



# MACOORA

Ocean Information for a Changing World

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**SAVE THE DATE: MACOORA ANNUAL MEETING**  
**NOV 11 and 12, 2009 \* Portsmouth VA.**  
**Special Session: DMAC Demystified**

**WWW/MACOORA.ORG**  
**Our new website is up and running. It features videos,**  
**blogs, ocean observation news and MACOORA news.**

## MACOORA and the WEATHER

Ocean Observations are critical to the understanding and prediction of weather. According to a recent NSF press release (see [www.nsf.org](http://www.nsf.org)) close to nine out of 10 adult Americans obtain weather forecasts an average of more than three times each day. The new nationwide survey by scientists at the National Center for Atmospheric Research (NCAR) in Boulder, Colo., claims that the value Americans place on forecasts appears to be far more than the nation spends on public and private weather services. The research was funded by the National Science Foundation (NSF), NCAR's sponsor, and the National Oceanic and Atmospheric Administration.

While the authors cautioned that it is difficult to put a dollar figure on the value of forecasts, the survey indicated that households in this country place an average value of 10.5 cents on every weather forecast obtained. This equates to an annual value of \$31.5 billion. In comparison, the cost of providing forecasts by government agencies and private companies is \$5.1 billion.

## Marine Spatial Planning

Marine spatial planning (MSP) is a practical way to create and establish a more rational organization of the use of marine space and the interactions between its uses, to balance demands for development with the need to protect marine ecosystems, and to achieve social and economic objectives in an open and planned way. It is defined as the public process of analyzing and allocating the spatial and temporal distribution of human activities in marine areas to achieve ecological, economic and social objectives that are usually specified through a political process. It is rapidly being adopted by resource managers throughout the U.S. For a free, downloadable step by step manual, visit <http://www.unesco-ioc-marinesp.be/publications>

**MACOORA: To improve the quality of life by seeking, discovering, sharing and applying new knowledge and understanding of our coastal ocean**

## MACOORA / MARCOOS

### **CODAR helps pinpoint search and rescue at sea.**

Asbury Park Press/Gannett New Jersey, June 10, 2009. By KIRK MOORE

Data streaming from the Rutgers University-operated system in Loveladies and from other stations from Cape Cod, Mass., to Cape Hatteras, N.C., has been flowing since May 4 into the Coast Guard search and rescue computer service, for the first time giving the service real-time updates of offshore waves and currents, and short-term forecasts of sea surface conditions. It's information that's critical in the early stages of search, when Coast Guard rescue coordinators must quickly decide where survivors from a sunken boat or downed aircraft are most likely to be drifting, and dispatch their helicopter crews there.

Armed with such information, Coast Guard rescue specialists are helping French and Brazilian forces track the debris field from the crash of Air France Flight 447 by using a data modeling program to predict where wreckage from the Airbus A330 may be drifting. The Reverse Drift Modeling Program has only been taught at the Coast Guard's National Search and Rescue School at Yorktown, Va., since May, and the Flight 447 recovery effort is its first major test, Coast Guard officials say.

The Coastal Ocean Dynamics Applications Radar has been used by Rutgers ocean researchers since 1998, when the first stations were set up as part of the Long-term Ecosystem Monitoring Project off Long Beach Island, said Roarty, the CODAR project manager. Over the years, with research funding from the Navy and National Oceanic and Atmospheric Administration, Rutgers has expanded its network to eight stations from Breezy Point, Long Island to Wildwood, and tied in with other universities to create a complete Northeast monitoring system.

The compiled sea state charts from Rutgers and forecasts from the University of Connecticut, another East Coast partner, look like extremely dense weather maps, with arrows denoting currents and color-coding for wave

continued next page

## **Sub-Regional Observing Systems**

**For a full listing visit**

<http://www.macoora.org/research.html>

### **Delaware**

<http://www.udel.edu/dbos/>  
<http://tidesandcurrents.noaa.gov/dbports/dbports.shtml?port=db>

