



# 2015 INTERNATIONAL MARINE SPATIAL PLANNING SYMPOSIUM: SHARING PRACTICAL SOLUTIONS

THE 14<sup>TH</sup> ANNUAL RONALD C. BAIRD  
SEA GRANT SCIENCE SYMPOSIUM

UNIVERSITY OF RHODE ISLAND  
GRADUATE SCHOOL OF OCEANOGRAPHY

OCTOBER 6, 2015



### **ABOUT THE BAIRD SYMPOSIUM**

The annual Ronald C. Baird Sea Grant Science Symposium provides a forum for researchers, resource managers, and stakeholders to discuss the most current science in various areas important to Rhode Island coastal communities and coastal and ocean environments.

This forum was formed in 2002 and renamed in 2006 to honor former National Sea Grant Director Ronald Baird and his contributions and continued service to the Sea Grant mission as an advisor to the Rhode Island and National Sea Grant programs.

### **SPONSORS OF THE 2015 SYMPOSIUM**

Rhode Island Sea Grant and the Coastal Resources Center at the University of Rhode Island Graduate School of Oceanography, and the R.I. Coastal Resources Management Council

### **WITH THANKS TO OUR FUNDERS**

Gordon and Betty Moore Foundation

### **ADVISORY COMMITTEE MEMBERS**

Geoff Coughlan, Professor, Fisheries and Marine Institute, Memorial University; Tracey Dalton, Professor, Department of Marine Affairs, University of Rhode Island; Grover Fugate, Executive Director, R.I. Coastal Resources Management Council; Jennifer Hennessey, Ocean Policy Lead, Department of Ecology, State of Washington; Edward LeBlanc, Chief, Waterways Management Division, U.S. Coast Guard Sector Southeastern New England; Betsy Nicholson, Northeast Lead, Office for Coastal Management, NOAA; Stephen Olsen, Director Emeritus, Coastal Resources Center

### **SYMPOSIUM CONTRIBUTORS**

Paige Gill, Consultant, Training by Design; Nicole Andrescavage, Graduate Student, Coastal Resources Center & Rhode Island Sea Grant; Christian Fox, Graduate Student, Coastal Resources Center & Rhode Island Sea Grant; Tom Pavitt, Marine Spatial Planning Intern, Coastal Resources Center; Danielle Turek, Graduate Student, Coastal Resources Center



**2015 INTERNATIONAL MARINE SPATIAL PLANNING SYMPOSIUM:  
SHARING PRACTICAL SOLUTIONS**

**14<sup>th</sup> Annual Ronald C. Baird Sea Grant Science Symposium**

University of Rhode Island Graduate School of Oceanography  
Corless Auditorium  
Narragansett, Rhode Island, USA  
October 6, 2015

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**7:30 Continental Breakfast and Networking**

**8:30 Welcome and Overview of the Day**

*Jennifer McCann, Director of U.S. Coastal Programs, Coastal Resources Center, and  
Extension Director, Rhode Island Sea Grant  
David Dooley, President, University of Rhode Island  
Bruce Corliss, Dean, University of Rhode Island Graduate School of Oceanography  
Dennis Nixon, Director, Rhode Island Sea Grant*

**8:50 Keynote: Marine Spatial Planning: An Industry Perspective**

*Jeffrey Grybowski, Chief Executive Officer, Deepwater Wind*

**9:25 Applying Marine Spatial Planning to Achieve Long Term Goals**

*Facilitator: Dennis Nixon  
Beth Kerttula, Director, U.S. National Ocean Council  
Dallas Smith, Board President, Nanwakolas Council  
Paul Gilliland, Head of Marine Planning, Marine Management Organisation, United Kingdom  
Lynne Hale, Senior Marine Conservation Fellow, The Nature Conservancy*

Facilitated Q&A (25 minutes)

**10:35 Break**

**10:50 Research to Inform MSP Practitioners**

*Facilitator: Tiffany Smythe, Coastal Manager, Coastal Resources Center,  
and Extension Specialist, Rhode Island Sea Grant  
Patrick Halpin, Director, Marine Geospatial Ecology Lab, Duke University  
Jason Blau, Project Manager, Redstone Strategy Group LLC  
David Robinson, Marine Archaeologist, University of Rhode Island Graduate School of Oceanography  
David Fluharty, Associate Professor, University of Washington*

