber. Considerations for Breach Design in Macro-tidal Marsh Restoration Projects. (Thu, Pos. 28-B)

Howard, Rebecca J.; Day, Richard H.; Krauss, Ken W.; Doyle, Thomas W. Expansion of Mangrove Forests in Southern Florida: Impact of a hydrologic restoration project. (Thu, Pos. 28-C)

Hunter, Montgomery; Hunter, Rachael; Day, John W.; Lane, Robert; Day, Jason; Lindsey, Joel. Nutrient Removal and Loading Rate Analysis of Louisiana Forested Wetlands Assimilating Treated Municipal Effluent. (Thu, Pos. 26-A)

Hunter, Rachael G.; Day, John W.; Moerschbacher, Matthew. Wetland Response to Stormwater Discharge at the Pointe au Chien Pumping Station, Terrebonne Parish, Louisiana. (Thu, Pos. 25-F)

Park, Sang Rul; **Kim, Jae Woo;** Kim, Young Kyun; Kim, Jong-Hyeob; Kim, Seung Hyeon; Lee, Kun-Seop. Effects of Planting Density and Fertilization on the Establishment of *Zostera marina* Transplants. (Thu, Pos. 26-F)

Kim, Jong-Hyeob; Li, Wentao; Kim, Young Kyun; Kim, Seung Hyeon; Kim, Jae Woo; Lee, Keun-Seop. Selection of Appropriate Eelgrass Transplanting Sites at Taehwa River Estuary in Korea. (Thu, Pos. 26-E)

Li, Wentao; Park, Jung-Im; Lee, Kun-Seop. Chlorophyll *a* Fluorescence Parameters as an Indicator of Establishment of *Zostera marina* Transplants. (Thu, Pos. 27-A)

May, Christine; Orr, Michelle; Garrity, Nick. Managed Pond Restoration Challenges from a Water Quality and Habitat-Goals Perspective. (Thu, Pos. 25-C)

Neatt, Nancy C.; Bowron, Tony M.; van Proosdij, Danika; Lundholm, Jeremy; Graham, Jennie M.; Pett, Robert. Macro- & Meso-tidal Wetland Restoration in Canada's Maritime Provinces. (Thu, Pos. 28-A)

Park, Hyun-Je; Choy, Eun Jung; Kim, Dong Sun. Upwelling Event by Artificially-created Seamount Can Enhance Primary Production in an Oligotrophic Coastal Sea of Korea. (Thu, Pos. 27-C)

Pitts, Patrick A.; Graves, Greg; Marley, Darlene; Johns, Elizabeth. Comparing Baseline Conditions to Restoration Targets: Florida Bay salinity case study. (Thu, Pos. 25-E)

Rubash, L. L.; Kilanowski, E. M. Planning Estuarine Restoration Combining Waves Modelling and Comparison of Historic and Modern Elevation Surveys: Reconciling a Railroad with an Estuary. (Thu, Pos. 25-D)

Shinskey, Tom; Rosman, Lisa; Turek, James. Results of 5 Years of Monitoring at a Restoring Salt Marsh, Long Island Sound, New York. (Thu, Pos. 27-E)

Sparks, Eric L.; Cebrian, Just; Sheehan, Kate L. Evaluation of Two Different Restoration Designs for a *Juncus roemerianus* Marsh. (Thu, Pos. 28-F)

Teague, Kenneth; Joffrion, Russ; Miller, Brad; Taylor, Patricia; Williams, Chris; Landers, Timothy; McQuiddy, David. Planning to Restore a Coastal Cypress-Tupelo Swamp Forest: Progress and hurdles at the midpoint. (Thu, Pos. 26-C)

Wainer, Laura E.; Collins, Darcie. Saving Time, Money and The Bay: How Save San Francisco Bay successfully manages a community-based wetland restoration program. (Thu, Pos. 28-E)

SCI-222 LATE-BREAKING POSTERS II A

Behrens, Dane; Bombardelli, Fabian; Largier, John. The Effect of El Niño Events on Seasonal Tidal Inlet Behavior. (Wed, Pos. 30-B)

Biber, Patrick. Seagrasses on Chandeleur Islands: A cautionary tale about climate change. (Wed, Pos. 30-A)

Cramer, Avilash; Xu, Mouzhong; Nurmi, James; Tratnyek, Paul; Simon, Holly. Correlating Geochemical Variables with Crenarchaeal Populations and Activities in Columbia River Sediment. (Wed, Pos. 31-C)

Wednesday-Thursday Poster Sessions

Dangremond, Emily M. Modeling Dispersal of a Rare Mangrove. (Wed, Pos. 31-A)

Day, Richard H.; Michot, Thomas C. Tracking the Spread of Mangroves in the Northern Gulf of Mexico. (Wed, Pos. 31-E)

Forsch, Margaux; Hettinger, Annaliese; Sanford, Eric; Gaylord, Brian; Hill, Tessa; Russell, Ann. Effects of Ocean Acidification on Larval and Juvenile Growth in the Olympia Oyster *Ostrea lurida*. (Wed, Pos. 30-F)

Harrison, John; Bouwman, Lex; Mayorga, Emilio; Seitzinger, Sybil. Global and Continental-scale Dissolved Inorganic Phosphorus Export by Rivers: Results from a New Regional-Global Model. (Wed, Pos. 29-E)

Hogle, Ingrid; Olofson, Peggy; Kerr, Drew; Grijalva, Erik; Feinstein, Laura; Ayres, Debra; Strong, Donald. Hybrid Assimilation in *Spartina*: Re-Evaluating Conservation Goals. (Wed, Pos. 31-D)

Lee, Courtney T.; Morales, Cynthia; Stunz, Gregory W.; Vega, Robert; Overath, R. Deborah. Microsatellites Reveal Weak Stock Structure in Spotted Seatrout, *Cynoscion nebulosus*, in the Western Gulf of Mexico. (Wed, Pos. 30-E)

Mooney, Rae F.; McClelland, James W. Watershed Export Events and Ecosystem Responses in the Mission-Aransas National Estuarine Research Reserve. (Wed, Pos. 29-D)

Parli, Bhaskar V. Biogeochemistry of Carbohydrates in a Tropical Bay, West Coast of India. (Wed, Pos. 29-F)

Rice, Clifford P.; Bialek-Kalinski, Krystyna. Evidence for Atmospheric Deposition of Pesticides to Forests Bordering Agricultural Fields. (Wed, Pos. 29-B)

Tewfik, Alexander; Andrew, Neil. Seasonal Monsoons and Habitat Availability Influence the Distribution and Catch of Indo-Pacific Spiny Lobsters. (Wed, Pos. 31-B)

Uyeda, Kellie. Abiotic Limitation of Invasive Plant Species in the Upland - High Salt Marsh. (Wed, Pos. 30-C)

Valinoti, Cara E.; Ho, Chuan-Kai; Armitage, Anna R. Invasive Aquatic Vegetation Alters Interactions between Native Plants and Invertebrates. (Wed, Pos. 30-D)

Vaudrey, Jamie; Brush, Mark; Ullman, David; Kremer, James. Development of a Hybrid Physical-Ecological Model for Predicting the Onset of Hypoxia in the Estuarine Waters of Narragansett Bay, RI, USA. (Wed, Pos. 29-C)

SCI-222 LATE-BREAKING POSTERS II B

Bohlen, Curtis C.; Abbott, Alex; Wright, Jed; Barilone, Jessica; Bilodeau, Christina. Using Fish Passage Survey Data to Prioritize Aquatic Habitat Restoration in Maine. (Thu, Pos. 32-E)

Cassin, Jan. Nearshore Ecosystem Services - A Framework for Conservation and Restoration of Coastal and Estuarine Ecosystems. (Thu, Pos. 32-A)

Couvillion, Brady R. Late 20th Century Land Use/Land Cover Changes in the Northern Gulf Coast: 2006. (Thu, Pos. 32-D)

Fischer, Michelle R.; Couvillion, Brady R. A New Assessment of Land Change Rates in Coastal Louisiana: 1985-2006. (Thu, Pos. 33-B)

Foster, Gregory D.; Housman, Kathleen. The Tidal Influence on PCB Concentrations in The Estuarine Turbidity Maximum Zone of The Coastal Plain Potomac River (Maryland, USA). (Thu, Pos. 32-B)

Shull, Suzanne; Penttila, Dan; Gaydos, Joe; **Gibson, Caroline.** Northwest Straits Forage Fish Habitat Suitability Model. (Thu, Pos. 32-F)

Lester, Kristen M. Habitat Restoration as an Experiential Teaching Tool. (Thu, Pos. 32-C)

Davies, Gareth; Halsey, Kevin; **Manson, Paul.** Cumulative Effects Analysis of Ocean Renewable Energy Development. (Thu, Pos. 33-C)

Merello, Manuel; Hall, Margaret O.; Kenworthy, Judson; Berns, Donna; Kunzelman, Jennifer; Toth, Katie. Development of Restoration Tools for Repairing Vessel Injuries in Tropical Seagrass Beds. (Thu, Pos. 33-A)

SCI-223 COASTAL AND MARINE ECOLOGICAL CLASSIFICATION STANDARD

Allee, Rebecca; Madden, Chris; Goodin, Kathy; Finkbeiner, Mark; Mayer, Garry; Cicchetti, Giancarlo; Moses, Chris; Bamford, Danielle. Standardizing Habitat Units Using the Coastal and Marine Ecological Classification Standard. (Thu, Pos. 34-B)

Finkbeiner, Mark A.; Allee, Rebecca J.; Madden, Chris J.; Cochrane, Guy; Mayer, Garry. Pilot Implementation of the Proposed Coastal and Marine Ecological Classification Standard (CMECS). (Thu, Pos. 34-C)

Mayer, Garry F.; Allee, Rebecca J.; Madden, Christopher J.; Goodin, Kathleen L.; Finkbeiner, Mark A.; Cicchetti, Giancarlo; Moses, Christopher S.; Bamford, Danielle E.; Dare, Jennifer; Soule, Judy. Federal Geographic Data Committee Review of the Proposed Coastal and Marine Ecological Classification Standard (CMECS). (Thu, Pos. 34-A)

SCI-402 ELECTRONIC POSTERS - SESSION TWO

Hansen, David M.; Seaton, Charles M.; Jaramillo, Alex V.; Turner, Paul J.; Schilling, Jeffrey; Maier, David; Freire, Juliana; Silva, Claudio; Baptista, Antonio M. From Observatories to Collaboratories: The SATURN cyber-infrastructure. (Wed, Pos. E-2)

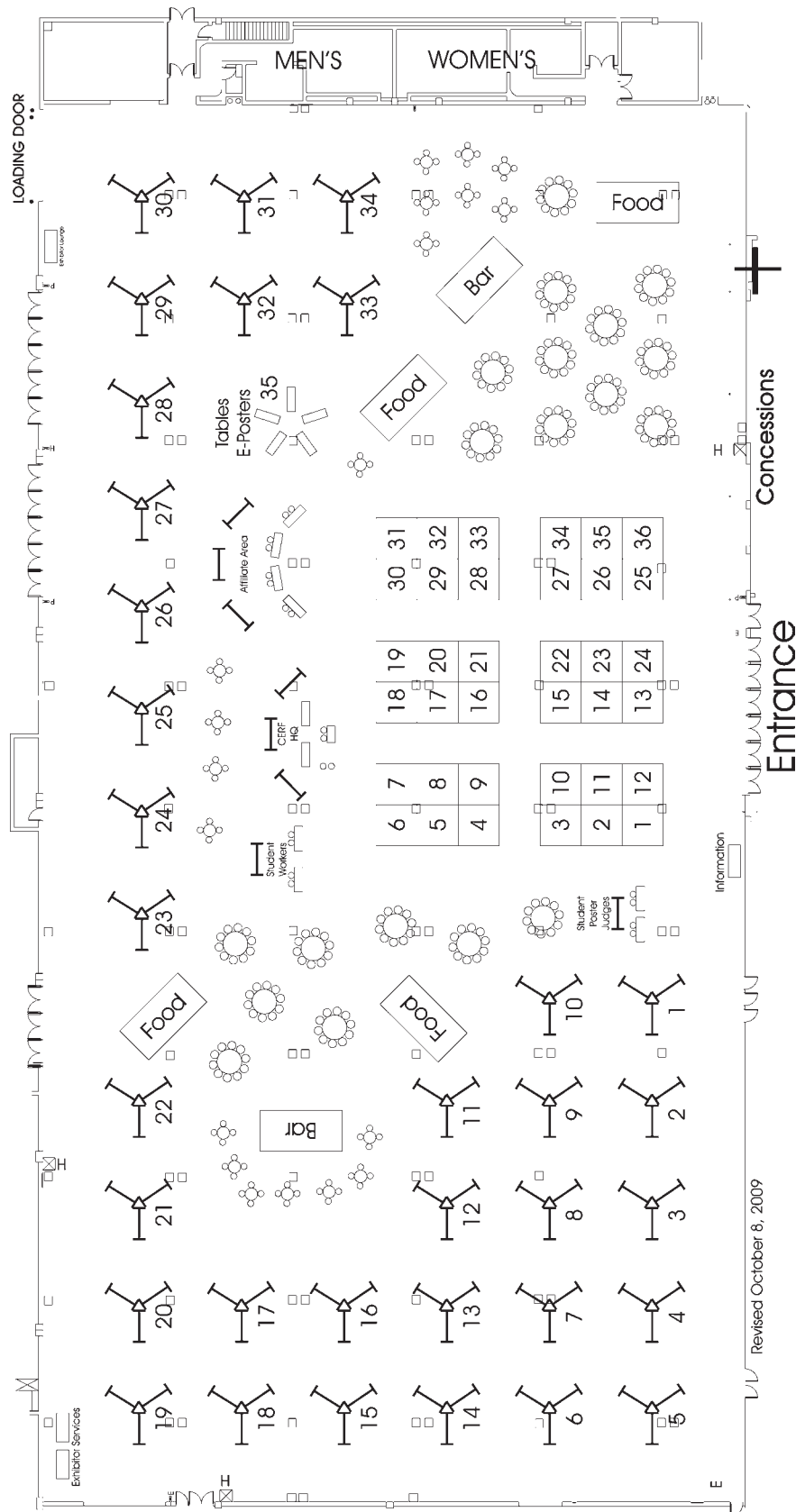
Kagan, Jimmy; Lev, Esther; Bauer, John; Christy, John; **Stout, Heather;** Walsh, Kuuipo. Oregon Wetlands Explorer, a Web-based Data and Mapping Portal. (Wed, Pos. E-1)

Suryan, Robert M.; Gladics, Amanda J. Do Common Murres, *Uria aalge*, Reflect Annual Variation in Forage Fish Populations and Upwelling Regimes off Central Oregon? (Wed, Pos. E-5)

Wegner, Karen E.; Woody, Elizabeth A.; Cresswell, Joyce; Davis-Lowe, Eda; Peterson, Tawnya D.; Baptista, Antonio M. Experiments in K-12 Education on Coastal Margins. (Wed, Pos. E-4)

Wilkin, Michael; Rathmell, Katie J.; Seaton, Charles M.; Turner, Paul J.; Needoba, Joseph A.; Peterson, Tawnya D.; Baptista, Antonio M. Towards Long-term Time Series of Biogeochemical Vertical Profiles in the Columbia River Estuary. (Wed, Pos. E-3)

Poster Hall and Exhibit Area Map



Revised October 8, 2009

CERF 2009 Workshops

A variety of hot topics will make workshops a must-do for CERF 2009. Workshops will be held on Sunday, 1 November 2009.

Two workshops will include roundtable discussions during lunch on Wednesday and Thursday. Mapping Seagrass Distributions Using Remote Sensing will take place on Wednesday in A105 (OCC). A second lunch-time roundtable discussion will take place on Thursday in A105 (OCC). This will be a synthesis from Sunday's day-long workshop on climate change.

A Short Tutorial on Scientific Writing and Publishing (for graduate students and early career scientists)

Time: 1:30 – 3:00 pm · *Location:* OCC, B110-112
Convener: James Cloern (jcloern@usgs.gov)

This workshop will consider attributes of a well-written scientific article (that participants read in advance) as well as practical aspects of publishing (journal selection, cover letters, reviewer comments, managing rejection, and reviewing a manuscript). Attendees must read the following manuscript prior to the workshop:

Kling et al. 1987. The 1986 Lake Nyos gas disaster in Cameroon, West Africa. *Science*. 236: 169-175 (DOI: 10.1126/science.236.4798.169).

RCN Denitrification Workshop: Introduction to and Advancements in MIMS, the N₂/Ar Technique and the Isotope Pairing Technique for the Measurement of Denitrification in Estuarine Systems

Time: 1:30 – 3:00 pm · *Location:* OCC, B117-119
Convener: Todd Kana (kana@hpl.umces.edu)

This workshop will include presentations by Kana on membrane inlet mass spectrometry, Jeff Cornwell on the N₂/Ar technique, and Anne Giblin on the isotope pairing technique for measuring denitrification in aquatic systems. Group discussion will follow regarding methods, applications, and advances (www.denitrification.org).

Wireless Datalogger Well Monitoring Networks

Time: 1:30 – 3:00 pm · *Location:* OCC, B115-116
Convener: Jeff Adams (jadams@campbellsci.com)

Adams will set up and demonstrate a wireless network of dataloggers and sensors for monitoring wells typically used in estuarine or coastal systems. Discussion topics will include hardware design, programming, wiring, installation, software, and data collection.

Integrating Climate Change into Coastal and Estuarine Management, Research and Decision-making

Time: 1:30 – 5:00 pm · *Location:* OCC, B113-114
Conveners: Lara Hansen (lara@ecoadapt.org) and Karsten Shein (Karsten.Shein@noaa.gov)

Several short overview lectures and an intensive NOAA-led exploration of climate data, information, services and tools will orient participants to the state of the science and practice of climate change management. Participants will consider case studies in breakout groups and reconvene to exchange findings and provide feedback to fulfill emerging data needs.

High Resolution Spatial Sampling of Aquatic Systems in Real Time

Time: 3:30 – 5:00 pm · *Location:* OCC, B110-112
Convener: Chris Madden (cmadden@sfgwmd.gov)

The third in a series of workshops focusing on use of boat-based, multi-sensor arrays with high frequency sampling for spatial characterization and mapping of aquatic systems, this workshop updates the state of the method, geospatial data analysis, synergies with remote sensing, and new research directions.

Advances in Dissolved Oxygen Sensing Put to Work

Time: 3:30 – 5:00 pm · *Location:* OCC, B117-119
Convener: Carol Janzen (cjanzen@seabird.com)

Janzen will introduce recent advances in Sea-Bird Electronics SBE 43 dissolved oxygen sensor technology. Topics will include data accuracy on long-term moorings in high fouling regimes, maximizing field deployment duration, sampling frequency, response time, transit speed, and sensor validation and data processing protocols from case studies.

