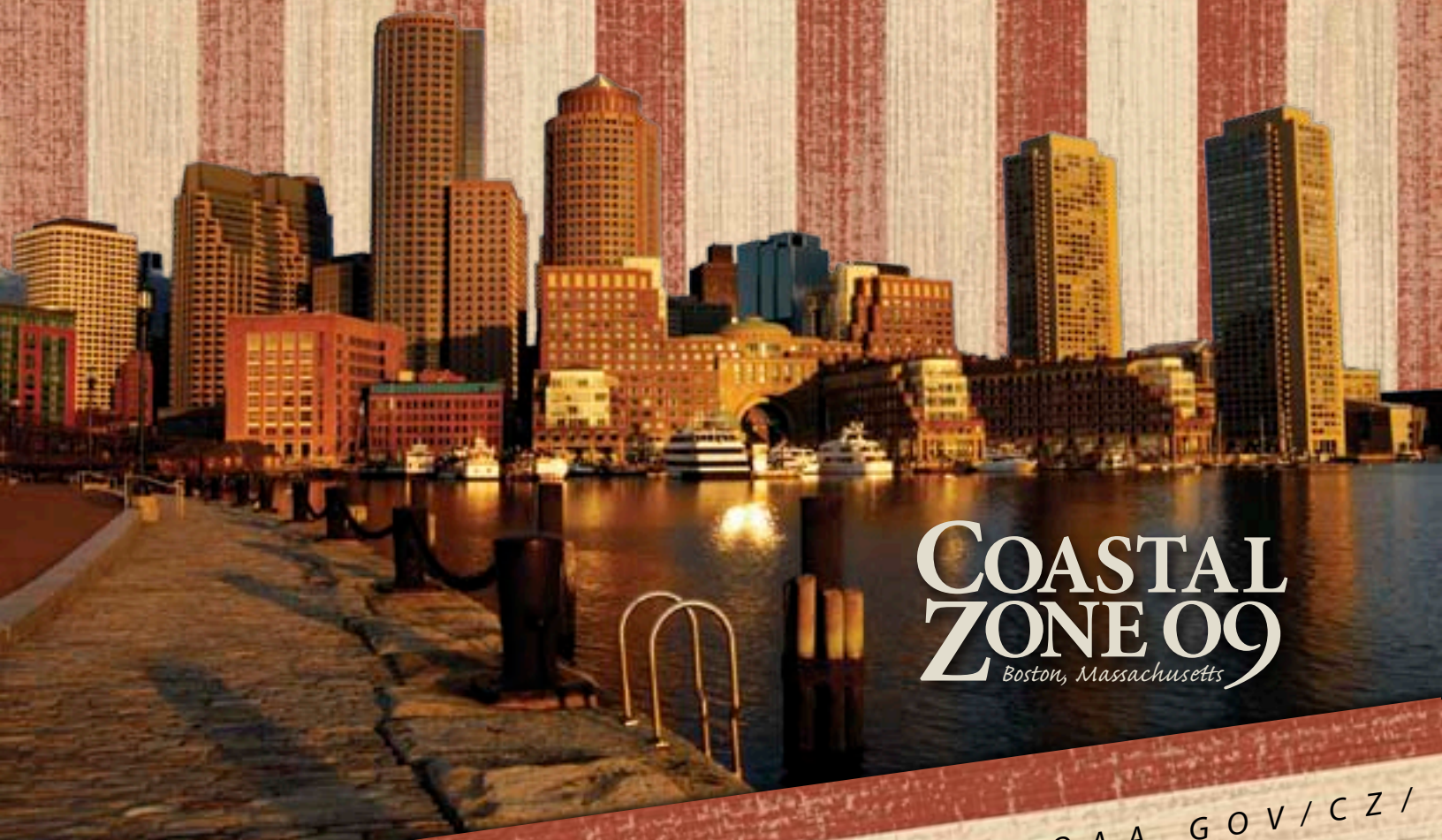


JULY 19 TO 23, 2009

# FINAL PROGRAM

**REVOLUTIONARY TIMES: CATCHING THE WAVE OF CHANGE**



**COASTAL  
ZONE 09**  
*Boston, Massachusetts*

[WWW.CSC.NOAA.GOV/CZ/](http://WWW.CSC.NOAA.GOV/CZ/)

# CONFERENCE AT A GLANCE

## Monday, July 20

8:00 a.m. .... Coffee  
8:00 a.m. to 5:00 p.m. .... Conference Check-in  
9:00 to 10:30 a.m. .... Opening Plenary  
10:30 to 11:00 a.m. .... Break  
11:00 a.m. to 12:30 p.m. .... Concurrent Sessions  
12:30 to 1:45 p.m. .... Networking Luncheon and Hershman Award  
2:00 to 4:30 p.m. .... Café Conversations  
2:00 to 3:30 p.m. .... Concurrent Sessions  
3:30 to 4:00 p.m. .... Break  
4:00 to 5:00 p.m. .... Concurrent Sessions  
6:00 to 8:00 p.m. .... Welcome Reception and Stratton Award

## Tuesday, July 21

8:00 a.m. .... Coffee  
8:00 a.m. to 5:00 p.m. .... Conference Check-in  
9:00 to 11:30 a.m. .... Poster and Federal Partner Hall Open  
9:00 to 11:30 a.m. .... Café Conversations  
9:00 to 10:00 a.m. .... Concurrent Sessions  
10:00 to 10:30 a.m. .... Break  
10:30 to 11:30 a.m. .... Concurrent Sessions  
11:30 a.m. to 1:00 p.m. .... Poster Luncheon  
1:00 to 2:30 p.m. .... Concurrent Sessions  
2:30 to 3:00 p.m. .... Break  
3:00 to 4:30 p.m. .... Concurrent Sessions

## Wednesday, July 22

8:00 a.m. .... Coffee  
8:00 a.m. to 5:00 p.m. .... Conference Check-in  
9:00 to 10:30 a.m. .... Local Plenary  
10:30 to 11:00 a.m. .... Break  
11:00 a.m. to 12:30 p.m. .... Concurrent Sessions  
12:30 to 2:00 p.m. .... Lunch on Your Own  
2:00 to 4:30 p.m. .... Café Conversations  
2:00 to 3:30 p.m. .... Concurrent Sessions  
3:30 to 4:00 p.m. .... Break  
4:00 to 5:00 p.m. .... Concurrent Sessions  
7:00 to 10:00 p.m. .... Aquarium Reception

## Thursday, July 23

8:00 a.m. .... Coffee  
8:00 a.m. to 3:30 p.m. .... Conference Check-in  
9:00 to 10:30 a.m. .... Concurrent Sessions  
10:30 to 11:00 a.m. .... Break  
11:00 a.m. to 12:30 p.m. .... Concurrent Sessions  
12:30 to 1:45 p.m. .... Networking Luncheon and Magoon Award  
2:00 to 3:00 p.m. .... Concurrent Sessions  
3:00 to 3:30 p.m. .... Break  
3:30 to 4:30 p.m. .... Concurrent Sessions  
4:30 p.m. .... Adjourn

REVOLUTIONARY TIMES: CATCHING THE WAVE OF CHANGE

# CONFERENCE TIPS

**Conference Evaluations** – Your input is very important and is used to help shape future conferences. A link to the evaluation will be e-mailed to you during the week. Use your personal laptop or one of the computers in the Internet Café to complete your evaluation on-line. Then, stop by the registration desk to pick up your fun Coastal Zone 09 token!

**Conference Proceedings** – Do you want to learn more about the talk you just attended? Check out the Coastal Zone 09 Proceedings to find all abstracts. Your conference proceedings are available on a flash drive included in your welcome package.

**Daily Brief** – Pick up your copy of the *Daily Brief* each morning from the registration area. This bulletin highlights conference activities, provides information on Boston, profiles the conference partners, and much more. Check it out. Be informed.

**Internet Café** – The Fairfield room near the registration area offers computers for those wishing to check e-mail. The room is open from 8:00 a.m. to 5:00 p.m. each day.

**Message Board** – Need to get word to a colleague that you will be late for a meeting? Try posting a message on the message board located next to the program and session information table.

**Speaker Assistance** – A speaker ready room is available during conference registration hours. It is located in the Hancock room near the registration area. Please report here the day before your scheduled talk to have your presentation loaded on a conference laptop.

**Technical Program Assistance** – Please visit the program and session information table, located near the registration area, for any questions you may have about sessions or presentations. We ask that all presenters, including poster presenters, and moderators check in at this table immediately after registering.



## MARC J. HERSHMAN EXCELLENCE IN MENTORING AWARD

In memory of Marc Hershman, the Joint Ocean Commission Initiative will present the inaugural Marc J. Hershman Excellence in Mentoring Award at Coastal Zone 09. Professor Hershman taught at the University of Washington School of Marine Affairs and School of Law and was a respected leader in the ocean and coastal community, including serving as a member of the U.S. Commission on Ocean Policy and the Joint Ocean Commission Initiative. Professor Hershman's devotion to inspiring young people stands out as his legacy. His dedication and enthusiasm for mentoring students, as well as his continued facilitation of their professional development, helped to cultivate the next generation of ocean and coastal managers and scientists.

# Monday, July 20, 2009

	8:00	9:00	10:00	11:00	12:00	1:00	2:00	3:00	4:00	5:00	6:00		
Mezzanine	Conference Check-in												
Hancock	Speaker Ready Room												
Fairfield	Internet Café												
Imperial Ballroom Foyer	Coffee			Break					Break				
Imperial Ballroom		Opening Plenary				Networking Luncheon and Hershman Award (12:30 to 1:45 p.m.)				Poster and Federal Partners Set-up		Welcome Reception (6 to 8 p.m.)	
Arlington					Social, Economic, and Environmental Perspectives on Protected Areas			Fisheries Management		Regional Sediment Management			
Berkeley/Clarendon					From Observations to Applications: Enhancing Coastal Science for Managers, Practitioners, and the Public			Partnering with NOAA Sea Grant in Your State		The Debate over Aquaculture			
Georgian					Climate Change Impacts			Geologic Maps and Models of Coastal and Nearshore Change for Aiding Coastal Managers in Adapting to Sea Level Rise and Storms		Climate Change in the Great Lakes: A Presentation Panel to Discuss the Risk, Vulnerability, and the Role of Adaptation in Addressing Coastal Hazards			
Stanbro					Got Energy? Tools, Lessons Learned, and Future Trends for Tidal and Offshore Energy			Ecosystem-Based Management Approaches		Evaluating the Effectiveness of Coastal Ecosystem Science and Management: Moving Beyond Performance Measures			
Terrace					Ecosystem Assessment, Conservation, and Management			Realizing the Vision for the Future of the Coastal Zone Management Act		Marine Ecosystem-Based Management in Practice in the Northeast U.S.			
St. James, Fourth Floor							Café Conversation: Native Conversations: Intergenerational Connections to Our Decision-Making						
Stuart, Fourth Floor							Café Conversation: Building Capacity for Collaborative Decisions, Resilient Ecosystems, and Sustainable Practices: Water, Land, Community, and People						
Thoreau, Fourth Floor							Café Conversation: U.S. Offshore Wind Collaborative: An Integrated Approach to Sustainable Renewable Energy Development						
White Hall, Fourth Floor							Café Conversation: Establishing a Resilient Marine Protected Areas Network: What's Happening?						
Whittier, Fourth Floor							Café Conversation: Who Should Pay for Conservation?						

# Tuesday, July 21, 2009

	8:00	9:00	10:00	11:00	12:00	1:00	2:00	3:00	4:00
Mezzanine	Conference Check-in								
Hancock	Speaker Ready Room								
Fairfield	Internet Café								
Imperial Ballroom Foyer								Break	
Imperial Ballroom	Coffee			Break		Poster Luncheon			
Arlington		Educating and Inspiring Coastal Communities			Harmful Algal Blooms Monitoring and Management			Smart Growth at the Water's Edge: Waterfront and Coastal Community Smart Growth	Development of Wave Energy in Oregon, U.S.A.
Berkeley/Clarendon		Coastal Management Policy and Legislation I			Coastal Management Policy and Legislation II			Toxic Contaminants: Environmental Assessments and Human Interaction	
Georgian		Holding the High Ground: Coastal Habitat in a Changing Climate			Coastal Hazard Preparedness and Mitigation			Regional Ocean Governance: Progress toward Ecosystem-Based Management in Selected Multi-State Approaches	Department of Interior Ocean and Coastal Activities Regional Governance
Stanbro		Managing Beach and Shorefront Development			Engaging Communities to Promote Healthier Coastal Environments			Marine Debris Regional Issues and Action Plans: A Roadmap to Success	By Land and By Sea: Blending Science, Technology, and Information to Tackle Marine Debris
Terrace		Monitoring and Forecasting Coastal Storm Hazards			Reducing Runoff to Improve Water Quality			Decision-Support Tools for Coastal Hazards	Climate Risks and Vulnerabilities
St. James, Fourth Floor		Café Conversation: Creating More Effective Education and Outreach							
Stuart, Fourth Floor		Café Conversation: Coastal Smart Growth and Resilience							
Thoreau, Fourth Floor		Café Conversation: Mapping for Managers: Bridging the Gap between Data and Information							
White Hall, Fourth Floor		Café Conversation: Regional Ocean Governance: Facing the Challenges of Regional Collaboration							
Whittier, Fourth Floor		Café Conversation: Coastal Management Information Needs in a Changing Climate: Challenges and Opportunities							

# Wednesday, July 22, 2009

	8:00	9:00	10:00	11:00	12:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00				
Mezzanine	Conference Check-in															
Hancock	Speaker Ready Room															
Fairfield	Internet Café															
Imperial Ballroom Foyer	Coffee				Break				Break							
Imperial Ballroom	Local Plenary															
Arlington					Smart Growth: From Research to Outreach				Spatial Data and Tools of the Trade				Technology and Partnerships in Coral Reef Management			
Berkeley/Clarendon					Coastal and Ocean Observing Systems: Approaches and Applications				Working Together for Habitat Restoration in the Narrow River (Pettaquamscutt River Estuary)				Integrated Coastal Management: Lessons Learned			
Georgian					Climate Change on the Coast: Plan Today to Adapt Tomorrow				The StormSmart Network: How Local Action across the U.S. Is Preparing Communities for Climate Change				Collaborative Approaches to Regional Ocean Governance			
Stanbro					Policy and Planning Strategies Supporting the Future of Ocean Management				Education and Capacity Building in Coastal Communities				Tools and Approaches for Environmental Restoration			
Terrace					Coastal Flooding: Identifying and Assessing Current and Future Risks				Introducing the International Coastal Atlas Network				Ecological Forecasting: Providing Predictions for Ecosystem-Based Management			
St. James, Fourth Floor									Café Conversation: Building Collaboration between Coastal Management and FEMA's Community Rating System: Changing the Coastal Elements							
Stuart, Fourth Floor									Café Conversation: Building In Climate Change Effects to Urban Waterfront Development Policies							
Thoreau, Fourth Floor									Café Conversation: How Can GEOSS Connect Coastal Zone Observations with Coastal Zone Concerns?							
White Hall, Fourth Floor									Café Conversation: Massachusetts Ocean Management Planning							
Whittier, Fourth Floor									Café Conversation: The Next Generation of Coastal Management: Building Leadership Capacity							
					Lunch on Your Own								Aquarium Reception (7 to 10 p.m. Meet in hotel lobby at 6:45)			

# Thursday, July 23, 2009

	8:00	9:00	10:00	11:00	12:00	1:00	2:00	3:00	4:00	
Mezzanine	Conference Check-in									
Hancock	Speaker Ready Room									
Fairfield	Internet Café									
Imperial Ballroom Foyer	Coffee			Break				Break		
Imperial Ballroom					Networking Luncheon and Magoon Award (12:30 to 1:45 p.m.)					
Arlington		Offshore Alternative Energy Development: State Needs and Proactive Approaches		Working Waterfronts			Recent Legislative and Policy Developments for NOAA's Conservation and Restoration Programs: ARRA, CELCP, and CZMA		Communicating Stormwater Research to a Diverse Set of Stakeholders	
Berkeley/Clarendon		Coastal Environmental Sensing Networks I: Sensor Devices, Networks, Cyber-infrastructure		Coastal Environmental Sensing Networks II: Sensor Applications			Coastal Environmental Sensing Networks III: Policy and Management-Related Information and Technology Needs		Technology and Information Management	
Georgian		Climate Change Adaptation Strategies		Communicating Climate Change Impacts and Risks to Communities: Lessons Learned			Climate-Ready Estuaries: An Adaptation Toolkit to Get Ready for a Changing Climate		Protect or Retreat: Case Studies of Coastal Hazard Response Strategies	
Stanbro		Establishing Human and Ecological Goals for Ecosystem-Based Management: Applied Case Studies along the West Coast		Conservation Planning			Water Quality: Dischargers and Nutrient Monitoring		Developing Coastal Livelihoods for Coastal Biodiversity Conservation: Lessons from the Sustainable Coastal Communities and Ecosystems Project	
Terrace		How to Arrive at a Regional Vision of Ocean Governance Using Marine Spatial Planning Techniques		Measuring and Communicating the Value of Collaboration in Coastal Management			Applying Innovative Land Use Technology in Coastal Communities		Engaging Stakeholders through Communication, Outreach, and Training	

# MONDAY

## July 20, 2009

**COASTAL  
ZONE 09**  
*Boston, Massachusetts*

REVOLUTIONARY TIMES: CATCHING THE WAVE OF CHANGE

8:00 a.m. to 5:00 p.m. | *Mezzanine*  
**CONFERENCE CHECK-IN**

8:00 to 9:00 a.m. | *Imperial Ballroom Foyer*  
**COFFEE**

9:00 to 10:30 a.m. | *Imperial Ballroom*  
**OPENING PLENARY**

**Moderator:**

Mr. John H. Dunnigan, Assistant Administrator, NOAA National Ocean Service

**Keynote Speakers:**

Dr. Jane Lubchenco, Under Secretary of Commerce for Oceans and Atmosphere and Administrator, NOAA

Ms. Laura Davis, Associate Deputy Secretary, Department of the Interior

Ms. Lisa Jackson, Administrator, U.S. Environmental Protection Agency (*invited*)

Climate change adaptation and mitigation is one of the top priorities of United States President Barak Obama's administration. This is good news for state and local governments, since the need for a national strategy is becoming increasingly apparent. At the opening plenary, top administration officials will discuss the national strategy and how this focus will impact our communities and our organizations.

