



NEWSLETTER OF THE GULF OF MEXICO COASTAL OCEAN OBSERVING SYSTEM

GCOOS NEWS AND UPDATES FOR 5 OCTOBER 2012

GULF OF MEXICO REGIONAL NEWS

GCOOS Board of Directors Meet in Corpus Christi, TX

The fifteenth meeting of the GCOOS Board of Directors (BoD) was held 26-28 September 2012 at the Harte Research Institute, Corpus Christi, TX. Following a warm welcome from Executive Director Dr. Larry McKinney, the BoD voted unanimously to adopt the agenda. Day one was dedicated to understanding the world in which the GCOOS-RA operates. Updates on IOOS Program Office activities, the national High Frequency Radar network, and the IOOS certification process were provided by NOAA IOOS Executive Director Zdenka Willis, Jack Harlan, and Dave Easter, respectively. Josie Quintrell, NFRA Executive Director, provided an update on the political arena in which IOOS is operating. The discussion moved from the national arena to more local activities in the GCOOS-RA. Invited speakers from The Gulf of Mexico Alliance, Gulf of Mexico Research Initiative, Gulf of Mexico Ecosystem Restoration Task Force, Bureau of Ocean Energy Management, The Nature Conservancy, and neighboring Regional Association SECOORA provided updates and identified areas of collaboration with GCOOS. In the afternoon, time was spent exploring how to proceed with the development of the Central and South Texas Integrated Water Quality Network pilot project. Five organizations provided overviews of the information they have and need, and the audiences they serve. These include the Texas Coastal Ocean Observing Network, Mission Aransas National Estuarine Research Reserve, Gulf of Mexico Foundation, Galveston Bay Foundation, and Coastal Bend Bays and Estuaries Program. A summary was given on the Gulf of Mexico Alliance's Monitoring Design Workshop, the first of two that will result in a design and an implementation plan to meet GOMA's monitoring needs in water quality and nutrient reduction.

On the second day, GCOOS staff showcased new and developing products and pilot projects. Among the successes shared were a new iPhone application to enable boaters to access the GCOOS web pages from a mobile device; a viewing of the characters in the GCOOS kiosk to be launched at six aquariums this fall; and four special projects. The projects include deployment of a monitoring platform by the Florida Fish and Wildlife Research Institute to quantify harmful algae in Tampa Bay; a cooperative glider mission between the University of South Florida College of Marine Science and Mote Marine Laboratory to simultaneously monitor a HAB event; serving HAB data from the Texas A&M University Flow Cytobot; and launching a glider mission in partnership with the University of Southern Mississippi and Liquid Robotics to monitor ocean acidification. During the business meeting, the new GCOOS officers were announced. Jan van Smirren, Fugro GEOS, is the new Chair/Corporate President; former Chair Terry McPherson, The Baldwin Group, is First Vice President; Alfredo Prelat, NEOS Geosolutions, is Second Vice President; Joe Swaykos, National Data Buoy Center, is Secretary; and Dr. Worth Nowlin, Professor Emeritus, Texas A&M University, is Treasurer. The GCOOS-RA appreciates the excellent facilities provided by the Harte Research Institute and extends thanks to Larry McKinney, our host.

Dr. Nancy Rabalais receives a 2012 MacArthur Genius Award

The GCOOS-RA congratulates 2012 MacArthur Genius Award recipient Dr. Nancy Rabalais. Rabalais, a GCOOS Board of Directors member, is a Professor of Marine Ecology and Executive Director of the Louisiana Marine Consortium. She has dedicated the past three decades to documenting and mitigating the effects of hypoxic zones. Much of her work has focused on the seasonal hypoxia in the waters off the Louisiana continental shelf where she has led a long-term monitoring program to study the size and intensity of the annual phenomenon. Recently, she has expanded her efforts studying the relationship between the extent of hypoxia and the increasing quantities of nutrients flowing into the Gulf of Mexico to work with colleagues in Mexico via

the Gulf of Mexico Large Marine Ecosystem project. The prestigious MacArthur Fellowship is based on three criteria: exceptional creativity, promise for important future advances, and potential for the fellowship to facilitate subsequent creative work. The fellowship, a stipend of \$500,000 paid out in equal quantity installments over five years, is a “no-strings attached” award in support of people, not projects. The MacArthur Foundation is making an investment in Rabalais’ originality, insight and potential. The award is intended to enable her to continue exercising her own creative and intellectual instincts for the benefit of society. To that we say well-deserved Nancy!