ADDITIONAL WORKSHOP DISCUSSIONS

Mapping Seagrass Distributions Using Remote Sensing

Day: Wednesday, 4 November 2009
Time: 12:00 – 2:00 pm · *Location:* OCC A105
Convener: David Young (Young.David@epamail.epa.gov)

This workshop session will be an informal gathering of workers and endusers in the arena of remote sensing of seagrass distributions with particular focus on eelgrass, the dominant form on the U.S. West Coast.

Summing It Up: Integrating Climate Change into Coastal and Estuarine Management, Research and Decision-making

Day: Thursday, 5 November 2009
Time: 12:00 – 2:00 pm · *Location:* OCC, A105
Conveners: Lara Hansen (lara@ecoadapt.org) and Karsten Shein (Karsten.Shein@noaa.gov)

This will be a synthesis from the day-long workshop on Sunday that will incorporate information from sessions during the week.

Exhibitor Roster

Aquatic Informatics, Inc. (Booth #: 27)
1100-570 Granville Street
Vancouver, BC, Canada V6C 3P1
<http://www.aquaticinformatics.com>

Astoria Pacific International (Booth #: 1)
15130 SE 82nd Drive
Clackamas, OR 97015
<http://www.astoria-pacific.com>

Campbell Scientific, Inc. (Booth #: 19)
815 W. 1800 N.
Logan, UT 84321
<http://www.campbellsci.com>

CODAR Ocean Sensor (Booth #: 18)
1914 Plymouth Street
Mountain View, CA 94043
<http://www.codar.com>

Coastal and Marine Ecological Classification Standard (Booth #: 36)
Bldg. 1100, Rm. 232
Stennis Space Center, MS 39529

Daytona Beach Area Convention and Visitors Bureau (Booth #: 5)
126 E. Orange Ave.
Daytona Beach, FL 32114-4406
www.daytonabeachcvb.org

Elsevier (Booth #: 23)
360 Park Avenue South
New York, NY 18010
<http://www.elsevier.com>

EPA OWOW-Coastal Management Branch (Booth #: 6)

Hach Environmental (Booth #: 3)
c/o Front Range Business Support
P.O. Box 271264
Fort Collins, CO 80527
<http://www.hachenvironmental.com>

In-Situ, Inc. (Booth #: 14)
221 E. Lincoln Ave.
Fort Collins, CO 80524
<http://www.in-situ.com>

Institute for Coastal Science and Policy (Booth # 33)
East Carolina University
Flanagan Suite 250
Greenville, NC 27858-4353
<http://www.ecu.edu/icsp>

JFE Alec & Rockland Scientific (Booth: # 34)
520 Dupplin Road
Victoria, BC, Canada V8Z 1K1
<http://www.jfe-alec.com> / <http://www.rocklandscientific.com>

NANOOS (Booth#: 16)
Applied Physics Lab-University of Washington
1013 NE 40th Street
Seattle, WA 98117
<http://www.nanoos.org>

NERRS/NERRA (Booth #: 12)
444 N. Capitol Street, NW Ste. 322
Washington, DC 20001
<http://www.nerra.org>

NOAA, Center for Sponsored Coastal Ocean Research (Booth #: 32)
NOAA National Ocean Service, N/SCI2
1305 East-West Highway, SSMC-4, Room 8219
Silver Spring, MD 20910-3282
<http://www.cop.noaa.gov/>

NOAA, NMFS, Office of Habitat Conservation (Booth #: 31)
1315 East-West Highway, SSMC-3, Floor 14
Silver Spring, MD 20910
<http://www.nmfs.noaa.gov/>

Nortek USA (Booth #: 13)
222 Severn Ave., Bldg. 14, Suite 102
Annapolis, MD 21403
<http://www.nortekusa.com>

Oregon Department of Land Conservation & Development (Booth #: 24)
Oregon Coastal Management Program
635 Capitol St. NE #150
Salem, OR 97302
<http://www.oregon.gov/LCD>

Restore America's Estuaries (Booth #: 35)
5314-17th Avenue NW, Suite A
Seattle, WA 98107
<http://www.estuaries.org>

Seagrass Recovery (Booth #: 28)
1511 Gulf Blvd., Ste. A
Indian Rocks Beach, FL 33785
<http://www.seagrassrecovery.com>

Springer (Booth #: 15)
233 Spring Street
New York, NY 10013
<http://www.springer.com>

Teledyne RD Instruments (Booth: # 9)
14020 Stowe Drive
Poway, CA 92064
<http://www.rdinstruments.com>

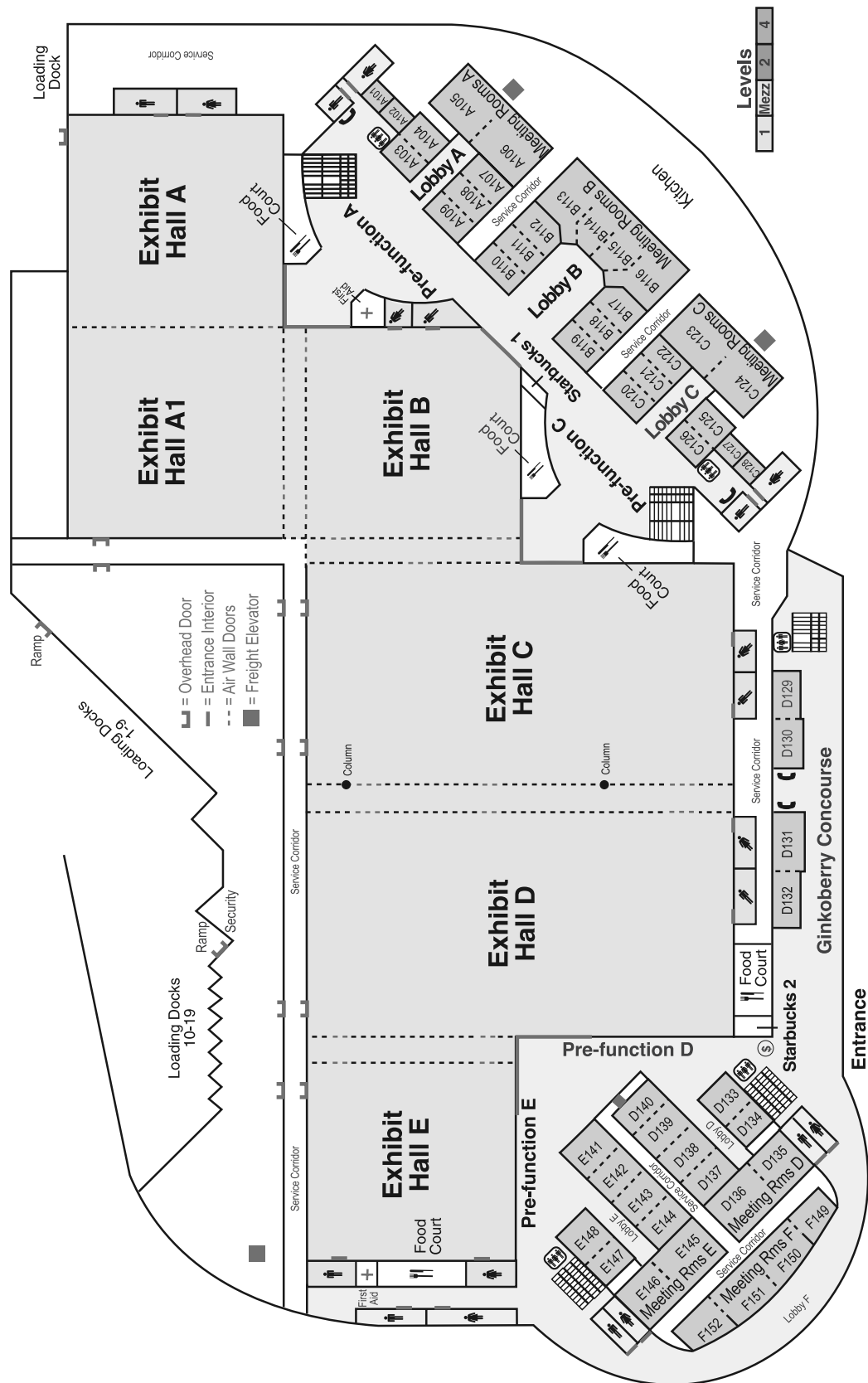
Turner Designs, Inc. (Booth #: 4)
845 W. Maude Ave.
Sunnyvale, CA 94085
<http://www.turnerdesigns.com>

U.S. Fish and Wildlife Service Pacific Region Coastal Program (Booth #: 30)
911 NE 11th Avenue
Portland, OR 97232
<http://www.fws.gov/coastal>

Wet Labs, Inc. / Sea-Bird Electronics, Inc. (Booths #: 25/26)
P.O. Box 518
Philomath, OR 97370
<http://www.wetlabs.com>
<http://www.seabird.com>

YSI, Inc. (Booth#: 7)
1725 Brannum Lane
Yellow Springs, OH 45387
<http://www.ysi.com>

OCC First Level



Special Meeting and Social Function Descriptions

CERF Sustaining Members Reception with the Scientific Awardees and Keynote Speaker (By Invitation Only)

Date and Time: Sunday, 1 November, 4:00 – 5:30 pm
Location: OCC, Skyview Terrace

CERF invites our sustaining members to attend a special reception to thank you for your support of the Federation, congratulate our 2009 scientific awardees, and speak with the keynote speaker, the Honorable William Bradbury.

Opening Address and CERF Awards

Date and Time: Sunday, 1 November, 6:00 – 7:30 pm
Location: OCC, Oregon Ballroom 201-202

Plan to attend to congratulate the winners of the 2009 CERF awards and hear keynote speaker William Bradbury speak about *Climate Change in Oregon and Beyond: Estuaries and Coasts in a Changing World*.

Presidents' Welcome Reception

Date and Time: Sunday, 1 November, 7:30 – 9:00 pm
Location: OCC, Oregon Ballroom

On behalf of the Federation Presidents, we invite you to the OCC to greet old friends and new. Celebrate the opening of the 20th biennial conference of the Coastal and Estuarine Research Federation.

CERF Happy Hours

Date and Time: Monday, 2 November, and Wednesday, 4 November, 5:30 – 6:30 pm
Location: OCC, Exhibit Hall A-A1

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

Discover Portland (Self-guided Tours)

Date and Time: Monday, 2 November, 5:00 pm
Location: Off-site

Join fellow CERFers for a night out on the town! Don't know where to go? The social committee did the research for you! Visit the conference Web site or Twitter page for a listing of suggestions.

Affiliate Society Meetings

Date and Time: Tuesday, 3 November, 5:45 – 6:30 pm
Location: OCC, Oral Session Rooms

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

CERF Business Meeting

Date and Time: Tuesday, 3 November, 6:30 – 8:00 pm
Location: OCC, Oregon Ballroom 203-204

Please stop by to learn about what is happening within CERF and to welcome CERF's 2009-2011 administration.

Town Hall Meeting

Date and Time: Tuesday, 3 November, 8:00 – 8:30 pm
Location: OCC, Oregon Ballroom 203-204

Plan to attend this interactive forum to lend your expertise and brainstorm with other CERF members on the CERF board's plans and accomplishments.

Women in Science Networking Breakfast (Ticketed Event)

Date and Time: Tuesday, 3 November, 7:00 – 8:00 am
Location: OCC, Oregon Ballroom 204

Seven in the morning may sound early to some CERF attendees, but Tuesday's Women in Science Networking Breakfast will reward early risers with a compelling and fun program, and it is an excellent opportunity to network with current and soon-to-be colleagues and friends.

This year's event will present Virginia Institute of Marine Science Professor Deborah A. Bronk.

Professor Bronk's interests include the fluxes of nitrogen in open ocean, coastal, and estuarine environments with emphasis on the role of dissolved organic nitrogen (DON) in microbial food webs. Her early work involved extensive method development with the goal of quantifying in situ rates of DON release and uptake using ¹⁵N tracer techniques. She now uses these techniques to address a host of questions relating to the release of DON from phytoplankton and zooplankton and subsequent reincorporation of DON as a nitrogen source for phytoplankton and bacteria. More recently Professor Bronk has investigated photochemical processes as a mechanism that facilitates the uptake of organic nitrogen by both phytoplankton and bacteria. Deborah Bronk continues to be intrigued by methods development, and she has most recently been working on linking flow cytometry with ¹⁵N tracer techniques to

quantify nitrogen flow into autotrophs versus heterotrophs in open ocean systems. Professor Bronk has recently been awarded the Dean's Prize for the Advancement of Women in Science at VIMS.

CERF Student Career Networking Event

Date and Time: Wednesday, 4 November, 7:00 – 9:00 pm

Location: OCC, Ballroom 203-204

The pizza social and career event is back with your hosts, Randy Chambers and Amanda Kahn.

ALL undergraduate and graduate students are invited to attend. This event provides students a fantastic and unique opportunity to network with established scientists and recently employed graduates in a fun and casual atmosphere. Students will have a chance to pick panelists' brains about topics such as career options, student internships, and employment opportunities. And did we mention FREE pizza and drinks?!

Panelists represent different careers (academia, federal agencies, state agencies, NGOs, consulting, and more!)

CERF 2009 Student Pub Night

Date and Time: Wednesday, 4 November, 8:00 pm – 2:30 am

Location: Doug Fir Lounge, 830 E. Burnside St.

Web site: <http://www.dougfir lounge.com/>

Come down to the Doug Fir Lounge to relax and mix with other students in a casual setting. (Any non-student CERF attendees also are welcome!) The Doug Fir is a restaurant, bar, and lounge with an art-deco theme that embodies the artistic, fun and funky character of Portland! Come for food and drinks, or head downstairs to listen to live music. Only a short 13-minute walk from the Convention Center!

Walking Directions: Walk south on Martin Luther King Jr. Blvd. (toward NE Irving St). Stay on Martin Luther King Jr. Blvd. for a 10-minute (approximate) walk (7 blocks). Turn left onto E. Burnside St. and walk 5 blocks. The Doug Fir Lounge will be on your right, on the corner of E. Burnside and NE 9th Ave.

Public Transit Directions: Walk south on Martin Luther King Jr. Blvd. (toward NE Irving St). Wait at corner of Hoyt St. and take #6 Bus. Get off on immediate next stop at E. Burnside. Walk east on Burnside toward NE Grand Ave. (away from water). Walk 5 blocks. The Doug Fir Lounge will be on your right, on the corner of E. Burnside and NE 9th Ave.

2009 CERF Inaugural “CERF the Turf” 5K Fun Run/Walk

Date and Time: Wednesday, 4 November, 12:30 pm (Runners assemble beginning at noon.)

Location: Willamette River Waterfront Loop

CERF is hosting a 5K (3.1 mile) Fun Run/Walk along the Willamette River waterfront loop on 4 November 2009 at noon. Pre-registration is encouraged. All paid participants will get a unique keepsake, snacks, and water. Special prizes will be awarded for the first place finishers from each Affiliate Society and the first three male and female finishers in each of four categories: Zoa (up to age 29), Megalopae (30-39), Juveniles (40-49), and Adults (50+).

Student Awards Presentations and Farewell Party featuring The CERFTones

Date and Time: Thursday, 5 November, 5:30 – 8:30 pm

Location: OCC, Oregon Ballroom 203-204

Light hors d'oeuvres and bar. Student Presentation Awards. Carbon Neutral check presentation.

Throughout this week our volunteer judges evaluated most of the student oral and poster presentations.

Tonight, the highest-ranking students receive monetary awards and recognition for their exceptional work. Come support the students, boogie down to The CERFTones, and say farewell until CERF 2011 in Daytona Beach, Florida!

Oral & Poster Author Index

A

Aalbersberg, W. 17
 Abbott, A. 57
 Abdelrhman, M. 43
 Abe, M.P. 21
 Abgrall, M. 40
 Able, K.W. 55
 Ackerman, D. 42
 Acosta, B. 48
 Adamack, A. 17, 30, 31
 Adamowicz, S. 28, 39
 Adams, A. 54
 Adams, M. 29
 Adamus, P. 28, 39, 41
 Adkins, J.Y. 35
 Agapito, M. 14
 Aighewi, I.T. 40
 Ailstock, S. 33
 Ainsworth, C. 16, 42
 Ainsworth, L. 44
 Aizawa, A. 37
 Akers, C. 18
 Akin, S.K. 42
 Alber, M. 28, 35, 54
 Albertson, S. 13, 47
 Alderson, M. 15
 Alexander, C. 35
 Alexander, J. 54
 al-Kharusi, L. 29
 Allam, B. 42
 Allee, R. 57
 Allee, R.J. 57
 Alleman, L.K. 18
 Allen, A.L. 39
 Allen, B. 42
 Allen, D.M. 19
 Allen, E.H. 34
 Allen, S. 13
 Allen, Y. 29
 Almeida, R. 48
 Almodovar Acevedo, L. 49
 Alphin, T. 21
 Alsterberg, C. 38
 Altabet, M.A. 29
 Altieri, A.H. 35
 Altman, S. 20
 Altoja, K. 13
 Altrichter, A.E. 54
 Alvarez Salgado, X. 42
 Ambler, J. 21
 Ambler, J.B. 46
 Ambler, J.W. 45, 50
 Ambrose, R.F. 51
 Ammann, A. 35
 Amorim, A.L. 38
 Amstutz, A. 35
 Andersen, J. 13, 41
 Anderson, A. 46
 Anderson, D.W. 23
 Anderson, G. 52
 Anderson, G.H. 28, 52
 Anderson, Gordon H. 52
 Anderson, I. 36, 38
 Anderson, I.C. 51
 Anderson, J.T. 55
 Andresen, M. 23, 53

Andrew, N. 57
 Ann-Marie, O. 35
 Anthony, S. 47
 Anton, A. 36
 Aoki, K. 44
 Apeti, D. 41
 Appeldoorn, R. 54
 Apple, J.K. 23, 36
 Archbald, G. 31
 Ardito, T. 43
 Argow, B.A. 50
 Arias, A.M. 36
 Arismendez, S.S. 28
 Arkema, K. 16
 Armbrust, E.A. 12
 Armbrust, K. 41, 43
 Armitage, A. 47, 56
 Armitage, A.R. 15, 30, 47, 57
 Armstrong, D. 22, 42
 Arnesen, J. 34
 Arnold, T.M. 49
 Arreola, A. 48
 Arrieta, J.M. 38
 Arsan, L. 31, 54
 Assis, J. 22
 Athearn, N. 13, 36, 40
 Attrill, M. 12
 Auer, C. 11, 31
 Auermuller, L. 39
 August, P. 13
 Aulenbach, B.T. 43
 Aulenbach, D.L. 45
 Aulio, D. 30
 Aultman, T. 12
 Aven, A. 41
 Avery, B. 21
 Avery, G. 21
 Aveytua-Alcazar, L. 34
 Ayres, D. 57
 Azémar, F. 19

B

Baas, P. 38
 Babin, B.L. 13
 Babson, A. 42
 Bahner, L. 11
 Bahng, B. 31
 Bailey, E. 42
 Bailey, E.M. 16, 30, 55
 Bailey, N. 12
 Bain, D. 28
 Baker, A. 50
 Baker, P. 42
 Baker, R. 36, 46
 Balcer, M.D. 21
 Bald, J. 11
 Baldwin, A. 40
 Baldwin, A.H. 55
 Baldwin, D. 43
 Baldwin, R.E. 18, 35
 Balentine, K. 28
 Balentine, K.M. 52
 Balke, T. 18
 Ballanti, L. 12
 Ball, W.P. 15