10:30 to 11:00 a.m.  
**BREAK**

11:00 a.m. to 12:30 p.m. | *Arlington*  
**SOCIAL, ECONOMIC, AND ENVIRONMENTAL PERSPECTIVES ON PROTECTED AREAS**  
Moderator: Jeff Adkins, NOAA Coastal Services Center

ADAPTIVE PROCESS DESIGN FOR MULTI-STAKEHOLDER ENVIRONMENTAL PLANNING:  
A TEMPLATE FOR SUCCESS FROM THE CALIFORNIA MARINE LIFE PROTECTION ACT INITIATIVE  
Evan Fox and Melissa Miller-Henson, California Marine Life Protection Act Initiative

THE ROLE OF SOCIOECONOMIC DATA IN DESIGNING AND EVALUATING MPA NETWORKS: CALIFORNIA'S MARINE LIFE PROTECTION ACT PROCESS  
Charles Steinback, Sarah A. Kruse, Ph.D., Jon Bonkoski, Mike Mertens, and Astrid J. Scholz, Ph.D., Ecotrust

PREVENTING THE ULTIMATE WIPEOUT: POLICY APPROACHES FOR PROTECTING SURFING AREAS  
Brycen Swart, Rick Wilson, and Chad Nelsen, Surfrider Foundation

DEVELOPING A PROCESS AND CRITERIA FOR EVALUATING WISCONSIN'S LAKE SUPERIOR FRESHWATER ESTUARIES' ECOLOGICAL CHARACTERISTICS,  
RESEARCH POTENTIAL, AND EDUCATIONAL OPPORTUNITIES  
Travis Olson, Wisconsin Coastal Management Program; Patrick Robinson, Becky Sapper, and Cathy Techtmann,  
University of Wisconsin Extension



11:00 a.m. to 12:30 p.m. | *Berkeley/Clarendon***FROM OBSERVATIONS TO APPLICATIONS:  
ENHANCING COASTAL SCIENCE FOR MANAGERS, PRACTITIONERS, AND THE PUBLIC**

Moderator: Kristin Tronvig, NOAA Center for Operational Oceanographic Products and Services

THE CHANGING TIDE: MEASURING, UNDERSTANDING, AND APPLYING VARIATIONS IN SEA LEVEL

Allison L. Allen, NOAA Center for Operational Oceanographic Products and Services; Galen A. Scott, NOAA National Geodetic Survey

MEASURING VERTICAL LAND MOTION AND THE IMPLICATIONS FOR LOCAL RATES OF SEA LEVEL RISE

Galen A. Scott, NOAA National Geodetic Survey

**Additional Panelists:**

Perry F. Gayaldo, Ph.D., NOAA Restoration Center

Kevin Knuuti, U.S. Army Corps of Engineers

11:00 a.m. to 12:30 p.m. | *Georgian***CLIMATE CHANGE IMPACTS**

Moderator: Daniella Hirschfeld, Massachusetts Office of Coastal Zone Management

EVALUATING POTENTIAL SEA-LEVEL RISE IMPACT TO THE U.S. MID-ATLANTIC OCEAN COAST: RESULTS FROM A PANEL ASSESSMENT

Benjamin T. Gutierrez, S. Jeffress Williams, and E. Robert Thieler, U.S. Geological Survey, Woods Hole Science Center

CLIMATE CHANGE AND EUTROPHICATION STATUS AND TRENDS IN THE GULF OF MAINE

Christine M. Tilburg, Gulf of Maine Council, Ecosystem Indicator Partnership; Holly Elwell, Tufts University; Jim Latimer, U.S. EPA Office of Research and Development; Gary Lines and Kathryn Parlee, Environment Canada; Susan Russell-Robinson, U.S. Department of the Interior

PROJECTING EMPLOYMENT EFFECTS OF STORM SURGE AND SEA LEVEL RISE IN YORK COUNTY, MAINE

Charles S. Colgan and Samuel Merrill, University of Southern Maine

COASTAL FLOODING AND ENVIRONMENTAL JUSTICE: IDENTIFYING VULNERABLE COMMUNITIES AND FEASIBLE ADAPTATION STRATEGIES FOR THE BOSTON METRO AREA

Ellen Douglas, Ph.D., and Chris Watson, Environmental, Earth and Ocean Sciences Department, University of Massachusetts, Boston; Paul Kirshen, Ph.D., Civil and Environmental Engineering, Tufts University; Jack Wiggin, Urban Harbors Institute, University of Massachusetts, Boston; Scott Goodwin, Center for Integrative Environmental Research and Department of Anthropology, University of Maryland, College Park

11:00 a.m. to 12:30 p.m. | *Stambro***GOT ENERGY? TOOLS, LESSONS LEARNED, AND FUTURE TRENDS FOR TIDAL AND OFFSHORE ENERGY**

Moderator: Barry Logue, Second Wind, Inc.

GOT TIDAL ENERGY? AN OPEN SOURCE, WEB-BASED, SPATIAL DECISION SUPPORT TOOL FOR TIDAL POWER SITING

Phil Osborne and Jessica Côté, Pacific International Engineering; Allison Bailey, Sound GIS; Aaron Racicot, Z-Pulley, Inc.; Neil MacDonald, Coldwater Consulting Ltd.

OFFSHORE RENEWABLE ENERGY SITING IN GERMANY AND THE UNITED STATES: LEGAL AND POLICY IMPEDIMENTS AND SUPPORTS

Michelle E. Portman, Marine Policy Center, Woods Hole Oceanographic Institution; John A. Duff, Environmental, Earth and Ocean Science Department, University of Massachusetts, Boston; Johann Köppel and Jessica Reiser, Environmental Assessment and Policy Research Group, Technische Universität, Berlin; Megan E. Higgins, Marine Affairs Institute, Roger Williams University School of Law

IMPACTS OF ENERGY RESOURCE DEVELOPMENT ON COASTAL COMMUNITIES

Mitchell T. Baer, Office of Oil and Gas Analysis, Office of Policy, U.S. Department of Energy

11:00 a.m. to 12:30 p.m. | *Terrace***ECOSYSTEM ASSESSMENT, CONSERVATION, AND MANAGEMENT**

Moderator: Pete Wiley, NOAA Coastal Services Center

INTEGRATED ECOSYSTEM ASSESSMENTS: A TOOL FOR BRIDGING SCIENCE AND ECOSYSTEM MANAGEMENT

Gary C. Matlock, Ph.D., Robert Wood, Ph.D., Ruth Kelty, Ph.D., and Susan Baker, Ph.D., NOAA National Centers for Coastal Ocean Science

SCIENCE TO INFORM AN ECOSYSTEM APPROACH TO MARINE MANAGEMENT

Peter Taylor, Waterview Consulting

AN ECOSYSTEM MANAGEMENT TOOL FOR THE SELECTION OF ENVIRONMENTAL AND SOCIO-ECONOMIC INDICATORS IN URBAN ESTUARIES

Kim M. Frashure, Ph.D. Candidate, Robert E. Bowen, Ph.D, Robert F. Chen, Ph.D., and Anamarija Frankic, Ph.D., University of Massachusetts, Boston

THE NATURE CONSERVANCY'S NORTHWEST ATLANTIC MARINE ECOLOGICAL ASSESSMENT: INTEGRATED PLANNING AND CONSERVATION OF COASTAL AND MARINE ENVIRONMENTS AND RESOURCES

Sally Yozell and Jennifer Greene, The Nature Conservancy

12:30 to 1:45 p.m. | *Imperial Ballroom***NETWORKING LUNCHEON AND HERSHMAN AWARD**

Catch up with old friends and colleagues during this sit-down luncheon and hear about the winner of the Marc J. Hershman Excellence in Mentoring Award.

2:00 to 4:30 p.m. | *St. James***CAFÉ CONVERSATION: NATIVE CONVERSATIONS:  
INTERGENERATIONAL CONNECTIONS TO OUR DECISION-MAKING**

Leader: Kalani Souza, PRiMO Indigenous Knowledge Hui

What would our great-great-grandchildren think of our natural resource management decision-making? This experience is designed to encourage immersion into "traditional science." Let's collaborate to uncover meaningful questions that will guide our future actions to manage our changing coastal and ocean resources. Join David Isaac and Juanita Brown, co-creators of the World Café; Dr. David G. Blumenkrantz, community psychologist, author, and teacher; and Native Cultural Practitioners, M. Kalani Souza and Chadd Paishon (Master Navigator), to experience the heart of indigenous conversations.

2:00 to 4:30 p.m. | *Stuart***CAFÉ CONVERSATION: BUILDING CAPACITY FOR COLLABORATIVE DECISIONS, RESILIENT ECOSYSTEMS,  
AND SUSTAINABLE PRACTICES: WATER, LAND, COMMUNITY, AND PEOPLE**

Leader: Marilyn Buchholtz ten Brink, Ph.D., U.S. Environmental Protection Agency

Population growth, urban expansion, and the warming climate have stressed, and will continue to stress, our coastal ecosystems. This café conversation will provide a forum to discuss the interface between people, technical knowledge, and environmental decisions; the urgent need to build capacity across the public sector for collaborative decision-making; the common interest in creating or preserving resilient ecosystems; and the implementation of sustainable practices. Participants are encouraged to bring examples of successes and challenges to this facilitated discussion, share their priorities, and take home strategies and tools that can assist in decision-making within estuarine watersheds.

2:00 to 4:30 p.m. | *Thoreau***CAFÉ CONVERSATION: THE U.S. OFFSHORE WIND COLLABORATIVE: NEW PARTNERSHIPS, BIG CHALLENGES**

Leader: Fara Courtney, Good Harbor Consulting

Offshore renewable energy has the potential to contribute significant public benefits, including climate change mitigation, economic development opportunities, and energy security, among others, creating new alliances among diverse interests. The U.S. Offshore Wind Collaborative (USOWC) provides a forum for ocean and clean energy advocates, state and federal agencies, academic institutions, and industry to work together to create sustainability in this promising new industry. This café conversation will focus on setting a collective agenda for this multi-sector partnership.

2:00 to 4:30 p.m. | *White Hall***CAFÉ CONVERSATION: ESTABLISHING A RESILIENT MARINE PROTECTED AREAS NETWORK: WHAT'S HAPPENING?**

Leaders: Annie Hillary and Gonzalo Cid, NOAA International Program Office

A new era in marine protected area management and network building is emerging. This café conversation will provide a forum for discussing advances being made to establish marine protected area (MPA) networks. The café will provide an opportunity for participants to provide insights on how to develop resilient MPA networks, as well as on current best practices. The results will be summarized and made available to participants and interested individuals and organizations.

2:00 to 4:30 p.m. | *Whittier***CAFÉ CONVERSATION: WHO SHOULD PAY FOR CONSERVATION?**

Leader: Neal Fishman, California Coastal Conservancy

Science, management, restoration, and technology are increasingly expensive. Join in a conversation about funding sources and effective strategies for increasing the size of the pie for the coast and ocean.

2:00 to 3:30 p.m. | *Arlington***FISHERIES MANAGEMENT**

Moderator: Martha Maxwell Doyle, Barnegat Bay Estuary Program

ATLANTIC COASTAL FISH HABITAT PARTNERSHIP: THE ROLE OF A FISH HABITAT PARTNERSHIP IN COASTAL HABITAT CONSERVATION

Emily Greene, Atlantic Coastal Fish Habitat Partnership

GRAPHICAL DEPICTION OF THE ECONOMIC EFFECTS OF FISHERY MANAGEMENT MEASURES

Monica Galligan, M.Sc. Candidate, Division of Science and Environmental Policy, California State University, Monterey Bay

PARTICLE TRACKING TO SIMULATE THE EFFECTS OF PROPOSED HURRICANE PROTECTION STRUCTURES ON THE MOVEMENT OF LARVAL FISH BEHAVIORS INTO LAKE PONTCHARTRAIN

Jennifer N. Tate, Tate O. McAlpin, and Tahirih C. Lackey, U.S. Army Corps of Engineers Coastal and Hydraulics Laboratory

LINKING DRIVING FORCES OF VULNERABILITY TO THE CONSEQUENCES OF REGULATIONS IN NEW ENGLAND FISHING COMMUNITIES:

A CAUSAL MODEL TO INFORM FISHERIES MANAGEMENT

Seth Tuler and Thomas Webler, Social and Environmental Research Institute, Inc.; Colin Polsky, Department of Geography, Clark University

2:00 to 3:30 p.m. | *Berkeley/Clarendon***PARTNERING WITH NOAA SEA GRANT IN YOUR STATE**

Moderator: Monique Myers, California Sea Grant, University of California Cooperative Extension

NATURAL RESOURCE OUTREACH COALITION AND NEW HAMPSHIRE'S COASTAL COMMUNITIES: EASING THE GROWING PAINS

Julia Peterson, University of New Hampshire Sea Grant Extension

JASPER COUNTY NATURAL RESOURCES CONSERVATION PLAN: PREPARING FOR GROWTH

April Turner, South Carolina Sea Grant Consortium

LOCAL DECISION-MAKER: A WEB-BASED GIS PLANNING SYSTEM FOR NATURAL RESOURCES AND ECONOMIC DEVELOPMENT

Robert McCormick, Illinois-Indiana Sea Grant College Program

UTILIZING SHIPWRECKS, COASTAL TOURISM AND MARITIME HERITAGE AS AN ECONOMIC DEVELOPMENT TOOL

Joseph E. Lucente and Dave Kelch, Ohio State University Extension, Ohio Sea Grant College Program

2:00 to 3:30 p.m. | *Georgian***GEOLOGIC MAPS AND MODELS OF COASTAL AND NEARSHORE CHANGE FOR AIDING COASTAL MANAGERS IN ADAPTING TO SEA LEVEL RISE AND STORMS**

Moderator: S. Jeffress Williams, U.S. Geological Survey

ASSESSING EXTREME STORM AND LONG TERM COASTAL CHANGE HAZARDS USING AIRBORNE LIDAR

Asbury H. Sallenger, U.S. Geological Survey (USGS) and the USGS National Assessment of Coastal Change Hazards Team

USING BAYESIAN NETWORKS TO EVALUATE SEA-LEVEL RISE IMPACTS FOR DECISION MAKING

Benjamin T. Gutierrez, E. Robert Thieler, and S. Jeffress Williams, U.S. Geological Survey, Woods Hole Science Center; Nathaniel Plant, U.S. Geological Survey, Center for Coastal and Watershed Studies; Donald R. Cahoon and Glenn Guntenspergen, U.S. Geological Survey, Patuxent Wildlife Research Center; Dean Gesch, U.S. Geological Survey, Earth Resources Observation and Science Center, John Masterson, U.S. Geological Survey, Massachusetts/Rhode Island Water Science Center

INTEGRATION OF GEOLOGIC FRAMEWORK AND OCEANOGRAPHIC STUDIES TO DEVELOP PREDICTIVE MODELS OF COASTAL CHANGE

Walter A. Barnhardt and John C. Warner, U.S. Geological Survey

SEAFLOOR SEDIMENT CHARACTERIZATION OF U.S. CONTINENTAL SHELVES USING usSEABED

S. Jeffress Williams, Matthew A. Arsenault, Lawrence J. Poppe, and Jane A. Reid, U.S. Geological Survey; Chris J. Jenkins, University of Colorado

2:00 to 3:30 p.m. | *Stamba***ECOSYSTEM-BASED MANAGEMENT APPROACHES**

Moderator: Pat Collins, Minnesota Lake Superior Coastal Program

SAVING LONG ISLAND SOUND: REGIONAL SOLUTIONS FOR LONG-TERM BIODIVERSITY

Jon Kachmar, The Nature Conservancy

PORT ORFORD, OREGON: A COMMUNITY APPROACH TO ECOSYSTEM-BASED MANAGEMENT

Leesa Cobb, Port Orford Ocean Resource Team; Pete Stauffer, Surfrider Foundation; Jennifer Bloeser, Pacific Marine Conservation Council

ACCLIMATIZING TO A NEW BAY AREA: ECOSYSTEM-BASED TOOLS AND RECOMMENDATIONS

Daniel Robinson, San Francisco Bay Conservation and Development Commission

EVERYONE IN THE WATER: COLLABORATIVE ENGAGEMENT TO ADVANCE NEW YORK'S ECOSYSTEM-BASED MANAGEMENT INITIATIVE

Sue Senecah, New York Ocean and Great Lakes Ecosystem Conservation Council

2:00 to 3:30 p.m. | *Terrace*

**REALIZING THE VISION FOR THE FUTURE OF THE COASTAL ZONE MANAGEMENT ACT**

Moderator: Kristen Fletcher, Coastal States Organization

REAUTHORIZATION OF THE CZMA: FACT OR FICTION?

