



## NEWSLETTER OF THE GULF OF MEXICO COASTAL OCEAN OBSERVING SYSTEM

### GCOOS NEWS AND UPDATES FOR 18 NOVEMBER 2011

#### GULF OF MEXICO REGIONAL NEWS

##### IOOS Funding

An appropriations “minibus” bill (H.R. 2112) consisting of three different spending bills (Agriculture, Commerce-Justice-Science, and Transportation-HUD) passed both the House (298-121) and Senate (70-30) on 17 November 2011 and was signed into law today. The bill provides \$4.9 billion for NOAA, which is \$306 million (7 percent) above FY11 and \$592 million (a cut of 11 percent) below the President's request. Within this total, under National Ocean Service, Ocean Resources Conservation and Assessment, Ocean Assessment Program, the Integrated Ocean Observing System is funded at \$31.055 million (regions, HFR, and sensor technology) and \$6.595 million for the NOAA IOOS Office. The package also contains a Continuing Resolution (CR) to fund the government through December 16th, or until Congress completes the remaining nine FY12 Appropriations bills. The CR is a “clean” extension and includes no new funding provisions for the remaining nine Appropriations bills. The text of the Conference Report ([http://www.rules.house.gov/Media/file/PDF\\_112\\_1/Committee%20Jurisdiction%20Reports/CR2112%201114s.pdf](http://www.rules.house.gov/Media/file/PDF_112_1/Committee%20Jurisdiction%20Reports/CR2112%201114s.pdf)) and the Joint Explanatory Statement of the Conference Committee ([http://www.rules.house.gov/Media/file/PDF\\_112\\_1/Committee%20Jurisdiction%20Reports/JointStates.pdf](http://www.rules.house.gov/Media/file/PDF_112_1/Committee%20Jurisdiction%20Reports/JointStates.pdf)) can be found online.

##### Glider Successfully Operated Through a Florida Red Tide

The GCOOS-RA congratulates two of its data partners, the University of South Florida (USF) College of Marine Science and Mote Marine Lab (MML), on their cooperative project to study Florida red tide. The mission's goal, implemented by the USF Center for Ocean Technology and MML, was to coordinate glider missions through a *Karenia brevis* bloom. The USF glider *Bass* was retrieved after a 28-day deployment, traveling 385 km and reaching a depth of 39.1 meters in the northeastern Gulf of Mexico. The survey track of the glider, from start of the deployment on 12 October 2011 to its retrieval on November 8<sup>th</sup> when its batteries were low, can be viewed at <http://ooma.marine.usf.edu/CROWChartsSync/>. Many of the approximately 1700 parameters available from the glider, including glider status, physical and biological data, and passive acoustic data, are available at <http://cotprojects.marine.usf.edu/data/plots.html> (see Mission 54). COT research engineer Chad Lembke ([clembke@marine.usf.edu](mailto:clembke@marine.usf.edu)) can be contacted to request specific data sets. An update on the MML glider will be featured in an upcoming GCOOS News and Updates.

##### Institute for Marine Mammal Studies

The GCOOS-RA is pleased to announce that its partner, the Institute for Marine Mammal Studies, successfully released four Kemp's Ridley sea turtles rescued and rehabilitated during the *Deepwater Horizon* oil spill. The 30 August 2011 release was especially noteworthy because of the seven species of sea turtles found worldwide, this species is most endangered, spending most of its time in the Gulf of Mexico and known to nest only at two locations in Texas and Mexico. The rescued sea turtles were caught by fishermen during May and June 2010. This is the first occasion since the spill in which turtles rescued in Mississippi were released back into Mississippi waters. Prior to this, 24 turtles from Mississippi were released in Florida. The official report on the cause of the stranding is still pending.

