



NEWSLETTER OF THE GULF OF MEXICO COASTAL OCEAN OBSERVING SYSTEM

GCOOS NEWS AND UPDATES FOR 29 JULY 2011

GULF OF MEXICO REGIONAL NEWS

GCOOS-RA Receives EPA Gulf Guardian Award

The Gulf of Mexico Coastal Ocean Observing System-Regional Association (GCOOS-RA) will receive a [2011 Gulf Guardian Award in the Partnership](#) category from the Gulf of Mexico Program of the U.S. Environmental Protection Agency for their work on the integration of and regional enhancements to the GCOOS. A major achievement of the GCOOS-RA has been the development of the GCOOS Data Portal that integrates ocean and coastal data sets from many different data providers. Initially, twelve institutions were involved in the portal development, including researchers at Texas A&M University and the University of Miami who developed the portal architecture and researchers and information-technology staffs of ten non-federal data providers who provided their near real-time oceanographic data from around the Gulf of Mexico. The challenge for the portal development was to interface the diverse data and products via an automated system and through web-based interfaces for users. The ten initial data providers are the Central Gulf of Mexico Ocean Observing System (University of Southern Mississippi); Coastal Ocean Monitoring & Prediction System (University of South Florida); Dauphin Island Sea Lab - Mobile Bay Environmental Monitoring (Alabama); Earth Scan Laboratory (Louisiana State University); Louisiana Universities Marine Consortium Environmental Monitoring; Mote Marine Laboratory; Texas Automated Buoy System (Texas General Land Office; operated by Texas A&M University); Texas Coastal Ocean Observation Network (Texas A&M University - Corpus Christi); Institute for Marine Remote Sensing (University of South Florida); and Wave-Current-Surge Information System for Coastal Louisiana (Louisiana State University).

<http://yosemite.epa.gov/opa/admpress.nsf/0/917E9EEA3AA955E7852578AA005E03F3>

RESTORE the Gulf Coast Act” Introduced in the Senate

On July 21st, Senators Mary Landrieu (D-LA) and Richard Shelby (R-AL) introduced the [“Resources and Ecosystems Sustainability, Tourist Opportunities, and Revived Economies of \(RESTORE\) the Gulf Coast States Act of 2011” \(S. 1400\)](#). The bill would establish the Gulf Coast Restoration Trust Fund, which would be made up of at least 80 percent of all civil penalties paid by BP or any other responsible party in connection with the Deepwater Horizon spill. The legislation would also establish a Gulf Coast Ecosystem Restoration Council, a Comprehensive Plan for the Gulf Coast, a Long Term Science and Fisheries Endowment, and Gulf Coast Centers of Excellence. The bill has been referred to the Senate Committee on Environment and Public Works.

Information Release on Mississippi River Water in the Gulf of Mexico

Roffer’s Ocean Fishing Forecasting Services, Inc. (ROFFS) has received numerous calls requesting information on the distribution and movements of the Mississippi River water in the open ocean and on coastal areas following the recent floods and resulting water discharge into the Gulf of Mexico. Several oceanographers from the private industry (Ken Schaudt), universities (Frank Muller-Karger, Univ. of South Florida Institute for Marine Remote Sensing, Nick Shay and Jerry Ault Univ. Miami RSMAS, George Maul, Florida Institute of Oceanography), and government (Gustavo Goni, Michelle Wood NOAA/AOML), who have been working in collaboration since the Deepwater Horizon oil spill incident last summer, are now working together to monitor the riverine water that