Kristen Fletcher, Coastal States Organization

REALIZING THE VISION FOR THE FUTURE OF COASTAL MANAGEMENT

John H. Dunnigan, NOAA National Ocean Service

ALTERNATIVE ENERGY AND THE FUTURE OF COASTAL MANAGEMENT

Chad Nelson, Surfrider Foundation

COASTAL MANAGEMENT IN THE ERA OF CLIMATE CHANGE

Kathryn Mengerink, Environmental Law Institute

3:30 to 4:00 p.m.

**BREAK**

4:00 to 5:00 p.m. | *Arlington*

**REGIONAL SEDIMENT MANAGEMENT**

Moderator: Rebecca Haney, Massachusetts Office of Coastal Zone Management

INTEGRATING DREDGING PROJECTS INTO A BROADER MANAGEMENT CONTEXT IN NEW ENGLAND

Thomas J. Fredette, U.S. Army Corps of Engineers, New England District; Melville P. Coté, Jr., U.S. Environmental Protection Agency, Region 1; Drew A. Carey, CoastalVision

BORROW AREA MANAGEMENT FOR BARRIER ISLAND RESTORATION IN LOUISIANA

Syed M. Khalil, Louisiana Office of Coastal Protection and Restoration

EMERGING SEDIMENT MANAGEMENT EFFORTS ON CAPE COD: A LOCAL APPROACH

Stephen J. McKenna, Massachusetts Coastal Zone Management

4:00 to 5:00 p.m. | *Berkeley/Clarendon*

**THE DEBATE OVER AQUACULTURE**

Moderator: Susan Bunsick, NOAA Aquaculture Program

REFRAMING THE DEBATE OVER AQUACULTURE

Kevin Amos, Susan Bunsick, and Kate Naughten, NOAA Aquaculture Program

NOAA'S ROLE IN THE FUTURE OF U.S. MARINE AQUACULTURE

David O'Brien, NOAA Aquaculture Program

AQUACULTURE AND TOURISM IN THE COASTAL ZONE: CONFLICT AND INNOVATION IN NEW ZEALAND

Laura W. Jodice, Clemson University; John Hull, New Zealand Tourism Research Institute, Auckland University of Technology; Ulrike Sassenberg, Auckland University of Technology

4:00 to 5:00 p.m. | *Georgian*

**CLIMATE CHANGE IN THE GREAT LAKES: A PRESENTATION PANEL TO DISCUSS THE RISK, VULNERABILITY, AND THE ROLE OF ADAPTATION IN ADDRESSING COASTAL HAZARDS**

Moderator: Pat Collins, Minnesota's Lake Superior Coastal Program

CLIMATE CHANGE IN THE GREAT LAKES: THE BIG PICTURE

Heather Stirratt, NOAA Coastal Services Center

GREAT LAKES CLIMATE CHANGE ADAPTATION STRATEGIES

Patrick J. Doran, Ph.D., The Nature Conservancy

CLIMATE CHANGE AWARENESS FOR THE GREAT LAKES REGION: WISCONSIN SEA GRANT'S APPROACH FOR RESEARCH AND OUTREACH OF ADAPTIVE RESPONSE PLANNING

Gene R. Clark, P.E., University of Wisconsin Sea Grant Institute

4:00 to 5:00 p.m. | *Stambr*

**EVALUATING THE EFFECTIVENESS OF COASTAL ECOSYSTEM SCIENCE AND MANAGEMENT: MOVING BEYOND PERFORMANCE MEASURES**

Moderator: Cory Riley, Cooperative Institute for Coastal and Estuarine Environmental Technology and NOAA Estuarine Reserves Division

CHALLENGE, PROMISE AND PRACTICE OF EVALUATING COASTAL ECOSYSTEM SCIENCE AND MANAGEMENT

Andy Rowe, ARCeconomics, Inc.

LESSONS FROM EXPERIENCE WITH A MULTI-STEP PROCESS FOR EVALUATING ECOSYSTEM MANAGEMENT EFFORTS

Julia Wondolleck, University of Michigan, School of Natural Resources and Environment

COASTAL ECOSYSTEM PROGRAM EVALUATION: MEASURING PROGRESS IN THE NATIONAL ESTUARY PROGRAMS

Richard Ribb, Narragansett Bay Estuary Program

4:00 to 5:00 p.m. | *Terrace*

**MARINE ECOSYSTEM-BASED MANAGEMENT IN PRACTICE IN THE NORTHEAST U.S.**

Moderator: Heather Leslie, Brown University

SMALL-SCALE ECOSYSTEM-BASED MANAGEMENT IN MAINE: THE TAUNTON BAY CASE STUDY

Kathleen Leyden, Maine Coastal Program

ECOSYSTEM-BASED MANAGEMENT AND THE MASSACHUSETTS OCEAN PLAN: APPLICATIONS AND LESSONS LEARNED

Deerin Babb-Brott, Massachusetts Office of Coastal Zone Management

RHODE ISLAND'S SPECIAL AREA MANAGEMENT PLANS: AN ECOSYSTEM MANAGEMENT TOOL

Grover Fugate, Rhode Island Coastal Resources Management Council

6:00 to 8:00 p.m. | *Imperial Ballroom*

**WELCOME RECEPTION**

Our federal partners and our poster presenters will be showcased during this reception. Enjoy light hors d'oeuvres and a cash bar while you network with the federal partners about their projects and tools, and view the poster presentations. During the reception, the winner of the Julius A. Stratton Award will be announced.

# TUESDAY

July 21, 2009

**COASTAL  
ZONE 09**  
*Boston, Massachusetts*

REVOLUTIONARY TIMES: CATCHING THE WAVE OF CHANGE

8:00 a.m. to 5:00 p.m. | *Mezzanine*  
**CONFERENCE CHECK-IN**

8:00 to 9:00 a.m. | *Imperial Ballroom*  
**COFFEE**

9:00 to 11:30 a.m. | *St. James*  
**CAFÉ CONVERSATION: CREATING MORE EFFECTIVE EDUCATION AND OUTREACH**  
Leaders: Scott Stafford and Christine Brittle, The Baldwin Group, Inc.

This café conversation will bring together coastal managers and others engaged in educational and outreach activities to discuss current audiences, techniques, successes, and challenges. Attendees will collectively develop a catalogue of outreach tools in use and discuss innovative and noteworthy approaches to engage particular audiences. The discussion will aim to uncover new ways that coastal managers can support one another as they develop and implement outreach and education efforts. All participants will brainstorm and learn from one another with the assistance of two co-facilitators.

9:00 to 11:30 a.m. | *Stuart*  
**CAFÉ CONVERSATION: COASTAL SMART GROWTH AND RESILIENCE**  
Leader: Sarah van der Schalie, NOAA Office of Ocean and Coastal Resource Management

During the Smart Growth and Resilience café conversation, participants will engage in discussions on how communities can integrate smart growth, hazard resilience, and climate change into community planning. Case studies will be used to generate a list of ideas and recommendations on how coastal communities can improve their resilience using techniques within the "Waterfront and Coastal Smart Growth Elements" and other coastal management approaches.

9:00 to 11:30 a.m. | *Thoreau*  
**CAFÉ CONVERSATION: MAPPING FOR MANAGERS:  
BRIDGING THE GAP BETWEEN DATA AND INFORMATION**  
Leader: Drew Carey, CoastalVision

The goal of this café conversation is to clarify the spatial information needs of ocean planning initiatives. This session will bring ocean mappers, data classifiers, and ocean managers together to identify problems, define gaps between data and information needs, and outline potential solutions. Invited participants will represent a range of geography and experience in each of the stages of developing map-based ocean governance tools. The session will be structured to involve the audience and invited participants to define their needs and identify approaches to narrowing the gap between mapping ocean data and information requirements of managers.

9:00 to 11:30 a.m. | *White Hall*

**CAFÉ CONVERSATION: REGIONAL OCEAN GOVERNANCE:  
FACING THE CHALLENGES OF REGIONAL COLLABORATION**

Leader: Kathleen Leyden, Maine Coastal Program

Participants in this session will be given the opportunity to discuss their experiences with regional ocean governance initiatives, including successes, challenges, and lessons learned. Participants will be asked to agree on three to five top challenges to managing ocean and coastal resources at a regional scale. Using facilitated break-out sessions, participants will work together to develop strategies that address these challenges and will share their plans for bringing these strategies back to their regions.

9:00 to 11:30 a.m. | *Whittier*

**CAFÉ CONVERSATION: COASTAL MANAGEMENT INFORMATION NEEDS IN A CHANGING CLIMATE:  
CHALLENGES AND OPPORTUNITIES**

Leader: Eileen Shea, NOAA National Climatic Data Center

This café conversation will provide an opportunity for coastal managers and other conference participants to contribute to the efforts of the NOAA National Environmental Satellite, Data, and Information Service's National Climatic Data Center (NCDC) to identify and respond to critical needs for climate information to enhance the resilience of coastal communities. Using both small-group and plenary discussions, participants will engage in a facilitated discussions on climate-related challenges, including information gaps, data products, and information services needed, as well as NCDC's and NOAA's roles in providing them.

9:00 to 10:00 a.m. | *Burlington*

**EDUCATING AND INSPIRING COASTAL COMMUNITIES**

Moderator: Carole McCauley, Massachusetts Office of Coastal Zone Management

COMMUNITY EDUCATION AND RESPONSIBLE COASTAL ZONE USE

Shannan Lewinski, I.M. Systems Group at the NOAA Pacific Services Center

CLIMATE AS COMMON GROUND: OUTREACH, EDUCATION AND RESEARCH WITH RELIGIOUS COMMUNITIES TO ENHANCE LITERACY AND STEWARDSHIP IN THE WAQUOIT BAY AREA

Lisa Greber and Anamarija Frankic, University of Massachusetts, Boston; Joan Muller, Waquoit Bay National Estuarine Research Reserve

DEVELOPING AWARENESS OF THE COASTLINE FOR FAMILIES THROUGH USES OF SONG AND STORY

Karen Melander-Magoon, D. Min, Bridget Fanning-Ono, Psy. D.

9:00 to 10:00 a.m. | *Berkeley/Clarendon*

**COASTAL MANAGEMENT POLICY AND LEGISLATION I**

Moderator: John Weber, Massachusetts Office of Coastal Zone Management

TOWARDS A REGIONAL APPROACH TO MARITIME BOUNDARY DELINEATIONS

So-Min Cheong, University of Kansas; Julien Rochette, Institute for Sustainable Development and International Relations, France

MARINE CONSERVATION AGREEMENTS – A PRACTITIONER'S TOOLKIT: [WWW.MCATOOLKIT.ORG](http://WWW.MCATOOLKIT.ORG)

Jay Udelhoven, The Nature Conservancy

IS 'COASTALITY' ABLE TO CATCH THE WAVE OF CHANGE ALONG COASTAL ABIOTIC ENVIRONMENT, AT LOCAL LEVEL?

John Kiousopoulos, Spatial Analysis Laboratory, Technological Educational Institute of Athens

9:00 to 10:00 a.m. | *Georgian*

**HOLDING THE HIGH GROUND: COASTAL HABITAT IN A CHANGING CLIMATE**

Moderator: Pat Montanio, NOAA National Marine Fisheries Service, Office of Habitat Conservation

*Panelists:*

Bruce Stein, National Wildlife Federation

Nadine Hitchcock, California State Coastal Conservancy (*invited*)

Catherine McCall, Maryland Chesapeake and Coastal Program (*invited*)

9:00 to 10:00 a.m. | *Stanbro*

**MANAGING BEACH AND SHOREFRONT DEVELOPMENT**

Moderator: Josh Lott, NOAA Office of Ocean and Coastal Resource Management

MANAGING BEACH AND SHOREFRONT DEVELOPMENT

Christa Rabenold and Josh Lott, NOAA Office of Ocean and Coastal Resource Management

MAPPING OUR WAY TO COASTAL ZONE MANAGEMENT: NEW JERSEY COASTAL MANAGEMENT PROGRAM'S USE OF MAPPED PRODUCTS TO MAKE LAND USE AND REGULATORY DECISIONS

Dorina Frizzera, AICP, and John R. D'Agostino, New Jersey Department of Environmental Protection, Coastal Management Office

A PROGRESSIVE, BALANCED COASTAL CONSTRUCTION SETBACK ORDINANCE ON THE ISLAND OF KAUAI, HAWAII: IMPLEMENTATION AND LESSONS LEARNED

James F. O'Connell, University of Hawaii Sea Grant College Program, Kauai, Hawaii; Dolan Eversole, University of Hawaii Sea Grant College Program, Oahu, Hawaii; Zoe Norcross-Nu'u, University of Hawaii Sea Grant College Program, Maui, Hawaii

9:00 to 10:00 a.m. | *Terrace*

**MONITORING AND FORECASTING COASTAL STORM HAZARDS**

Moderator: Patricia Bowie, New York Department of State, Division of Coastal Resources

FORECASTING OF DAMAGE LEVEL OF MARITIME STRUCTURES CAUSED BY TYPHOONS BASED ON CENTRAL PRESSURE METHOD

Ryusuke Hashimura, Sojo University, Department of EcoDesign, Japan

DETERMINING THE EFFECTS OF BARRIER ISLAND DEGRADATION/RESTORATION IN TERMS OF STORM INTENSITY AND TRACK

Tate McAlpin, Alison Sleath Grzegorzewski, and Mary Cialone, U.S. Army Corps of Engineers, Coastal and Hydraulics Laboratory

MONITORING THE EFFECTS OF CHANGING MANAGEMENT PRACTICE ON THE EVOLUTION OF A MIXED GRAVEL AND SAND BARRIER BEACH

Andrew P. Bradbury, Channel Coastal Observatory, United Kingdom

10:00 to 10:30 a.m.

**BREAK**

10:30 to 11:30 a.m. | *Arlington*

**HARMFUL ALGAL BLOOMS MONITORING AND MANAGEMENT**

Moderator: Mary Culver, NOAA Coastal Services Center

TRANSFERRING NEW TECHNOLOGIES TO COASTAL MANAGERS: PROGRESS IN MONITORING AND MANAGEMENT FOR HARMFUL ALGAL BLOOMS  
Marc Suddleson and Danielle Luttenberg, NOAA Center for Sponsored Coastal Ocean Research

MONITORING TOXIC ALGAE IN THE PUGET SOUND USING QUANTITATIVE PCR  
Sonya T. Dyhrman and Sheean T. Haley, Woods Hole Oceanographic Institution; Jerry A. Borchert, Washington State Department of Health, Shellfish Program; Bob Lona, Washington State Department, Marine Biotoxin Unit; Deana L. Erdner, University of Texas at Austin, Marine Science Institute

CRYPTIC BLOOMS: ARE THIN LAYERS THE MISSING CONNECTION?  
Margaret A. McManus, Ph.D., and Grieg F. Steward, Ph.D., University of Hawaii at Manoa, Department of Oceanography; Raphael M Kudela, Ph.D., and Mary W. Silver, Ph.D., University of California Santa Cruz, Ocean Sciences Department; Percy L. Donaghay, Ph.D., and James M. Sullivan, Ph.D., University of Rhode Island, Graduate School of Oceanography

10:30 to 11:30 a.m. | *Berkeley/Clarendon*

**COASTAL MANAGEMENT POLICY AND LEGISLATION II**

Moderator: Bruce Carlisle, Massachusetts Office of Coastal Zone Management

BEYOND SUSTAINABILITY  
Vicki Kelly, Koru Coaching, United Kingdom

WATER QUALITY TRADING: LEGAL HURDLES AND SCIENTIFIC CHALLENGES  
Stephanie Showalter, National Sea Grant Law Center, University of Mississippi

USING APPROPRIATE ESTUARINE SHORELINE STABILIZATION METHODS THROUGH POLICY REVISIONS AND EDUCATION IN NORTH CAROLINA  
Bonnie M. Bendell, North Carolina Division of Coastal Management

10:30 to 11:30 a.m. | *Georgian*

**COASTAL HAZARD PREPAREDNESS AND MITIGATION**

Moderator: Matt Nixon, Maine Coastal Program

FEMA'S COMMUNITY RATING SYSTEM IN THE COASTAL ZONE  
Josh Lott and Christa Rabenold, NOAA Office of Ocean and Coastal Resource Management; Bill Lesser, Federal Emergency Management Agency; Berry Williams, Berry A. Williams & Associates, Inc.