Baltz, D.M. 31
 Bamford, D. 57
 Bamford, D.E. 57
 Banas, N.S. 46
 Bandelj, V. 32
 Bandolin, N. 50
 Banks, M.A. 18
 Baptista, A. 12, 38
 Baptista, A.M. 46, 50, 57
 Barba Santos, G.M. 18
 Barbour, R. 21
 Barendregt, A. 40
 Bargu, S. 15
 Barham, J. 34
 Barilone, J. 57
 Barnard, A. 47
 Barnard, A.H. 19, 48
 Barnas, K. 37, 39
 Barnette, J. 46
 Barnette, J.T. 37
 Barras, J. 29
 Barreto, E.M. 52
 Barreto, M.B. 52
 Barrote, I. 10
 Bartell, S. 11
 Barth, J.A. 13, 28, 35, 53
 Bartholomä, A. 19
 Bartleson, R. 47
 Bass, A.L. 16
 Basset, A. 20, 53
 Bassin, C. 11
 Bassin, C.J. 14
 Batiuk, R. 32, 34, 41, 44
 Battaglia, L.L. 33
 Bauer, J. 50, 57
 Baugh, K.A. 54
 Baustian, J. 30
 Baustian, M.M. 38
 Baxter, A.E. 54
 Bayha, K.M. 14
 Bayley, H.K. 44
 B. Carruthers, T.J. 17
 Beal, J.L. 48
 Beamer, E. 12, 14
 Beaton, R.M. 32
 Beavis, F. 21
 Becker, L. 38
 Becker, P. 32
 Beckett, L. 40
 Beck, M. 34, 37
 Beckman, B. 35
 Bedford, B.J. 47
 Bedinger, L.A. 53
 Beegle-Krause, C.J. 17
 Beer, S. 10
 Beaver, J.W. 16
 Beaver, L.B. 16
 Behrens, D. 56
 Belabbassi, L. 29
 Belknap, D.F. 16
 Bell, C. 30
 Belli, S. 47
 Bell, M. 30, 56
 Bell, R.J. 28
 Bell, S. 13, 20
 Bell, S.S. 53
 Belshe, E.F. 10
 Belt, K.T. 17

Benigno, G. 42, 55
 Bennett, K.C. 10
 Bennett, R.J. 39
 Bennett, W.A. 23
 Benoit-Bird, K.J. 18
 Benson, S.R. 16
 Benson, W.H. 40
 Bentley, P. 46
 Bentley, S.J. 10
 Benusa, B. 38, 56
 Beran, A. 32
 Berger, C. 11
 Berg, P. 13, 14, 28, 36, 46
 Bergquist, D. 37
 Bergstrom, P.W. 34
 Berle, A.M. 30
 Berlyn, G.P. 16
 Bernhardt, P.W. 38, 51
 Berns, D. 18, 57
 Berounsky, V. 47
 Berounsky, V.M. 28
 Berry, H. 20, 49
 Berry, W.J. 22
 Beseres Pollack, J. 37
 Betteridge, K.F. 37
 Betz, F. 10
 Bevington, A.E. 35, 39, 51
 Bhuthimethee, M. 12
 Bialek-Kalinski, K. 57
 Biancani, P.J. 41
 Biber, P. 56
 Biber, P.D. 30
 Bickford, W.A. 55
 Bierman, V.J. 17
 Bierschenk, A. 40
 Bierschenk, B. 23
 Biers, E.J. 51
 Bill, B.D. 54
 Bilodeau, C. 57
 Bishop, T. 35, 50
 Blaine, J. 10
 Blair, A. 37
 Blake, J.A. 17
 Blake, R. 49
 Blanco-Garcia, J.L. 38
 Blanco, J. 30, 38
 Blaser, S. 32
 Blenckner, T. 30
 Blum, L. 10
 Bochdansky, A. 28
 Bode, A. 43
 Boehlert, G. 46
 Boehm, A.B. 28
 Boesch, D.F. 39
 Boese, B.L. 10
 Boettcher, A. 16, 17, 18
 Bohlen, C.C. 57
 Bohlmann, H.E. 49
 Boicourt, W. 11, 31
 Boldt, K. 19
 Boldt, K.V. 21
 Bollens, S. 12, 23, 28, 55
 Bolte, J. 41, 54
 Bombardelli, F. 56
 Bond, M. 35
 Boneillo, G.E. 46
 Bonito, V. 17
 Booker, M. 42

Boone, E. 16
 Booth, D.M. 33
 Booth, M. 36, 51
 Boothman, W.S. 52
 Boothroyd, J. 13
 Borde, A. 28, 30, 32, 34
 Borde, A.B. 51
 Borgeld, J. 45
 Borgnis, E. 12
 Borgnis, E.L. 54
 Borja, . 13
 Borja, A. 11, 13, 41
 Borkman, D. 28, 38
 Bosch, J. 29, 35, 37
 Bos, J. 11, 13
 Bos, J.K. 47
 Boström, C. 11
 Boswell, K. 31, 43
 Boswell, K.M. 49
 Bottom, D. 10, 44
 Bottom, D.L. 10, 12, 14, 44
 Bouma, T. 50
 Bouma, T.B. 12, 18
 Bourdon, B. 46
 Bourgeois, P. 11
 Bourgeois, S. 38
 Bourne, S. 14, 31
 Bouwman, L. 57
 Bowen, J.L. 36
 Bowles, C.M. 38
 Bowron, T.M. 38, 56
 Boyd, B. 17
 Boyd, J. 16
 Boyer, G.L. 23
 Boyer, J. 36
 Boyer, K. 20, 31, 36
 Boyer, K.E. 48, 52
 Boyle, J. 23
 Boynton, W. 15, 16, 17, 30
 Boynton, W.R. 55
 Braby, C.E. 18
 Bracken, M. 33, 37
 Bradley, C. 20
 Bradley, M. 13
 Bradley, P. 14
 Bradley, R. 23
 Brady, D.C. 33
 Braeckman, U. 20
 Brahamsha, B. 23
 Brame, A.B. 17
 Brandenberger, J. 14
 Brandt, S.B. 31
 Brauer, S.L. 51
 Brawley, J. 28
 Brearley, A. 23
 Breidenbach, S. 37, 39
 Breitburg, D. 14, 15, 17, 40
 Breitburg, D.L. 44, 52
 Brenda, N. 37
 Brenneis, V.E. 35
 Bresnan, E. 38
 Brewton, R.A. 53
 Briceño, H.O. 36
 Bricker, S.B. 29, 32, 41
 Bright, K. 23, 45
 Brinkmeyer, R. 21, 50
 Brinson, M. 10, 33
 Briscoe, C.H. 16
 Brodersen, J. 13
 Brodeur, R. 33
 Brodeur, R.D. 14, 16, 18
 Brodsky, S. 55

Bronk, D.A. 15
 Brophy, L. 28, 39, 41
 Broussard, W. 29
 Brouwer, M. 33
 Brown, C.A. 29
 Browne, J.P. 35
 Brown, G.L. 44
 Brown, J. 49, 55
 Brown, K. 11
 Brown, L. 35, 38
 Brown-Peterson, N.J. 33
 Bruland, G. 35
 Bruland, K.W. 34
 Brumbaugh, R. 37
 Brunner, C. 50
 Brush, G.S. 29
 Brush, J. 46
 Brush, M. 36, 38, 52, 57
 Brush, M.J. 52
 Bryant, D. 29
 Brylawski, A. 21
 Bryson, S. 40
 Buchanan, C. 40, 44, 47
 Buchanan, S. 44
 Buchholtz ten brink, M. 29
 Buckel, J.A. 54
 Buerger, B. 30
 Buffum, H. 42
 Bugden, G. 19
 Bukaveckas, P.A. 42
 Bulthuis, D. 20, 39
 Bulthuis, D.A. 49
 Bundy, M. 37
 Burak, M.K. 23
 Burchard, H. 37
 Burch, B. 33, 44
 Burd, A. 29
 Burdick, D. 28
 Burdige, D.J. 15
 Burfeind, D. 39
 Burghart, S.E. 23, 30, 45
 Burke, B.J. 33
 Burke, J.L. 31
 Burke, S.M. 43
 Burkhardt, W. 41
 Burkholder, J.M. 34
 Burnett, K.M. 51
 Burnett, N.M. 19, 49
 Burnett, W. 11
 Burns, C.W. 23
 Burrell, R.B. 44, 52
 Burrola, M. 48
 Burtner, J. 56
 Busch, K.E. 22, 49
 Buschman, F.A. 19
 Bushek, D. 22
 Buskey, E.J. 31, 40
 Butcher, K.A. 54
 Butler, J. 41
 Butler, K. 19
 Byrd, K. 41, 54

C

Cable, J. 29, 30, 37
 Cacchione, D.A. 36
 CAERS 40
 Cahoon, D.R. 10, 12, 18, 39
 Cain, C.J. 47
 Calabretta, C.J. 30

Calci, K.R. 41
 Callaway, J. 12, 36
 Callaway, J.C. 54
 Camacho-Ibar, V.F. 42
 Cambridge, M.L. 16
 Cameron, A.S. 32
 Cameron, C. 28
 Cammarata, K.V. 43
 Campbell, L.A. 12
 Campbell, M. 32
 Campbell, V. 36
 Camp, J. 41
 Campuzano H., A.C. 17
 Candelmo, A.C. 23
 Cangelosi, A.A. 21
 Canuel, E. 15, 36
 Cao, J. 44
 Cao, Y. 34
 Caraco, D. 39
 Carini, S.A. 33
 Carlin, J. 50
 Carlin-Morgan, K. 46
 Carlisle, B. 47
 Carlson, P.R. 38, 44
 Carmichael, R. 17, 41
 Carrada, G.C. 20
 Carranza, A. 37
 Carr, L. 36
 Carroll, J.M. 39
 Carr, S. 30
 Carruthers, T.
 10, 16, 22, 29, 46, 50
 Carruthers, T.J. 47, 50
 Carson, F.C. 35
 Carson, H.S. 15, 17
 Carstensen, J. 37
 Carter, J. 48
 Cartwright, G.M. 19
 Carullo, M. 47
 Carvalho, R.G. 53
 Casillas, E. 35
 Casini, M. 37
 Cassidy, K. 45
 Cassin, J. 57
 Castaneda, E. 52
 Castañeda-Moya, E. 17, 30, 52
 Castro, J. 36
 Cataletto, B. 32
 Cavalcanti, A. 48
 Cavell, J.A. 39
 Ceballos, M.C. 55
 Cebrian, J. 36, 49, 53, 56
 Celussi, M. 32
 Cerco, C. 12, 17, 32
 Cerco, C.F. 44
 Cerrato, R.M. 21
 Chai, F. 32
 Chakot, L. 11, 36
 Chakraborty, A. 39
 Chamberlain, A. 38
 Chamberlain, A.H. 52
 Chamberlain, R.H. 18
 Chamberlin, J. 10, 44
 Chambers, J.Q. 10
 Chambers, R. 50
 Chambers, R.M. 39
 Chandler, A.R. 46
 Chan, F. 35
 Chan, K. 16
 Chant, R. 19, 21, 48
 Chapman, J. 18, 31

Chapman, S.K. 38
 Charles, D. 42, 48
 Charles, F. 38
 Charpentier, M. 47
 Charpentier, M.A. 13
 Chartrand, K.M. 10
 Chavanich, S. 37
 Chavanne, C. 22
 Chee Kuang, C. 48
 Cheney, D. 32, 34, 43
 Chen, S. 20, 41, 45
 Chen, X. 29
 Chernetsky, A. 21
 Cherry, J. 31
 Chesney, E.J. 31
 Cheung, I. 10, 46
 Chickadel, C. 45
 Chickadel, C.C. 39
 Childers, D. 17
 Childers, D.L. 51
 Chilton, V. 43
 Chisholm, T. 49
 Chittaro, P. 42
 Chmura, G.L. 28
 Cho, H. 34
 Choi, W. 42
 Choy, E. 46, 56
 Chrustian, R.R. 33
 Christensen, B. 55
 Christensen, J. 13
 Christiaen, B. 36, 49, 53
 Christian, R. 10
 Christiansen, K. 51
 Christy, A. 21
 Christy, J. 28, 39, 41, 57
 Chua, V.P. 53
 Chumchal, M.M. 15
 Ciannelli, L. 16
 Ciappetta, J. 55
 Cibic, T. 32
 Cicchetti, G. 11, 13, 52, 57
 Ciminello, M. 13
 Claiborne, A. 46
 Clarke, A.L. 29
 Clarke, D. 22
 Clarke, D.G. 22
 Clausing, R.J. 52
 Claxton, A.T. 12
 Clements, S. 16, 23
 Clinton, P.J. 48
 Cloern, J. 34, 36
 Cloern, J.E. 56
 Closs, G.P. 11, 23
 Clough, J.S. 33
 Clough, L. 22
 Clumpner, C. 23
 Coade, G. 17
 Coates, K.A. 18
 Cobb, L. 41
 Coble, J.L. 50
 Cochran, G. 57
 Cochran, K. 18
 Codispoti, L. 53
 Coen, L. 37, 47, 53
 Cofer-Shabica, N. 30
 Coffin, R.B. 51
 Cohen, S. 36
 Cole, F.A. 28, 45
 Cole, L.W. 18, 19
 Coleman, A.M. 30
 Cole, P. 42
 Cole, P.R. 54

Coles, R.G. 20, 22
 Coletti, L.J. 19
 Collier, T. 43
 Collins, A. 35
 Collins, C. 32, 34
 Collins, C.M. 32
 Collins, D. 56
 Collis, K. 35
 Comblen, R. 18
 Comeau, M. 22
 Comici, C. 32
 Commagere, A.M. 39
 Conahan, G.C. 52
 Cone, J. 42
 Conley, D. 37
 Conner, W.H. 21
 Connolly, R.M. 31, 36
 Conrad, P.A. 23
 Cook, S. 12
 Cooksey, C. 37
 Cooper, K. 35
 Cooper, S. 29, 48
 Cope, B. 15
 Copping, A. 45
 Copping, A.E. 21, 39
 Corbett, C.A. 28, 32, 34
 Corbett, D. 43
 Corbett, S. 54
 Cordell, J. 12, 21, 31, 34, 42, 55
 Corman, S.S. 55
 Cormier, N. 21
 Cornelissen, G. 50
 Cornell, A. 50
 Cornu, C. 28, 39, 41
 Cornwell, J. 15, 21, 30, 32, 52
 Cornwell, T.J. 14, 44
 Coronado-Molina, C. 52
 Corry, T. 21
 Corzo, A. 53
 Cossarini, G. 32
 Cothran, J. 13
 Cotter, A. 21
 Coulton, K.G. 30
 Councilman, J. 46
 Counihan, T.D. 31
 Coupe, R.H. 43
 Courtenay, S.C. 18
 Cousins, M. 29
 Couvillion, B. 29
 Couvillion, B.R. 52, 57
 Cowan, J. 43
 Cowan, J.H. 35, 49
 Cowen, J. 33
 Cowles, G.W. 45
 Cowley, P. 40
 Craft, C. 10, 12, 21
 Cragin, M.H. 31
 Craig, B. 10
 Craig, K. 33
 Craig, P. 12, 29
 Cramer, A. 56
 Crawford, C. 30
 Crawford, M. 21
 Crawford, T.N. 41
 Cresswell, J. 57
 Cretini, K.F. 11
 Crevatin, E. 32
 Crim, R. 54
 Crist, P. 30, 34, 41
 Crossen, D. 15
 Cross, L. 22, 31
 Crosslin, T. 42

Cross, L.M. 52
 Cross, S. 37
 Crout, R. 48
 Crowell, M. 30
 Crump, B. 19, 36, 38
 Crump, B.C. 53
 Crusius, J. 46
 Cuesta, J.A. 36
 Culbertson, J. 21
 Cullen, L.C. 20
 Cullinan, V. 14
 Cummings, K. 45
 Cunha, A.H. 22
 Cunningham, M. 47
 Curran, M. 50
 Curran, M.C. 12, 35
 Currin, C. 36, 38
 Czubakowski, J.L. 15

D

Dagher, H.J. 11
 Dahl, K. 37
 Daly, E. 16, 33
 Dam, H.G. 54
 Dana, R. 14
 D'Andrea, A.F. 31, 51
 Dangremond, E.M. 57
 Dantin, D.D. 54
 Darby, F. 18
 Dare, J. 57
 Das, A. 29
 Daskin, J.H. 41
 Davenport, E. 34
 Davey, E. 20
 Davias, L.A. 52
 Davidson-Drexel, J. 32
 Davidson, T.M. 55
 Davies, G. 57
 Davis, D. 22
 Davis, J. 30, 34, 42
 Davis, K.S. 17
 Davis-Lowe, E. 57
 Davis, S.E. 17, 45
 Dawson, M.N. 14
 Day, J. 33, 35, 56
 Day, J.N. 56
 Day, J.W. 56
 Day, R.H. 38, 56, 57
 Day, W. 23
 Deacutis, C. 52
 Deal, B. 39
 DeAmicis, S. 12
 DeAngelis, D.L. 23
 Dean, J. 10
 Deborah, D.A. 11
 de Brauwere, A. 18, 19
 de Brye, B. 19
 Deck, A. 40
 Decker, M. 14, 16
 Deegan, L. 47
 Deehr, R.A. 22
 Defeo, O. 37
 Degens, S. 21
 Degraer, S. 17, 20, 40
 De Guise, S. 28
 Deheyn, D. 53
 de Jong, D.J. 18
 de Jonge, V.N. 23
 de la Torre Castro, M. 22

