

Gulf of Mexico News



NOAA Ocean Service, Office of Ocean & Coastal Resource Management

September 2007

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NOAA Gulf of Mexico News

NOAA Reports La Niña is Developing

Scientists with NOAA's Climate Prediction Center, in today's release of its monthly El Niño/Southern Oscillation ([ENSO](#)) Diagnostic Discussion, say that La Niña is on its way. "While we can't officially call it a La Niña yet, we expect that this pattern will continue to develop during the next three months, meeting the NOAA definition for a La Niña event later this year," said Mike Halpert, acting deputy director of the [Climate Prediction Center](#) in Camp Springs, Md.

La Niña refers to the periodic cooling of ocean surface temperatures in the central and east-central equatorial Pacific that occur every three to five years. [La Niña](#) originally referred to a cooling of ocean waters off the coasts of Peru and Ecuador. NOAA declares the onset of a La Niña event when the three-month average sea-surface temperature departure exceeds -0.5 degrees C (-0.9 degrees F) in the east-central equatorial Pacific, between 5 degrees North and 5 degrees South latitude and 170 degrees and 120 degrees West longitude.

The development of La Niña conditions is supported by increasing below-normal sea surface temperatures across the central and eastern equatorial Pacific and stronger than average easterly winds across the west-central equatorial Pacific. "Nearly all operational dynamical models, including the [National Centers for Environmental Prediction's](#) climate forecast system and many of the statistical models also favor a La Niña event," said Halpert. With La Niña developing, seasonal forecasters expect wetter than normal conditions in the Pacific Northwest and drier than normal conditions in the already drought stricken southwestern U.S. this fall.

"These conditions also reinforce NOAA's August forecast for an above normal Atlantic hurricane season," said Gerry Bell, Ph.D., NOAA's lead seasonal hurricane forecaster. The Climate Prediction Center will publish the next official ENSO diagnostic discussion on October 11. The El Niño/Southern Oscillation diagnostic discussion is a product of the Climate Prediction Center in association with its funded institutions. NOAA is dedicated to enhancing economic security and national safety through the prediction and research of weather and climate-related events and information service delivery for transportation, and by providing environmental stewardship of our nation's coastal and marine resources. Through the emerging Global Earth Observation System of Systems ([GEOSS](#)), NOAA is working with its federal partners, more than 70 countries and the European Commission to develop a global monitoring network that is as integrated as the planet it observes, predicts and protects.

EDITOR'S NOTE:

Broadcast quality animation of La Niña development is available at: http://nnvl.noaa.gov/Media/LaNina2007_NTSCuncompressed.mov. Animation displays sea surface temperature (SSTs) anomalies across the Eastern Pacific as depicted by NOAA's Polar Operational Environmental Satellite. The blue and purple colors indicate areas of colder-than-average SSTs, indicative of a developing La Nina. Please credit NOAA.

On the Web:

CPC ENSO Page:

<http://www.cpc.ncep.noaa.gov/products/precip/CWlink/MJO/enso.shtml>

Atlantic Hurricane Season Outlook Update:

<http://www.noaanews.noaa.gov/stories2007/s2905.htm>

'If Reefs Could Talk' Reveals Undersea Research in Real Time

On September 17, scientists and educators from the National Marine Sanctuary Program (NMSP) embarked on a nine-day mission, called "If Reefs Could Talk," to NOAA's Aquarius Undersea Laboratory off Key Largo in the Florida Keys National Marine Sanctuary. Aquarius is located at a depth of 60 feet next to deep coral reefs, and is the world's only undersea scientific facility. While living and working there, scientists will investigate changes in corals and other marine life in the sanctuary, and will webcast their activities in real time to students and general audiences via the www.OceansLive.org education Web portal. The scientists will primarily study sponge biology and ecology and the long-term monitoring of corals and reef fishes. The results will be compared with previously collected data, going back to 1994, to assess changes on the reef that may have occurred due to human activities, climate change, and other variables. For more information, contact [Lou Cafiero](mailto:Lou.Cafiero).

Students Participate in Distance Learning with a Live Feed to the Florida Keys Aquarius Habitat

On Wednesday, September 19, the Thunder Bay National Marine Sanctuary hosted 80 students from Lincoln Elementary's fourth-sixth grades, in the Great Lakes Maritime Heritage Center distance learning studio, for a special broadcast to aquanauts in the Aquarius Habitat in the Florida Keys National Marine Sanctuary. Pre-broadcast lessons prepared students and generated questions for the 50-minute live interactive experience with aquanauts both inside and outside the habitat. Reef ecology, maritime heritage, diving, and scientific research and life on Aquarius were all touched on in this engaging program. This program is part of Thunder Bay's continuing efforts to bring ocean and Great Lakes literacy to students through distance learning and "telepresence." For more information, contact Cathy.Green@noaa.gov.

OCRM Joins Partners at Gulf of Mexico Alliance Resiliency Working Group Meeting

The Gulf of Mexico Alliance Resiliency Working Group held its second meeting from September 17-19 in Biloxi, MS. Participants from Alabama and Mississippi shared information about existing programs and projects in their states. Multiple Federal agencies, including NOAA, the Federal Emergency Management Agency, U.S. Geological Survey, and U.S. Army Corps of Engineers, exchanged information about resilience-related efforts in the Gulf. Participants also developed a working definition of resiliency, honed the group's mission, and identified implementation activities as well as short-term and long-term products. For more information, contact Carleigh.Trappe@noaa.gov.

Gulf Alliance Continues Progress in Implementing Regional Monitoring Coordination

The Gulf of Mexico Alliance Nutrient Reduction and Water Quality teams held the second in a series of monitoring workshops on September 24-26, 2007 in Mobile, Alabama. The *Monitoring Standardization: Chlorophyll a* workshop convened state and federal agencies to identify opportunities for regionally standardized monitoring of this key water quality indicator. The teams' goal is to improve comparability of regional monitoring data for Chlorophyll *a*. Gulf States will also work together to refine a data

collection and analysis plan for a regional pilot project designed to improve understanding of ecosystem responses to nutrient levels. For more information, contact Laurie.Rounds@noaa.gov.

Coast Survey Demonstrates Response Readiness

The Office of Coast Survey's (OCS) Navigation Services Division and the National Weather Service facilitated a series of conference calls with ports located near the Gulf of Mexico, the U.S. Army Corps of Engineers, U.S. Coast Guard (USCG), pilots, and waterway industry ranging in territory from the Port of Panama City to Port Arthur, TX, who activated their hurricane/storm response procedures in anticipation of the landfall of a tropical depression in the Florida panhandle. The calls provided critical information and weather projections to aid the pilots, USCG, ports, and marine and tow industries in their decision-making for the movement of ships, tows, and other operations. For more information, contact Tim.Osborn@noaa.gov.

NOAA Leads Marine Debris Media Day in Plaquemines Parish, LA

The Office of Response and Restoration (OR&R) contributed to an energetic Media Day event in south Plaquemines Parish, LA. The event was organized by Louisiana Sea Grant, and along with NOAA's Office of Coast Survey, included WWLTV News of New Orleans, National Public Radio, Louisiana Sportsman Magazine, the local Plaquemines Parish newspaper, and a film crew from Paradise Louisiana. The Port of Plaquemines provided a boat for participants to view a number of hazards and debris found in the Empire Channel area. In approximately 98 square nautical miles, over 262 objects were processed and reported to NOAA for placement on the project website: <http://gulfofmexico.marinedebris.noaa.gov>. For more information, contact Megan.Forbes@noaa.gov.

Tour Provided on Hazards and Marine Debris Surveying in Southeast Louisiana

Office of Coast Survey staff hosted a tour and field trip of the NOAA hazards surveying effort onboard two survey boats working in south Plaquemines Parish, Louisiana with key decision makers from the Federal Emergency Management Agency, the Louisiana Governor's Office of Homeland Security and Office of Emergency Preparedness, and Louisiana Recovery Authority. During the field trip, NOAA survey procedures were discussed and both sidescan and multibeam sonar equipment was deployed to show the various technologies used in the detection and mapping of hazards and debris. Several debris field and hazards were surveyed and the imagery displayed. The field meeting and surveying demonstration provided important information on the procedures and standards used by NOAA for surveying and mapping marine debris and hazards. For more information, contact [Terence Lynch](mailto:Terence.Lynch@noaa.gov).