has been moving into the offshore waters in the Gulf of Mexico. The collaborative work being carried out by these scientists will allow for advances in many aspects related to mapping, monitoring, and modeling water flow and the possible fate of pollutants in the Gulf of Mexico and elsewhere, and to investigate possible links between extreme amounts of water river discharges and living organisms. ROFFS also continues to work with recreational and commercial fisheries on verifying the color, distribution, and flow of the river water and to provide on-site validation of what we are observing from the satellites. Similarly to what some members of this team did last summer, ROFFS is providing a satellite image and a brief analysis of the upper ocean Gulf of Mexico conditions. Of particular interest is the discolored water southwest of Tampa, FL, where there is a substantial counter-clockwise flowing exaggerated Loop Current frontal eddy with discolored fresh water that is composed of water that was observed leaving the Mississippi River and nearby coastal areas several weeks ago. While this water is slowly moving in a southward direction overall, this motion has been much slower than expected, due in part to the enlarged size of the frontal eddy water mass. Also of note is the "spike" shaped discolored (show as brown) water that is being pulled by the Loop Current from the Mississippi delta area in a east-southeastward direction to approximately 97°00'W & 28°30'N and then southward to at least as far as 97°30'W & 26°30'N. It remains to be seen where this water will travel and particularly interested to see if circles the feature centered near 89°00'W & 27°00'N as mentioned above.

Chemical Make-up of the Gulf of Mexico Plume Determined

Taking another major step in sleuthing the 2010 *Deepwater Horizon* oil spill, a research team led by the Woods Hole Oceanographic Institution (WHOI) determined what chemicals were contained in a deep, hydrocarbon-containing plume. The plume was at least 22 miles long. The scientists mapped and sampled it last summer in the Gulf of Mexico; it was a residue of the *Deepwater Horizon* oil spill. The researchers took a major step in explaining why some chemicals, but not others, made their way into the plume, they report this week in the online edition of the journal *Proceedings of the National Academy of Sciences*. The National Science Foundation (NSF) funded the project through three Rapid Response Research grants, which enable support for fast-response research tied to events such as the Gulf oil spill. "By any measure, this is a remarkable study," says Don Rice, director of NSF's chemical oceanography program. "Reddy and colleagues add several critical tiles to the growing *Deepwater Horizon* mosaic. We now have hints of why some earlier studies appear to refute one another. "Most importantly," says Rice, "we now have a far better understanding of how and why an oil 'spill' into the ocean from below differs from one from above. The significance of this work extends well beyond the Gulf of Mexico." It "helps explain and sheds light on the plume formation, and verifies much of what we thought about the plume's composition," said WHOI chemist Christopher Reddy, lead author of the study. The data "provide compelling evidence" that the oil component of the plume sampled in June 2010 essentially comprised benzene, toluene, ethylbenzene, and total xylenes--together, called BTEX--at concentrations of about 70 micrograms per liter, the researchers reported. The BTEX concentrations in the plume were "significantly higher than background," Reddy said. "We don't know with certainty the adverse effects it might cause on marine life." WHOI scientist Judith McDowell said that acute toxicity levels of BTEX are in the range of 5 to 50 milligrams per liter for aquatic organisms--100 to 1,000 times greater than that observed in the plume. Sublethal effects, including neurological impairment, are observed at lower levels, she said. "In most instances the BTEX compounds are volatilized very quickly, such that exposure duration is very short," McDowell said. "The persistence of BTEX at depth poses an interesting question as to the potential effects of these compounds on mid-water organisms." For more details, please refer to the [NSF news release](#).

The research was also funded by the U.S. Coast Guard.

-NSF-

http://www.nsf.gov/news/news_summ.jsp?cntn_id=120962&WT.mc_id=USNSF_51&WT.mc

NATIONAL NEWS

Visualize Inundation in the Digital Coast Coastal Inundation Toolkit

A new "Visualize" section is now available in the [Digital Coast's Coastal Inundation Toolkit](#). Learn how different types of visualizations can help communities understand their inundation risks and vulnerabilities. The "Picture It" page offers tools and local examples of how photos, maps, and mapping viewers can be used to visualize the extent and impacts of inundation. The "Graph It"

page directs users to tools and resources that can be used to visualize trends, such as sea level rise, and spatial relationships for complex data sets. More technical users, familiar with different data analysis techniques and GIS software packages, can explore the "Build It" section, where they will find mapping guidance, data, and training to help them create their own maps and visualizations. Contact: Jodie Sprayberry, Jodie.Sprayberry@noaa.gov.