EFFECTIVE PARTNERING TO MANAGE OCEAN RESOURCES AND MITIGATE COASTAL HAZARDS  
Marnie Meyer and Ann Ogata-Deal, Hawaii Coastal Zone Management Program

AFTER THE HURRICANES: PUBLIC RISK ASSESSMENTS AND POLICY SUPPORT IN THE U.S. GULF COAST  
Hyung Sam Park, Ph.D., and Arnold Vedlitz, Ph.D., Institute for Science, Technology, and Public Policy, Bush School of Government and Public Service, Texas A&M University

10:30 to 11:30 a.m. | *Stanbro*

**ENGAGING COMMUNITIES TO PROMOTE HEALTHIER COASTAL ENVIRONMENTS**

Moderator: Hanna Goss, NOAA Coastal Services Center

VOLUNTEER WATER QUALITY MONITORING AND ITS IMPACT ON CHANGING COASTAL COMMUNITIES  
Erin Jackson, Department of Marine Affairs, University of Rhode Island

A NEIGHBORHOOD NON-PROFIT'S EFFORT TO IMPROVE HARBOR WATER QUALITY THROUGH THE INTRODUCTION OF OYSTERS VIA SURFACE DISBURSAL  
Andrew T. Jay, Massachusetts Oyster Project for Clean Water

SCIENCE IN AID OF A COMMUNITY ADAPTING TO AN UNEXPECTED NEW TIDAL INLET: CHATHAM, MASSACHUSETTS  
Graham S. Giese, Provincetown Center for Coastal Studies; Theodore L. Keon, Town of Chatham, Massachusetts; Mark B. Adams, Cape Cod National Seashore, National Park Service

10:30 to 11:30 a.m. | *Terrace*

**REDUCING RUNOFF TO IMPROVE WATER QUALITY**

Moderator: Arlene O'Donnell, Eastern Research Group, Inc.

IT'S A SHORE THING – THE U.S. EPA NEW ENGLAND BEACH STRATEGY  
Matthew Liebman and Caitlyn Hunt, U.S. Environmental Protection Agency, New England

REDUCING SOIL AND NUTRIENT RUNOFF WITH CONSERVATION BUFFERS  
Fred L. Snyder, Ohio Sea Grant Extension, Ohio State University; Steve Davis, Natural Resources Conservation Service, U.S. Department of Agriculture; Ed Crawford, Division of Soil and Water Conservation, Ohio Department of Natural Resources; Jeff Mitchell, Farm Service Agency

BIOECONOMIC ANALYSIS OF NUTRIENT REDUCTION STRATEGIES IN THE LOWER MISSISSIPPI RIVER BASIN TO ADDRESS HYPOXIA IN THE NORTHERN GULF OF MEXICO  
John V. Westra and Augustus Matekole, Louisiana State University

11:30 a.m. to 1:00 p.m. | *Imperial Ballroom*

**POSTER LUNCHEON**

Take another opportunity to talk with poster presenters and federal partners during this stand-up luncheon.

1:00 to 2:30 p.m. | *Arlington*

**SMART GROWTH AT THE WATER'S EDGE: WATERFRONT AND COASTAL COMMUNITY SMART GROWTH**

Moderator: Lynn Desautels, U.S. Environmental Protection Agency, Smart Growth Program

COASTAL AND WATERFRONT SMART GROWTH ELEMENTS  
Kenneth Walker, NOAA Office of Ocean and Coastal Resource Management

MAKING THE COASTAL SMART GROWTH CONNECTION TO LOCAL CLIMATE CHANGE ADAPTATION A REALITY IN MASSACHUSETTS  
Andrea Cooper, Massachusetts Office of Coastal Zone Management

DENNIS, MASSACHUSETTS, SMART GROWTH INITIATIVES: FROM THE SHORELINE TO THE VILLAGES  
Daniel Fortier, AICP, Town of Dennis, Massachusetts

1:00 to 2:30 p.m. | *Berkeley/Clarendon*

**TOXIC CONTAMINANTS: ENVIRONMENTAL ASSESSMENTS AND HUMAN INTERACTION**

Moderator: Christian Krahforst, Massachusetts Office of Coastal Zone Management

CHARACTERIZING SOCIAL DISRUPTION FROM OIL SPILLS AND SPILL RESPONSE

Thomas Webler, Seth Tuler, and Fabienne Lord-Fonseca, Social and Environmental Research Institute

A CONTAMINANT ASSESSMENT OF VIEQUES, PUERTO RICO

David Whitall, NOAA National Centers for Coastal Ocean Science, Center for Coastal Monitoring and Assessment

LAND USE AND THE SPATIAL DISTRIBUTION OF LIPOPHILIC CONTAMINANTS AS MEASURED IN THE BLUBBER OF BOTTLENOSE DOLPHINS (TURSIOPS TRUNCATUS)

Jeffrey Adams, Todd Speakman, Eric Zolman, and Patricia Fair, NOAA National Centers for Coastal Ocean Science; Gregory Bossart, Harbor Branch Oceanographic Institute

CONTAMINANTS IN EGGS OF MARINE AND ESTUARINE BIRDS COMPARED TO BIRDS IN LACUSTRINE, RIVERINE, TERRESTRIAL HABITATS, MAINE U.S.A.

Wing Goodale and David Evers, BioDiversity Research Institute; Steve Mierzykowski, U.S. Fish and Wildlife Service, Maine Field Office; Brad Allen and Charlie Todd, Maine Department of Inland Fisheries and Wildlife; Linda Welch, U.S. Fish and Wildlife Service, Maine Coastal Islands National Wildlife Refuge; Scott Hall, National Audubon Society; Julie C. Ellis, Tufts University, Cummings School of Veterinary Medicine; Kurunthachalam Kannan, Wadsworth Center, New York State Department of Health; Robert Michener, Boston University Stable Isotope Laboratory

1:00 to 2:30 p.m. | *Georgian*

**REGIONAL OCEAN GOVERNANCE: PROGRESS TOWARD ECOSYSTEM-BASED MANAGEMENT IN SELECTED MULTI-STATE APPROACHES**

Moderator: Laura Cantral, Meridian Institute, Joint Ocean Commission Initiative

MARINE ECOSYSTEM-BASED MANAGEMENT IMPLEMENTATION

Kathryn Mengerink, Environmental Law Institute

NORTHEAST REGIONAL OCEAN COUNCIL

Kathleen Leyden, Maine Coastal Program

WEST COAST GOVERNORS' AGREEMENT ON OCEAN HEALTH

Brian Baird, California Resources Agency

GULF OF MEXICO ALLIANCE

William W. Walker, Mississippi Department of Marine Resources

1:00 to 2:30 p.m. | *Stambro*

**MARINE DEBRIS REGIONAL ISSUES AND ACTION PLANS: A ROADMAP TO SUCCESS**

Moderator: Holly Bamford, NOAA Marine Debris Program

ADDRESSING MARINE DEBRIS IN HAWAII: A DYNAMIC STATEWIDE ACTION PLAN

Carey Morishige and Kris McElwee, I.M. Systems Group, NOAA Marine Debris Program

AN ACTION PLAN TO ADDRESS MARINE DEBRIS IN THE WEST COAST:

AN IMPLEMENTATION OF THE WEST COAST GOVERNORS' AGREEMENT ON OCEAN HEALTH

Nir Barnea, NOAA Marine Debris Program; Eben Schwartz, California Coastal Commission; John Hansen, Washington Department of Natural Resources; Cyreis Schmitt, Oregon Department of Fish and Wildlife

MARINE DEBRIS WORK IN ALASKA

Erika Ammann, NOAA Fisheries

1:00 to 2:30 p.m. | *Terrace*

**DECISION-SUPPORT TOOLS FOR COASTAL HAZARDS**

Moderator: Audra Luscher, NOAA Coastal Services Center

NOAA'S NORTH ATLANTIC REGIONAL TEAM WORKS TO ENHANCE VISUALIZATION OF COASTAL INUNDATION ALONG THE NEW ENGLAND COAST

Matthew Pendleton and Doug Marcy, NOAA Coastal Services Center

CONNECTICUT COASTAL HAZARDS DATA PORTAL AND VISUALIZATION TOOL

Joel Johnson, Connecticut Department of Environmental Protection, Office of Long Island Sound Programs

USING THE SLAMM MODEL FOR PREDICTING MARSH RESPONSE TO SEA LEVEL RISE

Robert W. Scarborough, Ph.D., and David B. Carter, Delaware Department of Natural Resources and Environmental Control, Delaware Coastal Programs

USING CANVIS TO VISUALIZE COASTAL HAZARDS

Hansje Gold-Krueck, The Baldwin Group at the NOAA Coastal Services Center

2:30 to 3:00 p.m.

**BREAK**

3:00 to 4:30 p.m. | *Arlington*

**DEVELOPMENT OF WAVE ENERGY IN OREGON, U.S.A.**

Moderator: Holly V. Campbell, JD LLM, Oregon State University

OREGON MARINE ENERGY PLANNING

Holly V. Campbell, JD LLM, Oregon State University

CATCHING FISHERMEN – ENGAGING COASTAL COMMUNITIES IN OCEAN ENERGY DEVELOPMENT

Kaety Hildenbrand and Flaxen Conway, Oregon Sea Grant

THE SAN JUAN INITIATIVE: AN ECOSYSTEM APPROACH TO PROTECTING ENVIRONMENT AND COMMUNITY

Amy Windrope and Jim Kramer, San Juan Initiative; Pete Stauffer, Surfrider Foundation

ECOLOGICAL EFFECTS AND RESEARCH NEEDS FOR ALTERNATIVE ENERGY OFF THE OREGON COAST

Cathy Tortorici, NOAA National Marine Fisheries Service, Northwest Region

AMENDING THE REGULATORY REGIME FOR OCEAN ENERGY DEVELOPMENT IN OREGON

Paul N. Klarin, Oregon Coastal Management Program

3:00 to 4:30 p.m. | *Georgian*

**DEPARTMENT OF THE INTERIOR OCEAN AND COASTAL ACTIVITIES REGIONAL GOVERNANCE**

Moderator: Terry Holman, U.S. Department of the Interior

*Panelists:*

Terry Holman, U.S. Department of the Interior

Dave Russ, U.S. Geological Survey

Jess Weaver, U.S. Geological Survey

Marvin Moriarty, U.S. Fish and Wildlife Service

Fred Piltz, Minerals Management Service

Leon Carl, U.S. Geological Survey

3:00 to 4:30 p.m. | *Stanbro*

**BY LAND AND BY SEA:**

**BLENDING SCIENCE, TECHNOLOGY, AND INFORMATION TO TACKLE MARINE DEBRIS**

Moderator: Holly Bamford, NOAA Marine Debris Program

INTEGRATING MARINE DEBRIS PREVENTION WITH SOLID WASTE AND WASTEWATER MANAGEMENT

Katherine Weiler, Ashley Greene, and Molly Madden, Ocean and Coastal Protection Division, U.S. Environmental Protection Agency

GULF OF MEXICO MARINE DEBRIS PROJECT: ADDRESSING THE IMPACTS ON COASTAL COMMUNITIES BY HURRICANES KATRINA AND RITA

Nir Barnea, NOAA Office of Response and Restoration, Marine Debris Division; Neal Parry, I.M. Systems Group at the NOAA Marine Debris Division; Peter Murphy, Genwest Systems at the NOAA Marine Debris Division

FROM MARINE DEBRIS EVALUATION TO DEBRIS REMOVAL: THE BENEFIT OF A SOUND SCIENTIFIC APPROACH

H. Ward Slacum Jr., Versar Incorporated, Ecological Sciences and Analysis Division; Steve Giordano, NOAA Chesapeake Bay Office; Jay Lazar and David Bruce, Versar, Inc., NOAA Chesapeake Bay Office

AT-SEA DETECTION OF DERELICT FISHING GEAR: UTILIZING A NOVEL APPROACH TO COMBAT MARINE DEBRIS

Kris McElwee and Carey Morishige, I.M. Systems Group at NOAA Marine Debris Program; Kitty Courtney, TetraTech EM Inc.

3:00 to 4:30 p.m. | *Terrace*

**CLIMATE RISKS AND VULNERABILITIES**

Moderator: Christine Feurt, Wells National Estuarine Research Reserve

ANALYZING THE IMPACTS OF SEA-LEVEL RISE ON COASTAL PROPERTY AND ECOLOGICAL RESOURCES

Jeremy A. Martinich, U.S. Environmental Protection Agency; Daniel E. Hudgens and Ann Jones, Ph.D., Industrial Economics, Inc.

INCORPORATING THE IMPACTS OF CLIMATE CHANGE INTO COASTAL RISK ASSESSMENTS

Erica L. Harris, Marine Resource Management Program, College of Oceanic and Atmospheric Sciences, Oregon State University; Peter Ruggiero, Ph.D., Department of Geosciences, Oregon State University

EFFECTS OF LONG-TERM SEA-LEVEL RISE AND TROPICAL STORMS ON COASTAL COMMUNITIES: AN INTERDISCIPLINARY INTEGRATED ASSESSMENT

Travis Franck, Joint Program on the Science and Policy of Global Change, Massachusetts Institute of Technology

IMPACTS OF CLIMATE CHANGE ON SEAPORTS: A SURVEY OF KNOWLEDGE, PERCEPTIONS AND PLANNING EFFORTS AMONG PORT ADMINISTRATORS

Austin Becker, School of Earth Sciences, Stanford University; Martin Fischer, Department of Civil and Environmental Engineering, Stanford University; Meg Caldwell, Center for Ocean Solutions, Stanford University; Ben Schwegler, Walt Disney Imagineering Research and Development/Stanford University





# WEDNESDAY

July 22, 2009

**COASTAL  
ZONE 09**  
*Boston, Massachusetts*

REVOLUTIONARY TIMES: CATCHING THE WAVE OF CHANGE

8:00 a.m. to 5:00 p.m. | *Mezzanine*  
**CONFERENCE CHECK-IN**

8:00 to 9:00 a.m. | *Imperial Ballroom Foyer*  
**COFFEE**

9:00 to 10:30 a.m. | *Imperial Ballroom*  
**LOCAL PLENARY**

**Moderator:**

Mr. Deerin Babb-Brott, Assistant Secretary for Oceans and Coastal Zone Management and Director, Massachusetts Office of Coastal Zone Management

**Opening Remarks:**

Lieutenant Governor Timothy Murray, State of Massachusetts

*Panelists:*

Susan Tierney, Analysis Group, Massachusetts Ocean Advisory Committee Chair  
John Bullard, Executive Director of Sea Education Association,  
Massachusetts Ocean Advisory Committee Member  
Richard Delaney, Executive Director of Provincetown Center for Coastal Studies,  
Massachusetts Ocean Partnership Governing Board Chair  
Paul Diodati, Director of Massachusetts Division of Marine Fisheries,  
Massachusetts Ocean Advisory Committee Member

"The coastal waters of Massachusetts are our blessing, our birthright, and our legacy." With that statement, on May 28, 2008, Governor Deval L. Patrick signed the Massachusetts Oceans Act. This legislation marked the beginning of a comprehensive ocean management plan created to identify areas for protection and areas for development, particularly development related to renewable energy, aquaculture, and sand extraction for beach nourishment. Join us to learn about this plan from the stakeholders involved in its progress.