Gulf of Mexico Alliance Hosts Water Quality Monitoring Workshop

Dr. Barbara Kirkpatrick, Senior Research Science at Mote Marine Laboratory and member of the GCOOS Board of Directors, represented the GCOOS-RA at the September 2012 Gulf of Mexico Alliance Water Quality Monitoring Workshop held in Sarasota, FL. Along with colleagues Larry Lloyd, Research Specialist at the Conrad Blucher Institute for Surveying and Science, Texas A&M University-Corpus Christi, Alyssa Dausman, Gulf Coast Ecosystem Restoration Task Force, and Steve Wolfe, Gulf of Mexico Alliance, Florida Institute of Oceanography, the 25 workshop participants gathered to draft a water quality monitoring plan specifically targeting nutrients for the Gulf of Mexico. The planning priorities were to define long-term monitoring needs to support nutrient management for both ecosystem health and human health. Participants were asked to address questions about gulf-wide (deep water), regional, and coastal/estuary informational needs, including spatial and temporal variations in nutrient concentrations and long-term trends in nutrient loading and export. Kirkpatrick acknowledged that the draft plan aligns nicely with the GCOOS Build Out Plan (http://gcoos.tamu.edu/BuildOut/GCOOS_BuildoutPlan_V1.pdf) and that GOMA recognizes the leadership and infrastructure already in place, particularly to address ocean circulation and other pertinent meteorological and oceanographic data needs.

Interactive Kiosks Introduce Public to Ocean and Coastal Information with GCOOS

Interactive kiosks are now helping the public understand how the Gulf of Mexico influences their lives and livelihoods and are helping scientists track changes in public understanding of major ocean issues. The Gulf of Mexico Coastal Ocean Observing System, a regional member of the U.S. Integrated Ocean Observing System, opened the first of six kiosks at the Institute for Marine Mammal Studies in Gulfport, Miss. These kiosks, which feature interactive games about the societal value of real-time ocean and coastal information, aid in the informal education of the public on the topics of water quality, nutrients and nutrient reduction, coastal community resilience, habitat conservation, and ecosystem integration and assessment. Additional kiosks will be installed at the Florida Aquarium, Texas State Aquarium, Audubon Aquarium of the Americas, Dauphin Island Estuarium, and Secrets of the Sea Marine Exploration Center and Aquarium. Combined, these facilities host millions of visitors annually.

Obama Administration Announces 38 Million-Acre Oil and Gas Lease Sale in the Central Gulf of Mexico

As part of President Obama's all-of-the-above energy strategy to expand safe and responsible domestic energy production, Secretary of the Interior Ken Salazar and Bureau of Ocean Energy Management (BOEM) Director Tommy P. Beaudreau announced that BOEM will offer 38 million acres in the Central Gulf of Mexico for oil and gas exploration and development. This sale will build on two major Gulf of Mexico lease sales in the last year - a 21 million acre sale held last December and a 39 million acre sale held in June - and supports the Administration's goal of continuing to increase domestic oil and gas production which has grown each year the President has been in office, with domestic oil production in 2011 higher than any time in eight years. Proposed Lease Sale 227, scheduled to take place in New Orleans on March 20, 2013, will offer all unleased areas in the Central Gulf of Mexico Planning Area, offshore Louisiana, Mississippi, and Alabama and could lead to the production of up to nearly a billion barrels of oil and nearly 4 trillion cubic feet of natural gas. This will be the second sale under the Administration's new Outer Continental Shelf Oil and Gas Leasing Program for 2012-2017 and the first of five annual Central Gulf lease sales. Announced in June, the Five Year Program makes offshore areas with more than 75% of the technically recoverable oil and gas resources available for exploration and development, consistent with President Obama's commitment to continue to expand domestic energy production and reduce America's dependence on foreign oil. The Notice of Availability of the Proposed Notice of Sale can be viewed today in the Federal Register at: <https://www.federalregister.gov/public-inspection>.

Expanded Louisiana Coastal Zone Boundary Approved

The Office of Ocean and Coastal Resource Management recently approved a new inland boundary for the Louisiana Coastal Management Program after the state legislature revised the boundary based on the results

of a two-year study. The new coastal zone boundary incorporates a net increase of 4,887 additional square kilometers, about a 12.6 percent increase. The state was concerned that the original boundary, established in 1978, did not include all wetlands under coastal influence. State officials were also concerned that water quality in the coastal zone could be significantly affected by activities occurring outside the coastal zone and that the coastline has changed significantly since the boundary was established. Today, officials have access to better data collection and analysis capabilities to determine coastal influence (versus in 1978). Louisiana used these tools to determine the new boundary and helped contribute to a better understanding of the vulnerability of the Louisiana coastal zone to sea level rise, land subsidence, storm surge, and other flood hazard issues. The boundary change enhances state management of coastal resources in areas with a high level of coastal influence and reduces impacts of coastal hazards and wetland alteration through review of development proposals. In addition, the boundary change will simplify review of federal activities—within the newly added areas of the coastal zone—through the state's [federal consistency](#) authority under the Coastal Zone Management Act.

IOOS/NATIONAL/LEGISLATIVE NEWS

NOAA Coastal Services Center: Coastal Services Magazine

The September/October edition of NOAA's Coastal Services Magazine is now available online at <http://www.csc.noaa.gov/magazine/2012/05/issue.pdf>. In this issue, learn more about climate change communication in Virginia, red tide monitoring efforts in Texas, and Georgia's new Coastal Hazards Portal.