Airborne Imagery of Hurricane Humberto Supports Damage Assessment, Emergency Response

On September 15-16, the National Geodetic Survey (NGS) collected damage assessment imagery following the landfall of Hurricane Humberto over northeastern Texas and southwestern Louisiana. The 1,500 images that NGS's Remote Sensing Division collected over the extensively flooded area supported national security and emergency response requirements, including the efforts of NOAA's Emergency

Response Division and the U.S. Coast Guard to deal with a major release of phosphoric acid in the Houston Ship Channel that has been ongoing since mid-August. The images also will be used for ongoing research that is developing standards for airborne digital imagery. Humberto was the eighth named storm and third hurricane of the 2007 Atlantic hurricane season, and the first hurricane to strike the U.S. coast since Hurricane Wilma hit Florida in October 2005. The images are posted on the NOAA website for public and private-sector use at <http://ngs.woc.noaa.gov/humberto/>. For more information, contact [Mike Aslaksen](mailto:Mike.As laksen).

Online Tool Aids Hurricane Evacuation

A tool template devised by NOAA's Coastal Services Center (CSC) supports emergency managers and other coastal professionals in providing the public with hurricane evacuation information. The template can be used with agency data to develop a simple mapping application that would help community residents find specific evacuation zones. To learn more, view www.csc.noaa.gov/hez_tool/, or e-mail nos.csc.nez@noaa.gov and write "HEZ Tool" in the subject line.

NCCOS Provides Updated Wave Exposure Model (WEMo) to Tampa Bay Managers

The National Centers for Coastal Ocean Science (NCCOS) Center for Coastal Fisheries and Habitat Research (CCFHR) staff demonstrated the most recent version of the Wave Exposure Model to State and Federal Managers at a regular meeting of the Tampa Bay Estuary Program. The meeting focused on issues surrounding geomorphologic alterations to the Bay and their impacts on seagrass recovery. The presentation guided managers through use of the interactive software developed by CCFHR and its new capabilities of forecasting and hindcasting wave energy in a geographic information system. This model is considered vital for predicting the effects of the installation of artificial sandbars on wave energy reduction and seagrass restoration success. To see a description of the model, use the searchable database at <http://www.smartgrowthtools.org/ebmtools/index.php> (select "W" on the index guide and "next" for WEMo). For more information contact Mark.Fonseca@noaa.gov or, Amit.Malhotra@noaa.gov.

Models Combined to Assist Oyster Growth Rate and Population Predictions

Researchers from the Environmental Cooperative Sciences Center (ECSC) project an increase in salinity in Apalachicola Bay, which would have a negative effect on the bay's oyster population. Scientists from the National Centers for Coastal Ocean Science and the ECSC adapted an oyster model that simulates a diversity of population processes and coupled it with a hydrodynamic model to examine changes in salinity on oyster growth rates. Oyster population features and reproduction are closely related to salinity, and human consumption of freshwater species is expected to increase in the region. Findings indicate that more careful regulation of inflows from the Apalachicola-Chattahoochee-Flint (ACF) basin is needed to ensure future habitat for oysters. The eastern oyster (*Crassostrea virginica*) plays an important role ecologically and economically in Apalachicola Bay and elsewhere. For more information, contact Hongqing Wang (University of Louisiana at Lafayette) at hwx7894@louisiana.edu or John Christensen (CCMA) at John.Christensen@noaa.gov.

Website Provides Daily Updates of Research Cruise That Will Generate Benthic Habitat Maps

National Centers for Coastal Ocean Science (NCCOS) and Flower Garden Banks National Marine Sanctuary (FGBNMS) scientists have launched a second season of research aboard the NOAA ship *Nancy Foster* to address Sanctuary management issues by assessing the fish and coral communities, and generating a benthic habitat map showing the distribution of resources. The scientists are conducting inventory, assessment, and monitoring related activities throughout the Sanctuary waters. The cruise is running from September 8-15, and daily updates are available at http://sanctuaries.noaa.gov/missions/2007nancy_foster/welcome.html. Additional background on information is available at http://ccma.nos.noaa.gov/ecosystems/sanctuaries/fgb_nms.html. For more information, please contact Chris.Caldow@noaa.gov.

Identification of Multiple Algal Toxins Defines New Exposure Hazards to Bottlenose Dolphins in Sarasota Bay

National Centers for Coastal Ocean Science (NCCOS) researchers in collaboration with Mote Marine Laboratory have identified multiple algal toxins in dolphins that may impact animal health and exacerbate unusual mortality events. Dolphins caught during capture-release health assessments in Sarasota Bay, Florida between 2000 and 2006 were found to contain significant levels of both brevetoxin and domoic acid. Although high levels of either of these toxins can result in animal mortality, the effects of long term exposure to multiple toxins is unknown. These data will be used by the National Marine Fisheries Service Office of Protected Resources and NCCOS researchers to design more precise investigations of the impact of harmful algal blooms on animal populations in the western Gulf of Mexico. For more information, contact Mike Twiner at (843) 762-8649 or Mike.Twiner@noaa.gov.

Multi-Center Pilot of Texas Harmful Algal Bloom Forecast System Improves HAB Event Response

National Centers for Coastal Ocean Science (NCCOS) oceanographers from the Center for Coastal Monitoring and Assessment (CCMA) and the Center for Sponsored Coastal Ocean Research (CSCOR) have been working together for the past year piloting a new Harmful Algal Bloom (HAB) forecast for the Texas Coast. The collaboration enhances exchange of information about HAB events across NCCOS centers with different types of HAB expertise, improving response to HAB events in US waters. This HAB forecast provides important information to the public about where to expect respiratory impacts of a HAB event, and provides geographic information which helps target onsite water sampling. The Texas HAB bulletin is the second example of forecasting for a biological event, the first is the Gulf of Mexico HAB Operational Forecast System (or HAB Bulletin) for the west coast of Florida, which has been operational since 2004. The last bloom from the harmful algae *Karenia brevis*, the same HAB species which causes problems in Florida, occurred in fall 2006 in Texas waters, causing fish kills and respiratory irritation along the coast. For more information contact Michelle.Tomlinson@NOAA.gov or Libby.Jewett@NOAA.gov.

Other NOAA News

Interagency Report Says Harmful Algal Blooms Increasing

Calls for Improved Research on Prediction and Response

September 12, 2007

The National Oceanic and Atmospheric Administration and the National Science and Technology Council released today an interagency report on the United States' efforts to better predict, prevent, control, and mitigate harmful algal blooms. The report is the first of five mandated by Congress in the Harmful Algal Bloom and Hypoxia Amendments Act of 2004.

"Harmful algal blooms are very complex phenomena that cause serious economic harm. This report provides an important overview of the current status of efforts to respond to harmful algal blooms in our coastal and inland waters and is the first step in developing a national plan to improve those efforts," said retired Navy Vice Adm. [Conrad C. Lautenbacher](#), Ph.D., under secretary of commerce for oceans and atmosphere and NOAA administrator.

The report, National Assessment of Efforts to Predict and Respond to Harmful Algal Blooms in U.S. Waters, also known as the [Prediction and Response Report](#), assesses the harmful algal bloom problem in U.S. waters and identifies progress made since 2000 by federal agencies in prevention, control, and mitigation of harmful algal blooms in the U.S.

The report calls for the coordinated federal program to develop a strategy for maximizing progress in areas identified for major potential advancement including: - a refined focus on research for prevention, control, and mitigation of harmful algal blooms, - sustained and coordinated infrastructure, including increasing availability of standards and probes, shared-use facilities, platforms for continuous real-time monitoring, and training, - incorporating social sciences in harmful algal bloom response strategies, and - improving and coordinating event response.

The study reports that the frequency of harmful algal bloom events is increasing and their geographical distribution now impacts all the coastal states. Freshwater harmful algal blooms are an increasing problem in inland states as well. Human activities such as nutrient pollution are thought to contribute to some of these increases.

The economic effects of harmful algal blooms in the U.S. is estimated to reach at least \$82 million per year in lost income for fisheries, lost recreational opportunities, decreased tourism, public health costs of illness, and expense of monitoring and management.

Harmful algal blooms may produce toxins and/ or develop excess biomass that negatively impact humans and ecosystems. Humans, domestic animals, and wildlife can be exposed to algal toxins through their food, drinking water, the water in which they swim, and the air near the water, resulting in fish kills, mortality of protected species, and human illness and potentially even death. High biomass blooms can discolor the water, impart foul odors and tastes to drinking water, accumulate in large quantities on beaches, overgrow coral reefs, shade aquatic plants, and upon death, deplete the water of oxygen. The report notes that since 2000 advances are being made, notably in the area of mitigation, leading to improved monitoring, prediction, and event response. Specifically, significant advances have been made in cell and toxin detection technologies, which allow improved early warning of bloom events and toxicity to help managers prevent human poisonings while minimizing economic impacts on local communities.