## **New Loop Current Eddy Forms in Gulf of Mexico**

Mitchell A. Roffer, President of Roffer's Ocean Fishing Forecasting Service, Inc. (ROFFS) and an active member of the GCOOS-RA, observed the formation of a new Loop Current Eddy in the Gulf of Mexico. He reported that "As we were monitoring the conditions in the Gulf of Mexico this morning (14 November 2011) we observed several clear indications that a relatively large, clockwise rotating Loop Current eddy appears to have formed. The water of this anti-cyclonic eddy is rotating separately from the Loop Current. There is cooler water (less red/more orange on image) from the west Florida shelf being pulled around the eddy. We started to see this formation on 7 November 2011 and the development has continued for a week." Movie loops show the motion. A false color enhancement of a two day (13-14 November 2011) ROFFS sea surface temperature (SST) composite derived from a variety of infrared sensors on the NOAA, NASA and European Space Agency satellites, as well as two independent graphics (NOAA\_AOML and GCOOS-RA Partner Robert Leben of the Univ. Colorado) derived from altimetry data from a longer period that show this eddy and circulation field. The ocean color imagery also provided additional verification. The Loop Current SST is 27.6°-27.7°C (81.7°-81.9°F) and eddy is 26.8°-27.1°C (80.3°-80.8°F). We will continue to monitor this to see if remains separated from the Loop Current. Presently the eddy is pulling a filament of the Loop Current water around the western side of the eddy, but most of the Loop Current water appears to be flowing eastward toward the Straits of Florida. North of the Loop Current eddy is another counter-clockwise flowing eddy. This situation is very similar to the circulation we observed during the BP *Deepwater Horizon* oil spill episode. We also continue to receive reports of good tuna fishing action along the northern boundaries of the blue Loop Current water from south of the Mississippi delta and eastward over the Desoto Canyon area. Graphics are posted at [http://gcoos.tamu.edu/documents/ROFFS\\_LoopCurrent\\_eddy.pdf](http://gcoos.tamu.edu/documents/ROFFS_LoopCurrent_eddy.pdf)

## **IOOS NEWS**

### **Certification Standards for the Integrated Ocean Observing System (IOOS)**

The public commenting period is now open for review of the Integrated Ocean Observing System (IOOS) Certification Criteria. NSF published a [Federal Register notice](#) on 7 November 2011, announcing a 60-day comment period enabling the public to provide input on IOOS certification standards and criteria. This activity is a requirement of the Integrated Coastal and Ocean Observation System Act of 2009, Sec. 12034 (c)(2)(E). The IOOC will use public comments to determine certification standards for Regional Information Coordination Entities (RICEs), establishing eligibility for integration into the Integrated Ocean Observing System (IOOS). For more information on the Certification Standards please see: <http://www.iooc.us/committee-news/certification-standards/>. Comments should be received no later than 5:00 p.m. eastern standard time on 6 January 2012. Comments should be emailed to IOOC support office at <mailto:certification@iooc.us>.

### **U.S. IOOS® and Partners Establish Community Standards for Biological Observing Data Integration**

The week of 7 November, IOOS will make community standards for biological observing data available to the nation. Biological data includes information on species' presence, absence, or abundance. The standards are designed to increase access to and availability of such data, and reduce the time that researchers must spend locating and integrating data from various providers. This activity, which supports conservation efforts such as biodiversity and ecosystem-based fishery conservation and management, is the result of a two-year pilot project between IOOS and one of its regional entities, the Pacific Islands Ocean Observing System. Other partners include NOAA, the National Park Service, the U.S. Geological Survey, and academic sources in the Pacific region.

### **SECOORA and Partners in Action**

BioHAB GIS, created and maintained by the Florida Fish & Wildlife Research Institute and partially funded by SECOORA, has been updated to a new technology, using Adobe flash builder 4.5 with ESRI FLEX viewer 2.4. BioHab allows you to view multiple complex data sets and real-time observations. Data types include coral reefs, essential fish habitats, real-time and near real time datasets, bathymetry, and other habitats. [http://ocean.floridamarine.org/biohab\\_gis/](http://ocean.floridamarine.org/biohab_gis/)