10:30 to 11:00 a.m.  
**BREAK**

11:00 a.m. to 12:30 p.m. | *Arlington*  
**SMART GROWTH: FROM RESEARCH TO OUTREACH**

Moderator: Andrea Cooper, Massachusetts Office of Coastal Zone Management

COASTAL SMART GROWTH ELEMENTS IN PRACTICE: CASE STUDIES FROM THE GREAT LAKES REGION  
Rebecca Pearson and Victoria Pebbles, Great Lakes Commission; Heather Stirratt, NOAA Coastal Services Center

ARE THEY READY? DETERMINING WHETHER OR NOT TOWNS ARE PREPARED TO SHIFT FROM TOWN-BASED LAND USE MASTER PLANNING TO WATERSHED MASTER PLANNING  
Erika Washburn, Ph.D. Candidate, University of New Hampshire; Steve Miller, Great Bay National Estuarine Research Reserve, Coastal Training Program

SOUTH CAROLINA'S SHORELINE CHANGE ADVISORY COMMITTEE: RESEARCH PRIORITIES AND POLICY OPTIONS FOR THE FUTURE  
 Matthew J. Slagel, Earth Resources Technology Inc. at the South Carolina Department of Health and Environmental Control, Office of Ocean and Coastal Resource Management; Braxton C. Davis, South Carolina Department of Health and Environmental Control, Office of Ocean and Coastal Resource Management

USING COMMUNITY GROWTH SCENARIOS TO EVALUATE POTENTIAL WATER QUALITY IMPACTS  
 Jesse Schomberg, University of Minnesota Sea Grant; Valerie Brady, Ph.D., and Gerry Sjerven, University of Minnesota, Duluth, Natural Resources Research Institute

11:00 a.m. to 12:30 p.m. | *Berkeley/Clarendon*

**COASTAL AND OCEAN OBSERVING SYSTEMS: APPROACHES AND APPLICATIONS**

Moderator: Anne Ball, NOAA Coastal Services Center

APPLICABILITY OF THE INTEGRATED OCEAN OBSERVING SYSTEM FOR COASTAL MANAGEMENT: RESPONDING TO DATA AND INFORMATION NEEDS  
 Josie Quintrell, National Federation of Regional Associations; Kate Zultner, Coastal States Organization

BUILDING COASTAL COMMUNITY SUPPORT FOR OBSERVING SYSTEMS: NOAA "SMART BUOYS" AND THE CAPTAIN JOHN SMITH CHESAPEAKE NATIONAL HISTORIC TRAIL  
 Andrew W. Larkin, NOAA Chesapeake Bay Office

FISHERMEN IN OCEAN OBSERVING RESEARCH: ASSESSING THE AFFORDABILITY AND FEASIBILITY OF WORKING WITH OREGON COMMERCIAL CRAB FISHERMEN TO DEPLOY SCIENTIFIC INSTRUMENTATION  
 Jeremy L. Childress, R. Kipp Shearman, Ph.D., and Michael Harte, Ph.D., Oregon State University

AN INTERAGENCY COLLABORATION TOWARD IMPROVING INTEGRATION OF WATER QUALITY DATA  
 Rob Ragsdale, Ami Kang, Jeff de La Beaujardiere, and Charles Alexander, NOAA Integrated Ocean Observing Systems

11:00 a.m. to 12:30 p.m. | *Georgian*

**CLIMATE CHANGE ON THE COAST: PLAN TODAY TO ADAPT TOMORROW**

Moderator: Matt Gove, NOAA Office of Ocean and Coastal Resource Management

CHALLENGES FOR COASTAL MANAGERS IN DEVELOPING ADAPTATION PLANS  
 Julia Wyman, Coastal States Organization

MAINSTREAMING ADAPTATION – APPLYING A CLIMATE "LENS" TO COASTAL MANAGEMENT  
 Pam Rubinoff, Rhode Island Sea Grant, Coastal Resources Center

DESIGNING FOR RISING TIDES: RESULTS OF AN INTERNATIONAL COMPETITION FOR IDEAS RESPONDING TO SEA LEVEL RISE IN SAN FRANCISCO BAY AND BEYOND  
 Brad McCrea, San Francisco Bay Conservation and Development Commission

11:00 a.m. to 12:30 p.m. | *Stambr*

**POLICY AND PLANNING STRATEGIES SUPPORTING THE FUTURE OF OCEAN MANAGEMENT**

Moderator: Dale Blanton, Oregon Coastal Management Program

THE RHODE ISLAND OCEAN SPECIAL AREA MANAGEMENT PLAN  
 Jennifer McCann, University of Rhode Island, Coastal Resources Center

NORTH CAROLINA'S EMERGING OCEAN POLICY CHALLENGES  
 Lisa C. Schiavinato, North Carolina Sea Grant and North Carolina Coastal Resources Law, Planning, and Policy Center; Joseph K. Kalo, University of North Carolina School of Law and North Carolina Coastal Resources Law, Planning, and Policy Center

COASTAL SPATIAL PLANNING OF UNINHABITED ISLANDS IN KOREA  
 Jungho Nam, Keun-Hyung Yook, and Heejung Choi, Ocean and Coastal Policy Research Department, Korea Maritime Institute; Daeseok Kang, Department of Ecological Engineering, Pukyong National University

11:00 a.m. to 12:30 p.m. | *Terrace*

**COASTAL FLOODING: IDENTIFYING AND ASSESSING CURRENT AND FUTURE RISKS**

Moderator: Mark Crowell, Federal Emergency Management Agency

AN ESTIMATE OF THE U.S. POPULATION SUBJECT TO THE ONE-PERCENT ANNUAL CHANGE (100-YEAR) COASTAL FLOOD HAZARD  
 Mark Crowell, Federal Emergency Management Agency; Kevin Coulton, Watershed Concepts, AECOM Water

RISK REDUCTION MEASURES FOR REDUCING IMPACTS OF COASTAL STORMS ON THE BUILT ENVIRONMENT  
 John Ingargiola, Federal Emergency Management Agency

EVALUATING THE IMPACT OF CLIMATE CHANGE ON THE NATIONAL FLOOD INSURANCE PROGRAM  
 David Divoky, Watershed Concepts, AECOM Water; Mark Crowell, Federal Emergency Management Agency

IMPROVING FEMA'S COASTAL FLOODPLAIN MAPPING: PRIMARY FRONTAL DUNE AND COASTAL ZONE ASSESSMENTS FOR THE NFIP  
 Jonathan E. Westcott, P.E., Federal Emergency Management Agency; Darryl Hatheway, AECOM Water

12:30 to 2:00 p.m.

**LUNCH ON YOUR OWN**

2:00 to 4:30 p.m. | *St. James*

**CAFÉ CONVERSATION: BUILDING COLLABORATION BETWEEN COASTAL MANAGEMENT AND FEMA'S COMMUNITY RATING SYSTEM: CHANGING THE COASTAL ELEMENTS**

Leader: Bill Lesser, Federal Emergency Management Agency

The Community Rating System (CRS) is a voluntary program which encourages communities that participate in the National Flood Insurance Program (NFIP) to implement floodplain management techniques that are above the minimum NFIP standards. There are many overlaps between CRS standards and coastal zone management principles, including maintaining coastal floodplains in a natural, undeveloped state, implementing erosion-based coastal development setback programs, greater protection of coastal dunes, and requiring disclosure of coastal flood risks in real estate transactions. Currently, these and other CRS coastal elements are being revised, and this café conversation, led by FEMA and NOAA officials, will provide a forum for coastal managers to provide meaningful input on how the CRS should be revised to encourage more progressive coastal floodplain management. Participants will hear an overview of the CRS and the specific coastal elements, and then, aided by facilitators, will break into small groups to discuss and decide on specific recommendations. Output from this session will be collected by FEMA for inclusion in the revised CRS coastal standards.

2:00 to 4:30 p.m. | *Stuart***CAFÉ CONVERSATION: BUILDING IN CLIMATE CHANGE EFFECTS TO URBAN WATERFRONT DEVELOPMENT POLICIES**

Leader: Leslie-Ann McGee, Waquoit Bay National Estuarine Research Reserve

Now that most Americans understand that coastal areas will feel effects of climate change such as relative sea level rise and increased frequency and intensity of storms despite future mitigation efforts, it is time to build consideration of these effects into urban waterfront planning policies. Climate change adaptation will require the production or packaging of scientific data, risk and socio-economic assessments, mapping and modeling, science transfer to policy, planning, technical capacity, and coalition-building, as well as regulatory and technical tools for implementation strategies. Results of this conversation will be recommendations of practical procedures and means for taking climate change into account in urban planning and impact assessment.

2:00 to 4:30 p.m. | *Thoreau***CAFÉ CONVERSATION: HOW CAN GEOSS CONNECT COASTAL ZONE OBSERVATIONS WITH COASTAL ZONE CONCERNS?**

Leader: Joshua Lieberman, Ph.D., Traverse Technologies/Open Geospatial Consortium

Coastal zones in many ways epitomize the interoperability issues that the Global Earth Observation System of Systems (GEOSS) must overcome to realize its mission. Participants in this café conversation will be challenged to pose questions of Earth observation interoperability, comparability, discovery, and integration, and then consider how these questions can be addressed by developing specific capabilities within the framework provided by GEOSS. This is an opportunity for the coastal zone community to both learn more about GEOSS and provide feedback at a critical early phase of operational deployment.

2:00 to 4:30 p.m. | *White Hall***CAFÉ CONVERSATION: MASSACHUSETTS OCEAN MANAGEMENT PLANNING**

Leader: Stephanie Moura, Massachusetts Ocean Partnership

While the ink is still drying on Massachusetts' first-in-the-nation draft integrated ocean management plan, join the Executive Office of Energy and Environmental Affairs and the Massachusetts Ocean Partnership for an interactive dialogue about the commonwealth's ocean management planning experience. Discussion will highlight key challenges and lessons learned in three core aspects: science integration, stakeholder engagement, and the public-private collaboration model. Participants will come away with pragmatic information to support their own marine spatial planning work and will connect with colleagues facing similar challenges.

2:00 to 4:30 p.m. | *Whittier***CAFÉ CONVERSATION: THE NEXT GENERATION OF COASTAL MANAGEMENT: BUILDING LEADERSHIP CAPACITY**

Leader: Corey Riley, NOAA Office of Ocean and Coastal Resource Management, Cooperative Institute for Coastal and Estuarine Environmental Technology

This café conversation will build upon a session from Coastal Zone 07, which discussed how to transition to a new generation of coastal managers. Participants will identify actions to help solve the common gaps and challenges. Breakout groups led by facilitators from academia, government, and nonprofit organizations will contribute practical ideas to make clear progress on addressing topics such as establishing leadership fellowships or mid-career training opportunities; working with academic programs to ensure the essential skills identified are taught to graduate students; providing support to ensure effective succession planning; and identifying useful networking tools to address workforce management needs, etc. Facilitators and key partners will lead the generation of action items and identification of next steps and responsible parties. This café conversation will be a working session to move the important dialogue about the future of coastal management into actionable steps and clear outcomes.

2:00 to 3:30 p.m. | *Arlington***SPATIAL DATA AND TOOLS OF THE TRADE**

Moderator: Chris Kinkade, NOAA Coastal Services Center

OCEAN INFORMATION PRODUCTS IN SUPPORT OF OREGON'S MARINE SPATIAL PLANNING PROCESSES

Andy S. Lanier, Oregon Department of Land Conservation and Development

COASTAL RESILIENCE: USING MARINE SPATIAL PLANNING TO SUPPORT MANAGEMENT DECISIONS THAT ADDRESS THE NEEDS OF NATURAL AND HUMAN COMMUNITIES

Zach Ferdana, The Nature Conservancy

MARINE SPATIAL PLANNING IN CALIFORNIA: THE USE OF COMMON MAPPING AND DATA GATHERING PROTOCOLS TO IMPROVE AGENCY COORDINATION

Matthew Armsby, Caitlin Crain, and Margaret Caldwell, Center for Ocean Solutions; Ben Halpern, National Center for Ecological Analysis and Synthesis; Fiorenza Micheli, Hopkins Marine Station, Stanford University; Deborah Sivas, Stanford Law School

THE HUMAN DIMENSION IN WATERWAY RESOURCE MANAGEMENT: THE FLORIDA PERSPECTIVE

Charles Sidman and Russell Watkins, Florida Sea Grant College Program; William Sargent, Florida Fish and Wildlife Conservation Commission; Robert Swett, School of Forest Resources and Conservation, University of Florida; Laila Racevskis, Food and Resource Economics Department, University of Florida

2:00 to 3:30 p.m. | *Berkeley/Clarendon***WORKING TOGETHER FOR HABITAT RESTORATION IN THE NARROW RIVER (PETTAQUAMSCUTT RIVER ESTUARY)**

Moderator: Veronica M. Berounsky, Graduate School of Oceanography, University of Rhode Island

WHAT YOU CAN LEARN FROM A WATERSHED ASSOCIATION, VOLUNTEER MONITORS, AND GRADUATE STUDENTS: GRASS ROOTS MONITORING RESULTS AND THE CALL FOR RESTORATION IN THE NARROW RIVER (PETTAQUAMSCUTT ESTUARY) IN RHODE ISLAND

Veronica M. Berounsky, Graduate School of Oceanography, University of Rhode Island

THE STATE'S ROLE IN RESTORING THE NARROW RIVER

Elizabeth Scott, Rhode Island Department of Environmental Management, Office of Water Resources

NARROW RIVER STORMWATER ABATEMENT STUDY AND IMPLEMENTATION

M. James Riordan, AICP, Fuss &amp; O'Neill, Inc.

PLANNING ESTUARINE ECOSYSTEM RESTORATION IN THE NARROW RIVER

Lawrence R. Oliver, U.S. Army Corps of Engineers, New England District

2:00 to 3:30 p.m. | *Georgian***THE STORMSMART NETWORK: HOW LOCAL ACTION ACROSS THE U.S. IS PREPARING COMMUNITIES FOR CLIMATE CHANGE**

Moderator: Julia Knisel, Massachusetts Office of Coastal Zone Management

NO ADVERSE IMPACTS AND HOW IT APPLIES TO DECISION-MAKERS DEALING WITH FLOODPLAINS AND CLIMATE CHANGE

Edward A. Thomas, Esq., Michael Baker Jr., Inc.

HOW MASSACHUSETTS' COMMUNITIES ARE GETTING READY FOR CLIMATE CHANGE IMPACTS

Daniella Hirschfeld, Massachusetts Office of Coastal Zone Management

CREATING A NETWORK – LINKING LOCAL CHANGE

Wesley Shaw, Blue Urchin Consulting

2:00 to 3:30 p.m. | *Stambr*

**EDUCATION AND CAPACITY BUILDING IN COASTAL COMMUNITIES**

Moderator: Kris Tronvig, NOAA Center for Operational Oceanographic Products and Services

ADAPTIVE TRAINING METHODOLOGIES FOR DYNAMIC COASTAL COMMUNITIES

Lisa Auermuller, Jacques Cousteau National Estuarine Research Reserve; Rebekah Walker-Szivak, ACE Basin National Estuarine Research Reserve

CONNECTING MORE EFFECTIVELY WITH THE PUBLIC FOR OCEAN LITERACY AND CONSERVATION:

FINDINGS FROM THE OCEAN PROJECT NATIONAL SURVEY

Bill Mott, The Ocean Project

COASTAL PLANNING IN AMERICAN SAMOA THROUGH INNOVATION, EDUCATION, EROSION HAZARD ANALYSIS, AND SEDIMENT MANAGEMENT

Jessica H. Podoski and Thomas D. Smith, U.S. Army Corps of Engineers, Honolulu District

WATER, PEOPLE, AND NATURE IN A TANZANIAN COASTAL WATERSHED: FOSTERING ECOSYSTEM AND SOCIAL TIES

Donald D. Robadue, Jr., and Jim Tobey, University of Rhode Island; Appa Mandari and Jeremiah Daffa, Tanzania Coastal Management Partnership

2:00 to 3:30 p.m. | *Terrace*

**INTRODUCING THE INTERNATIONAL COASTAL ATLAS NETWORK (ICAN)**

Moderator: Dawn Wright, Oregon State University

OPENING REMARKS: OVERVIEW AND HISTORY OF ICAN

Dawn Wright, Oregon State University

U.S. WEST COAST PERSPECTIVE ON ICAN

Tanya Haddad, Oregon Coastal Management Program

U.S. EAST COAST PERSPECTIVE ON ICAN

Marcia Berman, Virginia Institute of Marine Science

U.S. GREAT LAKES PERSPECTIVE ON ICAN

David Hart, University of Wisconsin Sea Grant Institute

ICAN AND THE DIGITAL COAST INITIATIVE

Tony LaVoi, NOAA Coastal Services Center

VOICING CONCERNS ABOUT REGIONAL CLIMATE IMPACTS AND COMMUNITY VULNERABILITY ON THE OREGON COAST

Tim Nyerges, University of Washington

3:30 to 4:00 p.m.

**BREAK**

4:00 to 5:00 p.m. | *Arlington*

**TECHNOLOGY AND PARTNERSHIPS IN CORAL REEF MANAGEMENT**

Moderator: April Turner, South Carolina Sea Grant Consortium

BLENDED SPACE-BASED TECHNOLOGY WITH COMMUNITY-BASED KNOWLEDGE TO ADDRESS CORAL REEF MANAGEMENT

Jamie Carter, The Baldwin Group at the NOAA Pacific Services Center; Dave Eslinger, NOAA Coastal Services Center; Danielle Bamford, The Baldwin Group at the NOAA Coastal Services Center; Christine Feinholz, I.M. Systems Group at the NOAA Pacific Services Center; Chris Robinson and Keil Schmid, I.M. Systems Group at the NOAA Coastal Services Center

ASSESSING THE EFFECTS OF AGRICULTURAL CONSERVATION PRACTICES ON A CORAL REEF ECOSYSTEM: A NOAA AND USDA PARTNERSHIP

Adam G. Zitello, David R. Whitall, Ph.D., Mark E. Monaco, Ph.D., and John D. Christensen, NOAA National Centers for Coastal Ocean Science, Center for Coastal Monitoring and Assessment

TWO SAMOAS: TAKING AN ARCHIPELAGO-WIDE APPROACH TO ADDRESSING MANAGEMENT AND CONSERVATION ISSUES

Doug Harper, American Samoa Department of Commerce

4:00 to 5:00 p.m. | *Berkeley/Clarendon*

**INTEGRATED COASTAL MANAGEMENT: LESSONS LEARNED**

Moderator: Nell Codner, NOAA Coastal Services Center

SMALL ISLAND PLANNING – INTEGRATING CZM IN PARADISE

Steve Tilley, Zoning Office, Saipan, Commonwealth of the Northern Mariana Islands

ECUADOR'S COASTAL RESOURCES MANAGEMENT PROGRAM (1985-2008):

TWO DECADES OF INTEGRATED COASTAL MANAGEMENT AND LESSONS LEARNED

Maria D. Herrera, Graduate School of Oceanography, Coastal Resources Center, University of Rhode Island; Eduardo F. Molina, Ecuador Coastal Management Program (PRMC), Ministerio del Ambiente

LAND ACQUISITION AS A TOOL FOR EROSION, SEA-LEVEL RISE AND CLIMATE CHANGE PROBLEMS: EBRO DELTA CASE STUDY

Jordi Galofré, Ministry of the Environment and Rural and Marine Affairs, Spain

4:00 to 5:00 p.m. | *Georgian*

**COLLABORATIVE APPROACHES TO REGIONAL OCEAN GOVERNANCE**

Moderator: Tricia Ryan, NOAA Coastal Services Center

REGIONAL OCEAN GOVERNANCE: LEVERAGING THE EFFORTS

Robbin E. Peach, McCormack Graduate School of Policy Studies, University of Massachusetts, Boston; Michael K. Orbach, School of the Environment and Earth Sciences, Duke University

COASTAL AND ECOSYSTEM RESTORATION IN COMPLEX MULTI-JURISDICTIONAL SETTINGS: CASE STUDIES IN INSTITUTIONAL INNOVATION

Michael J. Donahue, Ph.D., National Coastal and Ecosystem Restoration Practice, URS Corporation

AN ACTION PLAN TO ADDRESS SUSTAINABLE ECONOMIC DEVELOPMENT IN COASTAL COMMUNITIES: IMPLEMENTATION OF THE WEST COAST GOVERNORS' AGREEMENT ON OCEAN HEALTH

Lynn Longan, Washington Community, Trade and Development; Chris Claffin, Oregon Economic and Community Development Department; Mary Small, California Coastal Conservancy; Stephen Freese, Ph.D., NOAA National Marine Fisheries Service; Valerie Termini, California Ocean Protection Council

4:00 to 5:00 p.m. | *Starbro*

**TOOLS AND APPROACHES FOR ENVIRONMENTAL RESTORATION**

Moderator: Hunt Durey, Massachusetts Office of Coastal Zone Management

MAPPING THE POTENTIAL DISTRIBUTION OF SHALLOW SUBTIDAL EELGRASS IN THE GREATER PUGET SOUND REGION OF WASHINGTON STATE  
Jeremy Davies, Anne Guerry, and Mary Ruckelshaus, Northwest Fisheries Science Center, NOAA Fisheries

RESTORATION OF TIDALLY RESTRICTED SALT MARSHES AT RUMNEY MARSH, REVERE, MASSACHUSETTS: BALANCING FLOOD PROTECTION WITH MARSH RESTORATION BY USE OF SELF-REGULATING TIDEGATES  
Edward L. Reiner, U.S. Environmental Protection Agency, New England District

CLASSIFYING SOUTH CAROLINA'S COASTAL WATERBODIES FOR ADDITIONAL PROTECTION  
Shawn Kiernan, AICP, South Carolina Department of Health and Environmental Control, Office of Ocean and Coastal Resource Management; Rob Hudson, AICP, GISP, Photo Science, Inc.