“By focusing the threat, we can reduce the warned area by as much as 70 percent, which equates to more than \$100 million in savings to the public,” said Vice Admiral Conrad C. Lautenbacher Jr., under secretary of commerce for oceans and atmosphere and NOAA administrator. “The real bottom line is that this will potentially save more lives. Eliminating areas needlessly warned builds confidence that you do indeed need to take action when a warning is issued.”

Storm-based warnings are displayed graphically and are extremely adaptable to cell phones, PDAs, and the Web. The Emergency Alert System is geared toward counties and NOAA Weather Radio All Hazards will still alarm if there is a warning anywhere in the county. However, text and audio messages will provide more specific information about where in the county the storm is, and the direction the storm is moving. Storm-based warnings will reference landmarks such as highways, shopping centers, and parks, and will use directional delimiters to indicate county location.

Citizen Monitoring Protocol Helps to Support Habitat Management of Natural and Stabilized Fringing Salt Marshes

A National Centers for Coastal Ocean Science (NCCOS) project has demonstrated that using volunteers to monitor shoreline stabilization can be helpful in habitat management. The study utilized an approach similar to that described in the NOAA Coastal Ocean Program Decision Analysis Series publication “Tools for Monitoring Coastal Habitats,” and demonstrated that citizen volunteers incorporated into a science-based monitoring program helped to provide a rigorous assessment of natural and transplanted habitats. A manuscript reporting these results has been accepted by the journal Wetlands Ecology & Management, and will be presented at a workshop sponsored by the North Carolina Division of Marine Fisheries and held at the NCCOS Center for Coastal Fisheries and Habitat Research on November 19, 2007 entitled, “An Updated Look at Estuarine Shoreline Stabilization in Coastal North Carolina.” For more information, contact Carolyn.Currin@noaa.gov.

Grass Shrimp Response to Cyclic Hypoxia Indicates Significant Impact on Population Dynamics

NCCOS supported researchers from the Aquatic Research Consortium (ARC) examined the responses of grass shrimp to cyclic hypoxia at both the molecular and organismal levels. Cyclic changes in dissolved oxygen, from hypoxic at night to normoxic or supersaturated in mid-afternoon, occur naturally in shallow estuarine systems. Despite its wide-spread occurrence little is known about adaptations and responses of estuarine organisms to cyclic hypoxia. ARC researchers found that at the molecular level, long term exposure to cyclic hypoxia resulted in inhibition of mitochondrial function while at the organismal level, cyclic hypoxia exposure reduces the number of broods a female can produce as well as fecundity of the first brood. Demographic analysis showed a lower estimated population growth rate in grass shrimp exposed to both continuous as well as short-term cyclic hypoxia, suggesting cyclic hypoxia may have population-level impacts on grass shrimp. For more information about ARC, contact Carol Auer at carol.auer@noaa.gov

In the Gulf States

Alabama's 303(d) List Approved by EPA

Alabama's 303(d) list of impaired water bodies for 2006 has been approved by the U.S. Environmental Protection Agency. The federal Clean Water Act directs all states to identify those waters that are impaired and do not currently support their designated uses and to establish a priority ranking of those waters by taking into account the severity of the impairment and the designated uses of such waters.

The Alabama Department of Environmental Management, which administers the Clean Water Act in Alabama, submitted its 2006 list to EPA in April 2006 and presented amendments to the list in July 2007. Based upon their thorough review, EPA determined that Alabama's list meets the requirements and implementation regulations of the Clean Water Act.

The preparation of Alabama's 2006 list included the removal of portions of 27 water bodies from the impaired list by ADEM. This signifies that segments of these water bodies have been found to meet applicable water quality standards or that a Total Maximum Daily Load (TMDL) for the pollutant responsible for the impairment has been approved by EPA.

"We are very pleased that EPA has agreed with our assessment of water quality in Alabama," said ADEM Director Trey Glenn. "The removal of specific streams, lakes, and portions of rivers from the list illustrates that our assessment activities of surface waters is working along with our efforts to restore water quality in impaired areas. However, there is more work to be done and we will continue to effectively utilize resources to address the remaining impaired segments."

After reviewing water quality data, evaluating special watershed studies, and analyzing non-point source assessments, the Department's water quality experts also made the decision to add 48 water body segments to the list. Most of the segments were added based on water quality data illustrating impairment due to the chemical, physical, or biological characteristics of the water and also due to new fish consumption advisories issued by the Alabama Department of Public Health. Waters that were added to the 303(d) list are scheduled to have a TMDL established that identifies reductions in pollutant loads that ADEM experts believe will lead to improvements water quality.

Faculty Activity from the Dauphin Island Sea Lab

Dr. Ruth Carmichael, Senior Marine Scientist at the Dauphin Island Sea Lab (DISL) and Assistant Professor of Marine Science, University of South Alabama (USA), received \$143,152 from USA/Alabama Oyster Reef Fisheries Habitat Program for "The effects of nutrient enrichment on oyster ecology in Mobile Bay." She also received \$28,271 from Alabama Division of Wildlife and Freshwater Fisheries for "A pilot study of the extralimital West Indian manatee population in Mobile Bay."

Dr. Carmichael and Dr. George F. Crozier, Executive Director of the DISL, received \$70,448 from NOAA/ National Coastal Data Distribution Center for "Development and integration of metadata and research data retention at Dauphin Island Sea Lab."

Dr. Carmichael received \$100,000 from the Mississippi-Alabama Sea Grant Consortium for "Use of

stable isotope ratios to link wastewater sources to effects on shellfish and human health: Defining relevant and effective spatial and temporal scales for management.”

Dr. Just Cebrian, Senior Marine Scientist, DISL and Assistant Professor of Marine Sciences, USA, received a grant from Southern Company and Environmental Partners to restore .25 acres of Little Lagoon in Bon Secour National Wildlife Refuge through submerged aquatic vegetation plantings. Project partners also include: Mobile Bay National Estuary Program; Alabama Department of Conservation and Natural Resources; and Bon Secour National Wildlife Refuge.

Dr. Ron Kiene, Senior Marine Scientist, DISL and Professor of Marine Science, USA, received a grant for \$356,427 from National Science Foundation (NSF), Environmental Genomics for “A functional genomics approach to organic sulfur cycling in the ocean.”

Dr. Kyeong Park, Senior Marine Scientist, DISL and Associate Professor of Marine Science, USA, received \$86,593 from NSF Chemical Oceanography for “Collaborative research: Tracer distributions, chemical fluxes, and distributary comparisons in the mixing zone of the Mississippi River.”

Dr. John Valentine, Senior Marine Scientist, DISL and Associate Professor of Marine Science, USA, is the PI for a \$64,392 two-year grant from NOAA/National Undersea Research Center for “Marine Reserve Effectiveness in Restoring Coastal Food Webs: A Multitrophic Assessment Using Special Protection Areas in the Florida Keys National Marine Sanctuary.”

Florida Celebrates National Estuaries Day

Waterway and coastal protection highlighted in statewide events --

TALLAHASSEE—The Florida Department of Environmental Protection (DEP) is encouraging Floridians to celebrate National Estuaries Day on September 29, 2007. Events taking place at Florida’s three National Estuarine Research Reserves (NERR) will provide education opportunities and activities exploring estuary habitats and wildlife.

“Estuaries serve as a very important part of our ecosystem by protecting the mainland from storm events and improving water quality by filtering runoff,” said Stephanie Bailenson, Director of DEP’s Office of Coastal and Aquatic Managed Areas. “National Estuaries Day is a great time for Floridians to explore and learn about these brackish habitats.”

DEP’s Office of Coastal and Aquatic Managed Areas oversees the three National Estuarine Research Reserves as well as 42 other sites, including aquatic preserves and the Florida Keys National Marine Sanctuary.



A partnership between the states and the National Oceanic and Atmospheric Administration, The National Estuarine Research Reserve System was established by the Coastal Zone Management Act to help protect the nation’s coastal resources. Through integrated research and education, the reserves help communities develop strategies to deal successfully with coastal resource issues. Reserves provide adult audiences with training on estuarine issues of concern in their local communities, offer field classes for K-12 students and support teachers through professional development programs in marine education. Reserves also provide long-term water quality monitoring.