Facilitated Q&A (25 minutes)

**12:00 Lunch**

**1:00 Stories from the Trenches: Implementation**

*Facilitator: John Weber, Executive Director, Northeast Regional Ocean Council  
Bruce Carlisle, Director, Massachusetts Office of Coastal Zone Management*

*Grover Fugate, Executive Director, Rhode Island Coastal Resources Management Council*  
*Paul Klarin, Marine Affairs Coordinator, Oregon Department of Land Conservation and Development*  
*Charlie Short, Manager, Marine Resources, Ministry of Forests, Lands and Natural Resource Operations,*  
*British Columbia, Canada*  
*Commander Amy Wirts, Waterways Management Branch Chief, United States Coast Guard Eleventh District,*  
*San Francisco, California*  
*Michael Carver, Deputy Superintendent, Cordell Bank National Marine Sanctuary, San Francisco, California*  
Facilitated Q&A (25 minutes)

**2:20 Break**

**2:35 Stories from the Trenches: Planning**

*Facilitator Katie Lund, Project Coordinator, Northeast Regional Ocean Council*  
*Jennifer Hennessey, Ocean Policy Lead, Department of Ecology, State of Washington*  
*Betsy Nicholson, Northeast Lead, Office for Coastal Management, National Oceanic and Atmospheric Administration*  
*Robert LaBelle, Senior Advisor to the Director, Bureau of Ocean Energy Management, speaking for the Mid-Atlantic*  
*Regional Planning Body*  
*Paul Gilliland, Head of Marine Planning, Marine Management Organisation, United Kingdom*  
*David Blatt, Supervising Coastal Planner, Connecticut Department of Energy and Environmental Protection*  
Facilitated Q&A (25 minutes)

**4:00 Implications for the Future**

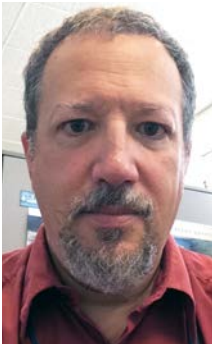
*Jennifer McCann and Tiffany Smythe*

**4:20 Adjourn**

**4:45 Reception and Dinner**

*Studio Blue, Coastal Institute, University of Rhode Island Graduate School of Oceanography*

## SPEAKER BIOGRAPHIES



**David Blatt** is a supervising coastal planner in the Office of Long Island Sound Programs, Department of Energy and Environmental Protection. He has worked in Connecticut's Coastal Zone Management program for over 25 years, dealing with issues such as municipal land use planning and regulation, coastal regulatory policy and implementation, legislation and regulations, and coastal management policy and planning, including coastal and marine spatial planning. He holds graduate degrees in law and regional planning.



**Jason Blau** has worked extensively on economic development and conservation policy projects—including indigenous lands, conservation in the American West, and United States fisheries—since joining Redstone in 2008. His focus is on helping philanthropies design, refine, and evaluate strategies to meet their goals. Before joining Redstone, Blau received a B.A. from Yale University in ethics, politics, and economics, specializing in development studies. His thesis analyzed regulatory schemes to balance economic growth and environmental protection in Chile, where he spent the summer as a Bates Fellow.



**Bruce K. Carlisle** is the director of the Massachusetts Office of Coastal Zone Management (CZM), providing oversight and administration for the agency. Carlisle directs policy development, planning efforts, and technical approaches for CZM program areas including ocean planning, offshore renewable energy, shoreline and floodplain management, climate change adaptation and coastal resilience planning, habitat protection and restoration, port and harbor planning, water quality, seafloor and tidal habitat mapping, and GIS/data management. He also supervises CZM's regulatory review of coastal and ocean projects. He formerly served as the manager for the commonwealth's Wetlands Restoration Program. Prior to that, Carlisle served as a project manager and principal investigator for coastal wetland assessment projects and as a specialist in water resources policy, monitoring, and planning. He holds a master's degree in environmental policy from Tufts University.



