



NEWSLETTER OF THE GULF OF MEXICO COASTAL OCEAN OBSERVING SYSTEM

GCOOS NEWS AND UPDATES FOR 10 AUGUST 2012

GULF OF MEXICO REGIONAL NEWS

Congratulations to the IOOS Federal Advisory Committee Members

Zdenka Willis, Director of the IOOS Program announced the members of the new US IOOS Federal Advisory Committee (FAC). The committee is comprised of members from government, academia, non-profit organizations and industry. The members include Rick Spinrad from Oregon State University who will serve as chair; CJ Beegle-Kraus, Environmental Research for Decision; Terence Browne, Collins Engineering; Tom Gulbransen, Battelle Memorial Institute; Ann Jochens, GCOOS Executive Director; Val Klump, Great Lakes WATER Institute, University of Wisconsin-Milwaukee, WI; Lynn Leonard, University of North Carolina at Wilmington; Justin Manley, Teledyne Benthos; LaVerne Ragster, University of the Virgin Islands; Tony MacDonald, Monmouth University Urban Coast Institute; Chris Ostrander, PacIOOS Executive Director; Emily Pidegon, Conservation International; and Eric Terrill, Scripps Institution of Oceanography. The IOOS FAC members were selected by a team comprised of members of the IOOC and subsequently approved to serve by Dr. Lubchenco. The first IOOS Advisory Committee meeting will be held 29-30 August at the Consortium for Ocean Leadership, Washington DC.

GCOOS-RA Fifteenth Meeting of the Board of Directors, 26-28 September in Corpus Christi

Details are now available on-line for the 15th GCOOS-RA Board of Directors Meeting at the Harte Research Institute in Corpus Christi, TX, from 26-28 September 2012. The website includes a link for registration, information on hotel accommodations and the draft agenda. For the details, please see:

http://gcoos.tamu.edu/meetingreports/2012_Sep/meeting.html. All members of GCOOS are encouraged to attend this meeting as a variety of topics and issues will be discussed.

GCOOS Members attend Glider Workshop in LaJolla, CA

Matthew Howard (GCOOS/TAMU) and Chad Lembke (GCOOS/SECOORA/USF) attended the *U.S. IOOS National Glider Strategy Development Workshop* held 1-3 August 2012 at Scripps Institution of Oceanography (SIO), UCSD, La Jolla, CA. Representatives from the Regional Associations and several NOAA and Navy groups attended. Included among the attendees were several very active and experienced glider operators. Becky Baltes of the U.S. IOOS Office did an excellent job leading the workshop, which was both informative and productive. [The Martin Johnson House](#) venue included spectacular coastal views, delicious catered meals, and an *extremely* fast Wi-Fi connection. The La Jolla weather was, of course, perfect. The purpose of the workshop was 1) to determine the requirements and goals of a national glider cooperative network and 2) to evolve a strategy to develop one. The first two days were spent first as a group viewing presentations on the current state of glider operations and then in breakout groups brainstorming requirements for a national glider network. On the third day the group produced a series of goals and an outline for an initial *National Glider Network Plan* document. Short-term goals (0-1 y) included developing standardized data formats and inventories of present-day glider missions, assets, and capabilities. Intermediate-term goals (1-3 y) included developing governance, demonstrative pilot projects, and data assembly centers. Long-term goals (3-10 y) included establishing mission involving cooperative arrays of gliders and international relationships. The final activity was to assign writing teams to the sections of the plan document. Howard is on the data management section writing team lead by Jim Potemera (PacIOOS). Lembke will lead the team writing the "Background" section and will contribute to the data management section. Becky Baltes would like the draft plan to be

completed in time for the IOOS Summit in November 2012. The agenda, presentations, and participant list are posted on the U.S. IOOS website at <http://www.ioos.gov/gliders/strategy/>. A special thanks go out to Dan Rudnick (SCCOOS/SIO) who gave the group a tour of the Spray glider facility at SIO.

