Newsletter of the Gulf of Mexico Coastal Ocean Observing System

GCOOS News and Updates for 15 June 2012

Gulf of Mexico Regional News

GCOOS Welcomes Pierre Yves Cousteau and Cousteau Divers

The GCOOS-RA is pleased to welcome Cousteau Divers to its growing network of Regional Association members. Cousteau Divers is a recently launched international not-for-profit organization fostering scientific programs that monitor and conserve marine biodiversity around the world. The program brings the legacy of Jacques-Yves Cousteau to life, by uniting a community of divers concerned about the marine environment, and educating them so that each diver can become an agent engaged in the study and conservation of the ocean. To participate, snorkelers and SCUBA divers use program course materials to learn about simple methods to observe and record information. After they conduct their underwater investigations, observing physical, geological, and biological conditions, they upload the information and any photos or videos to the online site (http://www.cousteaudivers.org/science). Collectively, the community of divers is helping to gather a near real-time diagnosis of the ocean's health—allowing researchers to visualize problems as they arise and targeting expeditions to help understand and respond to problems. Here in the Gulf of Mexico, Cousteau Divers recently opened the first Cousteau Divers School in North America. Partnering with GCOOS-RA member the Canterbury School of Florida, students will be trained to catalog and track biodiversity, and monitor water quality through data loggers. The GCOOS-RA is working with Ms. Jenna Cummings, Director of Marine Studies at the Canterbury School of Florida, to explore the feasibility of having the GCOOS Data Portal host some of the student-collected data. For more information about Cousteau Divers activities in the Gulf of Mexico or to learn how to become a Cousteau Diver participant, please contact Ms. Stephanie Stefanski, U.S. Coordinator, Cousteau Divers at s.stefanski@cousteaudivers.org.

GCOOS Party Members Help Art Meet Science in St. Petersburg, Florida

Several months ago, when Ms. Emily Stehle, Public Relations/Marketing Director of the Pier Aquarium, shared a finely crafted crochet piece in the shape of a branching coral, she failed to mention it was part of a grand project—one spanning several continents and including more than 250 contributors. The Pier Aquarium, recently expanded to include the Secrets of the Sea Marine Exploration Center and Aquarium, and several other GCOOS partners contributed to the St. Petersburg Crochet Coral Reef, a satellite of the Worldwide Hyperbolic Crochet Coral Reef Project. Hosted at the Florida Craftsmen Gallery, the project was created by Margaret and Christine Wertheim of the Institute for Figuring in Los Angeles, California. The impetus for using crochet to educate citizens came from Margaret Wertheim, a science journalist who had used the technique to model hyperbolic space, stating the spatial concepts could be communicated through the ruffle shapes created with crochet. Extending this concept to coral reefs, the sisters and a worldwide community, including a Florida team hosted by Florida Craftsmen Inc., spearheaded the creation of the St. Petersburg Satellite Reef. Marine scientists from the University of South Florida College of Marine Science, NOAA Southeast Fisheries Service, Southeast Regional Office, and Tampa Bay Watch provided expertise and educational materials that are on display with the reef. The more than 1,000 square feet of brain corals, star corals, shells, rays, eels, and other reef flora and fauna can be seen at the Florida Craftsmen Gallery until September 2012. The Pier Aquarium is also displaying their live coral tank to educate citizens about living reefs. For more information, please contact Diane Shelly, Executive Director, Florida Craftsman at diane.shelly@floridacraftsmen.net

GCOOS and SECOORA to Implements IOOS Biological Observational Standards

To promote interoperability, data content and access standards for IOOS biological core variables (fish and zooplankton species and abundance) have been developed by the US IOOS. The GCOOS-RA and SECOORA are working on implementing these standards. A kick-off webinar was held on 20 April 2012 and Matthew Howard (GCOOS), Hassan Moustafid (US IOOS Program Office) and Vembu Subramanian (SECOORA) attended. Representatives from several groups from the Gulf Coast attended this meeting. Representatives from the Gulf States Marine Fisheries Commission, Gulf of Mexico Fishery Management Council and laboratories in Pascagoula, MS, attended and provided input. Mitch Roffer, a member of both GCOOS and SECOORA, provided input in the discussion of the selection and use of Marine Resources monitoring, Assessment and Prediction (MARMAP) data. There will be a one-day workshop on 25 June 2012 at the Florida Fish and Wildlife Research Institute in St. Petersburg, to discuss the project requirements and plan for the implementation of data services in the GCOOS-RA and SECOORA. Matthew Howard will represent GCOOS at this meeting.