**Michael Carver** is the deputy superintendent of Cordell Bank National Marine Sanctuary. He received his B.S. in natural resource management from North Carolina State University and was hired directly out of school to work for NOAA. Carver started the Sanctuaries at Sea monitoring program, now in its 11th year of operation. His main responsibilities include overseeing enforcement, permitting, contracting, planning, and management actions to address threats to the marine environment of the sanctuary. Ever since 5 whales were confirmed killed by ship

strike in 2010, he has worked tirelessly with partner agencies, industry, and the NGO community to address the ship strike issue, and in 2014 his team was awarded the Department of Commerce Gold Medal for personal and professional excellence for their efforts.



**David Fluharty** has an interdisciplinary background in marine resource management and planning. He has been involved in the study and evaluation of living marine resource protection and management in the North Pacific, Europe, Northeast Asia, and West Africa since 1976. Fluharty served nine years as a voting member of the North Pacific Fishery Management Council that manages the fisheries in federal waters off Alaska. In addition, he was chair of the National Marine Fishery Service's Ecosystem Principles Advisory Panel that developed a report to Congress (1999) on ecosystem-based fishery management. More recently he chaired the External Ecosystem Task Team in developing recommendations on how to implement an ecosystem approach to management across the National Oceanic and Atmospheric Administration (NOAA) and its partners, which led to the adoption of Integrated Ecosystem Assessments on a regional basis. Fluharty was a member of the National Research Council study committee on Marine Protected Areas and Reserves in the United States and worked on the implementation of marine protected area concepts through studies at the National Center for Ecosystem Analysis and Synthesis. Fluharty received his B.A. in political science and Swedish and his M.A. in geography from the University of Washington and his Ph.D. in natural resource conservation and planning from the University of Michigan.



**Grover Fugate** is executive director of the Rhode Island Coastal Resources Management Council (CRMC). In his role of nearly 30 years, Fugate has been responsible for overseeing the development of all policies and programs for the state's coastal program. He is the project manager for the council's new Shoreline Change Special Area Management Plan (SAMP), which is developing responses to the impacts of climate change on Rhode Island's shoreline to protect the state's coastal infrastructure. Fugate has earned several awards, including the prestigious 2010 Susan Snow-Cotter Award for Excellence in Ocean and Coastal Resource Management from the National Oceanic and Atmospheric Administration. Fugate serves as the state co-lead for the Northeast Regional Ocean Council's Ocean Planning initiative, and is also the state co-lead for the Regional Planning Body established under President Obama's Executive Order on the National Ocean Policy. Fugate is adjunct faculty in the University of Rhode Island Marine Affairs program. He is also a guest lecturer on coastal and marine law at Roger Williams University School of Law.

**Paul Gilliland** has been closely involved in the establishment of marine planning in the United Kingdom, most recently as the head of marine planning with the Marine Management Organisation, the statutory marine planning body for England on behalf of govern-

ment. He lead the preparation of the first marine plans in England (for the East Inshore and Offshore areas), which are now being implemented, and is overseeing the production of further plans. He has over 20 years of experience of marine and coastal management, working with different public authorities across a wide range of issues to do with biodiversity, Marine Protected Areas, environmental assessment and management of human activities, and associated research and policy interpretation. He helped develop and advocate ideas to inform the legislation now in place to enable marine planning to go ahead. He has contributed to European initiatives and international projects, such as a UNESCO expert group on evaluation of marine spatial plans.



**Jeffrey Grybowski** is the chief executive officer of Deepwater Wind, where he manages the company's portfolio of offshore wind and transmission projects. He has been intimately involved since its inception in the development and execution of the first offshore wind farm in the United States, Deepwater Wind's Block Island Wind Farm. The project is scheduled for commercial operations in late 2016. Grybowski has been involved in shaping the federal and state policies supporting offshore wind in the United States, including the development of federal rules governing the leasing and permitting of offshore wind projects, federal tax policies supporting renewables, and policies at the state level throughout the Northeast for offshore wind, transmission, and renewables. Grybowski is a member of the board of directors of the American Wind Energy Association. Grybowski previously served as Chief of Staff to the Governor of Rhode Island. He previously practiced corporate law at Hinckley, Allen & Snyder in Providence, Rhode Island, and at Sullivan & Cromwell in New York. Grybowski earned an A.B. in public policy from Brown University and a J.D. from the University of North Carolina at Chapel Hill School of Law.