DeLaune, R.D. 18
 Deleersnijder, E. 19
 De Ley, P. 44
 Delgadillo-Hinojosa, F. 53
 Delgado, P. 40, 42
 Dellapenna, T. 45, 50
 Dellapenna, T.M. 50
 Del Negro, P. 32, 34
 DeLorenzo, M.E. 43
 DeLorenzo, S. 51
 Delp, T. 52
 DeMarzo, A. 42, 54
 Demer, D.A. 16
 den Hartog, C. 20
 Denkert, B. 45, 53
 Denkert, B.A. 23, 45
 Dennison, W. 13, 16, 17, 22, 30
 Dennison, W.C. 47, 50
 Denslow, N.D. 33
 DePinto, J.V. 17
 DePiper, G. 34
 De Ridder, F. 18
 de Rivera, C.E. 55
 Derr, A. 47
 de Swart, H.E. 19
 Detenbeck, N. 41, 43
 Dethier, M.N. 42
 Dettmann, E. 41, 43
 De Vittor, C. 32
 Devol, A. 11, 36
 Devreker, D. 19
 de Vries, M.B. 18
 De Vries, M.B. 12
 DeVries, P.J. 31
 Dewey, R. 13
 DeWitt, T.H. 18, 33
 DeYoe, H. 10, 12, 47, 49
 Dharia, P. 15, 21
 Diaz, R. 17, 21, 29, 35
 Di Carlo, G. 31
 Dickhudt, P. 19, 21
 Dider, K. 17
 DiDonato, E. 34
 Diefenderfer, H. 28, 30, 32
 Diefenderfer, H.L. 51
 Dieppa, A. 41
 Dijkstra, J.T. 18
 DiMarco, S. 50
 DiMarco, S.F. 29
 Dionne, M. 22, 28
 D'Iorio, M. 50
 Dixon, K. 29
 Doall, M. 42
 Dobbs, F.C. 21, 28
 Doering, P.H. 30
 Doherty, M. 36, 51
 Dokka, R.K. 39
 Domske, H. 46
 Donaghay, P. 17
 Donders, T. 29
 Dong-Yoon Lee, D. 19
 Donnellan, M.D. 35
 Donovan, L. 46
 Dorton, J. 48
 Doty, S.M. 19
 Doumbia, J. 41
 Dovalina, S. 43
 Dowty, P. 20
 Doyle, J. 28
 Doyle, L. 35, 37
 Doyle, M. 21
 Doyle, T.W. 38, 56

Draghi II, A. 28
 Draheim, R. 31
 Drake, L.A. 21
 Drake, P. 36
 Drexler, J. 12
 D.Thottahil, S. 30
 Duarte, C. 16, 38
 Dubois, J. 55
 Duda, J.J. 16
 Dudas, S. 28
 Duerr, J. 12
 Duff, J.A. 20
 Duffy, J.E. 49
 Dugan, J. 46
 Dugdale, R. 32, 34, 48
 Dumbauld, B. 45
 Dumbauld, B.R. 18, 40, 42
 Dunn, J. 51
 Dunn, S. 15
 Dunton, K. 18, 49
 Dunton, K.H. 13, 14
 Dupuis, M.J. 56
 Durako, M.J. 10, 18, 48
 Durand, J. 19, 35
 Durbin, E. 54
 Dusek, E. 51
 Dutch, M. 11
 Dutch, M.E. 11

E

Eaton, C.D. 10
 Ebberts, B. 32, 34
 Eberhardt, S. 22
 Ecklund, J. 10
 Eerkes-Medrano, D. 35
 Eggins, S. 21
 Eggleston, D.B. 15
 Ehlinger, G. 29
 Ehmen, B. 18
 Eisen, J. 38
 Elias, E. 19, 45
 Elise, G.F. 48
 Elizalde, C. 48
 Elken, J. 13
 Ellegaard, M. 38
 Ellings, C. 30, 34
 Elliott-Fisk, D. 40
 Ellis, D. 21
 Ellis, G. 23
 Ellis, L.R. 53
 Elsey-Quirk, T. 55
 Elston, S.A. 11
 Emmett, R. 16, 18, 35, 46
 Enache, M. 42
 Engle, V. 11, 13, 41, 44
 Eng, M. 16
 Enriquez, C. 39
 Ensign, S. 21, 35
 Erofeev, A. 13
 Eshghi, A. 28
 Eslinger, D. 41
 Essington, T.E. 42
 Estes, S. 51
 Estevez, E. 29
 Evans, N. 22
 Evans, T. 22
 Ewe, S. 52

F

Fabbro, C. 32
 Falconi, C. 32
 Fan, C. 54
 Fancher, K. 37
 Farnsworth, K. 19, 45
 Farr, H. 10
 Farris, C. 22
 Fear, J. 37
 Fee, S. 23
 Fehm-Sullivan, E. 54
 Feinstein, L. 57
 Felch, J.H. 53
 Feller, I.C. 38, 52
 Feng, Y. 50
 Fennel, K. 50
 Ferdana, Z.A. 34
 Ferguson, A. 17
 Ferm, N.C. 21
 Fernandez Delgado, C. 36
 Ferrarese, E. 31, 54
 Ferraro, S.P. 28, 45
 Ferreira, J.G. 32, 34, 41
 Ferrier, L. 20, 49
 Fertig, B. 17
 Fettweis, M. 40
 Feyrer, F. 29
 Field, C.L. 51
 Field, E. 37
 Filippino, K.C. 15, 38
 Fillis, D. 47
 Finkbeiner, M. 57
 Finkbeiner, M.A. 57
 Finlayson, D. 10
 Finn, J.T. 23
 Fischer, M.R. 57
 Fisher, K.M. 13
 Fisher, T.R. 47
 Fisher, W.S. 14, 15
 Fishman, P.A. 31
 Fisk, A.T. 15
 FitzGerald, D.M. 12
 Fitz, H.C. 34
 Fitzpatrick, J.J. 30
 Flament, P. 22
 Flannery, M.S. 29
 Fleenor, W. 35, 37
 Fleming, I.A. 12, 14
 Fletcher, M. 48
 Flitcroft, R.L. 51
 Flynn, A.M. 17
 Foe, C. 32
 Foggo, A. 12
 Fogleman, T. 12
 Foley, C. 47
 Foley, M.M. 34
 Folger, C. 10
 Fong, D. 22, 37
 Fong, P. 19, 37, 39, 40, 52
 Fonseca, M. 11
 Ford, K. 22, 30
 Ford, P.W. 31, 38
 Fore, L.S. 14
 Foreman, K. 13, 14, 28, 36, 44
 Foreman, K.H. 46
 Foreman, K.L. 40
 Foret, J.D. 18
 Forsch, M. 57
 Fortes, M.D. 20
 Fortunato, C.S. 36, 38

Foster, A. 52
 Foster, G. 53
 Foster, G.D. 57
 Foster, M.A. 33
 Foster, S.Q. 56
 Fourqurean, J. 15, 16, 18, 36, 42
 Foust, C.M. 35
 Fox, S. 14
 Fox, S.E. 37, 39
 Francis, C.A. 38, 47, 51
 Frankovich, T.A. 42
 Fraser, S. 38
 Frazer, T.K. 53
 Frazier, M. 23
 Frechette, D. 35
 Fredrickson, K. 23
 Fredrickson, K.A. 54
 Freed, S. 45
 Freeman, A. 32
 Freeman, A.M. 44
 Freire, J. 57
 French McCay, D. 17
 French-McCay, D. 17
 Fresh, K. 10, 12, 14, 44
 Fresquez, C.C. 31
 Frew, R. 54
 Frick, W.E. 13
 Friedenberg, L. 10, 23
 Friedrichs, C. 19, 21
 Fringer, O. 53
 Frisk, M.G. 21
 Fry, B. 15, 17, 36
 Fu, C. 36, 55
 Fugate, D.C. 23, 53
 Fukumori, K. 53
 Fulford, R. 17
 Fulford, R.S. 50
 Fuller, A. 33
 Fuller, J. 32, 34, 48
 Fuller, R.N. 33
 Fulton, B. 30
 Fulton, M.H. 43
 Fulweiler, R.W. 38
 Funk, C. 13
 Furman, B. 18
 Furota, T. 55

G

Gaeckle, J. 49
 Gaeckle, J.L. 10, 20
 Gaff, H. 28
 Gailani, J.Z. 44
 Gain, I.E. 53
 Gaiser, E. 31
 Gallagher, S.M. 15
 Gallagher, J.L. 30, 55
 Gallegos, C. 32
 Galleher, S.N. 18
 Gallo, J. 22
 Gallo, T. 30
 Galloway, A.W. 40
 Galván, C. 20
 Gambrell, R. 49, 55
 Gambrell, R.P. 49
 Ganesan, R. 46
 Gao, Y. 32
 Garcia Neto, E.V. 50
 Garcia-Robledo, E. 53
 Garcias-Bonet, N. 38

Garde, K. 51
 Gardner, K. 30
 Gardner, W.S. 20, 31, 33, 50
 Garono, R. 31
 Garono, R.J. 47, 54
 Garreau, C.M. 48
 Garritt, R. 34
 Garrity, N. 56
 Gass, J. 50
 Gaydos, J. 57
 Gaylord, B. 57
 Geatz, G. 52, 55
 Geatz, G.W. 55
 Gedan, K.B. 18
 Geerlofs, S. 39
 Gehrke, C. 10, 46, 49
 Gelfenbaum, G. 45
 Geoghegan, C. 39
 Geoghegan, C.E. 37
 Gephard, E. 28
 Gergel, S.E. 13
 Geron, C. 29
 Geyer, K. 32
 Geyer, R. 20
 Geyer, W. 45
 Ghazizadeh, S. 29
 Ghiglione, J. 38
 Giannico, G.R. 16
 Giblin, A. 13, 14, 28, 36, 37, 46
 Giblin, A.E. 46
 Gibson, C. 57
 Gibson, D. 10
 Gibson, J. 10
 Gibson, P.J. 20
 Giddings, S.N. 37
 Giesen, W. 18
 Gillett, D.J. 17
 Gillevet, P.M. 51
 Gillikin, D. 47
 Gilman, C. 12
 Ginger, T. 52
 Gingras, M. 55
 Ginsburg, H.S. 28
 Gintert, B. 13
 Giordano, J.P. 36
 Giosan, L. 33
 Gladics, A.J. 57
 Glibert, P. 11, 32, 34
 Gobler, C.J. 40
 Godhe, A. 38
 Godwin, D. 39
 Goetz, F. 44
 Goff, M. 34
 Gohbrial, S. 45
 Gold, A. 42
 Goldfinger, C. 14
 Goldman, E. 18
 Goldman, J. 19
 Golet, F. 12
 Gommermann, L.W. 53
 Gongol, C.L. 17, 54
 Goni, M. 45, 47
 Goñi, M. 47
 Goni, M.A. 45
 Gonzalez Del Río, J. 44
 Gonzalez, E. 50
 Gonzalez, L.A. 41
 Gonzalez Ortegon, E. 36
 Gooch, J. 43
 Goodbred, S.L. 18
 Goodin, K. 57
 Goodin, K.L. 57

Goodman Collins, D. 36
 Goodman, L. 22
 Goodman, P.K. 14
 Goodman, T. 31
 Goodwiin, J. 51
 Gordon, J. 55
 Gormally, C. 46
 Gould, A.L. 21
 Gould, K. 31, 54
 Goulette, G.S. 33
 Gourgue, O. 18, 19
 Grablow, K.R. 53
 Gracias, N. 13
 Grady, S.P. 56
 Graff, J.R. 34
 Graham, J.M. 38, 56
 Graham, S.A. 30
 Graham, S.L. 54
 Graham, T.R. 16
 Graham, V. 43
 Granek, E. 53
 Granek, E.F. 34
 Graves, G. 29, 56
 Gray, A. 14, 28, 45
 Gray, A.B. 19
 Graybill, M. 32
 Grayson, T.S. 13
 Gray, W. 16
 Grebmeier, J.M. 16
 Grech, A. 22
 Greene, C. 10, 12, 16, 44
 Greene, R.M. 11
 Greene, V.E. 32
 Greenfield, D. 13
 Greengrove, C. 11, 48
 Greening, H. 11, 15, 22, 31
 Greening, H.S. 52
 Green, J. 36
 Green, L. 37
 Green, L.T. 28
 Green, V.L. 46
 Greenwood, M. 31
 Greenwood, S. 30
 Gregory, S. 31
 Grevstad, F. 31
 Griffith, D.C. 22
 Grigg, N.J. 31, 38
 Grijalva, E. 57
 Grimaldo, L. 12
 Grizzle, R. 53
 Grober-Dunsmore, R. 17
 Groffman, P.M. 30
 Grosholz, E. 38, 40
 Grosholz, E.D. 49
 Grossman, E. 10, 28, 34, 42, 45
 Gruber, R.K. 18
 Grubert, M. 22
 Grupe, B. 34
 Grupe, B.M. 16
 Guarinello, M. 11, 13
 Guerra, J. 50
 Guerry, A.D. 16
 Guida, V.G. 23
 Guidone, M. 37
 Guillen, G.J. 15, 55
 Guinotte, J. 50
 Gulbransen, T. 42
 Gulland, F. 28
 Guntenspergen, G. 10, 18, 33, 39
 Guo, D. 48
 Guo, L. 36, 55
 Gupta, G.V.M. 30

Gurbisz, C. 10, 29, 46
 Gustafson, R. 18
 Gustafsson, B.G. 37, 43
 Guthrie, C.G. 50

H

Haag, S. 39
 Haas, E. 32
 Habib, E. 29
 Hacker, S. 22, 31, 39, 45, 49
 Hacker, S.D. 45
 Hackett, K. 40
 Hackney, C. 21
 Haddad, T. 14
 Haehn, R. 50
 Hagadorn, J.W. 14
 Hagley, C. 46
 Hagood, G. 41
 Hagy, J.D. 11
 Ha, H. 44
 Halchak, J.L. 30
 Hale, R. 19
 Hales, B. 47
 Halka, J. 32
 Hall, C.J. 21
 Hall, C.R. 48
 Hallett, C.S. 40
 Hall, J. 10, 21
 Hall, L. 18
 Hall, M.O. 18, 57
 Hall, N.S. 31, 36
 Hall, R.L. 14
 Halpin, E. 48
 Halsey, K. 57
 Hamaguchi, M. 37
 Hamdan, L.J. 51
 Hamilton, J. 33
 Hamlet, A.F. 21
 Hamlin, L. 44
 Hamm, D. 37, 39
 Hammond, M.P. 17
 Hamner, W.M. 14
 Hampden, J. 34
 Hampson, J.C. 14
 Hancock, R. 12
 Hanke, A. 38
 Hansen, D.M. 57
 Hansen, G.I. 14
 Hansen, J. 41
 Hanson, B. 28
 Hanson, J. 22
 Harding, J. 35
 Hardison, A. 36
 Hardison, A.K. 51
 Harlem, P. 36
 Härnström, K. 38
 Harper, S. 38, 56
 Harris, C.K. 19, 50
 Harris, L. 18, 22, 45, 49
 Harrison, J. 57
 Harrison, P.J. 36, 38
 Harris, P.M. 44
 Harstad, D. 35
 Hart, D.A. 46
 Hart, K.J. 22
 Hartmann, A. 16
 Hartsig, A. 54
 Hartsig, A.M. 47
 Harvey, J. 44

Harvey, J.T. 16
 Harwell, L. 44
 Haskell, C.A. 30
 Haskett, K. 55
 Haskins, J.C. 15
 Hastings, L.L. 39
 Hastings, R.H. 45
 Hatch, D. 34
 Hatcher, P. 15
 Hatten, J. 45
 Hatten, J.A. 47
 Hawkes, J.P. 33
 Hayden, N. 50
 Hayes, M. 45
 Hayes, S. 28
 Hayes, S.A. 35
 Haynes, L. 14
 Hayn, M. 13, 28
 Hay, S.J. 38
 Haywood, E. 12
 Heath, M.R. 21, 38
 Hebbeln, D. 19
 Hecht, S.A. 43
 Heck, K. 16, 38, 55
 Heerhartz, S.M. 12
 Heggie, K. 17, 45
 Heikes, B. 47
 Heiskanen, A. 41
 Heitmüller, P.T. 11
 Helander, E. 43
 Helms, A. 42, 54
 Helmuth, B. 13
 Helshe, J. 42
 Heltshe, J.F. 28
 Hench, J. 37, 39
 Henderson, J.S. 31
 Henderson, S.M. 10
 Hendrickson, J. 54
 Henriksen, P. 37
 Henry, K.M. 52
 Hensel, P. 39, 42
 Henshaw, D. 33
 Heo, M. 20
 Heppell, S.S. 18
 Herbert, D.A. 36
 Herbert, E. 12, 36
 Herbert, E.R. 54
 Herbort, M. 45
 Herfort, L. 36, 38, 51
 Hering, D.K. 14
 Herman, P. 13, 17
 Hermosilla, Z. 44
 Hernandez, A. 48
 Hernandez-Ayon, J.M. 42
 Herrera, J.A. 10
 Herrera-Silveira, J.A. 47
 Hershner, C. 29, 43
 Herstine, J. 30
 Herwig, R. 21
 Herzka, S.Z. 15, 17, 40
 Hessing Lewis, M. 31
 Hessing-Lewis, M. 39, 49
 Hester, M.W. 28, 35, 38, 49, 56
 Hetland, R. 50
 Hetland, R.D. 22, 37
 Hettinger, A. 57
 Heupel, M.R. 15
 Hewitt, C. 32
 Hibbert, J. 13
 Hickey, B.M. 28
 Higgins, J. 51
 Higgins, S. 39

Hilbish, T.J. 13
 Hilborn, R. 16
 Hill, J. 30
 Hill, P.S. 19
 Hill, T. 57
 Hill, V. 53
 Hinchey, E.K. 22, 46
 Hindell, J. 53
 Hines, E. 29
 Hinojosa-Corona, A. 52
 Hinton, S. 10
 Hinton, S.A. 44
 Hinz, S.C. 17
 Hitchcock, G.L. 23
 Hitt, S. 11
 Hjerne, O. 30
 Hladik, C. 35, 54
 Hladik, C.M. 54
 Hobbs, J. 23
 Ho, C. 30, 57
 Hoda, A. 29
 Hodder, J. 10, 14, 46
 Hodges, B.R. 52
 Hodgson, S. 30
 Hoekstra, P. 19
 Hoffer, S. 13
 Hoffman, E. 55
 Hoffman, J. 21, 43
 Hoffman, R. 55
 Hogg, I.D. 15
 Hogle, I. 57
 Hoitink, A. 19
 Holcomb, J. 23
 Holden, T. 51
 Holland, D. 42
 Hollander, D. 17
 Holland, F. 37, 43
 Holleman, R. 50
 Holman, M. 42
 Holmer, M. 12
 Holm, G.O. 29, 35, 39, 51
 Holser, R.R. 47
 Holsman, K.K. 35, 42
 Holzer, K.K. 14
 Hondorp, D.W. 52
 Hong, B. 28
 Hood, G. 10
 Hood, R. 16, 19, 31
 Hood, R.R. 53
 Hoover, K. 12
 Hopkinson, C. 34, 46, 50
 Hopkinson, C.S. 50
 Hori, M. 37
 Horner-Devine, A. 22
 Horner-Devine, A.R. 39
 Horner-Devine, C. 38
 Horner-Devine, M. 38
 Hosokawa, S. 48
 Hossain, I. 52
 Hostens, K. 13
 Houde, E.D. 11, 15, 18, 46
 Hou, L. 31
 Housman, K. 57
 Houziaux, J. 40
 Hovel, K.A. 11
 Hovey, R.K. 16
 Howard, A.C. 52
 Howard, M.K. 29
 Howard, R.J. 56
 Howard, S. 42
 Howarth, R. 13, 14, 28, 36, 37
 Howarth, R.W. 46