NOAA Seminar "Analog to Digital: The Next Generation of Gulf of Mexico Data Atlas"

The Gulf of Mexico Data Atlas is a comprehensive, high resolution, Internet-based atlas consisting of historical datasets, observations, records and information that have been quality assured and quality controlled by subject matter experts, to produce the respective subject matter "plate" which represents an analysis of typical conditions based on data collected over some years (ideally a decade or longer) of a particular biological, chemical, or physical characteristic of the Gulf ecosystem. This information can be ingested into multiple desktop or Internet-based Geographic Information Systems (GIS) and/or response management tools, including the National Ocean Service Environmental Response Management Application (ERMA) when appropriate. The atlas provides the plate (the "gold standard" analyzed product) and the associated web mapping service formats following the Open Geospatial Consortium (OGC) standards enabling ingest into multiple mapping applications; the associated FGDC metadata for the data; descriptive text referencing the significance of the respective data parameter and its relationship with other data in the Gulf; and lastly, direct access to the data provider for download of the actual data, e.g., fisheries-independent data, habitat data, or chemical data. For remote access instructions, please go to: http://www.nodc.noaa.gov/seminars/2012/06-jun.html - OneNOAAScienceSeminars_27Jun2012_NOS

Oceans in Action 2012: Marine Technology Advances in the Wake of *Deepwater Horizon*

Oceans in Action 2012 will take place on 13-14 August at the IP Resort, Biloxi, MS. Events will include the updates from invited speakers, selected speakers detailing major technologies developed and/or implemented since the *Deepwater Horizon* incident and business matchmaking sessions. Plans are to feature exhibits from agencies and companies involved in marine science and technology projects. There will be a reception on 13 August. Abstract proposals from individuals who have made technological advances since the April 2010 *Deepwater Horizon* incident are encouraged. Abstracts are due on 22 June 2012. For registration and hotel information please see: https://www.mtsociety.org/conferences/Oceansinaction2012.aspx or contact Ms. Chris Barrett at mailto:chris.barrett@mtsociety.org

Gulf of Mexico Fishery Management Council to Meet in Tampa, Florida

The Gulf of Mexico Fishery Management Council will meet 18-21 June 2012, at the Hilton Westshore Airport Hotel in Tampa, Florida. For a copy of the detailed agenda or to review briefing book materials, please visit the Council web site at www.gulfcouncil.org or call 888-833-1844. The Gulf of Mexico Fishery Management Council is one of eight regional Fishery Management Councils established by the Fishery Conservation and Management Act of 1976. The Council prepares fishery management plans, which are designed to manage fishery resources within the 200-mile limit of the Gulf of Mexico.

Gulf coastline vulnerable to Category 1 hurricane

June 1st marked the beginning of the 2012 hurricane season. A decade of USGS research on storm-driven coastal change hazards has provided the data and modeling capabilities to identify areas of our coastline that are likely to experience extreme and potentially hazardous erosion during a hurricane. The analysis is based on a storm-impact scaling model that uses observations of beach morphology combined with sophisticated hydrodynamic models to predict how the coast will respond to the direct landfall of category 1-5 hurricanes. Hurricane-induced water levels, due to both surge and waves, are compared to beach and dune elevations to determine the probabilities of three types of coastal change (1) collision – dune toe is eroded by waves and surge, (2) overwash - sand is transported landward over the beach and dune by waves and surge, and (3) inundation - beach and dune are completely and continuously submerged by

surge and wave setup. As new beach morphology observations and storm predictions become available, this analysis will be updated to describe how coastal vulnerability to storms will vary in the future. The key findings are that during a Category 1 hurricane landfall in the Gulf of Mexico, waves increase water levels at the shoreline by 170% above surge alone and 99% of sandy beaches are very likely to experience dune erosion, 71% are very likely to overwash and 27% are likely to inundate. As the hurricane category level increases, the percentage of area likely to overwash and inundate increases.
http://coastal.er.usgs.gov/hurricanes/erosionhazards/gom/

Historic Ship Wreck found in the Gulf of Mexico *(from NOAA Gulf of Mexico Disaster Response Center)*

During a recent Gulf of Mexico expedition, NOAA, the Bureau of Ocean Energy Management (BOEM), and partners discovered a historic wooden-hulled vessel, which is believed to have sunk as long as 200 years ago. Significant historical events occurring in the regions around the Gulf of Mexico during this time include the War of 1812, events leading to the Texas Revolution, and the Mexican-American War. The shipwreck site was originally identified during a 2011 oil and gas survey for Shell Oil Company. Surveys and archaeological assessments are required by BOEM prior to issuing permits for bottom-disturbing activities related to oil and gas exploration and development. Scientists on board the NOAA Ship *Okeanos Explorer* used underwater robots to view remnants of the ship laden with anchors, navigational instruments, glass bottles, ceramic plates, cannons, and boxes of muskets. While most of the ship's wood has long since disintegrated, a copper shell retaining the form of the ship remains intact. Credit: NOAA Okeanos Explorer Program.