### **Chesapeake Bay**

[www.cbos.org](http://www.cbos.org)  
[www.eyesonthebay.net](http://www.eyesonthebay.net)  
[www2.vims.edu/vecos/](http://www2.vims.edu/vecos/)  
[www.ccpo.odu.edu](http://www.ccpo.odu.edu)  
[www.weatherflow.com](http://www.weatherflow.com)  
<http://nerrs.noaa.gov/ChesapeakeBayMD/welcome.html>  
<http://nerrs.noaa.gov/ChesapeakeBayVA/welcome.html>  
<http://www.nasa.gov/centers/goddard/home/index.html>  
<http://www.frf.usace.army.mil/>  
<http://tideshttp://tidesandcurrents.noaa.gov/ports/index.shtml?port=csandcurrents.noaa.gov/ports/index.shtml?port=cn>

### **Massachusetts and Rhode Island Bays and Shelf**

<http://mvcodata.whoi.edu/cgi-bin/mvco/mvco.cgi>  
<http://mvcodata.whoi.edu/cgi-in/mvco/mvco.cgi>  
<http://tidesandcurrents.noaa.gov/ports/index.shtml?port=nb>  
<http://cdmo.baruch.sc.edu/QueryPages/viewstations.cfm?SiteID=wqb>

### **New York Bight**

<http://hudson.dl.stevens-tech.edu/maritimeforecast/info/>  
<http://www.marine.rutgers.edu/cool/>  
<http://www.marine.rutgers.edu/mrs/codar.html>  
<http://cdmo.baruch.sc.edu/QueryPages/viewstations.cfm?SiteID=hud>  
<http://nerrs.noaa.gov/JacquesCousteau/welcome.html>  
<http://co-ops.nos.noaa.gov/ports/index.shtml?port=ny>

### **Long Island Sound**

<http://www.sunysb.edu/soundscience>  
<http://www.co-ops.nos.noaa.gov/nhports/nhports.shtml>

## MARCOOS/MACOORA continued

heights and intervals. Along with lifesaving, the technology has applications in tracking oil spills, documenting coastal storms and relating ocean currents to fisheries studies, Roarty says. Rutgers scientists have long provided the Coast Guard on request with wave data and drift predictions, as they did in the hours after the March 24 sinking of the scallop boat Lady Mary, says associate professor Josh Kohut.

## MACOORA Members in the News

MACOORA welcomes new member, CARIS. CARIS solutions deliver cutting-edge bathymetric innovations, seamless feature data management, product extraction and distribution to support a diverse product range. Visit [www.caris.com](http://www.caris.com).

## Observations and Fishery Management

John Manderson (NMFS), Josh Kohut (Rutgers), and Matthew Oliver (U Delaware) have produced a paper, Developing Ecological Indicators for Spatial Fisheries Management using Ocean Observatory Defined Habitat Characteristics in the Mid-Atlantic Bight. The paper briefly describes how data provide spatially and temporally explicit habitat indicators useful for fisheries management . See [www.macoora.org](http://www.macoora.org).

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NOAA and NMFS have selected a consortium of five universities for the new Cooperative Institute for North Atlantic Region (CINAR). The institutions will join NOAA to conduct ocean and climate research to better understand the correlation between climate change and variability, fishing practices and fish populations, and to develop an integrated capability to research emerging issues from an ecosystem perspective. Led by the Woods Hole Oceanographic Institution, Woods Hole, Mass., the consortium will include Rutgers University, New Brunswick, N.J.; University of Maryland Center for Environmental Science, Cambridge, Md.; University of Maine, Orono, Maine; and Gulf of Maine Research Institute, Portland, Maine. The group was selected through a competitive process.