Nominations Sought for NOAA Marine Fisheries Advisory Committee

Nominations are being sought for the NOAA Marine Fisheries Advisory Committee. The deadline for nominations is 26 August 2011.

http://www.nmfs.noaa.gov/ocs/mafac/Documents/2011/07/12_federal_register.pdf

Study finds Climate Change Could Make Oceans a Less Efficient Carbon Sink

An analysis published in the journal "Nature Geoscience" found that rising water temperatures are hampering the ability of the ocean to take up carbon. Oceans now represent the largest natural carbon sink on Earth, absorbing about one-third of the world's carbon per year. For this study, researchers used a large database of observations of carbon content in the surface levels (down to about 33 feet) of the North Atlantic Ocean. The data was collected from three gyres, one in the north and two subtropical gyres farther south, over nearly three-decades from 1981 to 2009. Access to study requires a subscription to "Nature Geoscience," but the abstract is available [online](#).

<http://www.nature.com/ngeo/journal/vaop/ncurrent/full/ngeo1193.html> .

GAO Report on Aligning Climate Adaptation Funding with Strategic Priorities

The Government Accountability Office (GAO) released [Climate Change Adaptation: Aligning Funding with Strategic Priorities](#) (GAO-11-876T). The report addresses (1) the actions federal, state, and local authorities are taking to adapt to climate change; (2) the challenges that federal, state, and local officials face in their efforts to adapt and actions federal agencies could take to help address these challenges; and (3) the extent to which federal funding for adaptation and other climate change activities is consistently tracked and reported and aligned with strategic priorities. GAO found that funding for adaptation and other federal climate change activities could be better tracked, reported, and aligned with strategic priorities, and suggests that methods for defining and reporting such funding are not consistently interpreted and applied across the federal government. For more information, including links to a highlights page and the full report, visit: <http://www.gao.gov/products/GAO-11-876T>.

New NRDC Climate and Water Report for U.S. Cities

The Natural Resources Defense Council (NRDC) released a new report: [Thirsty for Answers - Preparing for the Water-related Impacts of Climate Change in American Cities](#). NRDC reviewed more than 75 scientific studies and other reports to summarize the water-related vulnerabilities in 12 cities across the United States. The report also considers how communities facing these vulnerabilities - from drought to sea level rise and increase rainfall - are trying to protect their water supplies and waterways. For more information about the report, visit: <http://www.nrdc.org/water>.

COMING EVENTS & MEETINGS

Meeting: "[Joint Gulf of Mexico Alliance-Hypoxia Task Force Meeting](#)" 2-4 August 2011. The Westin Canal Place, New Orleans, LA.

<http://events.r20.constantcontact.com/register/event?oeidk=a07e3krs9k5bb6993f7&llr=thqzaleab>

Workshop: "[SDSC 2011 Cyberinfrastructure Summer Institute for Geoscientists](#)" 8-12 August, San Diego Supercomputer Center, San Diego, CA.

<http://cybershare.utep.edu/announcements/2011/sdsc-2011-cyberinfrastructure-summer-institute-geoscientists>

Meeting: "[Oceans in Action](#)", Imperial Palace Casino, Biloxi, MS, 22-23 August 2011. Learn how government agencies and universities are supporting both current and emerging oceanographic operations worldwide.

<http://www.mtsociety.org/conferences/techsurge/oceansinaction.aspx>

Meeting: "[OCEANS '11 MTS/IEEE](http://www.oceans11mtsieee.org/)", 19-22 September 2011, Hilton Waikoloa Village, Kona, HI.
<http://www.oceans11mtsieee.org/>

Meeting: "[American Shore & Beach Preservation Association's Expanding Coastal Horizons](http://www.asbpa.org/conferences/conf_fall_11.htm)" 19-21 October 2011, New Orleans, LA.
http://www.asbpa.org/conferences/conf_fall_11.htm

National Estuaries Day, 24 September. To find out more about National Estuaries Day and the events scheduled on that day please visit their website.
<http://estuaries.gov/GetInvolved/Default.aspx?ID=153>

Meeting: "[Ocean Innovation 2011](http://www.oceaninnovation.ca/Themes/2011/Content/index.php)" 18-21 October, Iqaluit, Nunavut, Canada.
<http://www.oceaninnovation.ca/Themes/2011/Content/index.php>