### **Aquarius Yields NASA's First Global Map of Ocean Salinity**

The first global map of the salinity, or saltiness, of Earth's ocean surface produced by NASA's new Aquarius instrument reveals a rich tapestry of global salinity patterns, demonstrating Aquarius' ability to resolve large-scale salinity distribution features clearly and with sharp contrast. From NASA Press Release: "PASADENA, Calif. - NASA's new Aquarius instrument has produced its first global map of the salinity of

the ocean surface, providing an early glimpse of the mission's anticipated discoveries. Aquarius, which is aboard the Aquarius/SAC-D (Satélite de Aplicaciones Científicas) observatory, is making NASA's first space observations of ocean surface salinity variations -- a key component of Earth's climate. Salinity changes are linked to the cycling of freshwater around the planet and influence ocean circulation. The map shows several well-known ocean salinity features such as higher salinity in the subtropics; higher average salinity in the Atlantic Ocean compared to the Pacific and Indian oceans; and lower salinity in rainy belts near the equator, in the northernmost Pacific Ocean and elsewhere. These features are related to large-scale patterns of rainfall and evaporation over the ocean, river outflow and ocean circulation. Aquarius will monitor how these features change and study their link to climate and weather variations." The link is for the 1st light for Aquarius.

[http://www.nasa.gov/mission\\_pages/aquarius/news/aquarius20110922.html](http://www.nasa.gov/mission_pages/aquarius/news/aquarius20110922.html)

## NATIONAL NEWS

### **Georgetown Climate Center Releases Suite of Climate Adaptation Resources**

On 1 November the Georgetown Climate Center launched the [Adaptation Clearinghouse](#), a new online database and networking tool that will help communities adapt to climate change. The nearly 1,000 adaptation resources available through the Adaptation Clearinghouse are geared toward state and local planners and policymakers and can be sorted by geography, sector, impact, and more. CSO is pleased to partner with the Georgetown Climate Center on the coastal section of the Clearinghouse. The Georgetown Climate Center also released two new adaptation reports, both of which can be found in the Adaptation Clearinghouse. "Adaptation Case Studies in the Western United States" explores water shortages in the West and the protection of the greater sage grouse. The report looks at the policies and unique approaches being adopted in Colorado and Wyoming to meet these challenges. The "Adaptation Tool Kit: Sea-Level Rise and Coastal Land Use" explores 18 land use tools that communities can use to prepare for rising sea levels and the flooding that will result from climate change. To learn more about the Georgetown Climate Center, visit: <http://www.georgetownclimate.org/>. <http://www.georgetownclimate.org/adaptation/clearinghouse>

### **Survey: Priorities for Research Natural Resource Management/Conservation**

A recent publication in *BioScience* identified 40 research questions that, if answered, might provide the information needed by policy makers about natural resource conservation and management in the United States. The questions reflect the input of nearly 400 individuals affiliated with more than 100 public and private organizations. The study authors are now canvassing policy makers and their advisors, resource managers, and researchers to rank these research questions. Understanding how research priorities vary among sectors and organizations will help increase alignment between policy makers' needs and research. To assist in this prioritization effort, respond to the [survey](#) and distribute the survey link to colleagues who have responsibilities or interests in natural resource policy and management. The survey will take about 20 to 30 minutes to complete. If you do not have online access to BioScience and wish to obtain a copy of the article, request a reprint from Erica Fleishman (<mailto:efleishman@ucdavis.edu>).

### **Call for Proposals: Restore America's Estuaries National Conference**

Proposals for the 6th National Conference on Coastal and Estuarine Habitat Restoration, which will be held 20-24 October 2012, in Tampa, Florida, are now being accepted. The Conference theme is "Restoring Ecosystems, Strengthening Communities." All proposals relevant to coastal habitat restoration are highly encouraged, but there is particular interest in proposals for sessions, presentations, and posters dealing with the interface of the environment and the economy. For more information, including a full list of Conference topics and details on submitting a proposal, visit: <http://program.estuaries.org/>. The deadline to submit a proposal is 1 February 2012.