## Do you know the MACOORA region Congressional members who have at least one science or engineering degree?

<a href="#">Rush Holt Jr. (D)</a>	NJ-12	B.S., Physics, Carleton College; M.S., Ph.D., Physics, New York University
<a href="#">Ted Kaufman</a>	DE-Senate	B.S., Mechanical Engineering, Duke University; M.B.A., Warton School, University of Pennsylvania
<a href="#">Stephen Lynch (D)</a>	MA-9	B.S., Construction Management, Wentworth Institute of Technology; M.A., Public Administration, Harvard University; J.D., Boston College
<a href="#">Eric Massa (D)</a>	NY-29	B.S., Engineering, United States Naval Academy
<a href="#">John Olver (D)</a>	MA-1	B.A., Chemistry, Rensselaer Polytechnic Institute; M.S., Chemistry, Tufts University; Ph.D., Chemistry, Massachusetts Institute of Technology
<a href="#">David Price (D)</a>	NC-4	B.A., American History, Mathematics, University of North Carolina; B.D., Theology, Ph.D., Political Science, Yale University
<a href="#">Jack Reed (D)</a>	RI-Senate	B.S., Engineering, United States Military Academy, West Point; M.P.P., Kennedy School of Government Harvard University; J.D., Harvard Law School
<a href="#">Louise Slaughter (D)</a>	NY-28	B.S., Microbiology; M.S., Public Health, University of Kentucky, Lexington
<a href="#">Paul Tonko (D)</a>	NY-21	B.S., Mechanical and Industrial Engineering, Clarkson University
<a href="#">Sheldon Whitehouse (D)</a>	RI-Senate	Architecture, Yale University; J.D., University of Virginia Law School

## Legislative News

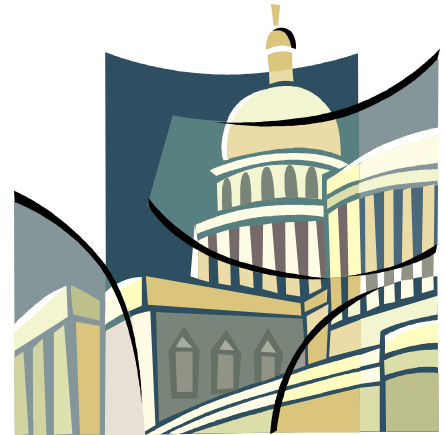
### \$33.3B Energy and Water Appropriations Bill Heads to House Floor

The House will take up the \$33.3 billion fiscal 2010 energy and water spending bill in July as Democratic leaders in that chamber push to complete all appropriations measures before the August break. Overall, the bill provides \$26.9 billion for DOE, which according to the House Appropriations Committee is \$86 million above current spending. It provides \$2.25 billion for renewable energy and energy efficiency programs, which is \$321 million above current year spending but \$68.6 million below the White House request. The bill boosts spending for water projects overall, increasing funding for the Army Corps of Engineers but cutting money for the Bureau of Reclamation. The corps' operations and maintenance budget would see the biggest increase, climbing \$309 million from current levels to \$2.5 billion in fiscal 2010. The cash infusion is aimed at tackling "the over \$1 billion backlog of operations and maintenance needs of navigation infrastructure critical to the U.S. economy," according to the bill summary.

### House Introduces Bills

**Hazard Resilience: H.R.3139.** To extend the authorization of the national flood insurance program, and for other purposes (Rep. Waters, CA). Introduced 7/9/09.

**Sustainable Coastal Development: H.R.3165.** To provide for a program of wind energy research, development, and demonstration, and for other purposes (Rep. Tonko, NY). Introduced 7/9/09



### Senate Appropriations

The Senate released their Commerce, Justice, State appropriations mark for FY10. The Senate is requesting \$34,055,000 for IOOS: \$6,555,000 for NOAA Administration; \$ 27,500,000 for regional IOOS; \$3,000,000 for ACT; 4,500,000 for super regional test bed; and \$20,000,000 for Regions

	President	House	Senate
Regional IOOS	\$ 14.6	\$ 20.0	\$ 27.5
NOAA Admin	\$ 6.6	\$ 6.5	\$ 6.5
Total	\$ 21.2	\$ 26.5	\$ 34.0

The Appropriations Committee wrote, "The budget request for IOOS reinforces the Committee's concern that the community's vision for this program is larger than NOAA's own internal initiative. Outside support for IOOS's overall funding—which includes long-standing recommendations from the Joint Ocean Commission—far outweighs this unrealistic budget request. A proven ocean observation network could be the very essence of a true National Ocean Service, maximizing both external and internal resources. Yet, this program instead seems to languish in stagnant funding requests and unachievable goals. Meanwhile, as NOAA struggles with IOOS's intra-agency identify, current assets within the community are being pulled away and shut down.... Although this Committee has endeavored to bridge this financial gap in past fiscal year recommendations, continual lackluster requests coupled with current funding constraints have left the Committee with no other option than to provide a modest increase compared to the true need. The administration should create a more holistic funding recommendation in 2011, and should consider reorganizing resources within the agency across line offices to create a more salient internal program."