IOOS/National/Legislative News

NOAA names new Deputy Under Secretary for Operations

In a recent announcement by Dr. Jane Lubchenco, Undersecretary of Commerce for Oceans and Atmosphere and NOAA Administrator, Rear Admiral David Titley was introduced as the new Deputy Under Secretary of Operations at NOAA. His responsibilities include managing operations across NOAA's entire portfolio and serving as a key advisor on NOAA program and policy issues. He brings a wealth of experience from his duties in the Navy that included seven deployments in the Mediterranean Sea, the Indian Ocean and the Western Pacific Region. He also served on the staff of the U.S. Commission on Ocean Policy and as the senior military assistant to the director of Net Assessment in the Office of the Secretary of Defense. He was appointed oceanographer and navigator of the Navy in 2009.

Coastal and Marine Ecological Classification Standard Receives Federal Approval

The Federal Geographic Data Committee (FGDC) has approved the Coastal and Marine Ecological Classification Standard (CMECS) as the first-ever comprehensive federal standard for classifying and describing coastal and marine ecosystems. CMECS offers a simple, standard framework and common terminology for describing natural and human influenced ecosystems from the upper tidal reaches of estuaries to the deepest portions of the ocean. The framework is organized into two settings, biogeographic and aquatic, and four components, water column, geoform, substrate, and biotic. The hierarchical arrangement of units of the settings and components allows users to apply CMECS to the scale and specificity that best suits their interests. The National Oceanic and Atmospheric Administration, NatureServe, the U.S. Environmental Protection Agency, and the U.S. Geological Survey have worked with over a hundred scientists and coastal managers to develop and implement the standard. The design of CMECS aspires to meet the needs of many users, including coastal resource managers and planners, development interests, engineers, mappers, and researchers from government, industry, and academia. The system was also developed to address applications on scales ranging from local and regional to national and beyond. Additional information on this document can be found at:
http://www.csc.noaa.gov/digitalcoast/publications/cmecs

Presidential Proclamation designates June 2012 National Oceans Month

President Barak Obama issued a Presidential Proclamation on 1 June designating the month of June as National Oceans Month. In his statement he proclaimed that our oceans help feed our Nation, fuel our economic engine, give mobility to our Armed Forces, and provide a place for rest and recreation. He also stated that healthy oceans, coasts, and waterways are among our most valuable resources -- driving growth, creating jobs, and supporting businesses across America. During National Oceans Month, we reaffirm our commitment to the oceans and celebrate the myriad benefits they bring to all Americans. To

read the entire proclamation visit http://www.whitehouse.gov/the-press-office/2012/06/01/presidential-proclamation-national-oceans-month-2012

Hurricane Season 2012

June 1 officially marked the beginning of the 2012 Atlantic Hurricane season. NOAA predictions for 2012 are that there will be nine to fifteen named storms and that four to eight of these storms will reach hurricane strength. The NOAA prediction model cannot predict where the storms will make landfall. Should the number of predicted storms fall short of the prediction, remember it only takes one intense storm like Category 5 Hurricane Andrew, to devastate a region. To learn more on hurricane preparedness, download the Tropical Cyclone Preparedness Guide or view Hurricane Preparedness Public Service Announcements produced by the National Hurricane Center in both English and Spanish.
http://www.nws.noaa.gov/os/hurricane/resources/TropicalCyclones11.pdf
http://www.csc.noaa.gov/hes/general.html

Severe weather alerts now available

Have you recently received a severe weather alert on your mobile device? The Wireless Emergency Alert (WEA) is a free national emergency alert system to send concise, text-like messages to WEA-capable mobile devices. When the National Weather Service issues certain weather warnings, cell towers will now broadcast the alert to cell users in the threat area. Private forecasting companies have offered warnings to subscribers before, but this is the first national service by the federal government and the wireless industry. Wireless providers representing nearly 97% of subscribers are participating in the program, including AT&T, Cellcomm, Cricket, Sprint Nextel, T-Mobile, U.S. Cellular, and Verizon. WEA is also known as the Commercial Mobile Alert System (CMAS) or the Personal Localized Alerting Network (PLAN).
http://www.noaa.gov/features/03_protecting/wireless_emergency_alerts.html

House Committees approve Marine Debris Bill

The House Committees on Natural Resources and Transportation and Infrastructure approved the "Marine Debris Act Amendments of 2012," on 7 June 2011. The bill reauthorizes the NOAA Marine Debris Program though fiscal year 2015.