National Estuaries Day began in 1988 as part of Coast Weeks to educate the public on the importance of estuaries and the need to protect them. The annual event has matured into a national campaign with festivities across the country. National Estuaries Day is a nationwide event encouraging the protection and preservation of aquatic environments where freshwater bodies meet marine waterways.

Activities are planned for the entire family to enjoy, including presentations with live animals, face painting, a touch tank and other exhibits. National Estuaries Day activities will focus on the importance of our estuaries and the need to protect them. Admission is \$2 for adults, \$1 for children age 10 and older and children under age 10 are free. Event proceeds will be used to support the education, research and stewardship programs of the Reserve. For a list of events, visit www.gtmnerr.org.

Rookery Bay NERR will host activities for the entire family to enjoy, including guided walks, kayaking, kids crafts, films, presentations and a scavenger hunt. Admission to the event is free. For more information, visit www.rookerybay.org. For more information on Florida's National Estuarine Research Reserves, visit <http://www.dep.state.fl.us/coastal/programs/nerrs.htm>

Florida DEP's Green Lodging Program Partners with Florida Restaurant and Lodging Association

--Partnership will assist hotels in protecting natural resources and conserving energy—

TALLAHASSEE – The Florida Department of Environmental Protection's (DEP) *Green Lodging* Program is partnering with the Florida Restaurant and Lodging Association (FRLA) to encourage hotels and motels to adopt cost-saving "green" practices that reduce waste and conserve natural resources. "Preserving our environment takes organizations such as the Florida Restaurant and Lodging Association taking a leadership role in their industry and community," said DEP Secretary Michael W. Sole. "This partnership is a commitment to protecting Florida's beautiful ecosystem and improving our already booming tourism industry."

As part of the partnership, FRLA will host regional workshops that provide Florida's hospitality industry with technical assistance and information on how they can preserve and protect the environment through conserving energy and water, preserving air quality and reducing waste.

In addition, FRLA will promote the *Green Lodging* Program to hotels and motels and encourage management and staff to utilize facilities actively participating in the Florida *Green Lodging* Program for conferences, meetings and travel. DEP will promote FRLA's commitment to the program and work with the FRLA to develop upcoming environmental workshops and events.

"Helping preserve Florida's delicate environment is central to the Florida Restaurant and Lodging Association's primary goal of ensuring a strong tourism industry," Carol Dover, FRLA President and CEO. "No other organization is in the position that we are to reach hospitality's decision makers and help bring about positive change in the industry, so it was an obvious choice for us to partner with the Department of Environmental Protection on the *Green Lodging* Program."

On July 13, at the "Serve to Preserve: A Florida Summit on Global Climate Change" event held in Miami, Governor Crist signed three executive orders initiating state energy-use policies, including one that requires his state agencies and departments to hold meetings and conferences only at hotels participating in DEP's *Green Lodging* Program starting January 1, 2008, whenever possible, unless no

other moderate alternative exists. The Summit was a bold first step to explore groundbreaking technologies and strategies that will place Florida at the forefront of the growing world-wide movement to reduce greenhouse gases.

Hotels designated in the *Green Lodging* Program are committed to resource conservation. Their practices include conserving water by implementing a towel and linen re-use program; saving energy by using energy efficient products; closing drapes and shades to reduce heat; and turning off heating and cooling systems in unoccupied rooms. To reduce waste, designated hotels implement recycling programs, and hotels use environmentally-friendly air filters and cleaners to improve air quality.

Launched in March 2004 by DEP, the Florida *Green Lodging* Program establishes environmental guidelines for hotels and motels to conserve natural resources and prevent pollution. As reward for designation, Florida is recommending facilities actively participating in the *Green Lodging* Program to companies and trade organizations seeking environmentally conscious lodging and convention facilities. To date, Florida has 39 facilities designated in the *Green Lodging* Program and more than 120 applicants. For more information on the Florida *Green Lodging* Program, visit www.dep.state.fl.us/greenlodging.

Florida DEP Encourages Participation in the International Coastal Cleanup

--Annual event spotlights the importance of protecting marine communities—

TALLAHASSEE - The Florida Department of Environmental Protection (DEP) is hosting International Coastal Cleanup activities at state parks and aquatic preserves on Saturday, September 15, 2007. Available for the public, the events provide an opportunity to help protect Florida beaches and coastlines.

“International Coastal Cleanup Day is a great opportunity to encourage environmental stewardship by encouraging Floridians to get involved and do their part to help preserve and protect our coasts,” said DEP Deputy Secretary Bob Ballard. “Florida’s beaches generate millions of dollars annually for the state’s economy as well as welcome millions of visitors and residents.”

Sponsored by the Ocean Conservancy, the International Coastal Cleanup is a worldwide effort to clean and protect the environment through debris removal. The effort is the world’s largest organized marine cleanup, collecting millions of pounds of debris from inland roadsides, coastal areas, lakes and rivers. Volunteers also collect valuable data that will be used later to educate the public. For more information about the International Coastal Cleanup, visit <http://www.dep.state.fl.us/cmp/> or www.coastalcleanup.org.

Florida Recognizes Week of September 9-15 as Water Reuse Week

-DEP aggressively pushing ‘reuse’ as essential to Florida’s water future-

TALLAHASSEE - Highlighting the fact that water reuse is essential to ensuring safe, clean and sustainable water resources, Florida Governor Charlie Crist and Florida Department of Environmental Protection (DEP) Secretary Michael W. Sole recognize September 9-15, 2007, as Water Reuse Week. A national leader, Florida currently reuses 240 billion gallons of reclaimed water each year statewide, but DEP Secretary Sole cautions that the state’s exponential growth requires an even more aggressive stance on reuse.

“Reuse is a key part and the largest part of Florida’s water future. We lead the nation; reusing 660 million gallons of reclaimed water each day to conserve freshwater supplies and replenish our rivers, streams, lakes and the aquifers; but we have more work to do with local partners,” said DEP Secretary Sole. “The Legislature has recognized that as our state continues to grow, the Department needs to continue to be a resource to local partners to ensure we have efficient water management that preserves our natural ecosystems and balances sustainable local drinking water supplies.”

Water reuse is the beneficial use of reclaimed water, highly treated wastewater, for landscape and golf course irrigation; agricultural irrigation; industrial uses; toilet flushing; fire protection; decorative water features; and ground water recharge. Among the many “net results” of reuse are that it augments Florida’s water resources and allows other sources of fresh water to be conserved or saved.

Florida has risen to be the national leader in water reuse, which has become a critical component of water management. Florida’s permitted reuse capacity exceeds 1.3 billion gallons per day, more than 52 percent of Florida’s total permitted capacity for all domestic wastewater treatment facilities.

The DEP, together with the state’s five water management districts, Florida Department of Health, Florida Public Service Commission, and other state agencies, recently implemented an award-winning Water Reuse Program. In 2006, the U.S. Environmental Protection Agency honored Florida’s Water Reuse Program with the prestigious Water Efficiency Leader Award in recognition of the water conservation achievements of the program. Florida currently uses reclaimed water to irrigate 201,465 residential lawns, 462 golf courses, 572 parks and 251 schools.

The Water Protection and Sustainability Program was established in 2005 to help water suppliers fund alternative water supply projects. About 66 percent of the projects funded in the first two years of the program involved reuse of reclaimed water. An additional 19 percent of the alternative water supply projects were for brackish groundwater projects. During the first two years of the program, the water management districts helped fund 238 projects.

In addition, DEP provides funding for reuse projects through the State Revolving Fund loan program and the Disadvantaged Small Community Grant Program. DEP established the State Revolving Fund in 1999 to provide low interest loans to plan, design and build wastewater and stormwater systems. Created in 2000, the Disadvantaged Small Community Grant Program provides grants to plan, design and build wastewater management facilities. During the last fiscal year, Florida invested more than \$198 million in reuse projects through the State Revolving Fund loan program and the Disadvantaged Small Community Grant Program, funding 37 projects statewide.

To learn more about Florida’s reuse program, visit www.dep.state.fl.us/water/reuse. To learn more about the State Revolving Fund Loan Program and water facilities funding, visit www.dep.state.fl.us/water/wff/index.htm.