**Lynne Zeitlin Hale** is The Nature Conservancy's (TNC) Senior Marine Conservation Fellow. Hale served as TNC's Managing Director for Oceans from 2003 to 2015, leading the transformation of TNC from an organization nearly exclusively focused on terrestrial conservation to one that is now

widely recognized as one of the world's leading marine conservation organizations. As senior fellow, Hale is focused on marine programs in Asia Pacific, the region with greatest marine biodiversity coupled with greatest human dependence on the ocean. Hale has focused on integrating science and policy work with "in-the-water" conservation and restoration in the United States and more than 30 countries in Asia, Oceania, the Caribbean, South America, and Africa. Areas of focus include sustainable fisheries, integrated ocean management, and climate adaptation and disaster risk reduction. Previously, as the associate director of the Coastal Resources Center, Hale played a leadership role in the design and implementation of integrated coastal management programs internationally. Hale has an M.S. in biological oceanography from the University of Rhode Island Graduate School of Oceanography and a B.A. in zoology from the University of Pennsylvania.



**Patrick Halpin** is an associate professor of marine geospatial ecology in the Marine Science and Conservation Division of the Nicholas School of the Environment, Duke University. Halpin leads the Marine Geospatial Ecology Lab as well as the Duke University Marine Lab. He received his Ph.D. in environmental sciences from the University of Virginia in 1995. His research focuses on marine geospatial

analysis, ecological applications of geographic information systems and remote sensing, marine conservation, and ecosystem-based management. He sits on a number of international scientific and conservation program steering committees including the Ocean Biogeographic Information System (OBIS), the Global Oceans Biodiversity Initiative (GOBI), the Marine Working Group for the Group on Earth Observations—Biodiversity Observing Networks (GEO-BON) and the Google Oceans Advisory Council.



**Jennifer Hennessey** is a senior ocean planner for the coastal program at the Washington Department of Ecology. She is the lead for the state's marine spatial planning effort and participates in regional planning activities. Hennessey coordinates a team of state agencies focused on improving ocean and coastal

management. She also assists the governor's office in coordinating with coastal tribes on ocean policy issues, in implementing the West Coast Governors Alliance on Ocean Health, and administering the Washington Coastal Marine Advisory Council. She has authored reports on ocean policy and has participated in a variety of state, regional, and national work groups and partnerships across a range of ocean and coastal policy issues. Hennessey holds an M.S. in marine resource management from Oregon State University and a B.A. in biology-environmental studies from Whitman College.



**Beth Kerttula** is the White House director of ocean policy and former Democratic leader of the Alaska House of Representatives, where she sponsored landmark legislation on cruise-ship pollution and led efforts to defend and improve the Alaska Coastal Zone Management Program. In addition to her 15 years in office,

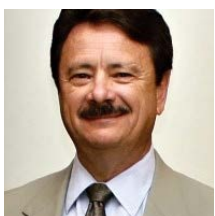
she brings expertise in ocean and coastal issues to Stanford University, where she expands the Center for Ocean Solutions' capacity on marine and coastal ecosystem policy. Kerttula earned a B.A. in political science from Stanford in 1978. She then went on to earn a J.D. from the University of Santa Clara in 1981 before returning to Alaska to tackle ocean issues through work in the public and private sectors. Before her legislative service, she was an attorney in the Alaska Attorney General's office, where she worked on coastal zone management issues and in the oil, gas and mining section.





**Paul Klarin** has served in various positions at the Oregon Coastal Management Program since 1990, performing a wide array of functions including administration, budgetary planning, contractual management, local plan review and implementation, state and federal permit coordination and federal consistency review, and policy and legislative analysis.