Howe, E.R. 10
 Howell, A. 56
 Howes, B.L. 41
 Howlett, E. 17
 Howson, U.A. 51, 54
 Hoyt, K. 16
 Hsueh, M. 53
 Huang, D. 12
 Huang, H. 35
 Huang, L. 33
 Huang, X. 12
 Hubbard, D. 46
 Hubbard, M.F. 56
 Huber, T. 20
 Hudley, J.W. 23
 Hughes, B.B. 15
 Hughes, R. 16
 Hughes, S.L. 38
 Hughes, Z.J. 10, 12
 Humborg, C. 12, 41
 Humphries, A.T. 40
 Hunley, W. 30
 Hunt, C. 42
 Hunter, M. 56
 Hunter, M.G. 56
 Hunter, N. 10
 Hunter, R. 56
 Hunter, R.G. 56
 Hunt, H. 40
 Huntington, B. 17
 Hurley, D. 37, 50
 Hu, X. 15
 Hyacinthe, C. 38
 Hyatt, C.J. 40
 Hyde, N. 50
 Hyland, J. 37

I

Ibáñez, C. 33
 Ignatiades, L. 41
 Ignoffo, T. 45
 Ingle, J. 47
 Inoue, M. 29
 Irvine, I.C. 51

J

Jack, M. 17
 Jackson, G. 50
 Jackson, J.R. 11
 Jackson, K. 49
 Jackson, N.L. 46
 Jacob, J. 23, 36, 41
 Jacobs, J. 23, 36, 46
 Jacobson, K. 12, 18, 35
 Jacobson, P.T. 14
 Jaffe, B. 19, 36
 Jahncke, J. 23
 Jahn, G.L. 53
 James, N. 40
 James-Pirri, M. 28
 Janicki, A. 11, 15, 31, 40
 Jannasch, H.W. 19
 Janssens, J. 40
 Jaques, D. 23
 Jaramillo, A.V. 57

Jarvis, J.C. 53
 Jassby, A.D. 36
 Jaw Chun, Y. 48
 Jay, D. 19, 21, 22, 44, 53
 Jay, D.A. 53
 Jenkins, D.G. 53
 Jenkins, G. 53
 Jennerjahn, T. 34
 Jesien, R.V. 47
 Jessup, A. 39
 Jessup, D. 23, 28
 Jewett, E. 20
 Jin, B. 36, 55
 Jochens, A.E. 29
 Joffrion, R. 56
 Johannessen, J. 51
 Johansson, M.L. 18
 Johns, E. 56
 Johnson, D. 47
 Johnson, E. 13
 Johnson, G. 30, 32
 Johnson, H. 28
 Johnson, J. 31, 44
 Johnson, J.C. 22
 Johnson, J.M. 18
 Johnson, K.S. 19
 Johnson, L. 28, 30, 32, 42
 Johnson, L.K. 40
 Johnson, R. 20, 47
 Johnson, S. 13
 Johnson, S.R. 54
 Johnson, S.W. 44
 Johnson, Y. 56
 Johnston, M.A. 51
 Johnston, R.K. 42
 Jones, A. 50
 Jones, A.B. 50
 Jones, E. 37
 Jones, G. 20
 Jones, K. 28, 31, 32, 42
 Jones, K.K. 14, 44
 Jones, M. 13
 Jones, M.K. 18
 Jones, R. 47
 Jones, R.C. 13
 Jones, R.J. 14
 Jones, S. 13
 Jones, S.J. 33
 Jones, T.A. 42
 Jordaan, A. 21
 Jordan, S. 13, 40, 41
 Jordan, S.J. 54
 Jorgensen, S. 15
 Jose, F. 44
 Joshi, D. 28
 Joye, S.B. 28, 38
 Juanes, J.A. 20
 Judd, C. 34
 Judith, T. 16
 Juli, D. 13
 Junemann, C.E. 32
 Jung, Y. 45
 Jun, M. 21
 Justic, D. 17, 29, 35

K

Kach, D. 28
 Kagan, J. 57
 Kagley, A. 12, 14

Kagley, A.N. 44
 Kahn, A.E. 48
 Kahn, P. 51
 Kaihatu, J. 50
 Kairis, P. 10
 Kaiser, C. 52
 Kaldy, J. 39
 Kaltenberg, A.M. 18
 Kamer, K. 47
 Kamimura, Y. 54
 Kamman, G. 21, 38, 39
 Kamman, R. 21, 38
 Kanapaux, W. 50
 Kane, T.L. 19
 Kang, C. 46, 52, 56
 Kang, S. 20
 Kang, Y. 20
 Kaplan, I. 16
 Karageorge, K. 14
 Kara, L.F. 21
 Karen, B. 52
 Karl, B. 19
 Karlen, D. 31
 Kärnä, T. 19
 Karauskas, M. 17
 Karrh, L. 49
 Karrh, L.P. 22
 Karr, J. 16, 34
 Kassondera, D.C. 10
 Katyal, R. 30
 Kaufman, K. 14, 38
 Kaushal, S.S. 17, 30
 Kawase, M. 31
 Kayen, R. 36
 Kay, I. 16
 K.Balachander, K. 30
 Kearney, M. 10, 40
 Keay, K.E. 17
 Keil, R. 10, 47
 Keim, B. 22
 Keisman, J. 12, 14
 Keister, J.E. 45
 Kelble, C.R. 23
 Keller, D. 19, 31
 Keller, D.P. 53
 Kelley, J.T. 16
 Kelly, C.J. 20, 50
 Kelly, D. 41
 Kelly, J.R. 21
 Kelly, V. 53
 Kelsey, H. 30
 Kelsey, R.H. 13, 51
 Kelsey, S. 46
 Kemp, M. 10, 15
 Kemp, P. 35
 Kemp, W. 15, 17, 35
 Kemp, W.M. 15, 18, 29
 Kendall, T.R. 16
 Kendrick, G. 16, 18, 20
 Kenne, A.K. 20
 Kennison, R. 37
 Kenny, P. 20
 Kentula, M. 41
 Kenworthy, J. 18, 57
 Kenworthy, W.J. 31
 Keppler, C. 41
 Kerr, D. 57
 Ketcham, B. 21, 38
 Keyzers, M. 13
 Khalil, S. 44
 Khangaonkar, T. 15, 39, 45, 53
 Kiehn, W.M. 55

Kiesling, J. 44
 Kiesling, R.L. 47
 Kikas, V. 13
 Kikuchi, T. 44
 Kilanowski, E.M. 56
 Kimball, B. 10, 47
 Kimball, M. 43
 Kim, C. 16
 Kim, D. 56
 Kim, H. 28, 29, 43
 Kim, J. 48, 56
 Kim, J.B. 23, 48
 Kim, K. 46
 Kimmel, D. 19, 21, 31
 Kimmel, D.G. 45
 Kimmerer, W. 19, 21, 23, 32, 45
 Kimmerer, W.J. 45
 Kim, N. 52, 56
 Kim, S. 22, 32, 44, 48, 56
 Kim, T. 15
 Kim, Y. 48, 56
 Kinder, C.A. 34
 King, I. 44
 King, J. 11, 13
 Kingsley, R. 54
 Kinney, E.L. 28
 Kinoshita, H. 54
 Kiriakopoulos, S.L. 48
 Kirshen, P. 42
 Kirwan, M. 10, 18, 33
 Kiss, E. 36
 Kiviat, E. 42
 Klaassen, P. 12, 18
 Klein-MacPhee, G. 22
 Kleiss, B.A. 29
 Klement, B. 53
 Klinger, T. 21
 Kloehn, K. 34
 Knee, K.L. 28
 Kneib, R.T. 36
 Knight, C. 16
 Kniskern, T. 45
 Kniskern, T.A. 19
 Knudsen, K.L. 29
 Koch, C. 47
 Koch, E.W. 12, 18, 33
 Koch, G.R. 51
 Koch, M.S. 31
 Koch, P.L. 34
 Kocik, J.F. 33
 Koepfler, E.T. 10, 12, 51
 Ko, J. 20, 47, 52
 Kolker, A.S. 18, 54
 Kopp, B.S. 18
 Koroncai, R. 41
 Korpinen, S. 13
 Kosro, M. 13
 Kowalski, J. 47
 Kowalski, J.L. 12
 Kozlowski, M. 46
 Kraatz, L.M. 19
 Krahforst, C. 56
 Krahforst, C.S. 43
 Kral, G.L. 32
 Kramer-Wilt, E. 32
 Krause-Jensen, D. 37
 Krauss, K.W. 11, 21, 56
 Krebs, J. 20, 31
 Kreeger, D. 20, 22, 42, 54
 Kreidler, J. 41, 54
 Krembs, C. 13, 47
 Kremer, J. 57

Kropp, R.K. 17
 Kruger, B. 11, 48
 Krumholz, J.S. 37
 Krupp, L. 34
 Kryss, C.L. 35
 Ksiazek, K. 10, 46
 Kuanui, P. 37
 Kudela, R. 34
 Kudela, R.M. 47
 Kuehl, S.A. 21
 Kuhn, S. 42
 Kuivila, K.M. 53
 Kulis, P.S. 52
 Kunzelman, J. 10, 18, 57
 Kuosa, H. 37
 Kürten, B. 15
 Kurtz, J.C. 11
 Kuvaldina, N. 13, 31
 Kuykendall, J.I. 50
 Kwak, J. 52, 56
 Kyte, M.A. 55

L

Laamanen, M. 13, 37
 Labiosa, R.G. 15
 Labiosa, W. 54
 Labiosa, W.B. 41
 Lackey, T. 22, 28
 Lacouture, R.V. 11, 47, 54
 Lacy, J.R. 44, 49
 Ladd, C. 16
 Laetz, C. 43
 Laferriere, A. 18, 32
 LaFrance, M. 13
 Lagemaa, P. 13
 Lake, S.J. 52
 Lakish, B. 19
 Lakshmi, V. 13
 Lamberson, J. 23
 Lambert, L. 52
 Lambrechts, J. 18
 Lamparelli, C.C. 15
 Lamparelli, M.C. 15
 Lancelot, C. 41
 Landers, T. 56
 Landis, E. 28
 Land, L. 55
 Landon, M.M. 11
 Lane, A. 44
 Lane, J.Q. 47
 Lane, M. 44
 Lane, R. 52, 56
 Lanerolle, L. 13
 Lane, R.R. 52, 56
 Lane, S.J. 50
 Langan, R. 39
 Langdon, C. 35
 Langley, A. 38
 Lantoine, F. 38
 La Peyre, M. 11, 22, 30, 40, 46, 55
 Lapointe, B.E. 47
 Lara, M. 50
 Large, S. 28
 Largier, J. 23, 40, 56
 Larreta, J. 11
 Larsen, K. 14, 30
 Larson, K. 20
 Lasseigne, J. 29
 Lathrop, R.G. 39

- Latimer, J.S. 13
 Lauer, N.T. 49
 Law, B.A. 19
 Law, C. 12
 Law, C.G. 50
 Law, G. 38
 Lawless, A. 20
 Law, N.L. 39
 Lawrence, D. 21
 Lawson, C. 42
 Lawson, P. 29
 Lea, P. 48
 LeBlanc, C. 16
 Lee, C. 37, 45
 Lee, C.T. 57
 Lee, D. 31, 53
 Lee, D.M. 29, 44
 Lee, H. 11, 23, 37, 48
 Lee, K. 10, 19, 37, 44, 48, 49, 56
 Lee, L. 53
 Lee, R.F. 43
 Lee, S. 22, 31, 38
 Lee, W. 30, 44
 Lee, Y. 52
 Leffler, K. 21
 Leffler, K.E. 53
 LeGresley, M. 38
 Lehman, P.W. 23
 Lehrter, J. 15, 36, 53
 Leight, A.K. 23
 Leischner, F. 34
 Lemieux, B. 55
 Lemieux, E.J. 21
 Lenaker, P.L. 30
 Leonard, J.A. 33
 Leonard, L. 21, 48
 Lepczyk, C. 15
 Lerczak, J. 20
 Lessmann, J.M. 46
 Lester, K.M. 57
 Lester, L.J. 41
 Letter, J.V. 21, 35
 Lev, E. 57
 Leverone, J. 15
 Levings, C. 16
 Levin, L.A. 15, 17, 28, 53
 Levin, M. 28
 Levin, P. 16
 Levinton, J. 42
 Lewandowski, M. 49
 Lewandowski, M.J. 22
 Lewis, E.J. 23
 Lewis, M. 19, 41, 48
 Liao, S. 28
 Libby, P.S. 38
 Liblik, T. 13, 31
 Libralato, S. 32
 Li, C. 49
 Lichter, J. 48
 Lichtkoppler, F.R. 46
 Liddel, M. 51
 Liedtke, T. 45
 Liedtke, T.L. 18
 Lijun, H. 50
 Lill, A.W. 11
 Limburg, K. 17, 43
 Lim, M. 52, 56
 Lindahl, O. 34
 Lindley, S. 54
 Lind-Null, A. 30
 Lindquist, N. 20
 Lindsey, J. 56
 Lindstrom, S. 48
 Lin, H. 37, 53
 Linker, L. 12, 32, 41
 Linthurst, R. 43
 Lionard, M. 19
 Lipcius, R. 17, 20
 Lipcius, R.N. 55
 Lipizer, M. 32
 Lips, I. 13, 31
 Lips, U. 13, 31
 Lipton, D. 34
 Lirman, D. 11, 13, 17
 Li, S. 12
 Littler, D.S. 47
 Littler, M.M. 47
 Litz, M. 46
 Litz, M.N. 18
 Liu, H. 16
 Liu, J.T. 19
 Liu, K. 45
 Li, W. 56
 Li, Y. 10
 Li, Z. 34
 Llanso, R.J. 32
 Loboshevsky, E. 55
 Lohstroh, B. 42
 Lokken, D. 37
 Lomax, D. 30
 Long, E.R. 11
 Longstaff, B. 13
 Longstaff, B.J. 30, 47
 Longval, B.A. 18
 Long, W. 31
 Loper, J. 29
 Lopez-Alvirde, S. 40
 Lopez-Duarte, P.C. 17
 López-Herrera, M.N. 48
 Lopez, M. 48
 Lopez, R. 41
 López-Rasgado, F.J. 17
 Lorenz, M. 37
 Loschl, P.J. 35
 Losee, J.P. 35
 Lott, M.A. 55
 Louchouart, P. 50
 Lovelock, C. 10
 Lovelock, C.E. 52
 Love, N. 15
 Lowe, M.R. 20, 35
 Lowe, R. 23
 Lozano, C. 15
 Lucas, L.V. 38
 Luckenbach, M. 16, 37
 Luczkovich, J.J. 22, 43
 Lu, D. 34
 Ludsin, S.A. 11, 31
 Ludt, W.B. 45
 Ludwig, K.D. 35
 Luettich, R. 46
 Lundholm, J. 38, 56
 Lundquist, C.J. 15
 Luzadis, V. 43
 Lynch, J.C. 12
 Lynch, S. 10
 Lynes, A. 54
 Lyons, D.E. 35
 Lyons, M. 28
 Lyons, P. 42
 Macauley, J. 44
 MacConnachie, S. 18
 MacCready, P. 20, 37
 MacDonald, E. 13
 Macdonald, S. 18
 MacDonald, T. 29
 MacFarlane, B. 35
 MacIntyre, H. 18
 Maci, S. 53
 Mackas, D. 33
 MacKenzie, M. 39
 MacKenzie, R.A. 35
 Mackey, K.R. 44
 Macneale, K. 28, 30, 42
 MacVean, L.J. 20
 Madden, C. 17, 29, 34, 39, 57
 Madden, C.J. 57
 Madden, K. 34, 41
 Madensky, N. 53
 Madrid, E.N. 30
 Magnien, R. 11
 Mahadevan, A. 12
 Maher, B.F. 50
 Mahl, U. 46
 Mahl, U.H. 37
 Maidment, D.R. 52
 Maier, D. 57
 Major, C.S. 47
 Major, K. 47, 49
 Major, K.M. 47
 Maki Jenkins, K. 40
 Malek, J.C. 40
 Malkin, E. 31
 Malkoski, V.J. 30
 Mallett, K. 10
 Mallin, M.A. 35
 Mallonee, M. 44
 Maloy, C. 13
 Malpezzi, M. 19, 36
 Manning, S. 33
 Manson, P. 57
 Mantua, N. 16, 28
 Manuel, S.A. 18
 Maranada, L. 28
 Marbà, N. 38
 Marcano, E. 50
 Marchi, A. 32, 34, 48
 Margerum, P. 49
 Marín Jarrín, J.R. 46
 Mariño, I. 39
 Marino, R. 13, 14, 28, 36, 46
 Mariño-Tapia, I. 39
 Marin, R. 13
 Marion, S.R. 16, 33
 Maris, T. 19
 Marko, K. 10
 Markunas, P. 38
 Marley, D. 56
 Marques, C. 21
 Marques, W. 21
 Marshak, A. 55
 Marshall, F. 29, 36
 Martens, C. 20
 Martí, C. 44
 Martignette, A. 47
 Martin, D. 13
 Martin, D.L. 16
 Martinez, G. 40
 Martínez-Guijarro, R. 44
 Martini, E. 12
 Martin, J.L. 38
 Martino, E.J. 11, 31
 Martin, S.K. 21
 Martiny, J. 51
 Martiny, J.B. 38
 Martz, T.R. 19
 Maruya, K.A. 43
 Marx, B. 52
 Mason, D.M. 30, 31
 Massaua, M.J. 18
 Masura, J. 48
 Mateo, I. 54
 Mather, M.E. 23
 Matlock, G.C. 23
 Matso, K. 39
 Matsumoto, J. 50
 Matthaei, C.D. 40
 Mattson, R. 38
 Maxemchuk, A. 42
 May, B. 14
 May, B.P. 44
 May, C. 18, 28, 56
 Mayer, C. 43
 Mayer, G. 57
 Mayer, G.F. 57
 Mayer, P.M. 17, 30
 Mayorga, E. 57
 Mazet, J.A. 23
 Mazumder, A. 33
 Mazzola, A. 53
 McAdory, R. 40
 McAlpin, T.O. 35
 McBride, A. 10
 McCarthy, M.J. 20, 31
 McCarthy, M.M. 50
 McClelland, J.W. 57
 McClellan, C. 17
 McConnell, R. 31, 40
 McConville, S.K. 49
 McCue, L. 36
 McDonald, A. 49, 53
 McDonald, A.A. 29, 39
 McDonald, P. 42
 McDonald, P.S. 40
 McDonald, S. 22, 42
 McElhany, P.E. 45
 McEvoy, P. 31
 McFarlin, C.R. 35
 McGinnis, T. 20
 McGlathery, K. 10, 12, 13, 14, 18, 28, 36, 37, 46, 51
 McGlathery, K.J. 51
 McHorney, R. 46
 McIlwain, J. 18
 McIver, M.R. 35
 McIvor, C. 17, 20
 McKee, B. 45
 McKee, K.L. 18, 38
 McKenzie, L. 20, 22
 McKinney, R. 47
 McKone, K.L. 12
 McLaughlin, K. 37
 McLaughlin, S.M. 23
 McLean, S. 19, 48
 McLenaghan, N. 46, 51
 McLenaghan, N.A. 37
 McLennan, M. 31
 McManus, M.A. 28
 McMichael, R. 31
 McNatt, R. 10
 McNeill, M. 10