Louisiana Speaks Hits Grand Slam at State APA Planning Awards

BATON ROUGE (September 21, 2007) - The Louisiana Chapter of the American Planning Association (APA) honored Louisiana Speaks with four distinguished awards that were announced at its annual conference in New Orleans today. Donna Fraiche, chair of the Louisiana Recovery Authority's (LRA) Long Term Community Planning Task Force received the APA's Distinguished Leadership Award for a Citizen Planner for her work with the LRA's planning task force and Louisiana Speaks. The APA also honored the Louisiana Speaks Regional Plan with its Current Topic Award. The Louisiana Speaks Pattern

Book received the APA's Public Education Award, and the Planning Toolkit received the APA's Outstanding Planning Award for a project, program or tool.

"Louisiana Speaks and local planning efforts empowered Louisianians to speak up about the direction of their communities and the region, making us all citizen planners," Fraiche said. "I am humbled to be honored as part of this effort and I know I speak for the thousands of 'citizen planners' across the state when I say that this hard work should not sit on the shelf gathering dust as an effort in centralized planning. With the continued support of our partners at the APA and the Center for Planning Excellence, I am confident we will see the recommendations of Louisiana Speaks implemented in the years to come." Louisiana Speaks is a long-term planning initiative of the LRA which was created in the wake of the destruction caused by Hurricanes Katrina and Rita. Spanning parishes from the Texas to Mississippi border-- including the Houma/Thibodaux, New Orleans, North Shore, Baton Rouge, Lafayette, Lake Charles, St. Bernard and Plaquemines areas-- the Louisiana Speaks Regional Plan provides a broad strategic framework and priorities for land use, transportation, community growth and economic development in South Louisiana.

The Center for Planning Excellence (CPEX), which was created to serve as a resource for residents, community organizations, developers and elected officials to provide information on best practices for planning and urban design, provides primary support and management for the Louisiana Speaks.

"The Louisiana Speaks Regional Plan is validated by the voices of 27,000 Louisiana citizens. It is a unifying vision that will help guide the way to a safer, stronger, smarter future for generations to come," said Elizabeth "Boo" Thomas, president and CEO of CPEX. "The Louisiana Speaks Planning Toolkit is an invaluable planning resource for communities in the region. It ensures that Louisiana recovers sustainably, grows smarter and thinks regionally."

Planning for the Louisiana Speaks Regional Plan was led by a team of top local and national professionals, including Calthorpe Associates, Fregonese Calthorpe Associates, Urban Design Associates, Duany Plater-Zyberk & Company, ABMB Engineers, Inc., Brookings Institution Metropolitan Policy Program, Brown+Danos Landdesign, Inc., Collective Strength, Kimley-Horn and Associates, Inc., PolicyLink, Dr. Robert R. Twilley, and LSU Coastal Louisiana Ecosystem Assessment and Restoration (CLEAR).

The Louisiana Speaks Planning Toolkit is an educational component of Louisiana Speaks. Geared toward individual communities, it is a planning guide for rebuilding across neighborhoods and regions that provides concise, bulleted lists for six key planning issues: landscape and natural systems; flood, wind and storm water management; transportation and utilities infrastructure; sustainability; equity, accessibility and affordability; and development patterns. Created by Urban Design Associates, the Planning Toolkit was funded through the Louisiana Recovery Authority Support Foundation, the Fannie Mae Foundation and the U.S. Environmental Protection Agency (EPA). A team of local and national planning professionals contributed to the Toolkit, including Urban Design Associates, Brown+Danos landdesign, Concrete Change, Enterprise Community Partners, Karen Levine, Jonathan Rose Companies, Suzanne Turner Associates, University of Buffalo-State University of New York IDEA Center and Wolfe Design.

The U.S. Federal Emergency Management Agency's ESF #14 Long Term Planning Division also made major contributions to Louisiana Speaks, including development of a dynamic and interactive web-based planning tool, available online at www.louisianaspeaks-parishplans.org.

Legislature Approves Governor Blanco, LRA's Plans for Fisheries

BATON ROUGE, La. (September 13, 2007) - The Louisiana Legislature today approved plans put forth by Governor Kathleen Babineaux Blanco and the Louisiana Recovery Authority to provide \$19 Million in Disaster Relief for Fisheries.

Through these plans \$19 million in CDBG funds will be used to create a new recovery program to improve and expand infrastructure critical to the fisheries industry including, but not limited to: docks, ice holds, boat launches, processing and shipping facilities, boats and other necessary infrastructure. The National Oceanic and Atmospheric Administration estimates Louisiana generated more than 76% of the annual catch landings in all the disaster declared parishes and counties in the Gulf Coast and suffered more than \$2.1 billion of damage to its fisheries.

State Approves \$5.6 Million for Elevation Projects in Jefferson Parish

METAIRIE, La. (September 13, 2007) - Today the Louisiana Recovery Authority (LRA) and the Governor's Office of Homeland Security and Emergency Preparedness (GOSHEP) announced approval of more than \$5.6 million in Hazard Mitigation Grant Program (HMGP) funds to elevate 30 homes in Jefferson Parish. "These elevations will help to break the cycle of flood-repair-flood by offering a permanent solution," said LRA Board Member Tim Coulon. "Through the state's hazard mitigation program-which is supported by local, state, federal and citizen partnerships-Louisiana is taking positive actions today that will provide for a safer tomorrow."

The LRA authorized the release of \$250 million to help parishes prevent damage from future disasters in November 2005. In accordance with the State Hazard Mitigation Program, LRA directed GOSHEP to distribute the first hazard mitigation funding available after Hurricanes Katrina and Rita to parish governments. "Across the state money for mitigation projects is at work, and this is just another example," said Colonel Jeff Smith, GOSHEP Acting Director. "Once these structures are rebuilt with a higher first floor, floodwaters will flow under rather than through them-thereby reducing the potential for these structures to sustain repetitive flood damage in the future. Because we are all in the same insurance pool, that's good news for us all."

One of the state's top priorities is mitigation planning. Approved by GOSHEP and the Federal Emergency Management Agency (FEMA), hazard mitigation plans enable communities to take actions to reduce or eliminate long-term risks to people and property from natural hazards and their effects. The \$5.6 million in funding for this project will go toward raising 30 homes that are on the severe repetitive loss list and received multiple National Flood Insurance Program (NFIP) flood insurance claims. Earlier this week, the state approved \$4.2 million in funding that will be used to raise an additional 30 homes in Jefferson Parish.

As defined by the NFIP, severe repetitive loss homes have suffered damages of \$1,000 or more on at least four occasions or suffered damages of more than 50 percent of their value on two or more occasions. About 1,700 homes, or about one-third of the severely and repetitively damaged homes in America, are in Louisiana. To access these hazard mitigation funds, parishes submit proposals to GOHSEP. The funds, which are provided under the Stafford Disaster Relief and Emergency Assistance Act, require a 25 percent match from parish governments or state agencies. Projects eligible for HMGP funds include structure elevation, wind retrofitting of facilities, property acquisition, planning, mitigated reconstruction, and safe room installation. Projects must fit within the state's and local governments' overall mitigation strategy and comply with HMGP guidelines.

A congressionally mandated study conducted for FEMA revealed that mitigation saves society an average of \$4 for every dollar spent. Such defensive, preventative mitigation measures learned and implemented by Louisianians will contribute to a national floodplain management plan that saves taxpayers an estimated \$1.1 billion per year by preventing flood damages.

Louisiana Charts Path Forward in Implementing Coastal Master Plan

BATON ROUGE -- The Louisiana Coastal Protection and Restoration Authority was given progress reports regarding ongoing levee protection projects for the New Orleans area, long-term federal plans for coastal restoration and hurricane protection in Louisiana and the ongoing implementation of the state Master Plan at its meeting Monday.

State officials detailed efforts to develop a set of principles and guidelines essential to the successful implementation of the CPRA comprehensive Master Plan for Coastal Restoration and Hurricane Protection. The secretaries and staff members of the Departments of Natural Resources and Transportation and Development as well as the Governor's Office of Coastal Activities (GOCA) have been engaged in discussions for more than six months to develop a memorandum of understanding among the three agencies.

The goal of the talks has been to outline the roles and responsibilities of the three agencies, all of which play a part in implementing the Master Plan. "We have been breaking down the barriers that have traditionally separated the roles of these three agencies to find the best way to implement this plan and get to work protecting and restoring our coast," said CPRA Chairwoman and GOCA head Sidney Coffee. "The level of cooperation between agencies that are used to doing things their own way has been tremendous. This cooperation is unprecedented in Louisiana's history."