Klarin is the Marine Affairs/Ocean Program coordinator responsible for amending and applying Oregon's Territorial Sea Plan, and is liaison to the Federal Bureau of Ocean Energy Management (BOEM) for the Oregon BOEM Marine Renewable Energy Task Force. Klarin has a B.A. from the University of California, Santa Barbara and a master's degree in marine affairs from the University of Washington College of Oceans and Fisheries. He was formerly at the Battelle Human Affairs Research Center in Seattle where he did research and analysis on the range of policy responses to the impacts of climate change and sea level rise on coastal environments and communities.



**Robert LaBelle** is senior advisor to the director, BOEM, and represents the agency in the Atlantic region. He contributes to management of key facets of the U.S. offshore renewable energy program. LaBelle is currently the DOI representative to the Northeast Regional Planning Body (RPB) and is the federal co-lead

for the Mid-Atlantic RPB. He has also served as the federal co-chair of the Northeast Regional Ocean Council, a state/federal partnership to advance ocean planning and related science in New England. Previous positions in BOEM include chief environmental officer and science advisor to the director. He holds degrees from the University of Massachusetts, Dartmouth (B.S., biology), the University of Maryland (M.S., biology), and Loyola College (MBA, management).



**Katie Lund** has worked since 2012 as Northeast Regional Ocean Council staff supporting ocean planning efforts. In addition to managing projects that lay a foundation for an ocean plan, she works directly with federal, state, and tribal Northeast Regional Planning Body members to oversee the group's activities and communications. In the late 1990s, Lund served as a NOAA Coastal Management Fellow at the Massachusetts Office of Coastal Zone

Management (CZM). She continued for eight years as MA CZM's stewardship coordinator working with agencies, municipalities, and conservation organizations to better manage and protect the state's designated special areas along the coast. For a brief time, she left the world of coastal management to work at the University of Michigan's Graham Environmental Sustainability Institute where she focused on climate, water resource, and urban sustainability assessments. She holds a master's degree from Oregon State University's Marine Resource Management Program.



**Jennifer McCann** is the director of U.S. Coastal Programs at the Coastal Resources Center at the University of Rhode Island Graduate School of Oceanography and the director of Extension Programs for Rhode Island Sea Grant. McCann leads research and is designing trainings and work-

shops for an international effort to build the capacity of MSP practitioners. She also serves as URI's lead for facilitating the comprehensive update of the Rhode Island Ocean Special Area Management Plan (Ocean SAMP), the first formally adopted ocean spatial plan in the nation, and shares her knowledge and experience nationally. From 2007–2010, McCann served as a principal lead for the development and implementation of the Ocean SAMP. She led the national effort to develop monitoring protocols and modeling tools for improved management of offshore renewable energy. She was a winner of the Department of Interior's Partners in Conservation Awards (2014) as well as the Outstanding Outreach Achievement Award from the Northeast Regional Sea Grant Consortium (2013). She began her career at the Center for Marine Conservation (CMC) (now The Ocean Conservancy).



**Betsy Nicholson**, NOAA's Northeast lead for the Coastal Services Center, began her career at NOAA's National Ocean Service as a Sea Grant Fellow. She later staffed the NOAA Administrator on ocean and coastal issues and served as the NOAA Policy Advisor to the Secretary of Commerce.

Most recently, Nicholson has returned to her native New England to tackle coastal management issues on a regional level for NOAA. She serves as a liaison between NOAA and New England coastal states, overseeing and coordinating state and regional coastal management initiatives. She is a graduate of Williams College and received a master's degree in coastal environmental management from Duke University.



**Dennis Nixon** is a URI professor of marine affairs and the director of Rhode Island Sea Grant, leading a multi-million dollar research and education program devoted to using scientific knowledge to improve the management of Rhode Island's coastal waters. Prior to that, he served for four years as the Associate Dean for Research and

Administration at the Graduate School of Oceanography and the previous eight years as the Associate Dean of Academic Affairs at the College of the Environment and Life Sciences, both at the University of Rhode Island. He has been a member of the faculty for 38 years, teaching courses in the areas of marine and coastal law. Nixon earned his bachelor's degree in history at Xavier University, his J.D. at the University of Cincinnati, and a Master of Marine Affairs at the University of Rhode Island.