McNinch, J.E. 19
 McPherson, J.W. 29
 McQuiddy, D. 56
 McRoy, C. 48
 McVoy, C. 39
 Mead, L.H. 50
 Meagher, L. 44
 Mecray, E. 29
 Medeiros, K. 12, 28
 Medeiros, K.C. 48
 Medina, I. 10
 Meek, M. 14
 Meek, M.H. 44
 Megonigal, J. 55
 Megonigal, P. 38, 55
 Meike, R. 13
 Meire, P. 19
 Mejia, N. 49
 Melaku Canu, D. 32
 Melanie, F. 11
 Mellors, J.E. 20
 Mendelssohn, I. 30
 Mendelssohn, I.A. 12, 28
 Menden-Deuer, S. 23, 54
 Mendez, L. 48
 Mendoza, G. 53
 Menge, B. 28, 35, 39
 Menke, D.P. 52
 Menking, K. 47
 Merani, P.B. 54
 Merello, M. 18, 57
 Merino, J. 48
 Merino, S. 48
 Meriwether, J.R. 20
 Merrell, W. 52
 Merz, J. 14
 Meselhe, E. 17
 Mesfioui, R. 15
 Messick, G.A. 23
 Meyer, D.L. 41
 Meyer, J. 14
 Meynecke, J. 22
 Miallet, B. 19
 Michael, B.D. 29
 Michot, B. 17
 Michot, T.C. 38, 57
 Mickett, J.B. 14
 Mico, C. 47
 Mico, L. 47
 Middelburg, J.J. 15, 30
 Miguel, G. 41
 Mikulak, S. 10
 Milbrandt, E. 47, 53
 Milbrandt, E.C. 53
 Miller, B. 56
 Miller, D.C. 56
 Miller, J. 14, 35
 Miller, J.A. 46
 Miller, K. 37
 Millette, T.L. 50
 Milligan, T. 19
 Milligan, T.G. 19
 Minchinton, T.E. 38
 Minello, T. 30, 36
 Mingione, C.M. 15
 Mintz, M.M. 47
 Miron, G. 40
 Miyajima, T. 37
 Mizuno, K. 54
 Mochon Collura, T. 29
 Mochon-Collura, T. 48
 Moellmann, C. 37

Moerschbacher, M. 56
 Mohlin, M. 51
 Mohri, K. 54
 Moisanter, P.H. 38
 Mokrech, M. 16
 Möller, B.A. 48
 Moller, C. 54
 Moller, L.F. 14
 Möller, O.O. 21, 48
 Monaco, M. 11
 Monaghan, P.H. 17
 Monbaliu, J. 40
 Mondragon, E. 38
 Monismith, S. 37, 39
 Monismith, S.G. 47
 Montagna, P. 28, 29, 31, 37, 40
 Montagna, P.A. 52
 Montague, C.L. 30
 Montgomery, R. 40
 Montserrat, F. 17
 Moody, J. 22
 Moon, D.C. 35
 Mooney, R. 13
 Mooney, R.F. 57
 Moon, G.E. 53
 Moon, J. 35
 Moore, C. 47, 48
 Moore, K. 48, 53
 Moore, K.A. 14, 16, 48, 53
 Moore, S.K. 11, 28
 Morace, J. 28
 Morales, C. 57
 Morales-Ojeda, S.M. 47
 Moran, M.A. 36
 Morehead, S. 41
 Morf, A.B. 43
 Morgan, E.E. 12
 Morgan, J. 52
 Morgan, L. 50
 Morgan, T.L. 21
 Moriarty, J. 19
 Morris, J. 20
 Morris, J.T. 10, 33, 55
 Morris, L. 18
 Morris, M.S. 18
 Morrison, D. 42
 Morrison, J. 11
 Morris, S. 50
 Morse, R.E. 30
 Mörtz, M. 12, 41
 Mort, H.P. 37
 Morton, G. 19
 Morzaria Luna, H. 42
 Morzaria-Luna, H. 40
 Moser, M. 54
 Moses, C. 57
 Moses, C.S. 57
 Mosier, A.C. 38
 Moskal, S. 36
 Moulton, O.M. 45
 Moyle, P.B. 44
 Mozdzer, T.J. 18
 Mueller-Solger, A.B. 32
 Mulder, J. 42
 Mulholland, M. 15, 29, 30, 38
 Mulholland, M.R. 46, 51
 Mullarney, J.M. 10
 Muller-Parker, G. 12
 Mull, P.A. 36
 Mulroney, E. 45
 Mulvey, C. 22
 Mumford, T. 20, 49

Munguia, P. 33
 Munroe, D. 17
 Murata, Y. 44
 Murphy, R. 15, 41, 43
 Murray, A. 18
 Murray, C. 13
 Murray, L. 10, 29, 46
 Muscarella, M. 36, 51
 Mutchler, T. 13, 18
 Muth, R.M. 23
 Muthukrishnan, R. 39
 Muxika, I. 11
 Myers, M.R. 51

N

Nabors, T. 18
 Nagel, A. 40
 Nagey, L.S. 20
 Nair, S. 30
 Najjar, R. 29
 Nakaoka, M. 37, 54
 Nash, J. 22
 Nasrollahi, N. 29
 Nauman, E.G. 30
 Navarro, M.O. 16
 Naylor, M. 49
 Naylor, M.D. 22
 Neale, A. 41
 Neale, P.J. 14
 Nealer, S.L. 54
 Neatt, N.C. 38, 56
 Neckles, H.A. 18
 Needelman, B. 40
 Needelman, B.A. 52, 55
 Needoba, J. 19
 Needoba, J.A. 50, 51, 57
 Neff, D.A. 44
 Neibauer, J. 10, 47
 Neidrauer, C. 39
 Neikirk, B.B. 48
 Neilson, B. 23
 Neilson, M. 35
 Neira, C. 53
 Nelson, B.N. 21
 Nelson, K.K. 52
 Nelson, K.L. 42
 Nelson, W. 11, 23, 44
 Nemerson, D.M. 39
 Nemeth, R. 11
 Nery, D. 15
 Nestlerode, J. 11, 13, 41
 Neubauer, S.C. 40
 Neubert, P.L. 17
 Newcomer, T.A. 30
 Newell, R. 20, 32
 Newell, R.I. 50
 Newkirk, S. 34
 Newsom, A.J. 55
 Newton, J. 11, 13, 14, 31, 36
 Neyland, E. 21
 Nezin, N.P. 42
 Nicholls, R.J. 16
 Nidzieko, N. 37
 Nidzieko, N.J. 47
 Niemand, C. 15
 Niiranen, S. 30
 Nilsen, E. 51
 Nilsson, W. 28
 Nilsson, W.B. 54

Nitsche, F.O. 19
 Nitttrouer, C. 10, 19, 21
 Nixon, M.E. 11
 Nixon, S. 30, 34, 38
 Noakes, D. 16, 23
 Noble, M. 45
 Nobriga, M. 23
 Noda, T. 17, 37
 Noel, M. 32
 Nordstrom, K.F. 46
 Norit, N. 13
 Norkko, A. 37
 Norman, R.S. 51
 North, E.W. 11, 53
 Nosakhare, O.K. 40
 Novak, A.B. 10
 Novotny, S. 31
 Novotny, S.P. 54
 Nowacki, D. 22
 Null, K. 34
 Nurmi, J. 56
 Nurse, A. 48
 Nuttle, W. 29, 36, 39
 Nyman, J. 18
 Nyman, J.A. 46

O

Oakley, B. 13
 O'Brien, K. 39
 Ochieng, C.A. 16
 O'Connor, J.E. 31
 Oczkowski, A.J. 30
 Odom, R.L. 53
 O'Donnell, J. 31
 Ogburn-Matthews, G. 19
 Ogston, A. 10, 19, 21
 O'Higgins, L. 18
 O'Higgins, T. 13, 42, 43
 O'Higgins, T.G. 54
 Oki, S. 55
 Okuda, N. 53
 Okuda, T. 37
 Olin, J.A. 15
 Oliveira Monteiro, R. 23
 Oliver, J.L. 11
 Oliver, L.M. 15
 Olofson, P. 57
 Olsen, C.R. 19
 Olsen, Y.S. 39
 Olson, O. 28, 30, 32
 Olson, P. 42
 Olson, T. 33
 Olyarnik, S. 16, 50
 Ono, K. 12
 Oosterhuis, S. 15
 Opatovskiy, S.J. 51
 Orlando, J.L. 53
 Orner, D. 18
 Orrico, C. 10, 19
 Orrico, C.M. 48
 Orr, M. 56
 Ort, B. 36
 Orth, R. 14, 16, 20, 22, 33
 Ortiz, A. 49
 Ortiz-Campos, E. 42
 Ortmann, A. 53
 Ortner, P.B. 23
 Orzetti, L.L. 41, 43
 Osborne, R. 39

Osborne, T.Z. 53
 Osgood, D. 56
 Osgood, D.T. 38
 Osland, M.J. 50
 Osman, R. 33
 Ott, J. 16
 Ott, J.A. 31
 Overath, R. 57
 Oviatt, C.A. 18, 30, 33, 37
 Owens, A.B. 29, 52
 Owens, A.L. 20
 Owens, M. 21, 52
 Owens, M.S. 15, 32
 Ozmon, I.M. 51

P

Pachés, M. 44
 Padeletti, A. 20, 22, 56
 Padgett, J. 45
 Padilla, G. 48
 Paerl, H.W. 31, 36
 Paganini, A. 32
 Page, J. 20
 Pahl, J. 12, 29
 Pahl, J.W. 44
 Painting, S.J. 15
 Pait, A. 41
 Paleczny, M. 23
 Palenik, B. 23
 Palinkas, C.M. 21
 Palomo, L. 38
 Paolisso, M. 29
 Papenfus, M. 16
 Paranjpye, R. 28
 Paranjpye, R.N. 54
 Parent, L.M. 43
 Parham, T. 49
 Parham, T.A. 22
 Park, D. 29
 Parker, A. 32, 34, 48
 Parker, A.E. 32
 Parker, A.K. 31
 Parker, M. 51
 Parker, V. 12, 36, 54
 Park, H. 56
 Park, J. 48, 49, 56
 Park, K. 44
 Park, S. 48, 56
 Parks, D.S. 18
 Parli, B.V. 57
 Parnell, A. 47
 Parrish, C. 39
 Parrish, D.B. 48
 Parsons, A.R. 37
 Parsons, L. 21, 38
 Parsons, M. 53
 Parsons, M.L. 23
 Partridge, V. 47
 Partridge, V.A. 11
 Passerat, J. 18
 Pasternack, G. 45
 Pasternack, G.B. 19
 Pastres, R. 32
 Patchen, R. 13
 Paterson, A.W. 36
 Pattanaik, B. 51
 Patterson, H.K. 17
 Paudel, S. 33
 Pauly, D. 23

Payne, M. 13
 Paynter, K. 51
 Paytan, A. 28, 44
 Peabody, B. 42, 43
 Peebles, E. 17, 23, 29, 30, 31
 Peebles, E.B. 45
 Pe'eri, S. 11
 Peich, B.E. 50
 Peierls, B.L. 36
 Pelletier, M. 42, 43
 Pennings, S. 35, 54
 Pennings, S.C. 10, 12
 Pennington, P. 35
 Penn, K. 38
 Penttila, D. 57
 Peralta, G. 50
 Perez Llorens, J. 50
 Perry, E.S. 14
 Perry, W. 40
 Persans, M. 10, 49
 Pete, D. 49
 Petersen, K. 16, 33
 Petersen, K.S. 29
 Petersen Manzo, K. 33
 Peterson, B.J. 18, 39, 40
 Peterson, G. 21
 Peterson, J. 29
 Peterson, M.S. 20, 35
 Peterson, T. 19, 36, 50, 51, 57
 Peterson, T.D. 50, 57
 Peterson, W. 13, 29, 46
 Pett, R. 56
 Peyton, K. 12
 Pfingsten, R. 38
 Phillips, C.E. 56
 Phillips, E.M. 23
 Piazza, B. 11, 22
 Piazza, S.C. 20, 29
 Pickart, A.J. 31
 Pickart, R.S. 53
 Pickens, C.N. 38
 Pickerell, C. 16, 33
 Pidgeon, E. 31
 Piehler, M. 20, 21, 36, 38
 Piehler, M.F. 47
 Pierce, S. 35
 Pierson, J. 31
 Pierson, J.J. 11, 19, 31, 45
 Pietrafesa, L.J. 29
 Pilditch, C.A. 15
 Pintelon, R. 18
 Piou, C. 52
 Pitkänen, H. 37
 Pittman, S. 11, 15
 Pitts, P.A. 56
 Plant, J.N. 19
 Ploskey, G. 30
 Plummer, R.E. 51
 Plunket, J. 19
 Plunket, J.S. 44
 Poffenbarger, H. 52
 Poirrier, M.A. 52
 Pollack, J. 43
 Pollard, A. 10
 Pollock, E.C. 55
 Pollock, R. 30
 Polunin, N.V. 15
 Pooler, P.S. 18
 Popper, K. 41
 Poretsky, R. 36
 Porrachia, M. 53
 Porter, D. 48, 51

Porter, D.E. 13, 51, 52
 Posey, M. 21, 41
 Pospelova, V. 32
 Post, D.M. 50
 Pothina, D. 50
 Potter, T. 41
 Potts, J. 17
 Poulakis, G. 15
 Poursohi, A. 13
 Powell, S.L. 12
 Power, J.H. 53
 Prael, F. 45, 50
 Prael, F.G. 19, 47, 50
 Prasad, M. 31
 Pratt, S.D. 28
 Pratt-Zossoungbo, M.L. 30
 Pregnall, M. 47
 Preston, C. 13
 Pretty, J. 20
 Pribble, R. 15
 Price, J.L. 40, 42
 Probert, K. 54
 Provoost, P. 20
 Pruski, A.M. 38
 Puckett, B. 15
 Puente, A. 20
 Pulich, W. 18
 Pulich, W.M. 47
 Punt, A. 51
 Purcell, J.E. 16
 Purdy, I. 56
 Purkis, S. 15
 Pyke, C. 29

Q

Qin, H. 36, 55
 Qi, Y. 16
 Quarles, R.L. 54
 Quenette, J. 10, 28
 Quigg, A. 21, 30
 Quinn, T. 44
 Quinn, T.P. 16

R

Raabe, E.A. 23
 Rabalais, N.N. 13, 19, 29, 31, 38
 Rabaut, M. 20
 Radabaugh, K. 23
 Radcliffe, G. 47
 Rahman, S. 29
 Raimondi, P.T. 34
 Rajan, K. 13
 Rakocinski, C.F. 31, 52
 Ralston, D.K. 45
 Ramage, D. 13
 Ramirez, D. 55
 Ramirez, J.R. 48
 Ramirez, M. 31
 Ramirez, M.F. 55
 Ramsey, M. 43
 Ranasinghe, A. 11, 13
 Rapaglia, J. 10
 Rasheed, M. 22
 Rasheed, M.A. 49
 Rasmussen, J. 21, 38
 Rasmussen, L.L. 17, 28
 Rasmussen, P. 29
 Rasmussen, R.S. 18
 Rathjen, K.A. 14, 44
 Rathmell, K.J. 50, 57
 Raverty, S. 28
 Raves Golden, R. 22, 49
 Rawlings, T.A. 18
 Raymond, P. 50, 52
 Raymond, P.A. 50
 Raynie, R. 12, 29
 Raynie, R.C. 52
 Reavie, E.D. 21
 Reblin, J. 48
 Redekopp, R. 42
 Reed, D.C. 37
 Reed, D.J. 22, 55
 Reed, R.E. 34
 Reese, M.M. 43, 53
 Reese, R. 45
 Rees, K. 35
 Reeves, G. 23
 Regan, H.M. 11
 Rego, J. 49
 Rego, S. 43
 Reid, P. 13
 Reise, K. 10
 Reisenbichler, R. 45
 Renkawitz, M.D. 33
 Rentmeester, S. 39
 Reum, J. 10
 Reusser, D.A. 37
 Revilla, M. 11
 Revsbech, N. 53
 Reyes, E. 33
 Reynolds-Fleming, J. 46
 Reynolds, L. 10, 12, 36, 46
 Rhoades, B. 47
 Rhoads, D.C. 17
 Rhodes, L.D. 28
 Rhodes, M. 36
 Rice, C. 10, 12, 16, 34
 Rice, C.P. 57
 Richard, P. 46
 Richardson, C.J. 50
 Richardson, N. 42
 Richey, J. 11
 Ricker, S. 14
 Riekerk, G. 37
 Riley, C. 39
 Riley, S.C. 21
 Rilov, G. 28
 Rinehimer, J.P. 19, 45
 Rines, J. 34
 Risgaard-Petersen, N. 53
 Riter, A. 10
 Ritter, K. 11
 Rivera-Monroy, V.H.
 17, 30, 39, 51, 52
 Rivers, D.O. 20
 Robbins, L.L. 23
 Robbins, S.H. 21
 Roberts, B.J. 19
 Roberts, H.H. 44
 Roberts, J.C. 55
 Roberts, M. 15
 Roberts, Q. 15
 Robinson, C. 49
 Robinson, L. 50
 Robinson, S.A. 38
 Robison, D.E. 40
 Roby, D.D. 35