Also, Karen Durham-Aguilera, director of the Corps' Project Hope, told the Authority the Corps continues to craft the Congressionally-mandated Louisiana Coastal Protection and Restoration Plan (LaCPR). Durham-Aguilera reasserted the promise she made the CPRA in April that the LaCPR plan will use the state Master Plan as a basis. "LaCPR is going to be an extension of the state Master Plan with additional work added to meet federal requirements," she said.

In addition to outlining future levee building projects, Durham-Aguilera said the LaCPR plan will address the dire need to curb wetland degradation and saltwater intrusion by re-introducing freshwater and sediment into areas that have been isolated from the Mississippi River by levees. The report will also detail the closing of the Mississippi River Gulf Outlet to both deep and shallow draft navigation opening the possibility of using the channel as a fresh water conveyance to rebuild surrounding marshes. A copy of the plan is due to Congress in December.

"No net loss of wetlands and slowing degradation of marshes is a prominent part of the LaCPR plan," Durham-Aguilera said. "The state Master Plan and the LaCPR are working hand in hand. LaCPR will be a way to deliver the vision the state first formed in its Master Plan."

The Corps' is also recommending that Congress supply funds in addition to the \$7.6 billion requested by the President to complete the 100-year hurricane protection system in New Orleans for continued maintenance and evaluation of the system over the next 50 years. The CPRA then heard a report from Terrebonne Parish Levee District Director Jerome Zeringue on the status of the Morganza-to-the-Gulf levee system which has been designed for more than 10 years but awaits construction. Authorization for

the project is contained in the Water Resources Development Act currently awaiting approval from Congress.

The CPRA also discussed the formation of five subcommittees to address ongoing issues and concerns as implementation of the Master Plan proceeds. The five suggested committees are: land use, linear levees, financing, insurance and legislation. For more information about Monday's meeting or the CPRA, please contact Chris Macaluso in the Louisiana Governor's Office of Coastal Activities at (225)342-3968 or by email at chris.macaluso@la.gov.

Restoration of 28 Inshore Artificial Reefs Nears Completion

BILOXI, Miss. – Gulfport will soon have 11 inshore artificial reefs for anglers to enjoy. Work has been under way all along the Mississippi Gulf Coast—most recently in Gulfport—restoring and enhancing inshore artificial fishing reefs damaged by Katrina. Today, the Department of Marine Resources (DMR) began deploying artificial reef material to create Kelly Ave. Reef in Gulfport.

So far in Gulfport six inshore reefs have been created: Charles Walker Pier, Urie Pier, Moses Pier, Ken Combs Pier, Fournier Ave. Reef and Thornton Ave. Reef. The five remaining reefs include: Kelly Ave. Reef, VA Hospital Reef, Tegarden Road Reef, Naval Home Reef and Legacy Towers Reef.

The DMR along with Mississippi Gulf Fishing Banks, are currently restoring and enhancing inshore artificial reefs along the Mississippi Gulf Coast in the three coastal counties. About 85 percent of Mississippi's inshore reefs were damaged by Hurricane Katrina. The DMR is restoring and enhancing the inshore artificial reefs using funds from the Emergency Disaster Recovery Program through NOAA. This is part of a five-year grant to restore Mississippi's marine resources. By the end of the five-year grant, all 44 of Mississippi's inshore reefs will be restored and enhanced.

This year, the DMR and Mississippi Gulf Fishing Banks are restoring and enhancing 28 inshore reefs. Since June, more than 20,000 cubic yards of artificial reef material have been deployed to restore 23 inshore reefs. The five remaining reefs are expected to be completed in October. Mathews Marine of Pass Christian is deploying the artificial reef material on the inshore reefs. It takes six barge loads, or about 900 cubic yards of artificial reef material to create an inshore reef. The inshore reefs are located around piers for pier fishermen, near boat ramps for the fishermen utilizing small boats and off the front beach for wade fishermen. Among others, the inshore reefs provide habitat for spotted seatrout, red drum, white trout, ground mullet and black drum.



A worker with Mathews Marine of Pass Christian deploys artificial reef material in the Mississippi Sound about 800 feet from the shoreline at Kelly Avenue in Gulfport. This is the 24th of 28 inshore artificial reefs that the DMR, in cooperation with Mississippi Gulf Fishing Banks, is restoring and enhancing along the Mississippi Gulf Coast in the three coastal counties this year. DMR is using funds from the Emergency Disaster Recovery Program through NOAA to restore the reefs. All 44 inshore reefs damaged by Hurricane Katrina will be restored by the end of the five-year grant. Since June, more than 20,000 cubic yards of artificial reef material have been deployed to restore 23 inshore reefs. The 28 inshore reefs are expected to be completed in October.

The Mississippi Department of Marine Resources is dedicated to enhancing, protecting and conserving marine interests of the State by managing all marine life, public trust wetlands, adjacent uplands and waterfront areas to provide for the optimal commercial, recreational, educational and economic uses of these resources consistent with environmental concerns and social changes. Visit the DMR online at www.dmr.state.ms.us

Mississippi's Coastal Cleanup Nets 3,484 Bags of Trash

Boaters and land-based volunteers flocked to Mississippi's beaches, islands and waterways to pick up marine debris at **57** designated cleanup sites during the 18th annual Mississippi Coastal Cleanup, part of the International Coastal Cleanup—the world's largest single-day volunteer effort to clean up the marine environment. More than **3,400** volunteers picked up **3,484** bags of trash along **159** miles of Coastal waterways in Hancock, Harrison and Jackson counties and the Barrier Islands during the Mississippi Coastal Cleanup.

Volunteers collected **53,840** pounds of trash—that's *more than 27 tons* of marine debris—including **7** dump truckloads of marine debris too large to fit in trash bags, such as the two refrigerators found on Belle Fontaine Beach. Other items collected were: a baby stroller, car batteries, a motorcycle, a toilet seat, tires, a cash register, an inflatable tent, a car muffler, thousands of cigarette butts, a breathalyzer, a computer circuit board, an above ground pool, fireworks, tires, and a sofa. There was a 6-foot dead alligator reported and 12 dead fish entangled in debris. The most peculiar item reported was a ladies purse filled with rocks, checks and credit cards, found in Bayou Heron, which belonged to a victim of a robbery in Grand Bay, Ala. Although rough waters and low visibility kept the DMR Fisheries Dive Team from conducting an underwater cleanup of the pier at West Ship Island, the six volunteers headed to Cat Island and cleaned a mile of shoreline.

The Mississippi Coastal Cleanup—in conjunction with the International Coastal Cleanup (ICC)—takes place each year on the third Saturday in September. Hundreds of thousands of people across the world spend three hours combing the beaches and waterways to pick up trash that pollutes our waters, harms marine life, hampers tourism and poses health risks to beach-goers. During last year's ICC about 350,000 volunteers worldwide removed debris from nearly 35,000 miles of shoreline spanning 68 different nations. They collected 7 million pounds of debris.

Sixty percent of the debris found during the 2006 Mississippi Coastal Cleanup came from shoreline and recreational activities such as beach picnics, festivals, sporting events, and general littering. The source of most debris is human activity. At this year's cleanup, green-and-white cardboard boxes for recyclables donated by Waste Management were placed at each cleanup site so that the thousands of plastic bottles of water that were handed out to volunteers could be collected and recycled.

“Man-made debris in our marine waters poses serious threats to marine wildlife, navigation and our communities,” said Lauren Thompson, state coordinator of the Mississippi Coastal Cleanup and public relations director for the Mississippi Department of Marine Resources. “It's amazing that most of the trash in our waterways in Mississippi and worldwide comes from land-based activities.”

The mission of the International Coastal Cleanup is to remove debris from shorelines, bayous, bays, rivers, waterways and beaches; collect valuable information on the amount and types of debris collected; educate people on the issue of marine debris; and use the data collected to affect positive change.

Volunteers clean beaches and collect information on what they find, using the International Coastal Cleanup Data Card, so that sources of marine debris can be targeted for education or pollution prevention campaigns. State coordinators mail the data cards to the Ocean Conservancy in Washington, D.C. where the data is tabulated. Over the years, data from the cleanups have been used to enact local, state, national, and even international legislation and agreements.

After the cleanup, Jennifer Blake and Chris Hein of Bonefish Grill and 20 staff of the Biloxi restaurant provided a free lunch of shrimp po-boys, chips and bottled water to more than **1,400** volunteers between 11 a.m. and 1 p.m. In Hancock County, the Office of Congressman Gene Taylor and the Bay St. Louis Rotary Club treated volunteers to hotdogs and drinks at a cookout held at the foot of Garfield Ladner Memorial Pier and Coleman Ave. at the beach in Waveland while Brook's BB's Snowballs provided snowballs. In Jackson County, **1,000** volunteers received a free lunch of brisket and pulled-pork sandwiches, sides and drinks at The Shed Barbeque in Ocean Springs courtesy of The Shed and Chevron.