Funding Opportunities

Gulf of Mexico Hydrological Restoration Inventory and Prioritization Project

The NOAA Restoration Center and Gulf of Mexico Sea Grant College Programs have announced a request for proposals to fund tidal hydrology restoration projects from Key West, FL to Brownsville, TX. Local, county and state governments, nonprofit organizations, businesses, communities, homeowner associations and universities are eligible. Projects can receive up to $100K. Proposals are due 17 August.
http://www.masgc.org/gulfhydrorestoration/index.htm

TGLO Grant Cycle #18

The Texas General Land Office expects to award approximately $1.8 million for §306/306A coastal projects funding Grant Cycle #18. The **pre-proposal deadline is June 20, 2012**. Submission of the pre-proposal is only required if you would like written comments on your pre-proposal. The **final application deadline is September 26, 2012**, with a proposed project start date of October 2013. The local match requirement remains at 40 percent of total project cost for this cycle. Match may be in the form of a "cash" match or an "in-kind" match or a combination of both. (Federal funds, received directly or passed-through by a state agency, cannot be used as match.) For on-the-ground habitat protection, restoration, and land acquisition projects, Commissioner Patterson will consider funding individual large-scale projects up to $400,000. For other types of eligible §306/306A projects, the Commissioner will fund individual small-scale projects up to $100,000. The commissioner will accept applications for both construction and non-construction projects that address the funding categories.

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

National Coastal Wetlands Conservation Grant Program Call for Proposals

The U.S. Fish and Wildlife Service is seeking proposals for the National Coastal Wetlands Conservation Grant Program to fund the protection and restoration of coastal wetlands. Projects can include acquisition

of coastal lands or waters or restoration, enhancement, or management of coastal wetland ecosystems. See the full FY 2013 Notice of Availability of Grants and Request for Applications for more information about the funding opportunity and how to apply. Applications are due by 29 June.

Florida Sea Grant Request for Proposals - Lionfish

Florida Sea Grant has announced a call for proposals for research on identifying methods to control the spread of and/or reduce the impacts of lionfish in the NOAA South Atlantic and Caribbean Regions. The RFP requirements and application instructions are available online at: http://seagrant.ifas.ufl.edu/CallForProposals/proposalsubmission/lionfish/. Questions regarding this RFP can be directed to Florida Sea Grant Director Dr. Karl Havens (khavens@ufl.edu) or to the Florida Sea Grant Aquatic Invasive Species Specialist Dr. Maia McGuire (mpmcg@ufl.edu)

Coming Events & Meetings

June

"Gulf of Mexico Alliance 2012 All Hands Meeting", 18-21 June 2012, Omni Bayfront & Marine Towers, Corpus Christi, TX.
http://events.r20.constantcontact.com/register/event?oeidk=a07e5iilc9sb1da6277&llr=thgzaleab

"Gulf of Mexico Fishery Management Council", 18-21 June 2012, Hilton Westshore Airport Hotel, Tampa, FL.
http://www.gulfcouncil.org.

"Risk and Response: Sea Level Rise Summit, the Future of Florida and the Coast" 21-22 June 2012, Marriott Boca Town Center, Boca Raton, FL. The purpose of this summit is to highlight the interrelationships between sea level rise, limestone geology, and water management in Florida; share the ongoing responses and adaptation planning of agencies, institutions, and civic society to sea level rise; and compare the Florida situation and response with other vulnerable localities in the U.S. and worldwide.
http://www.ces.fau.edu/SLR2012

"National Marine Educators Conference" Co-Hosted by AOOS, 24-28 June 2012, University of Alaska Anchorage Campus, Anchorage, AK.
http://www.coseealaska.net/nmeaconference2012/

"Analog to Digital: The Next Generation of Gulf of Mexico Data Atlas", 27 June 2012, Webinar 12:00PM Eastern Time.
http://www.nodc.noaa.gov/seminars/2012/06-jun.html - OneNOAAScienceSeminars_27Jun2012_NOS

July

"2012 ASLO Summer Meeting" 8-13 July 2012, Lake Biwa, Otsu, Japan.
http://aslo.org/meetings/japan2012/

"EARTH Workshop" 8-13 July 2012, University of North Carolina, Wilmington, North Carolina. Hosted by MBARI and SECOORA.
http://www.mbari.org/earth/

"12th International Coral Reef Symposium", 9-12 July 2012, Cairns, Australia.
http://www.icrs2012.com
The Social Coast – Social Science, Simply Explained and Applied, NOAA Webinar. 11 July 2012.
To register, see the Digital Coast Webinar Series website.

"Fourth International Conference on Climate Change", 12-13 July 2012, The University of Washington, Seattle, WA
http://on-climate.com/conference-2012/

"5th Annual International Ecosystem Services Partnership (ESP) Conference" 31 July – 4 August 2012, Portland, OR.
http://www.espconference.org/ESP_Conference/78852/5/0/60

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" 26-27 September 2012, Corpus Christi, TX.

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

"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.

2013

January

"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 COASTAL OCEAN OBSERVING SYSTEM
GCOOS

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).