### **TRB Workshop on Offshore Renewable Energy Development**

The Transportation Research Board is cosponsoring "Operating in the Ocean Environment: A Workshop on Offshore Renewable Energy Development" in Washington, D.C. on 15-16 December 2011. The goal of the forum is to inform offshore energy developers about domestic and international experiences, practices, and challenges that could be of use in planning and executing renewable energy projects on the outer continental shelf. A focus of the workshop will be on the challenges relating to maritime transportation, and logistics involved in the design, construction, maintenance, and repair of offshore facilities. To learn more, contact Beverly Huey (<mailto:BHuey@nas.edu>).

## UN Agencies Release Blueprint for Ocean and Coastal Sustainability

On 1 November several UN entities issued a “Blueprint for Ocean and Coastal Sustainability,” which highlights the role of oceans in sustainable development and offers recommendations ahead of the UN Conference on Sustainable Development. The Blueprint provides an overview of the threats faced by the oceans, including unsustainable use, deforestation of mangroves, disappearance of coral reefs, ocean acidification, and climate change. It also highlights the role of oceans in regulating the climate, contributing to food security, and sustaining livelihoods. Among the measures proposed by the Blueprint are: creating a global blue carbon market as a way of creating direct economic gain through habitat protection; promoting research on ocean acidification; increasing institutional capacity for scientific monitoring of oceans and coastal areas; reforming and reinforcing regional ocean management organizations; promoting responsible fisheries and aquaculture; strengthening legal frameworks to address aquatic invasive species; and enhancing coordination, coherence and effectiveness of the UN system on ocean issues. To learn more, see the [joint press release](#).

## COMING EVENTS & MEETINGS

### December

Meeting “[State of the Gulf Summit](#)”, hosted by Harte Research Institute, 4-8 December 2011, Omni Galleria Hotel, Houston, TX.

<http://www.harterresearchinstitute.org/state-of-the-gulf-summit/>

Meeting: “[American Geophysical Union Fall Meeting 2011](#)”, 5-9 December 2011, San Francisco, CA. The keynote address will be delivered by Simon Winchester on 5 December in the Moscone Center North.

<http://www.agu.org/fallmeeting>

Workshop: “[Workshop for “Smart Ocean/Smart Industries”](#) Program on Ocean and Climate Observations, 12-13 December 2011, Paris France.

[http://www.oceancouncil.org/site/smart\\_ocean.php](http://www.oceancouncil.org/site/smart_ocean.php)

### 2012

### January

Meeting: “[AMS 92<sup>nd</sup> Annual Meeting](#)”, 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”.

<http://ametsoc.org/meet/annual/>

### February

Meeting: “[Social Science For Coastal Decision-Making](#)” 15-16 February 2012, Francis Marion Hotel, Charleston, SC.

<http://www.csc.noaa.gov/socialcoastforum/>

Meeting: “[2012 Ocean Sciences Meeting](#)”, 19-24 February 2012, Salt Lake City, Utah. Please contact Lynda West ([lyndaw@sgmeet.com](mailto:lyndaw@sgmeet.com), Tel: 254.776.3550) at the conference office if you have any questions.

<http://www.sgmeet.com/osm2012>.

Meeting: “[World Ocean Summit 2012](#)” 22-24 February 2012, Capella, Singapore

<http://www.economistconferences.asia/event/world-oceans-summit>

### March

Meeting: “GCOOS Annual Parties Meeting and Board of Directors Meeting” 14-15 March 2012. Institute for Marine Mammal Studies, Gulfport, MS. More details will be posted soon.

Conference: “[Oceanology International](#)” 13-15 March 2012, London, England. Oceanology International is the global forum where industry, academia and government share knowledge and connect with the marine

technology and ocean science community, improving their strategies for measuring, exploiting, protecting and operating in the world's oceans.

<http://www.oceanologyinternational.com/>

#### April

Meeting: "[2012 Defense Security + Sensing](#)" 23-27 April 2012, Baltimore Convention Center, Baltimore, MD. This meeting is sponsored by SPIE, the International Society for Optics and Photonics.