4:00 to 5:00 p.m. | *Terrace*

**ECOLOGICAL FORECASTING: PROVIDING PREDICTIONS FOR ECOSYSTEM-BASED MANAGEMENT**

Moderator: Elizabeth Turner, NOAA National Ocean Service

TOWARDS THE FUTURE OF ENVIRONMENTAL MODELING AT NOAA: INCLUDING MARINE ECOLOGICAL FORECASTING  
Marie Colton, Ph.D., NOAA Great Lakes Environmental Research Lab

FORECASTING TO MANAGE: SUCCESSES AND CHALLENGES OF A COLLABORATORY FOR THE COLUMBIA RIVER ESTUARY AND PLUME  
Antonio Baptista, Ph.D., Science and Technology Center for Coastal Margin Observation

MODELING THE GULF OF MAINE FOR ECOSYSTEM-BASED MANAGEMENT  
Robert Beardsley, Ph.D., Woods Hole Oceanographic Institute

7:00 to 10:00 p.m. | *New England Aquarium*

**AQUARIUM RECEPTION**

Join our non-federal partners at the New England Aquarium to learn about their coastal management tools and services. As you network with colleagues, you will also be able to experience all the aquarium has to offer—from the African penguins, to Myrtle the green sea turtle, to exhibits on the Amazon rainforest and Pacific reef coral community. Heavy hors d'oeuvres and a cash bar will be provided.

Transportation to the aquarium will be provided beginning at 6:45 p.m. Meet in the hotel lobby, and don't forget your name badge and ticket!



THURSDAY

July 23, 2009

**COASTAL  
ZONE 09**  
*Boston, Massachusetts*

REVOLUTIONARY TIMES: CATCHING THE WAVE OF CHANGE

8:00 a.m. to 3:30 p.m. | *Mezzanine*  
**CONFERENCE CHECK-IN**

8:00 to 9:00 a.m. | *Imperial Ballroom Foyer*  
**COFFEE**

9:00 to 10:30 a.m. | *Arlington*  
**OFFSHORE ALTERNATIVE ENERGY DEVELOPMENT: STATE NEEDS AND PROACTIVE APPROACHES**  
Moderator: Carleigh Trappe, NOAA Office of Ocean and Coastal Resource Management

ALTERNATIVE ENERGY DEVELOPMENT IN THE COASTAL STATES  
Kate Zultner, Coastal States Organization

MASSACHUSETTS OCEAN MANAGEMENT PLAN  
John Weber, Massachusetts Office of Coastal Zone Management

WIND ENERGY IN LAKE ERIE: OHIO'S PLANNING AND REGULATORY FRAMEWORK  
Ohio Department of Natural Resources, Office of Coastal Management

ALTERNATIVE ENERGY ON THE OUTER CONTINENTAL SHELF  
Will Waskes, Minerals Management Service, Office of Offshore Alternative Energy Programs

9:00 to 10:30 a.m. | *Berkeley / Clarendon*  
**COASTAL ENVIRONMENTAL SENSING NETWORKS I:  
SENSOR DEVICES, NETWORKS, CYBER-INFRASTRUCTURE**  
Moderator: Robert D. Stevenson, University of Massachusetts, Boston

DEVELOPING CYBER-INFRASTRUCTURE FOR COASTAL APPLICATIONS: FORMING THE TEAMS AND ADAPTING THE STANDARDS  
Philip Bogden and Tom Shyka, Gulf of Maine Ocean Observing System, Inc.

USING SIMULATION TO DESIGN MARINE ACOUSTIC MONITORING SYSTEMS  
David C. Mountain and David Anderson, Boston University Department of Biomedical Engineering

DESIGN AND IMPLEMENTATION OF AN EMBEDDED SENSOR NETWORK FOR THE OBSERVATION AND RESEARCH OF HARMFUL ALGAL BLOOMS IN SOUTHERN CALIFORNIA COASTAL WATERS  
Ryan N. Smith, Robotic Embedded Systems Laboratory, University of Southern California

INFORMATION AGENTS FOR ENVIRONMENT SENSOR NETWORKS  
Alex Rogers, University of South Hampton

9:00 to 10:30 a.m. | *Georgian*

**CLIMATE CHANGE ADAPTATION STRATEGIES**

Moderator: Jennifer Pagach, Connecticut Department of Environmental Protection, Office of Long Island Sound Programs

COASTAL PROTECTION OF LOWLANDS: ARE ALTERNATIVE STRATEGIES PURPOSEFUL FOR CHANGING CLIMATE?  
Hanz D. Niemeyer, Coastal Research Station of the Lower Saxon State Board for Ecology

DESIGNING COASTAL GOVERNANCE TO PROMOTE RESILIENCY TO CLIMATE CHANGE  
Margaret Peloso, Ph.D. Candidate, Duke University, J.D., 2009, Stanford Law School; Meg Caldwell, Center for Ocean Solutions, Stanford Environmental and Natural Resources Law and Policy Program

DEVELOPING A REGIONAL STRATEGY FOR CLIMATE CHANGE AND SEA LEVEL RISE  
Will Travis, San Francisco Bay Conservation and Development Commission

WHAT DO YOU DO WHEN YOUR COMMUNITIES COULD VANISH OVERNIGHT? THE STATE OF ALASKA'S RESPONSE TO SIX COMMUNITIES IN PERIL FROM CLIMATE CHANGE  
Michael Black, Alaska Immediate Action Work Group (IAWG) and Department of Commerce, Community and Economic Development; Patricia Opheen, IAWG and U.S. Army Corps of Engineers Alaska District; John Madden, IAWG and Alaska Department of Homeland Security and Emergency Management; Steve Ivanof; Amy Holman, IAWG and NOAA Alaska Regional Collaboration Team; Meg King, IAWG and Resource Solutions, Office of Community Partnerships, University of Alaska Anchorage

9:00 to 10:30 a.m. | *Stanbro*

**ESTABLISHING HUMAN AND ECOLOGICAL GOALS FOR ECOSYSTEM-BASED MANAGEMENT: APPLIED CASE STUDIES ALONG THE WEST COAST**

Moderator: Linwood Pendleton, The Ocean Foundation

*Panelists:*  
Dean E. Wendt, Ph.D., California Polytechnic State University  
Bryan Largay, Elkhorn Slough National Estuarine Research Reserve  
Susan Schlosser, University of California Sea Grant Extension  
Pete Stauffer, Surfrider Foundation

9:00 to 10:30 a.m. | *Terrace*

**HOW TO ARRIVE AT A REGIONAL VISION OF OCEAN GOVERNANCE USING MARINE SPATIAL PLANNING TECHNIQUES**

Moderator: Leslie-Ann McGee, Waquoit Bay National Estuarine Research Reserve

*Panelists:*  
Leslie-Ann McGee, Waquoit Bay National Estuarine Research Reserve  
Betsy Nicholson, NOAA Coastal Services Center  
Michael Orbach, Duke University  
Sally Yozell, The Nature Conservancy

10:30 to 11:00 a.m.

**BREAK**

11:00 a.m. to 12:30 p.m. | *Arlington*

**WORKING WATERFRONTS**

Moderator: Dorina Frizzera, New Jersey Coastal Management Program

PRESERVING SEAFOOD-RELATED WORKING WATERFRONT THROUGH STRATEGIC DECISION-MAKING PROCESSES  
Gilbert Sylvia, Coastal Oregon Marine Experiment Station, Oregon State University; Heather Mann, Seafood Consumer Center; Laurel Kellner, Marine Resource Management, Oregon State University; Jeff Feldner, Oregon State University Extension Service; Susan Hanna, Agricultural and Resource Economics, Oregon State University; Michael Dickerson, Adam Zimmerman, and Margret Kirby, Shorebank Enterprise Cascadia

MAINE'S WORKING WATERFRONT ACCESS PILOT PROGRAM  
Hugh Cowperthwaite, Coastal Enterprises, Inc.

WATERFRONT LAND USE CHANGE AND MARINE RESOURCE CONDITIONS: THE CASE OF NEW BEDFORD/FAIRHAVEN HARBOR  
Michelle E. Portman and Di Jin, Marine Policy Center, Woods Hole Oceanographic Institution; Eric Thunberg, NOAA National Marine Fisheries Service, Northeast Fisheries Science Center

THE FATE OF WORKING WATERFRONTS AFTER HURRICANE KATRINA: THE ALABAMA EXPERIENCE  
Jody A. Thompson, Auburn University Marine Extension and Research Center/Alabama Sea Grant Extension

11:00 a.m. to 12:30 p.m. | *Berkeley/Clarendon*

**COASTAL ENVIRONMENTAL SENSING NETWORKS II: SENSOR APPLICATIONS**

Moderator: Robert F. Chen, University of Massachusetts, Boston

DEVELOPMENT OF AUTONOMOUS CHEMICAL SENSORS FOR OCEAN CARBON CYCLE RESEARCH AND MONITORING  
Mike DeGrandpre, University of Montana

MICRO-MOBILE SENSOR NETWORKS  
Rajan Zambre, CEO/CTO, Erallo Technologies

APPLICATION OF DISSOLVED ORGANIC MATTER FLUORESCENCE TO MONITOR BALLAST WATER EXCHANGE COMPLIANCE IN COMMERCIAL VESSELS  
Jennifer Boehme, Christopher Brown, Tim Mullady, Monaca Noble, Darrick Sparks, George Smith, and Greg Ruiz, Smithsonian Environmental Research Center; Kate Murphy, School of Civil and Environmental Engineering, University of New South Wales

VOXNET: A DISTRIBUTED ACOUSTIC SENSING NETWORK FOR LOCALIZING ANIMAL CALLS  
Lewis Girod, Massachusetts Institute of Technology

11:00 a.m. to 12:30 p.m. | *Georgian*

**COMMUNICATING CLIMATE CHANGE IMPACTS AND RISKS TO COMMUNITIES: LESSONS LEARNED**

Moderator: Sunshine Menezes, Metcalf Institute for Marine and Environmental Reporting

INSURANCE INDUSTRY STRATEGIES FOR LOSS PREVENTION  
Diana L. McClure, Institute for Business and Home Safety

HOW NEWSPAPERS COMMUNICATE CLIMATE CHANGE  
Beth Daley, The Boston Globe

ADDRESSING BARRIERS TO COASTAL COMMUNITY RESILIENCY: RESEARCH AND OUTREACH IN MAINE AND OREGON  
Kristen Grant, Maine Sea Grant and University of Maine Cooperative Extension

11:00 a.m. to 12:30 p.m. | *Stanbro*

**CONSERVATION PLANNING**

Moderator: Katie Dolan, The Nature Conservancy

BUILDING SUPPORT FOR COASTAL CONSERVATION: SMALL ORGANIZATIONS AND BIG PLANS

Tin Smith and Susan Bickford, Wells National Estuarine Research Reserve

E-ESTUARY: A DECISION SUPPORT SYSTEM FOR COASTAL WATER AND ECOSYSTEM MANAGEMENT IN THE U.S.A.

Naomi Detenbeck, Marilyn Buchholtz ten Brink, Marguerite Pelletier, Mohammed Abdelrman, Steve Rego, and Jim Latimer, U.S. Environmental Protection Agency, Office of Research and Development, National Health and Environmental Effects Research Laboratory, Atlantic Ecology Division

COOPERATIVE HABITAT PROTECTION PARTNERSHIPS AND A PILOT EFFORT IN MOBILE BAY, ALABAMA

Roberta Arena Swann, Mobile Bay National Estuary Program; Carl Ferraro, Alabama Department of Coastal and Natural Resources; Kathi Rodrigues, NOAA Office of Habitat Conservation; Mary Austill Lott and Jay Udelhoven, The Nature Conservancy; Lauren Long, NOAA Coastal Services Center

PROMOTING ALTERNATIVE MOORING TECHNOLOGIES TO PROTECT EELGRASS HABITAT

Christopher Boelke, NOAA National Marine Fisheries Service

11:00 a.m. to 12:30 p.m. | *Terrace*

**MEASURING AND COMMUNICATING THE VALUE OF COLLABORATION IN COASTAL MANAGEMENT**

Moderator: Kate Barba, NOAA Office of Ocean and Coastal Resource Management, National Policy and Evaluation Division

SLOSEA (SAN LUIS OBISPO SCIENCE AND ECOSYSTEM ALLIANCE): A BOUNDARY ORGANIZATION HELPING DEVELOP MARINE EBM ON THE COAST OF CENTRAL CALIFORNIA

Dean E. Wendt, Ph.D., California Polytechnic State University

ENHANCING RESILIENCE IN COMMUNITY-BASED PLANNING IN HAWAII

Catherine A. Courtney, Tetra Tech EM Inc.

BARRIERS AND BRIDGES TO ECOSYSTEM MANAGEMENT – USING COLLABORATIVE LEARNING TO DEFINE AND MEASURE PROGRESS

Christine Feurt, Wells National Estuarine Research Reserve

HUMBOLDT BAY INITIATIVE: ADAPTIVE MANAGEMENT IN A CHANGING WORLD

M. Wheatley and Susan Schlosser, University of California Sea Grant Extension

12:30 to 1:45 p.m. | *Imperial Ballroom*

**NETWORKING LUNCHEON AND MAGOON AWARD**

Visit and network with new friends and colleagues during this sit-down luncheon and hear about the winner of the Orville T. Magoon Award for Service.

2:00 to 3:00 p.m. | *Arlington*

**RECENT LEGISLATIVE AND POLICY DEVELOPMENTS FOR NOAA'S CONSERVATION AND RESTORATION PROGRAMS: ARRA, CELCP, AND CZMA**

Moderator: Emily Woglom, The Nature Conservancy (invited)

Panelists:

Chris Doley, NOAA National Marine Fisheries Service, Office of Habitat Conservation

Ralph Cantral, NOAA Office of Ocean and Coastal Resource Management

Elaine Vaudreuil, NOAA Office of Ocean and Coastal Resource Management

2:00 to 3:00 p.m. | *Berkeley/Clarendon*

**COASTAL ENVIRONMENTAL SENSING NETWORKS III: POLICY AND MANAGEMENT-RELATED INFORMATION AND TECHNOLOGY NEEDS**

Moderator: John A. Duff, University of Massachusetts, Boston

CURRENT AND FUTURE ENVIRONMENTAL SENSING APPLICATIONS FOR COASTAL ZONE MANAGEMENT

Bruce K. Carlisle, Massachusetts Office of Coastal Zone Management

MONITORING FOR CHANGE IN THE STELLWAGEN BANK NATIONAL MARINE SANCTUARY

Ben Cowie-Haskell, NOAA Office of National Marine Sanctuaries, Stellwagen Bank National Marine Sanctuary

LANDSCAPE STUDIES AND THEIR INTEGRATION INTO DECISION-MAKING DATABASES – A VIEW FROM THE "FIELD"

Allen M Gontz, University of Massachusetts, Boston

2:00 to 3:00 p.m. | *Georgian*

**CLIMATE-READY ESTUARIES: AN ADAPTATION TOOLKIT TO GET READY FOR A CHANGING CLIMATE**

Moderator: John Wilson, U.S. Environmental Protection Agency

CLIMATE CHANGE ADAPTATION IN A COASTAL NEW HAMPSHIRE WATERSHED: IMPROVING CULVERT INFRASTRUCTURE FOR INCREASED STORM FREQUENCY AND INTENSITY

Derek Sowers, Piscataqua Region Estuaries Partnership; Michael Simpson and Colin Lawson, Antioch University; Latham Stack, Syntectic International; Thomas Crosslin, Climate Techniques

ESTIMATING THE COSTS TO REPLACE LOST ECOLOGICAL SERVICES DUE TO SEA LEVEL RISE IN THE DELAWARE ESTUARY

Ann Shellenbarger Jones, Industrial Economics, Inc.