Meeting: "NRDA for the Gulf: Improving Our Ability to Quantify Chronic Damages" 2-4 November 2011, The National Aquarium, Baltimore, MD.
http://app.bronto.com/public/?q=preview_message&fn=Link&t=1&ssid=2525&id=i54q5mei775lgk60s4aojgzkvtrd&id2=16kbzuc8wgwmavs801ea1owop5hk0&subscriber_id=awmxryazphmbxsdbgydnhdqjimpbjm&messageversion_id=baqwlfgzufatmelglaxwqmcjnxgobhm&delivery_id=amdxnkwqrgt

Meeting: "[Using Modeling to Solve Engineering and Environmental Assessment Problems](http://www.oce.uri.edu/ecm12/)", 7-9 November 2011, The Renaissance Resort, St. Augustine, FL.
<http://www.oce.uri.edu/ecm12/>

Meeting "[State of the Gulf Summit](http://www.hartheresearchinstitute.org/state-of-the-gulf-summit/)", hosted by Harte Research Institute, 4-8 December 2011, Omni Galleria Hotel, Houston, TX.
<http://www.hartheresearchinstitute.org/state-of-the-gulf-summit/>

Meeting: "[American Geophysical Union Fall Meeting 2011](http://www.agu.org/fallmeeting)", 5-9 December 2011, San Francisco, CA. The keynote address will be delivered by Simon Winchester on 5 December in the Moscone Center North.
ABSTRACT DUE DATE: 4 AUGUST 2011.
<http://www.agu.org/fallmeeting>

Meeting: "[AMS 92nd Annual Meeting](http://ametsoc.org/meet/annual/)", 22-26 January 2012, Ernest N. Morial Convention Center, New Orleans, LA. This year's theme is "Technology in Research and Operations - How We Got Here and Where We're Going".
ABSTRACT DUE DATE: 1 August 2011.
<http://ametsoc.org/meet/annual/>

Meeting: "[2012 Defense Security + Sensing](http://spie.org/x6765.xml)" 23-27 April 2012, Baltimore Convention Center, Baltimore, MD. This meeting is sponsored by SPIE, the International Society for Optics and Photonics.
ABSTRACT DUE DATE: 10 October 2011.
<http://spie.org/x6765.xml>

FUNDING OPPORTUNITIES

Fiscal Year 2012 NOAA Gulf of Mexico Bay-Watershed Education and Training (B-WET) Program

The National Marine Fisheries Service Southeast Region (Fisheries Southeast Regional Office) is seeking [proposals](#) under the Gulf of Mexico NOAA Bay-Watershed Education and Training (Gulf B-WET) Program. The Gulf B-WET Program is an environmental education program that promotes locally relevant, experiential learning in the K-12 environment. Funded projects provide Meaningful Watershed Educational Experiences (MWEEs) for students, related professional development for teachers, and help to support regional education and environmental priorities in the Gulf of Mexico. This program addresses NOAA's goals to "Protect, Restore, and Manage the

Use of Coastal and Ocean Resources Through an Ecosystem Approach to Management" and "Healthy Oceans".

<http://www07.grants.gov/search/search.do?&mode=VIEW&oppld=103533>

NOAA Climate Program Announces FY'12 Funding Opportunity

NOAA's Climate Program Office (CPO) published its FY'12 federal funding opportunity announcement. Individual programs within CPO are now accepting letters of intent. In FY'12, CPO will accept individual applications for 12 Competitions, organized around CPO's four major programs: Climate Observations and Monitoring; Earth System Science; Modeling Analysis, Predictions, and Projections; and Climate and Societal Interactions. Letters of intent are due on July 26, 2011. Full applications for all Competitions (except for the International Research and Applications Project) must be received by 5:00 p.m. EST on October 3rd. Full applications for the International Research and Applications Project must be received by 5:00 p.m. EST on November 2nd. The full announcement is available on the CPO Funding Opportunities page and on the [Grants.Gov](#) website.