New Harmful Algal Bloom Observing System Platform in Tampa Bay, FL

Florida Fish and Wildlife Conservation Commission (FWC) scientists Drs. Jim Ivey and Alina Corcoran are in the final stages of field testing a Harmful Algal Bloom (HAB) monitoring station partially funded by GCOOS. The platform will be deployed in Old Tampa Bay, FL, a system prone to blooms by the potentially toxic dinoflagellate *Pyrodinium bahamense*. *Pyrodinium bahamense* produces saxitoxin, which can accumulate in shellfish and pose a potential health risk from paralytic shellfish poisoning. This species has been documented in Tampa Bay since the 1960s and extensive blooms have occurred almost every year since 2008. With platform permits in place, the team is wrapping up communications and system tests and initiating an *in situ* test run prior to launching. The platform will contribute to the Harmful Algal Bloom Marine Observation Network (HABMON) program (<http://myfwc.com/research/redtide/research/current/habmon/>) of the HAB group at the Fish and Wildlife Research Institute (FWRI), the research arm of FWC. The platform is equipped with a suite of sensors to measure numerous water quality and meteorological parameters, including current speed and direction, salinity, water temperature, turbidity, pH, dissolved oxygen concentrations, chlorophyll and phycocyanin fluorescence, irradiance, wind speed, wind direction, air temperature, barometric pressure, relative humidity and rainfall. Water samples are collected from surface and bottom depths for measurement by onboard instrumentation. The HABMON platform is designed for rapid reconfiguration to accommodate new sensors and sampling regimes. All data will be collected hourly and telemetered to a FWRI server for manual download and quality control, then shared via the GCOOS Data Portal. As HABs continue to emerge in the Gulf of Mexico, resource managers will require a better understanding of HAB dynamics. In this context, the FWC/FWRI team will use the observing platform to link environmental drivers to bloom dynamics at high frequencies on local scales.

2012 Gulf Hypoxic Zone 4th Smallest Since 1985

GCOOS Board of Directors member Dr. Nancy Rabalais, Executive Director, Louisiana Universities Marine Consortium (LUMCON), led the 2012 survey cruise to monitor the size of this year's Gulf of Mexico hypoxic zone off the coast of Louisiana and Texas. Measuring approximately 2,889 square miles, the area is the fourth smallest since mapping of the annual hypoxic area began in 1985, and the smallest since 2000. This is in stark contrast to last year when flood conditions resulted in an area measuring 6,770 square miles. Dr. Rabalais attributed the smaller area to drought conditions and the fact that nutrient output into the Gulf this spring approached near the 80-year record low. She stated "what wasn't expected was how the scattered distribution of hypoxia areas differed from any others documented in the past. Confirmed, however, is the strong relationship between the size of the hypoxic zone and the amount of fresh water and nutrients carried to the Gulf by the Mississippi River." The average size of this zone over the past five years has been 5,684 square miles, more than twice the 1,900 square mile goal set by the Gulf of Mexico/Mississippi River Watershed Nutrient Task Force. For Dr. Rabalais' report, visit the LUMCON web site (www.gulfhypoxia.net). Prior to the LUMCON cruise, two cruises in June, one led by GCOOS member, Texas A&M University (TAMU), and another by NOAA's Southeast Area Monitoring and Assessment Program (NOAA-SEAMAP), surveyed the northwestern GOM shelf. Data published by NOAA-SEAMAP showed no hypoxia for the area surveyed and data from TAMU showed small, patchy areas of hypoxia on the Louisiana shelf. Results from the NOAA-SEAMAP cruise can be found at <http://www.ncddc.noaa.gov/hypoxia/>. TAMU researchers will be conducting a second survey in mid-August to provide additional data on hypoxic conditions across the Louisiana-Texas shelf. To follow the August cruise conducted by TAMU researchers, visit the TAMU web site (hypoxia.tamu.edu).