RESPONDING TO RISING TIDES: VULNERABILITY ASSESSMENT AND POLICY RESPONSE TO SEA LEVEL RISE IN SAN FRANCISCO BAY

Steve Goldbeck, San Francisco Bay Conservation and Development Commission

2:00 to 3:00 p.m. | *Stanbro*

**WATER QUALITY: DISCHARGERS AND NUTRIENT MONITORING**

Moderator: Zack Steele, Wells National Estuarine Research Reserve

NO DISCHARGE AREAS (NDAs): ELIMINATING THE LAST MAJOR SOURCES OF SEWAGE DURING DRY WEATHER

Regina Lyons, Office of Ecosystem Protection, U.S. Environmental Protection Agency, New England Region

BEST MANAGEMENT PRACTICES AND GUIDELINES FOR GREEN BOSTON HARBOR, MASSACHUSETTS, USA

Anamarija Frankic, Carrie Schuman, and Dorothy Bassett, University of Massachusetts, Boston

THE MAINE HEALTHY BEACHES PROGRAM: INTEGRATING SCIENCE AND EDUCATION FOR BETTER WATER QUALITY

Peter Slovinsky, Maine Geological Survey; Paula Thomson, Maine Coastal Program; Todd Janeski, Virginia Commonwealth University; Esperanza Stancioff, University of Maine Cooperative Extension

2:00 to 3:00 p.m. | *Terrace*

**APPLYING INNOVATIVE LAND USE TECHNOLOGY IN COASTAL COMMUNITIES**

Moderator: Kalle Matso, Cooperative Institute of Coastal and Estuarine Environmental Technology, University of New Hampshire

APPLYING INNOVATIVE LAND USE TECHNOLOGY IN COASTAL COMMUNITIES

Kalle Matso, Cooperative Institute of Coastal and Estuarine Environmental Technology, University of New Hampshire



DISSEMINATION AND USE OF A WEB-BASED TOOL TO SUPPORT NATURAL RESOURCE-BASED PLANNING AT THE LOCAL LEVEL

Chester L. Arnold, Jr., Center for Land Use Education and Research, University of Connecticut; David Dickson, Emily Wilson, and John Rozum, NEMO

COLLABORATIVE LEARNING AND LAND USE TOOLS TO SUPPORT COMMUNITY-BASED ECOSYSTEM MANAGEMENT

Christine Feurt, Wells National Estuarine Research Reserve

3:00 to 3:30 p.m.

**BREAK**

3:30 to 4:30 p.m. | *Arlington*

**COMMUNICATING STORMWATER RESEARCH TO A DIVERSE SET OF STAKEHOLDERS**

Moderator: Richard Langan, Cooperative Institute of Coastal and Estuarine Environmental Technology

REGIONAL RESULTS FROM USER-DRIVEN OUTREACH AND EDUCATION STRATEGIES AT THE UNH STORMWATER CENTER

James J. Houle, Robert M. Roseen, and Thomas P. Ballestero, University of New Hampshire Stormwater Center

LOCAL LAND USE DECISION MAKERS AS THE BOTTOM LINE: TALES FROM THE NATIONAL NEMO NETWORK

Chester L. Arnold, Jr., Center for Land Use Education and Research, University of Connecticut; David Dickson, National NEMO Network

CALIFORNIA WATER AND LAND USE PARTNERSHIP: PARTNERING ACROSS THE STATE OF CALIFORNIA AND PROVIDING TOOLS FOR LOCAL DECISION MAKERS

Susan F. Zaleski, University of Southern California Sea Grant Program; Al Wanger, California Coastal Commission; Timothy Lawrence, California Sea Grant Program, University of California, Davis

3:30 to 4:30 p.m. | *Berkeley/Clarendon*

**TECHNOLOGY AND INFORMATION MANAGEMENT**

Moderator: Joel Johnson, Connecticut Department of Environmental Protection, Office of Long Island Sound Programs

HOW DIGITAL IS WHAT DIVIDES US? THE ROLE OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) IN SUPPORT OF REGIONAL NETWORKS OF LEADERS WORKING TOWARD SUSTAINABLE COASTAL COMMUNITIES AND ECOSYSTEMS

Bob Bowen and Donald D. Robadue, Jr., Coastal Resources Center, University of Rhode Island

COINATLANTIC, A NETWORK OF PEOPLE AND TECHNOLOGY IN SUPPORT OF COASTALSHELD MANAGEMENT

M.J.A. Butler, International Ocean Institute; P.R. Boudreau and C. LeBlanc, ACZISC Secretariat; J. Boxall, Geographic Information Centre, Dalhousie University; C.W. MacDonald, GeoNova, Province of Nova Scotia

DO ETHICS MATTER? ADDRESSING UNFORESEEN ETHICAL, LEGAL, AND REGULATORY IMPLICATIONS OF NEW OCEAN SCIENCE TECHNOLOGY

Edward R. Urban, Jr., Ph.D., Scientific Committee on Oceanic Research (SCOR), University of Delaware, College of Marine and Earth Studies; Melissa A. Brodeur, U.S. Census of Marine Life Program Office, Consortium for Ocean Leadership

3:30 to 4:30 p.m. | *Georgian*

**PROTECT OR RETREAT: CASE STUDIES OF COASTAL HAZARD RESPONSE STRATEGIES**

Moderator: Deborah Purce, Washington State Department of Ecology

CLIMATE CHANGE ADAPTATION STRATEGIES IN THE SPANISH COAST: EBRO DELTA CASE STUDY

Jordi Galofré, Ministry of the Environment and Rural and Marine Affairs

BEACH PROTECTION POLICY IN THE SOUTHEASTERN COASTAL ZONE

Sarah Skigen, Town of Hilton Head Island, South Carolina

MANAGED RETREAT IN MAUI, HAWAII

Thorne Abbott, Maui County Planning Department; Zoe Norcross-Nu'u, University of Hawaii Sea Grant

3:30 to 4:30 p.m. | *Stambr*

**DEVELOPING COASTAL LIVELIHOODS FOR COASTAL BIODIVERSITY CONSERVATION: LESSONS FROM THE SUSTAINABLE COASTAL COMMUNITIES AND ECOSYSTEMS PROJECT**

Moderator: Elin Torell, Ph.D., University of Rhode Island, Coastal Resources Center

MODERATING OUR EXPECTATIONS ON LIVELIHOODS IN ICM: EXPERIENCES FROM THAILAND, NICARAGUA, AND TANZANIA

Elin Torell, Ph.D., University of Rhode Island, Coastal Resources Center

COMMUNITY-BASED MARINE CONSERVATION AND SUSTAINABLE LIVELIHOODS: LESSONS FOR NORTH SULAWESI INDONESIA

Brian Crawford, University of Rhode Island, Coastal Resources Center

SMALL-SCALE, COMMUNITY-BASED AQUACULTURE – EXAMPLES FROM OUR GLOBAL EXPERIENCE

Maria Haws, University of Hawaii, Hilo

3:30 to 4:30 p.m. | *Terrace*

**ENGAGING STAKEHOLDERS THROUGH COMMUNICATION, OUTREACH, AND TRAINING**

Moderator: Lisa Auermuller, Jacques Cousteau National Estuarine Research Reserve

USING COMMUNICATION SCIENCE TO EFFECTIVELY ENGAGE COASTAL POPULATIONS

Joseph Cone, Oregon Sea Grant, Oregon State University

PLANNING FOR CLIMATE CHANGE: HOW NOAA'S COASTAL TRAINING PROGRAM IS HELPING LOCAL ENTITIES PREPARE

Cathy Angell, Padilla Bay National Estuarine Research Reserve; Katrina Hoffman, Washington Sea Grant; Lara Whitely Binder, Climate Impacts Group; Elizabeth Willmott, King County Executive Office

MEETING THE NEEDS OF COASTAL COMMUNITIES IN THE FACE OF CLIMATE CHANGE: CREATING TARGETED OUTREACH MATERIALS

Jenna Borberg and Michael Harte, Oregon State University; Joseph Cone, Oregon Sea Grant; Laurie Jodice, Clemson University

# CONFERENCE POSTERS

## COASTAL COMMUNITIES ADAPTING TO CHANGING CONDITIONS

COASTAL DEVELOPMENT REGULATION IN RESPONSE TO COASTAL EROSION IN THREE NORTHWEST FLORIDA COUNTIES  
Ariana Marshall and Larry Robinson, Ph.D., Florida A&M University, NOAA Environmental Cooperative Science Center and Environmental Sciences Institute

COASTAL GEOLOGIC HAZARDS AND CLIMATE CHANGE  
Jon C. Boothroyd, Rhode Island Geological Survey, University of Rhode Island;  
Rachel E. Hehre, Department of Geosciences, University of Rhode Island

COMMUNICATING RISK ASSOCIATED WITH A DYNAMIC COASTLINE  
Alan Lulloff, Association of State Floodplain Managers

A DATA INTEGRATION FRAMEWORK TO ENHANCE RESEARCH, MONITORING, AND ASSESSMENT OF COASTAL AND OCEAN CONDITIONS TO BENEFIT COASTAL COMMUNITIES  
Charles Alexander, Jeff de La Beaujardiere, Carmel Ortiz, Rebecca Shuford, and Marcia Weaks, NOAA Integrated Ocean Observing Systems

DECADES OF CHANGE IN A RURAL COASTAL ZONE: WATER, MANGROVE, FISH AND PEOPLE  
Jon P. Altamirano and Hisashi Kurokura, Laboratory of Global Fisheries Science, University of Tokyo

DEVELOPING A SEA LEVEL RISE ADAPTATION PLAN FOR THE STATE OF DELAWARE  
Gabrielle Lyons, Susan Love, and Dave Carter, Delaware Coastal Programs, Division of Soil and Water Conservation, Delaware Department of Natural Resources and Environmental Control

DEVELOPING GUIDANCE FOR THE MANAGEMENT OF MARINE RIPARIAN AREAS IN PUGET SOUND, WASHINGTON  
Kathy Taylor, Ph.D., Washington Department of Ecology; Timothy Quinn, Ph.D., and Randy Carman, Washington Department of Fish and Wildlife; Jim Brennan, Washington Sea Grant; Hilary Culverwell, Starrfish Environmental Consulting

DEVELOPMENT OF NEW YORK STATE GUIDELINES FOR POST-STORM REDEVELOPMENT PLANS  
Patricia Bowie, New York State Department of State, Division of Coastal Resources

THE DEVELOPMENT OF THE SOUTH CAROLINA COASTAL INFORMATION NETWORK AND PORTAL SITE: BRINGING TRAINING OPPORTUNITIES AND EDUCATIONAL RESOURCES TO COASTAL COMMUNITY OFFICIALS AND THE PUBLIC  
April L. Turner and Samantha M. Bruce, South Carolina Sea Grant Extension Program

THE GULF OF MEXICO AT A GLANCE: A PRESENTATION OF SELECTED REGIONAL SOCIOECONOMIC VARIABLES DEVELOPED IN SUPPORT OF THE GULF OF MEXICO ALLIANCE  
Kristen Crossett, NOAA Special Projects, Coastal Resources Assessment Branch

*HD.gov*: AN INTERAGENCY WEB PORTAL FOCUSED ON THE HUMAN DIMENSIONS OF NATURAL RESOURCE MANAGEMENT  
Hansje Gold-Krueck, The Baldwin Group at the NOAA Coastal Services Center; Jeffery E. Adkins, NOAA Coastal Services Center; Fred J. Clark, Office of Tribal Relations, U.S. Forest Service; Thomas E. Fish, Cooperative Ecosystem Studies Units Network, National Park Service

MARINE AND COASTAL ADAPTATION TO CLIMATE CHANGE IN NORTH AMERICA: A SYNTHESIS OF EMERGING IDEAS  
Lara Hansen, Rachel M. Gregg, Jennie Hoffman, Eric Mielbrecht, Jessica Hitt, and Alex Score, EcoAdapt

MONITORING OYSTER VIABILITY AFTER REINTRODUCTION TO BOSTON HARBOR  
Mathew E. Brevard, M.S., and Andrew Jay, DMD, MBA, Massachusetts Oyster Project;  
Richard Bradshaw, Ph.D., Condition Engineering

MULTI-DIMENSIONAL INTEGRATED APPROACH TO COASTAL ENVIRONMENT MANAGEMENT IN MASAN BAY OF KOREA  
Jungho Nam, Wonkeun Chang, Jisun Lee, Heejung Choi, and Keunhyung Yook, Ocean and Coastal Policy Research Department, Korea Maritime Institute

A NOVEL APPROACH FOR ESTIMATING HURRICANE DAMAGES TO COASTAL FISHING  
Rex H. Caffey and Richard F. Kazmierczak, Center for Natural Resource Economics and Policy, Louisiana State University

NUMERIC NUTRIENT CRITERIA FOR THE GREAT BAY ESTUARY IN NEW HAMPSHIRE  
Philip R. Trowbridge, Piscataqua Region Estuaries Partnership

OPENING WINDOWS FOR CLIMATE CHANGE POLICY DEVELOPMENT: KEY FACTORS  
Rebecca Feldman, NOAA Office of Ocean and Coastal Resource Management

AN OVERVIEW OF FLOODING, EROSION AND VILLAGE RELOCATION EFFORTS IN THE NATIVE VILLAGE OF NEWTOK, ALASKA  
Sally Russell Cox, Alaska Division of Community and Regional Affairs; Stanley Tom, Newtok Traditional Council, Native Village of Newtok

THE PACIFIC ISLANDS COASTAL MANAGER'S VIRTUAL LIBRARY AND FORUM  
Carrie Hall, Sarah van der Schalie, and Marjorie Ernst, NOAA Office of Ocean and Coastal Resource Management; Mary Lou Cumberpatch, NOAA Central Library; Stephanie Fauver, Steve Frano, and Stephanie Beard, NOAA Coastal Services Center; Sarah Jones, NOAA National Weather Service

A PARAMETRIC STUDY OF METEOROLOGICAL FORCING IN STORM SURGE MODELING: A CASE STUDY IN COASTAL MISSISSIPPI  
Himangshu S. Das, Jackson State University; Emily Dhingra, URS Corporation

PROCESSING AND ACCURACY OF TOPOGRAPHIC LIDAR DATA IN COASTAL MARSHES  
Keil Schmid, Brian Hadley, and Rebecca Love, I.M. Systems Group at the NOAA Coastal Services Center; Rebecca Mataosky and Robert McGuinn, The Baldwin Group at the NOAA Coastal Services Center

PROJECT CI-FLOW – TRACKING THE RAINDROP FROM THE SKY TO THE SUMMIT TO THE SEA  
Suzanne Van Cooten, NOAA National Severe Storms Laboratory; Kevin Kelleher, Jack Thigpen and Robert Bacon

A QUANTITATIVE ANALYSIS OF THE RELATIONSHIP BETWEEN SOCIO-ECONOMIC INDICATORS AND VULNERABILITY TO COASTAL FLOODING  
Jawon Lee, Geography Department, Sungshin Women's University, Korea; Ellen Douglas, Environmental, Earth and Ocean Sciences, University of Massachusetts, Boston

A REVIEW OF THE PUERTO RICO SUSTAINABLE COASTAL COMMUNITY DEVELOPMENT PROJECT: CHALLENGES AND OPPORTUNITIES TO REACH SUSTAINABLE DEVELOPMENT IN THE CARIBBEAN  
Lillian Ramírez-Durand and Manuel Valdés-Pizzini, Ph.D., Sea Grant College Program, University of Puerto Rico

RIISING WATERS: HELPING HUDSON RIVER VALLEY COMMUNITIES ADAPT TO CLIMATE CHANGE  
Katie Dolan, The Nature Conservancy

THE ROLE OF ABIOTIC FACTORS IN SUBMERGED AQUATIC VEGETATION CHANGE IN THE HUDSON RIVER  
Catherine A. McGlynn, Hudsonia Ltd.; Eugenia Barnaba, Susan Hoskins, and Stephen Smith,  
Institute for Resource Information Sciences, Cornell University; Elizabeth A. Blair, Hudson River  
National Estuarine Research Reserve; Stuart E. G. Findlay, Cary Institute of Ecosystem Studies;  
W. Charles Nieder, New York State Department of Environmental Conservation

SATELLITE OCEANOGRAPHY AT THE NOAA NATIONAL OCEANOGRAPHIC DATA CENTER:  
A NEW GENERATION OF HIGH QUALITY LONG-TERM CLIMATE DATA RECORDS AND ENHANCED USER ACCESS  
Kenneth Casey, Yongsheng Zhang, Tess Brandon, Vicky Lin, and  
Sheri Phillips, NOAA National Oceanographic Data Center