EDA Working Waterfronts Funding Opportunity (\$0.3M)

On July 7th, the Economic Development Administration (EDA) announced a new Federal funding opportunity (FFO) - "[FY 2011 Promoting Sustainable Working Waterfronts: A Toolkit for Community and Economic Development Practitioners.](#)" EDA is soliciting applications from qualified researchers to identify strategies, practical methods, and finance mechanisms to address current economic challenges and maintain the economic resilience and diversity of coastal communities. It is anticipated that only one project will be selected and awarded funds (\$0.3 million). The application deadline is 15 August 2011.

<http://www.eda.gov/PDF/Waterfronts.pdf>

CMP Grant Cycle 17: Final applications are due October 12, 2011

In the past, the Council has used the §306/§306A [coastal management grant funds](#) to fund small-scale projects. While the Council will continue to fund individual small-scale projects up to \$100,000, the Council will also consider funding individual large-scale §306A projects up to \$400,000 for on-the-ground habitat protection/restoration and land acquisition projects. While the Council prefers to fund on-the-ground projects, it recognizes the need for applied research and technology development to help fulfill the goals of the CMP and other coastal programs ((e.g., Galveston Bay Estuary Program (GBEP), Coastal Bend Bays and Estuaries Program (CBBEP), Coastal Erosion Planning and Protection Act Program (CEPRA) and Coastal Impact Assistance Program (CIAP.)) Therefore, the Council is interested in funding specific types of research and technical projects, with a proactive outreach component, that have a tangible benefit to local, state and federal entities.

<http://www.glo.texas.gov/what-we-do/caring-for-the-coast/grants-funding/cmp/grant-cycle.html>

EMPLOYMENT

Mid-Atlantic Regional Association Coastal Ocean Observing System (MARACOOS) Stakeholder Liaison

The Mid-Atlantic Regional Association Coastal Ocean Observing System (MARACOOS), a regional non-profit organization seeks a dynamic leader to serve as Stakeholder Liaison. The MARACOOS mission—to “seek, discover, share, and apply new knowledge and understanding of our coastal ocean”—is supported by its growing and maturing operational regional ocean observing network in the Mid-Atlantic region of the United States. Job Description: The Stakeholder Liaison serves as a vital link of engagement between MARACOOS and its constituent groups in the theme areas of (1) maritime safety, (2) ecological decision support, (3) water quality, (4) coastal inundation, and (5) offshore energy. The MARACOOS Stakeholder Liaison is responsible for expanding information dissemination facilitated by technology, facilitating synthesis, integration, and translation of MARACOOS products into appropriate end uses for stakeholders, and formalizing a system for stakeholder feedback. The ultimate goal is to shorten the process of research to operations and in return, inform research via operations. To accomplish this goal and related tasks, the Stakeholder Liaison will engage the MARACOOS Users Council in identifying data, data products, and decision model needs, as well as serving as staff to the Council. The Stakeholder Liaison will undertake

proposal writing when necessary to support targeted and specific stakeholder requests. Frequent travel will be required. Position funding: Funding is available for 12 months with the anticipation of additional funding which will extend the position to 2016. Continued employment in the position will be contingent on individual performance and the successful growth and evolution of MARACOOS funding. To apply: Please submit cover letter addressing skills and qualifications, curriculum vitae, and three professional references (name, title, address, and phone number).

<http://maracoos.org/>

Mid-Atlantic Regional Association Coastal Ocean Observing System (MARACOOS) seeks Executive Director

The Mid-Atlantic Regional Association Coastal Ocean Observing System (MARACOOS), a regional non-profit organization seeks a dynamic leader to serve as Executive Director. The MARACOOS mission—to “seek, discover, share, and apply new knowledge and understanding of our coastal ocean”—is supported by its growing and maturing operational regional ocean observing network in the Mid-Atlantic region of the United States. Job Description: The Executive Director leads the operational aspects of the organization, under the guidance of the MARACOOS Board of Directors, which establishes the strategic and business plans. The successful candidate will provide regional association leadership consistent with Board-defined operational goals. Responsibilities include serving as principal spokesperson for MARACOOS, overseeing fundraising activities, providing leadership and guidance in the development and implementation of programs that are targeted to engage prospective users, and serving as primary liaison to the Board of Directors. Frequent travel will be required. Position funding: Funding is available for 12 months with the anticipation of additional funding which will extend the position to 2016. Continued employment in the position will be contingent on individual performance and the successful growth and evolution of MARACOOS funding. To apply: Please submit cover letter addressing skills and qualifications, curriculum vitae, and three professional references (name, title, address, and phone number).