New USGS Maps Showing Nutrient Delivery to Estuaries, Bays, and Sounds in the Gulf of Mexico

[Maps](#) showing estimates of yields and information on sources of nutrients transported to 21 estuaries, bays, and sounds in the Gulf of Mexico are now available. These estimates are based on the USGS SPARROW (Spatially Referenced Regression On Watershed Attributes) models developed for the southeastern and south-central United States and integrate Federal, State, and local agency monitoring data from more than 700 stations. These maps show where estimated nutrient yields are elevated locally and which areas have the highest yields to downstream estuaries, bays, and sounds in the Gulf of Mexico.

An on-line, interactive [decision support system](#) also provides easy access to these regional models that describe how rivers receive and transport nutrients from natural and human sources to sensitive waters throughout the Gulf of Mexico. Users can evaluate source reduction scenarios that target one or more nutrient sources to evaluate changes in the amount of nutrients transported downstream. For more information on nitrogen and phosphorus loading and delivery to streams and coastal areas in Florida, Georgia, and Alabama,

contact: Anne Hoos, abhoos@usgs.gov. For more information on nitrogen and phosphorus loading and delivery to streams and coastal areas in Mississippi, Louisiana, and Texas contact: Richard Rebich, rarebich@usgs.gov
<http://water.usgs.gov/nawqa/sparrow/mrb/gom/>

Gulf Fishery News now Available on-line

The June-July 2012 edition (Vol. 34, No. 3) of Gulf Fishery News from the Gulf of Mexico Fishery Management Council is available online at http://www.gulfcouncil.org/news_resources/gulf_fishery_news_archive.php. Included under "Recipe Rewind" is a recipe for Frozen Crabmeat Cocktail. This edition gives details on free downloads of federal fishing regulations Apps for iPhones and Droids

IOOS/NATIONAL/LEGISLATIVE NEWS

New Oil Spill Application for iPhone, iPad

The Marine Defenders application is a mobile tool for documenting, mapping and reporting oil pollution and marine debris. All reports are mapped online, sent to the National Response Center in Washington, D.C., and passed along to the U.S. Coast Guard. The app is photo and GPS-enabled, which allows volunteers and researchers to take pictures and post reports to interactive maps in real time. Funding for the application was provided by the National Fish and Wildlife Foundation.

<http://itunes.apple.com/us/app/oil-spill-response/id371743298?mt=8&ign-mpt=uo=6>

FUNDING OPPORTUNITIES

Sea-Bird Electronics and WET Labs Graduate Student Equipment Loan Program

Sea-Bird Electronics and WET Labs announced the 2013 Graduate Student Equipment Loan Program! WET Labs and Sea-Bird are soliciting innovative proposals from outstanding graduate students for study of environmental variables in oceans, estuaries, rivers, lakes, or laboratories. Award recipients will receive a loan of Sea-Bird and/or WET Labs equipment for up to a 1-year study period. Grant proposals are due 15 September 2012 and grants will be announced by 1 December 2012. For details about this program, please visit www.seabird.com/StudentGrants.htm .

COMING EVENTS & MEETINGS

August

[“Oceans in Action 2012: Marine Technology Advances in the Wake of *Deepwater Horizon*”](#), 13-14 August 2012, IP Resort, Biloxi, MS
<https://www.mtsociety.org/conferences/Oceansinaction2012.aspx>

September

[“GCOOS-RA Board of Directors Meeting”](#) 26-28 September 2012, Corpus Christi, TX.
http://gcoos.tamu.edu/meetingreports/2012_Sep/meeting.html

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.oceans12mtsieehamptonroads.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](http://ncseonline.org/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](http://www.gulfresearchinitiative.org/news-and-events/gulf-of-mexico-oil-spill-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/>

EMPLOYMENT

NOAA Coastal Services Center - Coastal Management Fellowship
<http://www.csc.noaa.gov/cms/fellows.html>



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).