“Thousands of volunteers donated their time on a Saturday morning to come out and clean up the shoreline, islands and marine waters of South Mississippi, sharing in a worldwide effort to make our oceans and waterways safer and healthier for people and wildlife, and free from the hazards of marine debris,” Thompson said. “This was a massive team effort and its success was due to the hard work of the Department of Marine Resources staff, Mississippi Marine Debris Task Force members, cleanup coordinators, zone captains, volunteers and the generosity of our sponsors.”

Grand Bay National Estuarine Research Reserve Presents a “Paint En Plein Air” Event in Honor of National Estuaries Day

BILOXI, Miss. – On the morning of September 29, 2007, the Grand Bay National Estuarine Research Reserve (GNDNERR) hosted: *Paint En Plein Air—A Morning Excursion into the Reserve for Artists in Celebration of National Estuaries Day*. This event was a free outdoor adventure for mature teens and adults who enjoy painting en plein air (painting outside in a natural environment). Reserve staff took painters and sketchers out into the reserve in a pontoon boat and strategically placed them around the reserve so they could capture the beauty of the reserve from beautiful but hard to access areas. For more information call Jennifer Buchanan at (228) 475-7047 or e-mail her at jen.buchanan@dmr.ms.gov.

The last Saturday in September is National Estuaries Day—an interagency celebration of the magical places where rivers meet the sea. It began in 1988 as part of Coast Weeks to educate the public on the importance of estuaries and the need to protect them. The annual event has matured into a national campaign with festivities across the country. To learn more about National Estuaries Day or estuaries in general, visit the Web site www.estuaries.gov.

The GNDNERR is located near the community of Pecan in southeast Jackson County and includes wild lands and waterways from Bangs Lake to the Alabama state line. A major goal of the reserve is to provide for research coordination and dissemination of scientific data to the community and local decision-makers to provide sound information on which to base management decisions. The 18,000-acre reserve is home to several rare plant and animal species and serves as an essential nursery habitat for numerous important commercial and recreational fish species. GNDNERR is managed through state-federal partnership between the DMR and its local partners: Mississippi Secretary of State's Office, U.S. Fish and Wildlife Service, Mississippi State University, The Nature Conservancy, The University of Southern Mississippi and the National Oceanic and Atmospheric Administration.

Public Meetings Scheduled for October to Discuss Land Buyouts and Other Hurricane Damage Reduction Measures

BILOXI, Miss. – The U.S. Army Corps of Engineers along with the Mississippi Department of Marine Resources has scheduled a series of public meetings to discuss various measures being considered to reduce future damages from hurricane surges. Measures being discussed include structural levees, nonstructural elevations and/or land buyouts. Members of the public are invited to attend the following public meetings scheduled for October:

October 23, Pass Christian Public Meeting, 6 p.m.
Location: Old Library, Hern Ave., Pass Christian.

October 25, Harrison County Public Meeting, 6 p.m.
Location: Harrison County Board of Supervisors Office, Gulfport Courthouse, 1801 23rd Avenue, Gulfport.

October 30, Jackson County Public Meeting, 6:30 p.m.
Location: Ocean Springs Middle School, Hanshaw Road, Ocean Springs.

Similar meetings were held recently in Bay St. Louis and in Long Beach. For information concerning the public meetings, contact Tina Shumate at tina.shumate@dmr.ms.gov.

The Mississippi Department of Marine Resources is dedicated to enhancing, protecting and conserving marine interests of the State by managing all marine life, public trust wetlands, adjacent uplands and waterfront areas to provide for the optimal commercial, recreational, educational and economic uses of these resources consistent with environmental concerns and social changes. Visit the DMR online at www.dmr.state.ms.us.

Volunteers Plant Grasses at Mission-Aransas NERR Education Center

More than 100 dedicated volunteers planted wetland grasses and other aquatic vegetation at the 2.6-acre Wetlands Education Center (WEC), a salt marsh created for education and demonstration purposes at the Mission-Aransas National Estuarine Research Reserve in Texas last month.

The volunteers planted smooth cordgrass, black mangrove and a variety of wetland grasses in the center, located at the University of Texas Marine Science Institute in Port Aransas. The center is designed to enhance educational opportunities for school groups and visitors to the reserve and serve as a model for marsh creation and its use in education programs. When completed next summer, the WEC will feature a public boardwalk with shaded overlooks around the perimeter; three floating platforms connected to an adjacent amphitheater and interpretive graphics. Two separate tidal access points will provide natural flow in the WEC. For more information, contact matt.chasse@noaa.gov.

State Judge Rules: Texas Open Beaches Act is Constitutional

AUSTIN — State District Judge Patrick Sebesta ruled today that 16 houses encroaching on the public beach in Surfside must go. Judge Sebesta's ruling is the second judicial determination since May that the Texas Open Beaches Act passes constitutional muster. The owners of these 16 houses on the public beach had sued Jerry Patterson, Commissioner of the Texas General Land Office, over Patterson's efforts to enforce the Texas Open Beaches Act. Judge Sebesta today granted the Land Office's motion for summary judgment, ordering the removal of the houses from the public beach.

"I want to make clear, the government is not taking anyone's house. Mother Nature is," Patterson said. "Erosion moved the beach easement under these houses. The Gulf of Mexico claimed these homes a long time ago." Patterson said he hopes that with this decision, he will be able to increase commonsense, cooperative efforts to aid removal of houses from the beach. "The law is clear. Texas beaches belong to Texans — all Texans," Patterson said. "I'd much rather work with property owners than fight with them in court. Working together, we can ensure a fair deal for the property owners and keep Texas beaches open to the public."

Patterson has offered owners of houses on the beach up to \$50,000 in public assistance to help reimburse the costs of moving their houses off the public beach. Patterson has specified that even property owners who choose to sue the state remain eligible for the \$50,000 in relocation expenses. Under the Texas Open Beaches Act, Patterson may petition the courts to authorize the removal of any structure on the public beach to ensure the public's access. In 2006, Patterson notified several property owners that he might seek to remove any houses on the public beach and offered financial assistance to move the houses.

Instead, several of the property owners continued to pursue this lawsuit, and were today ordered to remove their houses from the beach. A total of 15 other property owners along the coast accepted Patterson's offer of financial assistance to move their houses off the beach. Of that number, 14 property owners used the money to help move their house off the public beach. One used the money to help cover demolition costs. At least four others have recently applied for the relocation money, some even dropping out of the lawsuit.

Patterson's relocation expense reimbursement program is an attempt to balance the right of public access to Texas beaches with the interests of property owners whose houses wind up in the public beach easement due to erosion, Patterson said. Patterson's Plan for Texas Open Beaches seeks to avoid costly and time-consuming litigation by offering help to property owners to remove their structures from the public beach. For more information on Patterson's Texas Open Beaches Enforcement Policy or Plan for Texas Open Beaches, visit <http://www.glo.state.tx.us/coastal/beachdune/openbeaches.html>.

More than 9,600 Adopt-A-Beach Volunteers Clean Texas Coast

AUSTIN — More than 9,600 volunteers removed almost 190 tons of trash from Texas beaches last weekend as part of the 2007 Texas General Land Office Adopt-A-Beach Fall Cleanup. The turnout of volunteers was the largest since Jerry Patterson became Texas Land Commissioner in January 2003.

"When almost 10,000 Texans show up for an Adopt-A-Beach Cleanup, you better believe a lot of work is going to get done," Patterson said. "With this kind of public support, we can make our beaches the cleanest in the nation."

In addition to cleaning the beaches, volunteers found the usual hodgepodge of oddities, including a toilet seat, ladies underwear, hypodermic needles, one-half of a bra, a Cadillac steering wheel, a bikini, a rubber chicken, a hair piece, a dog house, a personal massager, a headboard, fake fingernails, a tea cup, hair curlers, light bulbs, a rug and a broom.