SHORELINE CHANGE IN ACCRA, GHANA: PAST, PRESENT, AND FUTURE  
Kwasi Apeaning Addo, Ph.D., Accra Polytechnic

SPATIAL MODELS FOR THE ASSESSMENT OF THE STORM-SURGE AFFECTED REGIONS IN COASTAL AREAS:  
CASE STUDY OF THE CYCLONE NARGIS IN MYANMAR  
Ceyhun Ozelik, Columbia University; Yuri Gorokhovich, Lehman College,  
City University of New York

THE STATE OF THE COAST WEB SITE: TELLING THE STORY OF THE COAST  
Chris David, NOAA Special Projects Office

STORMSMART COASTS IN ACTION: AN EVALUATION OF LOCAL LEVEL CLIMATE CHANGE ADAPTATION  
AND FLOODPLAIN MANAGEMENT STRATEGIES  
Daniella Hirschfeld, Massachusetts Office of Coastal Zone Management

A STUDY OF WATER CIRCULATION AND WATER QUALITY IN HILO BAY, HAWAII  
Jessica H. Podoski and Thomas D. Smith, U.S. Army Corps of Engineers, Honolulu District

TOWARD UNDERSTANDING THE DYNAMICS OF WATER DEPENDENT USES AND COASTAL POLICY THROUGH RHODE ISLAND'S  
PORTS AND COMMERCIAL HARBORS INVENTORY  
Donald D. Robadue, Jr., Rebecca Bannon, and Angela Wilson, University of Rhode Island; Austin  
Becker, Stanford University

Tsunami Education, Preparation and Recovery Project for Downtown Hilo  
Christian Kay, County of Hawai'i Planning Department; Genevieve Cain, Pacific Tsunami Museum

VENTURA COUNTY'S COMPACT FOR SUSTAINABLE DEVELOPMENT  
Monique Myers, California Sea Grant, University of California Cooperative Extension

VISIBLE SPACE BY LANDSCAPE RECOGNITION BY LOCAL INHABITANTS AND THE COMPOSITION  
Hirotomo Ohuchi, Department of Architecture College of Industrial Technology, Nihon  
University, Japan; Satoshi Yamada and Setsuko Ouchi, Graduate School of Industrial Technology,  
Nihon University, Japan

VISUALIZING SEA LEVEL RISE: A GLIMPSE AT RHODE ISLAND'S FUTURE COASTLINE  
Angela Wilson, Virginia Lee, Pam Rubinoff, and Nate Vinhatero, Coastal Resources Center,  
University of Rhode Island

WATERFRONT EVOLUTION: INVESTIGATING LAND USE CHANGE IN NEWPORT, OREGON  
Laurel Kellner, Marine Resource Management, Oregon State University;  
Gil Sylvia, Coastal Oregon Marine Experiment Station, Oregon State University

## CONSERVATION IN THE FACE OF CHANGE

ADDRESSING MARINE DEBRIS PREVENTION THROUGH EXISTING SOLID WASTE AND WASTEWATER MANAGEMENT TOOLS  
Ashley Greene, U.S. Environmental Protection Agency, Ocean and Coastal Protection Division

ASSESSMENT OF HORSESHOE CRAB MANAGEMENT REGIMES  
Denise M. Ellis and John A. Duff, J.D., LL.M., University of Massachusetts, Boston

CULTURAL AND HISTORICAL RESOURCE ASSESSMENT FOR ECOSYSTEM-BASED MANAGEMENT  
Zac Hart, I.M. Systems Group at the NOAA Coastal Services Center; Christina Hoffman, The  
Baldwin Group at the NOAA Coastal Services Center; Rebecca Pollock, NOAA Coastal Services  
Center; Susan Schlosser, California Sea Grant Extension Program; Tiffany Wilson, Planwest  
Partners, Inc.

DEFINING AND MEETING MANAGEMENT CHALLENGES AT THE STELLWAGEN BANK NATIONAL MARINE SANCTUARY  
Craig D. MacDonald, Stellwagen Bank National Marine Sanctuary

DELAWARE BAY BENTHIC MAPPING PROJECT: PROVIDING CONSTRAINTS ON CONSERVATION OF THE ESTUARY  
John Madsen, University of Delaware; Bartholomew Wilson and Michael Rhode, Delaware  
Department of Natural Resources and Environmental Control

THE EBM TOOLS COLLABORATIVE: FOSTERING AN ON-LINE COMMUNITY OF  
ECOSYSTEM-BASED MANAGEMENT PRACTITIONERS  
Sarah Carr and Patrick Crist, NatureServe; Ken Snyder, Jason Lally, and  
Jocelyn Hittle, PlaceMatters

ECONOMIC VALUATION OF POTENTIAL ECOSYSTEMS BENEFITS FROM CRAWFISH POND HABITAT IN COASTAL LOUISIANA  
John V. Westra and Rex H. Caffey, Center for Natural Resource Economics and Policy, Louisiana  
State University; Jay V. Huner, Crawfish Research Station, University of Louisiana at Lafayette

EXAMINING THE EFFICIENCY OF COASTAL RESTORATION IN LOUISIANA  
Rex H. Caffey and John Westra, Center for Natural Resource Economics and Policy, Louisiana  
State University; Christiane Aust, Department of Agricultural Economics and Agribusiness,  
Louisiana State University

GREEN MARINAS ON NANTUCKET ISLAND: A RECIPE FOR A SUSTAINABLE WILD BAY SCALLOP FISHERY  
ON NANTUCKET ISLAND, MASSACHUSETTS, USA  
Kimberly Starbuck, Urban Harbor Institute;  
Anamarija Frankic, University of Massachusetts, Boston

IMPROVING COASTAL LAND-USE PLANNING THROUGH THE APPLICATION OF DECISION SUPPORT TOOLS  
IN THE MISSION-ARANSAS NATIONAL ESTUARINE RESEARCH RESERVE  
Kiersten Madden and Sally Morehead, Mission-Aransas National Estuarine Research Reserve;  
Patrick Crist, NatureServe; Ken Dunton, Department of Marine Science, University of Texas at  
Austin; Dave Eslinger, NOAA Coastal Services Center; John Jacob, Texas Coastal Watershed  
Program, Texas Sea Grant Extension; Doug Walker, Placeways

AN INTERNET-BASED, GEOSPATIAL TECHNIQUE FOR ASSESSING SCENIC PREFERENCES AND AESTHETIC RESOURCES  
FOR WASHINGTON STATE PARKS  
Anthony O. Gabriel, Department of Geography, Central Washington University;  
David S. Cordner, Center for Spatial Information, Central Washington University



MARINE DEBRIS IN "DOWN EAST" NORTH CAROLINA: LOCAL PERCEPTIONS AND MITIGATIVE APPROACHES  
Chris Ellis, Ph.D., NOAA Coastal Services Center; Shay Viehman and Jenny Vander Pluym, NOAA National Centers for Coastal Ocean Science, Center for Coastal Fisheries and Habitat Research; Paula Gillikin, North Carolina Division of Coastal Management, North Carolina National Estuarine Research Reserve; Katherine Straus, Vassar College

MARINEMAP: PARTICIPATORY MARINE PROTECTED AREA DESIGN USING AN WEB-BASED OPEN SOURCE TOOL  
Charles Steinback, EcoTrust; Will McClintock, Chad Burt, Colin Ebert, Jared Kibele, Chris MacDonald, Matt Merrifield, Mike Mertens, Alexei Peters, and Dennis Wuthrich

MISSISSIPPI OYSTER RESTORATION EFFORTS POST HURRICANE KATRINA  
Dale A. Diaz, Kristina Broussard, and John S. Gordon, Office of Marine Fisheries, Mississippi Department of Marine Resources

MONITORING THE RESTORATION OF RED BROOK, A SMALL COASTAL STREAM IN SOUTHEASTERN MASSACHUSETTS  
Ellen M. Douglas, Steven L. Kichefski, Barry Fradkin, and Allen M. Gontz, Environmental, Earth and Ocean Sciences, University of Massachusetts, Boston; Beth C. Lambert and Tim A. Purinton, Massachusetts Riverways Program, Department of Fish and Game

PRESERVING VALUABLE ECOSYSTEM SERVICES: COLLABORATING TO INTEGRATE INFORMATION NEEDS AND RESOURCES  
Susan Lovelace, Ph.D., NOAA Center for Human Health Risk, Hollings Marine Laboratory; L. Dorsey Worthy, Ph.D., U.S. Environmental Protection Agency, Ecosystem Services Research Program, National Exposure Research Laboratory; Robert McGuinn, NOAA Coastal Services Center; Laura Jackson, Ph.D., U.S. Environmental Protection Agency, Ecosystem Services Research Program, National Health and Environmental Effects Research Laboratory

RESPONDING TO THE CORAL REEF USER COMMUNITY: THE NOAA CORAL REEF INFORMATION SYSTEM (CORIS) REGIONAL DATA PORTAL  
Michele Newlin, Donald Collins, Anthony Picciolo, Sarah O'Connor, Sheri Phillips, and Zachary Bronder, NOAA National Oceanographic Data Center; Davida Remer and Georgia Shao, NOAA National Ocean Service, Communications and Education Division; Robb Wright, NOAA National Ocean Service, Strategic Program Services Division

A SPATIAL BIBLIOGRAPHY TO ASSESS EXISTING INFORMATION ON ATLANTIC COASTAL FISH HABITAT  
David Moe Nelson, Tom McGrath, and Ken Buja, NOAA Center for Coastal Monitoring and Assessment; Emily Greene, Atlantic States Marine Fisheries Commission

SPATIAL ECONOMICS OF WETLAND MITIGATION BANKING  
Rex H. Caffey, Ryan Bourriaque, and John Westra, Center for Natural Resource Economics and Policy, Louisiana State University

UNDERSTANDING THE ROLE OF ENGOs IN DEVELOPING FISHERY MANAGEMENT PLANS  
Alesia N. Read, Department of Natural Resources and the Environment, University of New Hampshire

WATERSHED TO OCEAN: PERSONAL CONNECTIONS TO THE OCEAN THROUGH ON-LINE INTERACTIVE EXPERIENCES  
Bruce D. Campbell, The Ocean Project

## OCEAN AND GREAT LAKES PLANNING FOR CHANGING HUMAN USES

DEPOSITIONAL ENVIRONMENTS AND SEDIMENT TRANSPORT ON A MICROTIDAL, WAVE DOMINATED SHOREFACE  
Bryan A. Oakley, Department of Geosciences, University of Rhode Island; Jon D. Alvarez, ESS Group, Inc.; Howard Brenner, Commander Navy Region Mid-Atlantic GeoReadiness Center, U.S. Navy; Matthew Dowling, Charlestown, Rhode Island Wastewater Management Office; Joseph Klinger, Ecotones Inc.; Matthew Zitello, Aiea Intermediate School; Jon C. Boothroyd, Rhode Island Geological Survey and Department of Geosciences, University of Rhode Island

DERELICT GEAR HOTSPOT ANALYSIS: USING SPATIAL MODELING TOOLS TO SUPPORT DERELICT NET REMOVAL EFFORTS IN PUGET SOUND  
Jeremy Davies and Tom Good, NOAA Fisheries, Northwest Fisheries Science Center; Ginny Broadhurst, Northwest Straits Commission; Kyle Antonelis, Natural Resources Consultants, Inc.

THE HYDROLOGICAL IMPACT OF THERMOELECTRIC ENERGY PRODUCTION IN MASSACHUSETTS  
Seth Sheldon and Anamarija Frankic, University of Massachusetts, Boston

IN-STREAM GRAVEL MINING IN OREGON  
James W. Charland, Oregon Coastal Management Program

AN INTERAGENCY APPROACH TO RENEWABLE ENERGY PLANNING AND RESOURCE MAPPING: CURRENT INITIATIVES IN THE STATE OF MAINE  
Matthew E. Nixon, Maine State Planning Office and Maine Department of Marine Resources

A LOCAL COMPARISON OF SEA MUSSEL, MYTILUS CALIFORNIANUS (CONRAD) GROWTH RATES ON THE CENTRAL COAST OF CALIFORNIA  
A. M. Jones, Division of Science and Environmental Policy (SEP), California State University Monterey Bay; D. P. Lohse, Department of Biology, University of California, Santa Cruz

NEW NORTHWARD POLYCHAETES IMMIGRANTS THROUGH THE SUAZ CANAL  
H. H. El-Rashidy, M. M. Atta, M. M. Dorgham, and R. Hamdy, Oceanography Department, Faculty of Science, Alexandria University, Egypt

OBSERVATIONS OF COASTAL SUSPENDED SEDIMENTS DURING THE 2005 HURRICANE SEASON  
S. Jack Stamates and John R. Proni, PhD., NOAA Atlantic Oceanographic and Meteorological Laboratory, Ocean Chemistry Division; Christopher J. McArthur, P.E., U.S. Environmental Protection Agency, Region 4

REACHING THE SHORE: PROVIDING SHORELINE PUBLIC ACCESS INFORMATION THROUGH THE WASHINGTON COASTAL ATLAS  
Deborah Purce and Kathy Taylor, Ph.D., Shorelands and Environmental Assistance Program, Washington State Department of Ecology

SEAMLESS NETWORK CONCEPT SPURS USE OF REMUS IN ENVIRONMENTAL DATA GATHERING FOR DOCK-SITE PLANNING AT SANDYHOOK, NJ, GATEWAY NATIONAL RECREATION AREA, NPS  
Norbert P. Psuty, Michael DeLuca, Joseph Dobarro, Tom Grothues, and Tanya Silveira, Rutgers University; Barry Sullivan and Mark Christiano, Gateway National Recreation Area, National Park Service; Lisa Auermuller, Jacques Cousteau National Estuarine Research Reserve; Charles T. Roman, National Park Service

SEDIMENT MANAGEMENT STRATEGIES FOR THE LONG ISLAND REPLACEMENT CABLE PROJECT: MAPPING THE PLUME OF PLANNING AND IMPLEMENTATION STRATEGIES  
Mark D. Driscoll and Susan M. Herz, ESS Group, Inc.

SITING ANALYSIS FOR HULL, MASSACHUSETTS, OFFSHORE WIND ENERGY PROJECT: STUCK BETWEEN A ROCK AND A CRUSTACEAN  
Glendon Barnes, Mark D. Driscoll, Carol Wasserman, Jonathan Alvarez, and Meghann Murray, ESS Group, Inc.

STAKEHOLDER-DRIVEN REGIONAL RESEARCH PLANNING: AN EXAMPLE OF TWO APPROACHES  
Stephen H. Sempier and LaDon Swann, Mississippi-Alabama Sea Grant Consortium; Julie M. Risien, Oregon Sea Grant; Karl Havens, Florida Sea Grant; Robert Stickney, Texas Sea Grant; Charles Wilson, Louisiana Sea Grant



## CONFERENCE PARTNERS

### FEDERAL

National Oceanic and Atmospheric Administration  
 U.S. Department of the Interior  
 U.S. Environmental Protection Agency  
 Federal Emergency Management Agency

### NON-FEDERAL

Massachusetts Ocean Partnership  
 The Nature Conservancy  
 The Baldwin Group  
 I.M. Systems Group

## COMMITTEES

### TECHNICAL PROGRAM COMMITTEE

Mary Conley, The Nature Conservancy  
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 Office of Ocean and Coastal Resource Management  
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 Andrea Geiger, Coastal States Organization  
 Jaime Geiger, U.S. Fish and Wildlife Service  
 Adrienne Harrison, I.M. Systems Group at the NOAA Coastal Services Center, Northeast Region  
 Jan Kucklick, NOAA Coastal Services Center  
 Dolores Leonard, Cooperative Institute for Coastal and Estuarine Environmental Technology  
 Robert McAdory, U.S. Army Corps of Engineers  
 Leslie-Ann McGee, Waquoit Bay National Estuarine Research Reserve  
 Susan Russell-Robinson, U.S. Geological Survey  
 Kristen Tronvig, NOAA Center for Operational Oceanographic Products and Services

### CONFERENCE MANAGEMENT

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 Adrienne Harrison, I.M. Systems Group at the NOAA Coastal Services Center, Regional Liaison  
 Ginger Hinchcliff, NOAA Coastal Services Center, CZ09 Executive Director  
 Jan Kucklick, NOAA Coastal Services Center, Technical Program Chair  
 Donna McCaskill, NOAA Coastal Services Center, Communications Manager  
 Betsy Nicholson, NOAA Coastal Services Center, Regional Liaison  
 Gale Peek, NOAA Coastal Services Center, Logistics Management  
 Lynn Sellers, I.M. Systems Group at the NOAA Coastal Services Center, Logistics Management

Registration support provided by Sylvester Management Corporation

# Getting Around



## MEZZANINE LEVEL

SECOND FLOOR



## CONFERENCE ROOMS

FOURTH FLOOR



## **NOAA Coastal Services Center**

**LINKING PEOPLE, INFORMATION, AND TECHNOLOGY**

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Guiding the conservation and management of the nation's coastal resources is a primary function of the federal government's National Oceanic and Atmospheric Administration (NOAA). This goal is accomplished through a variety of mechanisms, including collaboration with state coastal programs.

NOAA's Coastal Services Center supports local and state coastal programs by facilitating their access to the most up-to-date technology, information, and management strategies available in this field of work.

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