- Roby, E. 37
 Rodgers, J. 35
 Rodil, I. 46
 Rodney, W. 50
 Rodney, W.S. 41, 43
 Rodriguez, A.B. 46
 Rodríguez-Calderón, C. 21
 Rodriguez, G. 11
 Rodriguez Medina, M. 41
 Roegner, C. 10, 32, 34
 Roeland, K. 16
 Rogers, J. 41
 Rohrer, J. 50
 Rohrer, S. 43
 Roleda, M.Y. 51
 Rollwagen-Bollens, G. 12, 23, 28
 Roman, C.T. 12, 28, 55
 Roman, M. 11, 19, 21, 31
 Roman, M.R. 45
 Romano, T. 51
 Romer, J. 16
 Romero, I. 44
 Romsos, C. 14
 Rondorf, D.W. 18
 Rordam, L. 50
 Rose, K. 17
 Rose, M. 38
 Rosman, L. 56
 Ross, C. 16, 35, 49,
 Rossi, A. 35
 Rossignol, K.L. 36
 Ross, J. 30
 Ross, P.M. 15
 Rothenberger, M.B. 34
 Roth, J. 23
 Rounds, S. 19
 Routledge, R. 44
 Rowe, S. 10, 46
 Rowe Soll, M.A. 32
 Rowse, M. 14
 Rozas, L. 30, 36, 43
 Rubash, L.L. 56
 Rubiano-Gomez, L. 13
 Rubin, S. 45
 Rubinstein, N.I. 22
 Ruckelshaus, M.H. 16
 Rudershausen, P.J. 54
 Rudnick, D. 17, 39
 Rudy, D. 10
 Ruef, W. 11, 36
 Ruesink, J.L. 15
 Ruggiero, P. 22
 Ruiz, G. 20, 21
 Rumrill, S. 32, 39, 42, 54
 Rumrill, S.S. 28, 34, 38, 40
 Rush, T.C. 15
 Russell, A. 57
 Russell, D.E. 56
 Russell, M. 41
 Russell, M.J. 54
 Russell, S.M. 20
 Russell, T. 50
 Ruttenberg, A. 39
 Ryan, A.B. 20
 Ryan, J. 13
 Rybak, A. 47, 53
 Rybczyk, J.M. 10
 Ryckman, L.Y. 31
 Ryneerson, T.A. 34
 Ryves, D.B. 29
- S**
- Sabal, M. 50
 Sackmann, B. 13, 47
 Saini, S. 46
 Sakai, Y. 53
 Samarkin, V.A. 38
 Samhour, J. 16
 Sánchez, L.E. 52
 Sanders, R. 31
 Sanders, R.D. 51
 Sandford, B. 28
 Sandifer, P.A. 43
 Sanford, E. 57
 Sanford, L. 32
 Sanger, D. 37
 Sangiorgi, F. 29
 Santos, R. 10, 35
 Santos, R.O. 11
 Santschi, P.H. 50
 Sapkota, S.K. 20
 Sasser, C.E. 29, 35
 Sather, N. 12, 28, 30, 42
 Sather, N.K. 51
 Saumweber, W. 37
 Saurel, C. 32
 Savage, C. 11, 17, 40, 45, 54
 Savant, G. 11, 44
 Savchuk, O.P. 12, 17, 37, 41, 43
 Savenije, H. 20, 49
 Scanes, P. 17
 Scaroni, A.E. 46
 Schaefer, J. 32
 Schaefer, S.C. 54
 Schaffner, L. 13, 15, 17, 21
 Schallenberg, M. 11, 23
 Schalles, J. 54
 Schalles, J.F. 54
 Schanz, A. 20, 33, 49
 Schaub, R. 48
 Scheidt, D.M. 48
 Scheiner, C. 46, 51
 Scheuerell, M. 35
 Scheurer, D. 11
 Schildhauer, M. 31, 37
 Schile, L. 12, 36
 Schile, L.M. 54
 Schilling, J. 57
 Schindler, D.E. 16
 Schladow, G. 37
 Schlessman, M. 47
 Schmid, K. 39
 Schmidt, C. 47
 Schneider, K. 55
 Schneider, M. 20
 Schoellhamer, D. 13, 21, 36
 Schoenberg, S. 49
 Schofield, P.J. 35
 Scholin, C. 13
 Scholz, N. 43
 Schooler, S. 31
 Schott, S. 33
 Schraga, T. 34
 Schraga, T.S. 56
 Schreck, C.B. 16, 23
 Schroeder, P. 28
 Schroeter, S. 46
 Schuerch, M. 10
 Schulze, A. 53
 Schulz, K. 43
 Schuttelaars, H. 39
- Schuttelaars, H.M. 21
 Schwab, D. 13
 Schwartz, R. 36, 47
 Schwarzschild, A. 10, 46
 Schwerh, K.A. 47
 Scott, G. 37, 39
 Scott, G.I. 13, 43, 51
 Scully, M.E. 21
 Seabloom, E. 22
 Searfoss, R. 56
 Seaton, C.M. 50, 57
 Secor, D. 17
 Secru, B. 51
 Seeb, J.E. 16
 Segelsky, S. 45
 Seitzinger, S. 57
 Seitz, R. 20
 Selby, M. 36
 Seliskar, D.M. 30, 55
 Sellner, K. 29, 43
 Semans, S. 43
 Seminara, D.N. 54
 Semmler, C. 19, 41
 Sen Gupta, B.K. 29
 Serafy, J. 11
 Serrão, E. 22
 Seward, S.M. 50
 Sexton, M.A. 16
 Shafer, D.J. 33
 Shaffer, A. 18
 Shanks, A. 15, 17, 22
 Shanks, A.L. 46
 Shannon, T. 10
 Shapiro, K. 23
 Sharp, L. 20
 Shaw, L. 17
 Shea, C. 12
 Shearman, K. 17
 Shearman, R. 13
 Sheehan, K.L. 56
 Sheehan, T.F. 33
 Sheets, B.A. 19
 Sheldon, J.E. 29
 Shellenbarger, G. 13, 36
 Shen, J. 17, 30
 Shenk, G. 12, 33, 41
 Sherman, A. 13
 Sherman, T.D. 16, 47, 49
 Shervette, V. 13, 41
 Sherwood, C.R. 19, 45
 Sherwood, E. 15
 Sherwood, E.T. 22, 31, 52
 Shields, A.R. 30
 Shields, E. 49
 Shi, J. 17
 Shinn, J. 13, 36
 Shinskey, T. 56
 Shoji, J. 54
 Short, F. 10, 20
 Short, F.T. 53
 Shull, S. 20, 57
 Shumchenia, E. 11, 13
 Sigleo, A.C. 13
 Sikaroodi, M. 51
 Silbiger, N. 20
 Sillett, K.B. 32
 Silva, C. 57
 Silva, J. 10, 35
 Silver, A. 45, 56
 Silver, J.M. 38
 Simenstad, C. 10, 11, 12, 31, 32,
 40, 44, 51, 55
- Simenstad, C.A. 44, 55
 Simenstad, S. 34
 Sime, P. 14, 29
 Simmons, R. 16
 Simon, E.R. 51
 Simon, H. 56
 Simon, H.M. 36, 38
 Simons, J. 43, 45
 Simpfendorfer, C.A. 15
 Simpson, M.H. 42
 Siri, P. 43
 Sislak, C. 35
 Siwicke, J. 47
 Skalski, J. 32, 42
 Skelton, H.M. 54
 Skinner, L. 41
 Sklarew, D. 47
 Sklar, F. 39
 Slack, W.T. 35
 Slaughter, A.M. 45
 Slesser, G. 38
 Slocum, J. 43
 Slomp, C.P. 37
 Smalling, K.L. 53
 Smeed, D.L. 28
 Smith, B. 30, 41, 43
 Smith, C. 45
 Smith, C.D. 18
 Smith, C.R. 30
 Smith, D. 20
 Smith, E. 11, 19, 20, 44, 51
 Smith, E.M. 51
 Smith, G. 11, 21
 Smith III, T.J. 52
 Smith, J. 41, 47
 Smith, J.M. 47, 51
 Smith, K. 38
 Smith, L. 14, 44
 Smith, L.M. 13, 33, 37, 43
 Smith, M.D. 33
 Smith, R. 42
 Smith, R.C. 28
 Smith, S.M. 28
 Smith, T.J. 28, 52
 Smit, M. 36, 38
 Smyth, A. 20, 36
 Smyth, R. 30
 Snedden, G. 29
 Snider, A. 30
 Sobieszczuk, S. 28
 Sobocinski, K. 28, 30
 Soetaert, K. 15, 20
 Sokolov, A. 12, 41
 Solidoro, C. 32, 34
 Sol, S. 28, 30, 32, 42
 Sommerfield, C. 19, 21, 40, 42, 48
 Sommerfield, C.K. 48
 Sommer, T. 42, 55
 Sorgini, C.A. 49
 Sorte, C. 33
 Souissi, S. 19
 Soule, J. 57
 Southard, S. 28
 Souza, A. 44, 49
 Souza, A.C. 50
 Souza, A.J. 37, 44
 Sowers, D.C. 42
 Sowl, K. 48
 Spackeen, J.L. 40
 Spangenberg, D. 35
 Sparks, E.L. 56
 Sparrow, M. 45

Specht, D.T. 48, 49
 Spilsbury-Pucci, D. 44
 Spilseth, S. 55
 Sprague, M.W. 43
 Springfield, A. 44
 Spromberg, J. 28, 30, 43
 Stacey, M. 20, 29, 35, 37, 50
 Stack, L. 42
 Staehr, P.A. 51
 Stafford, N. 13
 Stair, C. 53
 Stamatiou, L.A. 55
 Stanhope, J.W. 51
 Stanko, G.M. 17
 Starinsky, N.S. 51
 Starke, A. 42
 Stark, J. 43
 Stark, K. 11, 48
 Stauffer, P. 41
 Staver, L.W. 15
 Stecher, H.A. 29
 Steichen, J. 21
 Steinberg, M.K. 21
 Steinberg, P. 34
 Stein, D. 43
 Stein, S. 14
 Stenberg, K. 14, 45
 Stephen, C.A. 50
 Stephens, T. 16
 Stepien, C. 35
 Sterling, D. 46
 Steube, D. 17
 Steven, A. 31, 38
 Stevens, A. 10
 Stevens, A.W. 45, 49
 Stevenson, J. 10
 Stevenson, J.C. 15
 Stevenson, R. 11
 Stevick, P.F. 40
 Stewart, J. 43
 Steyer, G. 29
 Steyer, G.D. 11, 20, 29, 52
 Stillman, J. 32
 Stiner, J. 29
 Stoddard, A. 12, 29
 Stoecker, D.K. 32
 Stoessel, M. 29
 Stokes, M. 28
 Stolt, M. 13
 Stone, G.W. 44
 Stone, S. 40
 Storch, A.J. 42
 Stout, H. 57
 Stow, C. 29, 30, 31
 St. Pierre, J.M. 32
 Straub, P.F. 53
 Street, J.H. 28
 Strindberg, S. 17
 Strobel, C. 56
 Strom, M. 28
 Strom, M.S. 54
 Strom, S. 23, 45, 54
 Strom, S.L. 54
 Strong, D. 57
 Struck, U. 15
 Strumpf, R. 11
 Stumpf, R. 13
 Stunz, G.W. 43, 53, 57
 Sturdivant, S.K. 35
 Sturgis, B. 34, 36, 47
 Stutes, J. 36
 Styles, R. 48

Suanda, A. 53
 Suchman, C.L. 16
 Suh, Y. 48
 Sullivan, L.J. 23, 32
 Sullivan, M.C. 55
 Summers, J.K. 43
 Summy, K.R. 10
 Sundback, K. 38
 Sundberg, K. 20, 33
 Suryan, R.M. 57
 Sustersic, A. 32
 Sutherland, D.A. 20
 Sutherland, W. 16
 Sutton, G. 15
 Sutula, M. 37
 Suykerbuyk, W. 18
 Swales, A. 10
 Swaney, D. 54
 Swaney, D.P. 28
 Swanson, J.L. 28
 Swarth, C. 40, 42
 Swart, P. 54
 Swarzenski, C. 18
 Swarzenski, P. 10
 Swearer, S. 53
 Sweatman, J. 43
 Sweetman, A.K. 30
 Swenson, E. 29
 Swift, C.C. 42
 Switzer, T.S. 31
 Sylvester, S. 53
 Sytsma, M. 31
 Szeto, K. 32
 Szlyk, T. 13
 Szoboszlai, A.I. 49

T

Tackx, M. 19
 Takekawa, J. 13, 34, 36, 40
 Takesue, R. 12, 33
 Talke, S.A. 19, 39
 Talley, D.M. 54
 Tallis, H. 16
 Tamminen, T. 37
 Tanaka, Y. 37
 Tanasichuk, R. 44
 Tango, P. 18, 44
 Tang, S. 36
 Tang, Y.Z. 21
 Tanner, B.R. 16
 Tanner, C.A. 17
 Tanner, C.E. 12
 Targett, T.E. 33
 Tate, J. 28
 Tate, J.N. 44
 Tayasu, I. 53
 Taylor, C.J. 49
 Taylor, P. 56
 Taylor, R.H. 23
 Teague, K. 56
 Tear, L. 55
 Tebo, B.M. 51
 Teel, D. 10, 12, 28, 42, 44
 Teh, S.J. 23
 Teichberg, M. 37, 39
 Teixeira, H. 13
 Temmerman, S. 10, 12, 18
 ten Brink, M. 43
 Testa, J. 15, 29

Tettelbach, S.T. 39
 Tewfik, A. 57
 Thaney, K. 29
 Thedinga, J.F. 44
 Thériault, M. 18
 Thessen, A.E. 53
 Thomas, E. 29
 Thomas, J. 47
 Thomas, P. 29
 Thomas, R.L. 48
 Thompson, J. 32, 38
 Thompson, J.K. 32
 Thompson, M. 47
 Thompson, S.P. 20, 47
 Thom, R. 28, 30, 32, 34, 42
 Thomson, J. 45
 Thorhaug, A. 16
 Thornber, C.S. 37
 Thorne, K. 40
 Threadgill, T.L. 17
 Thronson, A. 30
 Tian, J. 48
 Tibbetts, I. 39
 Tiffan, K.F. 30
 Tiling, G. 28
 Timms, G. 13
 Tippery, A. 48
 Tiselius, P. 14
 Tissot, B. 12
 Tobias, C. 36
 Tobias, V.D. 18, 46
 To, E.S. 52
 Toffolon, M. 20, 49
 Toft, J. 12, 34, 51
 Toft, J.D. 40
 Tolley, G. 53
 Tolley, S.G. 23, 45
 Tomaro, L.M. 35
 Tomasko, D. 15
 Tomczak, M.T. 30
 Tomlinson, M. 13
 Tommasi, D. 44
 Törnqvist, T.E. 10
 Toropova, C. 37
 Toro, S.P. 33
 Torres, R. 41
 Toth, K. 18, 57
 Townsend, C.R. 40
 Townsend, H. 11, 55
 Toyokawa, M. 44
 Trainer, V.L. 28, 54
 Tramati, C. 53
 Trask, P. 34
 Tratnyek, P. 56
 Traxler, S. 29
 Trefry, J. 41
 Trembanis, A.C. 19
 Trescott, D. 16
 Trice, T.M. 29
 Trowbridge, P. 11, 13
 Trudel, M. 33
 Trueblood, D.D. 39
 Truitt, B.R. 16
 Tucker, J. 13, 28, 46
 Tulipani, D.C. 55
 Tullos, D. 39
 Tully, R. 41
 Tunberg, B.G. 13
 Tunnell, J.W. 28
 Tunnicliffe, V. 13
 Turek, J. 56
 Turek, J.G. 41

Turner, B. 29
 Turner, E. 11
 Turner, J.T. 38
 Turner, K. 34
 Turner, P.J. 50, 57
 Turner, R. 12, 18, 29
 Turner, R.E. 19, 29, 48
 Turner-Tomaszewicz, C. 16
 Tweel, A.W. 48
 Twilley, Robert R. 52
 Twilley, R.R. 15, 17, 29, 30, 35, 39, 51, 52
 Tyburczy, J. 28
 Tyler, C. 37, 46, 51
 Tyrol, K. 36
 Tyrrell, M. 22, 28

U

Uc, E. 39
 Udy, J. 39
 Ullman, D. 57
 Ulm, I.M. 38
 Unger, D. 34
 Unsworth, R. 49
 Uriarte, A. 11
 Urquidi Gaume, M. 42
 Urquidi-Gaume, M. 42
 Ustin, S. 40
 Uyeda, K. 57
 Uye, S. 14

V

Vafeidis, A. 10
 Vahtera, E. 37
 Vale, C. 32
 Valentine, J. 38
 Valentine, V. 50
 Valesini, F.J. 40
 Valette-Silver, N. 11, 23
 Valiela, I. 23, 28, 37, 39
 Valinoti, C.E. 57
 Valle-Levinson, A. 37, 39
 Vanaverbeke, J. 20
 van Beusekom, J. 23
 VanBlaricom, G.R. 40, 42
 van Burm, E. 19
 Vance, T.C. 17
 Van Colen, C. 17
 Van Damme, S. 19
 van de Koppel, J. 18
 Van de Koppel, J. 12
 Vandenbruwaene, W. 12
 van der Heide, T. 18
 Vander Schaaf, D. 41
 van der Vegt, M. 19
 Vandiver, L. 52
 Van Dolah, R. 41
 Van Duren, L. 12
 Van Dyke, E. 39
 Vanha, A. 32
 Van Hoey, G. 13
 van Katwijk, M. 12, 18
 Van Lancker, V. 40
 Van Niel, K. 18
 van Proosdij, D. 19, 38, 45, 55, 56

van Tussenbroek, B.I. 18
 Varekamp, J.C. 29
 Vasey, M.C. 54
 Vaudrey, J. 57
 Vavrinec, J. 28
 Vavrinek, J. 34
 Vega, R. 57
 Velinsky, D.J. 40, 42, 48
 Venturi, L. 18
 Verwaest, T. 40
 Viitasalo, M. 37
 Vilas, C. 36
 Vilela, C. 50
 Vile, M.A. 40
 Village, V. 17
 Villareal, T.A. 40
 Vincent, M.S. 13
 Vincent, R. 28
 Vincx, M. 17, 20, 40
 Vinebrooke, R. 29
 Vinzon, S. 50
 Virnstein, R.W. 18, 53
 Visser, J.M. 11, 29, 43, 52
 Vitello, J. 35
 Vivanco, L. 51
 Viyakarn, V. 37
 Vizzini, S. 53
 Volety, A. 14
 Volk, E.C. 12, 44
 Volson, B. 50
 Voss, C.M. 10
 Vredenberg, V.T. 54
 Vrijenhoek, R. 13

W

Wagner, R. 12
 Wagner, W. 35
 Wahle, C. 50
 Wainer, L. 36
 Wainer, L.E. 56
 Waite, I.R. 31
 Walker, D. 41
 Walker, D.I. 20
 Walker, H. 44
 Walker, H.A. 56
 Walker, J.T. 29
 Wallace, M. 14
 Wallace, S.C. 49
 Wall, C.C. 40
 Wallen, C. 12, 29
 Wallendar, W.W. 23
 Walls, B. 30
 Walsh, J.P. 43
 Walsh, K. 57
 Walter, L.M. 39
 Walters, L. 45, 53, 55
 Walters, L.J. 31, 53
 Waltham, N.J. 31
 Wang, J. 28
 Wang, L. 17, 19, 29
 Wang, P. 12, 32
 Wang, P.F. 42
 Wang, Z. 22
 Wan Roshairry, W. 48
 Ward, D. 48
 Ward, D.H. 14
 Ward, G. 52
 Ward, J. 28
 Ward, P.D. 12