Study finds that ocean acidification is accelerated in nutrient-rich areas

Carbon dioxide released from decaying algal blooms, combined with ongoing increases in atmospheric carbon emissions, leads to increased levels of ocean acidification, and places additional stress on marine resources and the coastal economies that depend on them, according to a new study published recently. Ocean acidification occurs when the ocean absorbs carbon dioxide from the atmosphere or from the breakdown of organic matter, which then causes a chemical reaction to make it more acidic. Research by NOAA's William G. Sunda and Wei-jun Cai of the University of Georgia points to the process of eutrophication as a large, often overlooked source of CO₂ in coastal waters. When combined with increasing CO₂ in the atmosphere, the release of CO₂ from decaying organic matter is accelerating the acidification of coastal seawater.

Sign Up for USGS Alerts for Flooding and Drought

Use 'ProjectAlert' to keep up with USGS scientists as they respond to floods, droughts, and chemical spills. These alerts are official, yet informal notices that describe flood, drought, or water quality conditions across the country, as well as how USGS field crews are responding to the event. While the USGS has used ProjectAlert to send e-mail notifications about extreme hydrologic events to selected officials for years, now they are available to the public. These alerts describe the activities of USGS to obtain and report the hydrologic information urgently needed by water resource managers, forecasters, and emergency management officials. A link to the RSS feed and the web archive can be found at <http://water.usgs.gov/alerts/>. For information on real-time hydrologic conditions visit <http://waterwatch.usgs.gov>.

Geologic Map Day

Celebrate the inaugural "Geologic Map Day" on 19 October, as a part of the Earth Science Week 2012 activities. Geologic maps are important for education, science, business, and public policy concerns. Geologic Map Day will focus the attention of students, teachers, and the general public on the study, uses, and significance of these tools by engaging audiences through educational activities, print materials, online resources, and public outreach opportunities. Earth Science Week 2012 will be celebrated 14-20 October. For more information, visit the [Geologic Map Day](#) web page.

<http://www.earthsciweek.org/>
<http://www.earthsciweek.org/geologicmap/>

EMPLOYMENT

Tenure-track Position in Geochemistry, University of Vermont

<https://www.uvmjobs.com/applicants/jsp/shared/frameset/Frameset.jsp?time=13>

Two Assistant Professors in Neotectonics, and Sedimentology, New Mexico State University
<http://www.nmsu.edu/~geology/>

Two Faculty positions in Solid Earth Processes, University of Rochester, NY
<http://www.ees.rochester.edu/faculty-search.html>

Natural Resources Defense Council: Ocean Advocate
<http://www.nrdc.org/jobs>

COMING EVENTS & MEETINGS

October

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

"[OCEANS '12 MTS/IEEE](#)" 15-19 October 2012, Hampton Roads. VA.
<http://www.oceans12mtsieeehamptonroads.org/>

November

"[2012 Biennial Gulf Estuarine Research Society Meeting](#)", 8-9 November 2012, The Dauphin Island Sea Labs, Dauphin Island, Alabama
<http://www.gers.us/GERS2012meeting.html>

"[IOOS Summit 2012 - A new Decade of Integrated and Sustained Ocean Observing](#)" 13-16 November 2012, Herndon, VA. WE NEED YOUR HELP - Please visit <http://www.iooc.us/summit/ioos-summit/> to see how you can help.

"Bays and Bayous Symposium" 14-15 November 2012, Mississippi Coast Coliseum and Convention Center, Biloxi, MS
<http://masgc.org/page.asp?id=717>

December

2012 American Geophysical Union Fall Meeting, 3-7 December 2012, San Francisco, CA.
<http://fallmeeting.agu.org/2012/>

2013

January

American Meteorological Society Annual Meeting, 6-10 January 2013, Austin, TX.
<http://annual.ametsoc.org/2013/?CFID=420872&CFTOKEN=99740603>

"[2013 National Conference: Environmental Disasters](#)", 15-17 January 2013, Washington, DC. Sponsored by the National Council for Science and the Environment.
<http://ncseonline.org/2013-national-conference-environmental-disasters>

"[Gulf of Mexico Oil Spill and Ecosystem Science Conference](#)", 21-23 January 2012, New Orleans Marriott Hotel, New Orleans, LA.
<http://www.gulfresearchinitiative.org/news-and-events/gulf-of-mexico-oil-spill-ecosystem-science-conference/>

March

“[Coastal GeoTools Conference](#)”, 25-28 March 2013, Myrtle Beach, SC. Abstracts due 1 October 2012
<http://geotools.csc.noaa.gov/default.aspx>

April

Inaugural National Adaptation Forum, 2-4 April 2012, Denver Marriott City Center, Denver, CO.
<http://www.nationaladaptationforum.org>



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), 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).