**David Robinson** is a marine archeologist at the URI Graduate School of Oceanography and president & CEO of David S. Robinson & Associates, Inc., a submerged cultural resource management firm working with industry and in academia in the United States and abroad.

He specializes in multi-disciplinary marine archeological investigations of submerged shipwrecks, coastal infrastructure, and ancient Native American cultural sites. He also has extensive experience in archeological conservation and curation, public education and outreach, and collaborative archeology with tribal communities. He served as the underwater principal investigator and project archeologist on Deepwater Wind energy projects, and is co-principal investigator on a multi-year project funded by BOEM to develop protocols for identifying ancient Native American submerged cultural sites on the continental shelf. Robinson holds a master's degree in anthropology/underwater archeology from Texas A&M University.



**Charles Short** began his undergraduate studies at the University of Victoria on coastal/marine resource and wildlife management, and from there, earned a graduate degree in marine ecology. His research focused on the distribution of whales in relation to marine protected areas off the west coast of Vancouver Island. He later studied marine mammals (west coast of the

United States, Gulf of Mexico and the Western Antarctic Peninsula) and then returned to British Columbia in 2006 as a marine specialist, and has worked on coastal and marine-related initiatives ever since. His focus is on marine ecosystem-based management techniques and marine spatial planning for the North Coast of British Columbia as well as marine protected area network design.



**Dallas W. Smith** is the founder, president, and CEO of Nanwakolas Council, which is comprised of seven member First Nations whose traditional territories are located in the Northern Vancouver Island and adjacent South Central Coast areas of British Columbia. The council protects and manages First Nation cultural values while building strategic

opportunities and partnerships with both government and industry to increase sustainable opportunities and employment for the region. Smith also serves on several boards and committees, including the Island Coastal Economic Trust, Coast Sustainability Trust, and the Coast Opportunity Fund (totaling \$200 million) as well as government advisory committees.



**Tiffany Smythe** is a coastal management extension specialist with the Coastal Resources Center and Rhode Island Sea Grant. A social scientist and policy analyst, Smythe specializes in marine spatial planning, ecosystem-based management, and interagency and stakeholder collaboration. She co-authored and co-facilitated the Rhode Island Ocean Special Area Management Plan (Ocean SAMP), which led

to the siting of the Deepwater Wind project off Block Island. She is working to build the capacity of MSP practitioners by developing research-based case studies of other planning processes. Smythe has master's and Ph.D. degrees in marine affairs from URI as well as bachelor and master's degrees from Columbia University. She is also a U.S. Coast Guard-licensed ship captain, an Environmental Leadership Program Senior Fellow, and an adjunct professor in the URI Department of Marine Affairs.

**John Weber** has 17 years of experience in the coastal and marine management field. He is the executive director for the Northeast Regional Ocean Council, a partnership of New England states and federal agencies collaborating on ocean management issues, providing strategic direction for the Northeast regional ocean planning effort. He recently served as the ocean program manager for the Massachusetts Office of Coastal Zone Management, where he managed the day-to-day development and implementation of the Massachusetts Ocean Management Plan, completed in 2009. His previous private- and public-sector experience included review of urban waterfront development and planning activities, dredging, coastal erosion, and wetland restoration projects. He has a B.S. in coastal geology from Long Island University and an M.S. in marine resource management from Oregon State University.



**Amy Wirts** is a commander in the U.S. Coast Guard, serving as the chief of waterways management for Coast Guard Sector District 11 in Alameda, California. She is responsible for oversight of the overall safety of navigation, including aids to navigation management and vessel traffic management, for the California coast. She has served as the chief of waterways

management at Coast Guard Sector San Francisco and as the international oil spill policy coordinator for the Coast Guard, responsible for outreach and joint response planning with Russia, Canada, Mexico, and Caribbean nations. During her 16 years of active duty service, Wirts spent two years as the chief of contingency planning at Coast Guard Sector Guam, served on two seagoing buoy tenders, and taught at the United States Coast Guard Academy. She is a graduate of the Coast Guard Academy and earned an M.S. in physical oceanography from the University of Washington.