Wardrop, D. 29
 Warner, M.J. 14
 Warner, N. 16
 Warner, R.A. 54
 Warner, S.J. 37
 Warren, R. 47
 Warrick, J. 18, 19, 45
 Warrick, J.A. 45
 Warzybok, P. 23
 Washburn, L. 28
 Wasson, K. 15
 Watanabe, K. 54
 Waters, L. 12
 Watkinson, A. 16
 Watson, E. 45, 52
 Watson, E.B. 19, 52
 Waycott, M. 12, 20
 Wazniak, C.E. 47
 Wazniak, C.S. 34
 Weakland, S. 11
 Wear, E.K. 51
 Weaver, C.A. 15
 Weaver, E. 45
 Webb, M. 10
 Weckström, K. 29
 Wedding, L. 15
 Weeks, E. 49
 Wegner, K.E. 57
 Weifenbach, D. 20
 Weilbeer, H. 19
 Weil, R.R. 55
 Weinblatt, G. 10
 Weisberg, S.B. 13
 Weishar, L. 38
 Weitkamp, L. 33, 46
 Welch, K. 11
 Wellman, K.F. 43
 Wells, C.J. 38
 Welschmeyer, N. 21
 Welty, C. 17
 Wen, G. 34
 Wessel, M. 31, 40
 West, J. 42
 Weston, N.B. 40
 Wethey, D.S. 13, 33
 Wetzel, C. 47
 Wetzel, L. 14, 45
 Wetz, M.S. 36
 Whalen, L. 20, 22, 56
 Whanpetch, N. 54
 Wheatcroft, R. 45, 51
 Wheatcroft, R.A. 19, 31, 51
 Wheatley, M. 41
 Whelan, T. 10
 Whitall, D. 41
 White, D. 43
 White, J. 30, 41
 White, Q. 12
 White, S. 37
 Whitfield, A. 23, 36, 40
 Whiting, J.R. 20
 Whitin, S. 38, 43
 Whitlatch, R. 33
 Whitlow, L. 32
 Whitney, M.M. 37
 Wiberg, P. 10, 19
 Wicks, C. 30, 47
 Wiegner, T.N. 50
 Wieski, K. 12
 Wigand, C. 20, 47
 Wiggert, J.D. 31
 Wijekoon, N. 39

Wikfors, G.H. 54
 Wilber, D. 22
 Wilcox, D.J. 16, 20
 Wilcox, W. 39
 Wild-Allen, K. 13
 Wilhelm, S. 23
 Wilkerson, C. 10, 46
 Wilkerson, F. 32, 48
 Wilkin, M. 50, 57
 Williams, C. 56
 Williams, G. 54
 Williams, J. 53
 Williams, M. 13
 Williams, M.R. 47
 Williamson, A. 45
 Williamson, K.J. 54
 Williams, S.L. 37, 49, 55
 Willis, A. 40
 Willis, J.M. 49
 Willis, M. 30
 Willman, A. 19
 Wilson, B. 56
 Wilson, C. 12
 Wilson, C.J. 14
 Wilson, K.R. 16
 Wilson, P.S. 14
 Windecker, L. 34
 Winder, M. 36
 Wingard, G.L. 23
 Wingard, L. 29
 Wing, M. 39
 Winkler, G. 21
 Winsor, M.A. 50
 Winter, C. 19
 Wintzer, A. 14
 Wintzer, A.P. 44
 Wise, D. 28
 Wisneski, C. 42
 Witherspoon, C. 10
 Woerner, J. 46
 Wohlford, T.D. 47
 Woithe, R.D. 40
 Wolf, J. 49
 Wolhowe, M. 19
 Wong, G. 41
 Wood, B. 36
 Woodfield, R. 42
 Woodin, S.A. 13
 Wood, J. 42
 Woodland, R.J. 17
 Wood, R. 11, 23, 28, 31
 Woodrey, M.S. 33
 Woodruff, D. 14, 34
 Woodson, C.B. 28
 Woody, E.A. 57
 Woo, I. 34, 36
 Wright, J. 32, 57
 Wu, J. 12
 Wulff, A. 51
 Wulff, F. 17, 41
 Wulff, F.V. 12
 Wylie, G. 40
 Wyllie-Echeverria, S. 12, 16, 33, 36
 Wynne, T. 13

X

Xia, K. 41
 Xia, M. 29
 Xu, J. 31, 38

Xu, K. 50
 Xu, M. 56
 Xu, W. 55

Y

Yaakub, S.M. 20
 Yadav, S. 49
 Yamada, S. 44
 Yamakita, T. 54
 Yamamoto, T. 37
 Yáñez-Arancibia, A. 33
 Yang, Q. 48
 Yang, Z. 10, 15, 34, 45, 53
 Yarbrow, L.A. 38, 44
 Yarrington, C. 46, 51
 Yasuda, A. 44
 Yeager, K.M. 50
 Yeats, P. 19
 Yentsch, C.S. 47
 Yerxa, T. 34
 Yin, K. 36, 38
 Ylitalo, G. 28
 Yoder, N.J. 45
 York, R.H. 15
 Yoshida, G. 37
 Yoshida, R.L. 20
 Yoskowitz, D.W. 43
 Younan, L. 56
 Young, C. 28, 41
 Young, D.K. 31
 Young, D.R. 48
 Young, G.A. 14
 Yozzo, D.J. 42
 Ysebaert, T. 13, 17
 Yuan, W. 55

Z

Zabek, E. 28
 Zackey, T. 14
 Zajac, R. 33
 Zaleski, S. 31
 Zamon, J.E. 10, 23
 Zanevald, R. 47
 Zappala, S. 22
 Zarnetske, P. 22
 Zaron, E. 22
 Zaron, E.D. 22
 Zaugg, S. 51
 Zehr, J.P. 38
 Zhang, G. 55
 Zhang, H. 31
 Zhang, J. 34
 Zhang, X. 11, 31
 Zhang, Y.J. 38, 50
 Zhao, Y. 52
 Zhu, C. 34
 Zhu, J. 19
 Ziemann, J.C. 12, 18
 Zimmerman, R.C. 15, 33
 Zimmerman, S. 30, 32
 Zimmerman, S.A. 51
 Ziombra, K. 47
 Zirino, A. 53
 Zitello, A. 41
 Zuber, P. 36, 38, 51

Are you a coastal manager
with too much to do
and too little time?

Coastal and Estuarine Science News — CESN

Where coastal managers stay on the leading edge

Coastal and Estuarine Science News (CESN)
is an electronic newsletter that provides
brief summaries from the journal,
Estuaries and Coasts.

Articles are chosen specifically to give you:

- Recent scientific results every coastal manager should know.
- A link between science and management in coastal systems.
- A quick resource to aid in your reporting, teaching, and decision-making within the coastal management community.

Best of all, it's **free!**
Sign-up **TODAY** at www.erf.org

CESN is an electronic publication of the Coastal and Estuarine Research Federation





United States Environmental Protection Agency

Oceans and Coastal Protection Division

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

Proud Sponsor of

CERF 2009

Portland, Oregon
November 1 - 5, 2009

Visit our Web site at:
<http://www.epa.gov/owow>

Generate
high-resolution maps
of water quality and bathymetry



without getting your feet wet.



800 363 3269
systems@ysi.com
www.y.si.com/ecomapper

Introducing...

YSI EcoMapper® Autonomous Underwater Vehicle.

The first AUV designed specifically for water quality and bathymetry mapping. Easy mission planning and one-person deployment save time in the field. Stay dry, learn more.

What Is the **True Cost** of Your Data?



**Site & Equipment
Selection**



Deployment



**Telemetry & Remote
Troubleshooting**



**Field
Maintenance**



**Post-Deployment
Check**

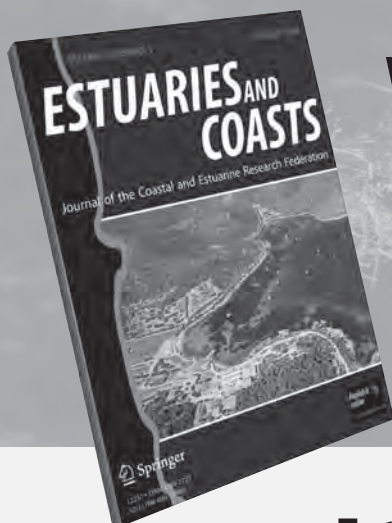


**Cleaning &
Maintenance**

At TrueCostofData.com, discover the inside tips and expert tricks for efficiently collecting water quality data. Minimize the time and cost of every phase of your monitoring program.

TrueCostofData.com





Why you should publish your research with Estuaries and Coasts

Estuaries and Coasts

Journal of the Coastal and Estuarine Research Federation

Co-Editors-in-Chief: C. Duarte & J. Cloern

Just a few reasons to submit your research to Estuaries and Coasts

- ▶ Outstanding Usage Figures – Tripled in the Last Year!
- ▶ Now Available via Almost 4,000 Institutions
- ▶ Submission to Publication – Now Takes 1/3 of the Time!

Submit your research online today

The journal **Estuaries and Coasts** publishes manuscripts covering aspects of research on physical, chemical, geological or biological systems, as well as management of those systems, at the interface between the land and the sea. The interface is broadly defined to include areas within estuaries, lagoons, wetlands, tidal rivers, watersheds that include estuaries, and near-shore coastal waters. The journal publishes original research findings, reviews, techniques, and comments.

We invite you to submit your papers to **Estuaries and Coasts**. Manuscripts will be judged on the basis of their contribution of original data, ideas and interpretation. For further information regarding research areas of particular interest, please visit the journal's homepage at springer.com



Submit online at <http://www.editorialmanager.com/esco/>

Easy Ways to Order for the Americas ▶ **Write:** Springer Order Department, PO Box 2485, Secaucus, NJ 07096-2485, USA ▶ **Call: (toll free)** 1-800-SPRINGER
▶ **Fax:** 1-201-348-4505 ▶ **Email:** journals-ny@springer.com or **for outside the Americas** ▶ **Write:** Springer Customer Service Center GmbH, Haberstrasse 7,
69126 Heidelberg, Germany ▶ **Call:** +49 (0) 6221-345-4303 ▶ **Fax:** +49 (0) 6221-345-4229 ▶ **Email:** subscriptions@springer.com

014225x



NOAA Fisheries Office of Habitat Conservation

“Supporting the Nation’s communities and economy
by protecting and restoring coastal and marine habitats”

What We Do:

- Support Community-based Restoration of Habitat
- Protect Important Fish Habitat
- Conserve Coastal Wetlands
- Restore Damaged Habitats
- Remove Barriers to Fish Passage
- Promote Proactive Conservation
- Demonstrate Place-based Research, Restoration, and Stewardship

Proud Sponsor of CERF 2009

Portland, Oregon
November 1-5, 2009



NOAA Habitat Program
Conserving Habitat for the Future

For more information visit our website:
<http://www.nmfs.noaa.gov/habitat/>

Salt Marshes

A Natural and Unnatural History

Judith S. Weis and Carol A. Butler

“Judith S. Weis and Carol A. Butler put salt marshes into a broad environmental context. With chapters on marshland species, pollution, and restoration, this book is both valuable and encompassing for anyone interested in the future of salt marshes.”

—John M. Teal, Scientist Emeritus, Woods Hole Oceanographic Institution

“Judith Weis and Carol Butler have created a clear, wide-ranging, nontechnical explanation of salt marshes that will engage readers at every level of knowledge. Coastal residents, biology students, environmental planners, consultants, and naturalists should read this book.”

—Erik Kiviat, executive director, Hudsonia Ltd

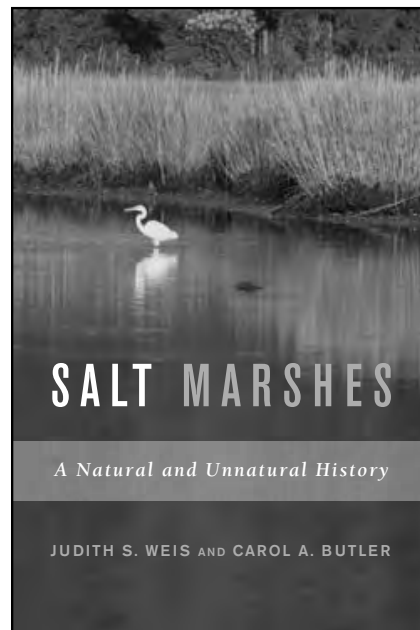
“In an accessible and sophisticated manner, *Salt Marshes* draws on extensive “local knowledge” and a thorough grasp of much broader scientific literature to show the impact of humans on marshes and estuaries. This book is an important contribution to popular writing on coastal systems.”

—R. Scott Warren, Tempel Professor of Botany Emeritus, Connecticut College

Now championed as critical habitats for plants, animals, and people because of the environmental service and protection they provide, salt marshes were once considered unproductive wastelands. *Salt Marshes*, with an emphasis coastal wetlands in the Atlantic and Gulf regions and the San Francisco Bay area, offers readers a wealth of essential information about a variety of flora and fauna, marshes’ ecological importance, consequences of human neglect and overdevelopment, and insight into how these wetlands recover.

JUDITH S. WEIS is a professor in the department of biological sciences at Rutgers University, Newark. An expert on estuarine biology, she is past-president of the American Institute of Biological Sciences, and frequently serves as a consultant to the Environmental Protection Agency (EPA) and the National Oceanic and Atmospheric Administration (NOAA).

CAROL A. BUTLER is the coauthor and photographer for an animal Q & A series from Rutgers University Press which includes *Do Butterflies Bite? Fascinating Answers to Questions About Butterflies and Moths* and forthcoming books on bees, hummingbirds, and bats.



272 pages

Paper \$23.95 • 978-0-8135-4570-7

Cloth \$49.95 • 978-0-8135-4548-6

20% DISCOUNT

QTY	ISBN	TITLE	AUTHOR	COVER	COST	TOTAL
	4570-7	Salt Marshes	Weis/Butler	Paper	\$23.95 \$19.15*	
	4548-6	Salt Marshes	Weis/Butler	Cloth	\$49.95 \$39.95*	
					Subtotal	
					NC Residents add state and local tax	
					7% Sales Tax (Canada only)	
					Postage (\$6 for first book, \$1 each add'l)	
					Total Amount Due	

Card #	CVV Code (3-digit security number in reverse italics)
Expiration date	Phone number
Signature	
Name	
Address	
City	State Zip

*For purchases made in the United Kingdom, Ireland and Europe, please contact Eurospan Group at +44 (0) 1767 604972 or visit www.eurospangroup/bookstore for correct pricing.

Circle one:

Visa

Mastercard

American Express



RUTGERS UNIVERSITY PRESS

Phone: 800-848-6224 • Web: rutgerspress.rutgers.edu • Fax: 800-272-6817

Mail: Longleaf Services, Inc., PO Box 8895, Chapel Hill, NC 27515-8895

To receive notification of similar titles and discounts, subscribe to **RU Reading?** @ <http://rutgerspress.rutgers.edu/subscribe.html>



Become a member of CERF!

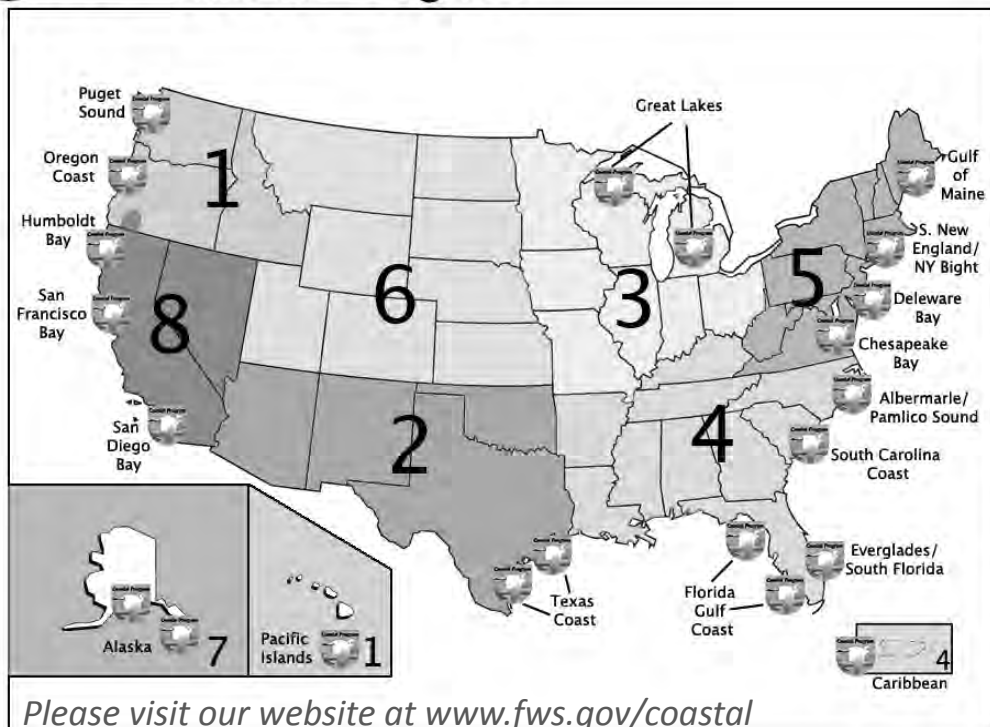
The Federation advances understanding and wise stewardship of estuarine and coastal ecosystems worldwide. Its mission is to:

- Promote research in estuarine and coastal ecosystems
- Support education of scientists, decision-makers and the public
- Facilitate communication among these groups

Learn more about membership benefits at <http://www.erf.org/>



U.S. Fish and Wildlife Service Coastal Program





The Coastal and Estuarine Research Federation

would like to recognize The Oregon Department of Land Conservation and Development for their contributions towards the CERF 2009 Conference!

The mission of the department is to support all of our partners in creating and implementing comprehensive plans that reflect and balance the statewide planning goals, the vision of citizens, and the interests of local, state, federal and tribal governments.

Web: <http://www.lcd.state.or.us> · Voice: 503-373-0050

Special thanks to the Red Star Tavern & Road House for their generosity and gracious support of this year's conference.

Portland's favorite gathering place, Red Star offers an inspired menu of new American classics. Set in a historic building at the corner of Fifth Avenue and Alder Street, Red Star's magnificent floor-to-ceiling windows show off its glow of warm, golden hues, dark woods and high ceilings, drawing guests in to the restaurant's bustling conviviality.

All of our beef is Prime Cascade Natural and dry aged in house. Wherever possible, Red Star uses local, sustainable and organic products. All of our meat, eggs and dairy are all natural and hormone free. We recycle and compost over 90% of our waste.

503 S. W. Alder Street, Portland, Oregon 97204

Voice: 503-222-0005 · Web: <http://www.redstartavern.com>

Oysters on the Half Shell
Smoked Shrimp Cakes, C
Baked Oysters, Crawfish
Manila Clams, Chorizo, C
Toasted Bread
Whole Leaf Romaine Salad,
Dressing, Parmesan, Crou
Red Star Burger, Fresh Gro
Sirloin With All the Trimming
Grilled Chicken Sandwich, M
Aioli, Roasted Sweet Peppers
Rotisserie Prime Rib Sandwic
Onions, Provolone, House M

Notes

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.



Future CERF Biennial Conference Dates

CERF 2011 BIENNIAL CONFERENCE

6-11 November 2011

Ocean Center

Daytona Beach, Florida

CO-CHAIRS

Felicia C. Coleman

Department of Biological Science

Florida State University

Tallahassee, FL

James W. Fourqurean

Department of Biological Science

Florida International University

Miami, FL

The call for session conveners will go out in the winter of 2010.



Coastal & Estuarine Research Federation

P.O. Box 510 • Port Republic, MD 20676
Phone: (410) 326-7467 • Fax: (410) 326-7466
<http://www.erf.org> • info@erf.org

Membership Services

5400 Bosque Blvd., Suite 680
Waco, TX 76710-4446
Phone: (254) 776-3550 • Fax: (254) 776-3767
<http://www.sgmeet.com/erf> • membership@erf.org