<http://maracoos.org/>

New England Ocean Program (Boston, MA) seeks Deputy Regional Director

The Environmental Defense Fund (EDF) seeks a Deputy Regional Director for the New England Oceans Program. The position will be based in Boston, MA. The Deputy Regional Director will be responsible for developing and implementing strategies that advance program goals in New England, and will play an instrumental role in guiding the fisheries project teams. This is a great opportunity for individuals with expertise in fisheries and oceans policy and demonstrated success managing teams and affecting environmental policy change. To be considered for this position, follow the link below to submit a resume, cover letter, and salary requirements.

http://www.ceiconsulting.com/what/position_details.aspx?client=CEA&jobId=157

The Environmental Defense Fund (EDF) hiring an Economist

Economist, Gulf and Southeast Oceans Program (Austin, Texas) – EDF seeks an economist to serve as a senior member of the Gulf of Mexico and Southeast Oceans Program. The economist will perform the following and other duties as assigned: work with the Senior Conservation Manager for the Gulf of Mexico and the Oceans team to develop market/incentive and ecosystem based strategies to reduce overfishing and coastal and marine habitat loss, and address other key issues facing the Gulf and Southeast; conduct economic analyses of complex fishery management and marine resource conservation issues and programs; provide substantive feedback on Oceans team proposals and projects; and work closely with and testify before the Gulf of Mexico Fishery Management Council, National Marine Fisheries Service, state agencies and legislatures, and the U.S. Congress. To be considered for this position, follow the link below to submit a resume, cover letter, and salary requirements. CEA Recruiting is assisting EDF with this search.

http://www.ceiconsulting.com/what/position_details.aspx?client=CEA&jobId=158

National Policy Specialist, Oceans Program (Washington, DC)

The Environmental Defense Fund (EDF) seeks a National Policy Specialist for its Oceans Program. The Policy Specialist will be an integral member of EDF’s Oceans Program, working in a multidisciplinary setting to encourage the adoption, funding and implementation of incentive-based marine conservation tools and mechanisms. The successful candidate will have experience in public policy campaigns and advocacy with legislative offices. The job requires working closely with other EDF Oceans Program staff, including other national policy and regional staff, as well as individuals outside the organization such as members of Congress and their staffs, government

officials, private industry, and others to achieve measurable environmental results. This position will report to the National Policy Deputy Director, Oceans Program. To be considered for this position, follow the link below to submit a resume, cover letter, and salary requirements. The position will remain open until filled.

http://www.ceaconsulting.com/what/position_details.aspx?client=CEA&jobId=161

Climate Outreach and Communications Specialist

The Carolinas Integrated Sciences and Assessments (CISA) is seeking an outreach and communications specialist to assist in efforts to improve regional capacity to cope with climate variability and change. For further information on position and the application process go to <http://hr.sc.edu/employ.html> and search for Research Associate.

Gulf Research Initiative Grants Administrator

The Consortium for Ocean Leadership announced the search for a Project Administration Manager, Gulf Research Initiative (GRI). This is a regular, full-time, exempt position. The position will report to the Vice President and Director, Research and Education Programs. Visit the Web site for more information.

<http://www.oceanleadership.org/2011/project-administration-manager-gulf-research-initiative/>



GCOOS is the Gulf of Mexico regional component of the U.S. Integrated Ocean Observing System (IOOS). Our mission is to provide timely, reliable, and accurate information on the open and coastal ocean waters of the Gulf of Mexico to ensure a healthy, clean, productive ocean and resilient coastal zone. Your input, guidance, support, and membership are important to the development of the data, products and services that you need. Contact GCOOS Coordinator, Ann Jochens (ajochens@tamu.edu), to become a GCOOS member and for more information.

We welcome your feedback. If you have an item that you would like to share with others, please email that item to Laura Caldwell (lcaldwell@geos.tamu.edu).