<http://spie.org/x6765.xml>

#### May

Meeting "[National Water Quality Monitoring Council's 8<sup>th</sup> National Monitoring Conference - Water: One Resource - Shared Effort - Common Future](#)" 30 April - 4 May 2012, Portland, OR.

<http://acwi.gov/monitoring/conference/2012/index.html>

#### June

Meeting: "[The Coastal Society's 23<sup>rd</sup> International Conference](#)", 3-6 June 2012, Hyatt Regency, Miami, FL.

<http://thecoastalsociety.org/conference/tcs23/index.html>

#### July

Meeting: "2012 ASLO Summer Meeting" 8-13 July 2012, Lake Biwa, Otsu, Japan.

Symposium: "[12<sup>th</sup> International Coral Reef Symposium](#)", 9-12 July 2012, Cairns, Australia.

<http://www.icrs2012.com>

#### September

Meeting: "GCOOS-RA Board of Directors Meeting" 26-27 September 2012, Corpus Christi, TX.

#### October

Meeting: "[Restore America's Estuaries 6<sup>th</sup> National Conference on Coastal and Estuarine Habitat Restoration](#)" 20-24 October 2012, Tampa, FL.

\*DUE DATE FOR SUBMITTAL: 1 FEBRUARY 2012\*

<http://www.estuaries.org/conference/>

Meeting: "[OCEANS '12 MTS/IEEE](#)" 15-19 October 2012, Hampton Roads, VA.

<http://www.oceans12mtsieeehamptonroads.org/>

## FUNDING OPPORTUNITIES

### Coral Reef Conservation Fund 2012

The National Fish and Wildlife Foundation (NFWF) and NOAA's Coral Program, have announced the availability of grant funding for domestic and international coral reef projects. The full RFP can be found at <http://www.nfwf.org/coralreef>. U.S. Jurisdictions can apply for funding to: (1) enhance watershed management planning; (2) reduce sedimentation; or, (3) improve fisheries management. International priorities are to: (1) Implement NOAA's International Strategy; (2) Apply Lessons from NOAA-Sponsored Training Programs; or, (3) Increase MPA capacity in the Caribbean. More information on priority geographies can be found at <http://www.nfwf.org/priorities>. The majority of awards under this program will fall in the range of \$20,000 to \$70,000. Matching funds from non-federal sources are required at a 1:1 ratio for all proposed projects. See the RFP announcement for a description of the funding priorities for this competition as well as other important application information. Brief pre-proposals are due on December 19th and must be submitted via the NFWF Easygrants system. NFWF will also host a webinar on November 15th to discuss the priorities identified in the RFP and describe how to write a competitive application. Details and sign up information for the webinar can be found in the RFP and at <http://www.nfwf.org/coralreef>.

## NOAA Funding Opportunity: Ocean Acidification

The NOAA Ocean Acidification Program and the NOAA Center for Sponsored Coastal Ocean Research (CSCOR) have released a new competitive grants announcement for FY12. Proposals are being solicited for research under the Regional Ecosystem Prediction Program theme focused on the impacts of ocean acidification on key fish and shellfish species and their supporting ecosystems in U.S. coastal and estuarine waters. CSCOR is accepting proposals focused on the development of modeling and prediction tools to determine population-, community-, and ecosystem-level effects of increasing ocean acidification in marine and estuarine systems. Total funding for this research is expected to be approximately \$1.5 million over 3 years, depending on final appropriations. Funding limits for individual projects are approximately \$200,000 to \$400,000 per year lasting up to three years. The closing date for applications is January 30, 2012, but required Letters of Intent are due by 5:00 pm EST, December 15th. To learn more, visit: [http://www.cop.noaa.gov/opportunities/grants/funding\\_grants.aspx](http://www.cop.noaa.gov/opportunities/grants/funding_grants.aspx).



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 Executive Director, Ann Jochens ([ajochens@tamu.edu](mailto: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](mailto:lcaldwell@geos.tamu.edu)).