Statewide, 9,604 volunteers removed 189.84 tons, or 379,706 pounds, of trash from 185.5 miles of Texas beaches. Most of the trash consisted of typical items left by beachgoers: cigarette butts, soda cans, beer bottles, beach toys and tires. This mix of trash has changed over the years that Adopt-A-Beach volunteers have walked the beaches. When the program started in 1986, the bulk of trash on Texas beaches came from international ships that simply dumped it overboard. Since then, data collected by Adopt-A-Beach volunteers has helped to pass an international shipping treaty that bans such sloppy practices and requires all oceangoing vessels to dispose of their trash responsibly while in port.

The Texas General Land Office's Adopt-A-Beach Cleanup is an all-volunteer effort to remove trash from Texas' shores. Coastal cleanups are held three times each year and the program's success is due to the hard work of volunteers, including local coordinators who work many unpaid hours publicizing the cleanups in coastal communities.

Texas beaches still receive large amounts of marine debris due to a convergence of currents in the Gulf of Mexico. Since 1986, more than 365,000 Adopt-A-Beach volunteers have picked up more than 6,900 tons of this debris, some of it originating from as far away as South America. Volunteers record data on the trash to learn more about the causes of marine debris and to help mitigate pollution along Texas' 367 miles of coastline. The Adopt-A-Beach Fall Cleanup is one of three all-volunteer seasonal cleanups coordinated through the Adopt-A-Beach Program of the Texas General Land Office. The next coastwide cleanup will be the Spring Adopt-A-Beach effort scheduled for Saturday, April 26, 2008.

The success of the Adopt-A-Beach Program is made possible by the generous efforts of dedicated volunteers and the strong support of community leaders and sponsors across the state. This year the Adopt-A-Beach Program thanks its statewide Fall Cleanup sponsors: Shell Oil Company, Rowan Companies, Inc., Lyondell Chemical Company, ExxonMobil, Halliburton and the Ocean Conservancy.

To learn more about items collected at the cleanup, and for information on the health of the Texas coast, visit the Adopt-A-Beach Program Web site at www.texasadoptabeach.org, or contact the Texas General Land Office at 1-877-TXCOAST (1-877-892-6278).

<http://www.glo.state.tx.us/news/docs/2007-Releases/09-25-07-AAB-fall-results.pdf>

Other News

Federal Offshore Sand to Build-Up South Carolina Beaches

Up to 3 Million Cubic Yards to Bolster 25 Miles of the Grand Strand

WASHINGTON - South Carolina's Grand Strand will receive Federal sand conveyed by the U.S. Department of Interior's Minerals Management Service (MMS) to help shore up its eroding beaches. Up to 3 million cubic yards of Federal Outer Continental Shelf (OCS) sand will be used to renourish 25 miles of storm-damaged beaches in North Myrtle Beach, Myrtle Beach, Surfside and Garden City in Horry County, South Carolina.

“I am pleased to say this is the second time in a decade that MMS has helped provide Federal OCS sand to renourish these storm damaged Grand Strand beaches,” said MMS Director Randall Luthi. “Helping to restore South Carolina’s Grand Strand is a prime example of government, through MMS serving the citizens of South Carolina and the U.S.”

In 1998 Federal sand was placed on Surfside and Garden City beaches. MMS today issued three separate non-competitive lease agreements for the use of federal OCS sand for the Myrtle Beach Storm Damage Reduction Project. North Myrtle Beach will receive 703,000 cubic yards of sand from the Little River Borrow Area. Myrtle Beach will receive 1,442,500 cubic yards of sand from the Cane South Borrow Area, and the Surfside and Garden City beaches will receive 778,600 cubic yards of sand from the Surfside Borrow Area. All three borrow sites straddle the State/Federal line about 3 nautical miles offshore South Carolina. The U.S. Army Corps of Engineers, Charleston District, is partnering with the local and county governments for the design of the project and the removal and placement of sand. The sand will be dredged from the three borrow sites, transported to the project sites, and hydraulically pumped from the dredge ship to the beach nourishment handling areas.

Over a decade ago, MMS and coastal states recognized that sand resources from the OCS are a viable and critical source for protection of the nation’s shores and wetlands. MMS, through partnerships with 14 coastal states, identified over 2 billion cubic yards of OCS sand resources available for beach nourishment and other coastal restoration uses. To date, the MMS has conveyed more than 25 million cubic yards of sand for projects that have restored about 100 miles of the nation’s shorelines.

New EPA Tools for Addressing Nitrogen and Phosphorus Pollution

On September 27 2007, EPA released new web-based tools to help states, territories, tribes and the public fight "nutrient" pollution, or high loadings of nitrogen and phosphorus into water bodies. EPA's redesigned nutrients web site (<http://www.epa.gov/waterscience/nutrients/>) now houses new information and tools that will help states, territories, and tribes establish and meet numeric water quality criteria for nitrogen and phosphorus. The new tools include:

- Scientific Literature Reviews on problems related to excess nitrogen (N) and phosphorus (P) in specific types of waterbodies and on the relationship between excess N and P and dissolved oxygen.
- Wetlands Criteria Technical Guidance on how to consider water, vegetation and soil conditions when developing regionally-based numeric N and P criteria for wetland systems.
- Webcasts that allow academic, government and other experts to share in-depth scientific information with states and others on topics such as nutrient limitation and statistical analysis of nutrient and response variable data.
- BMP and Treatment Technologies Clearinghouse that links to EPA-evaluated data sets on (1) agricultural best management practices (BMPs) and conservation practices, (2) National Pollutant Discharge Elimination System (NPDES) stormwater BMPs, (3) Publicly Owned Treatment Works (POTW) treatment technologies, and (4) Water Environment Research Federation (WERF) stormwater data.

The public can also visit the web site to learn what they can do to prevent excessive amounts of nitrogen and phosphorus from entering local water bodies. In future updates to the website, EPA plans to include

answers to implementation questions that states have identified as obstacles to N and P water quality criteria development.

U.S. Army Engineer Research and Development Center Announces Publication of Mississippi Sound Model

“Application of a Water Quality Model to Mississippi Sound to Evaluate Impacts of Freshwater Diversions”

The report, *Application of a Water Quality Model to Mississippi Sound to Evaluate Impacts of Freshwater Diversions*, describes the development and application of a water quality model to the Mississippi Sound region to address the impacts of various freshwater diversion alternatives. The CH3D-Sigma (sigma level vertical coordinates) model code was the hydrodynamic model that was used to provide transport fluxes for the CE-QUAL-ICM water quality model. The model domain also included Mobile Bay, the Mississippi coastal bays, Lakes Pontchartrain and Borgne, Biloxi Marsh, and part of Breton Sound.

The three-dimensional model had five sigma coordinate vertical layers. The model included 15 water quality variables including temperature, salinity, inorganic and total suspended solids, dissolved oxygen, dissolved and particulate organic carbon, various forms of inorganic and organic nitrogen and phosphorus, phytoplankton biomass, chlorophyll a, and underwater light extinction. The model was calibrated for the period April through September 1998.

Three diversions were simulated, diversion of freshwater flow from the Mississippi River at Bonnet Carre spillway and into Lake Borgne near Violet, LA, and diversion of all of the Escatawpa River flow into Grand Bay. Summer average salinity was decreased along the western portions of Mississippi Sound by as much as 11 parts per thousand for the Bonnet Carre diversion. For the Violet diversion, summer average salinity reductions were as great as 6 to 8 parts per thousand in western Mississippi Sound. The Escatawpa River diversion had little effect on Mississippi Sound. The Mississippi River diversion will also result in higher concentrations of nutrients, TSS, phytoplankton, and TOC, and greater light extinction, thus, less light reaching the bottom.

If you wish to access/download the document (888 pages, 10 mb) in pdf format, the address is: <http://libweb.wes.army.mil/uhtbin/hyperion/EL-TR-07-20.pdf>

New Report Details Potential Devastation of Sea Level Rise

Report Released at US Mayors’ Sundance Summit on Global Warming

SUNDANCE, UTAH – A coastal impact study issued today by Architecture 2030 makes clear that without a moratorium on coal, the United States will be unable to avert the dangerous impacts of climate change. Ed Mazria, founder of Architecture 2030, released the report at the Sundance Summit in Utah, a gathering of more than 40 mayors from across the country who are gathered to discuss the science behind and the local solutions to global warming. The study includes new visual imaging and reveals that, beginning with just one meter of sea level rise, many areas of the US will experience devastating consequences.

The report is available at www.architecture2030.org/current_situation/coastal_impact.html
Mazria addressed the mayors at Sundance after a Sunday night keynote speech by Florida Governor Crist and welcoming remarks from Robert Redford, who hosts the annual event with Salt Lake City Mayor

Rocky Anderson and ICLEI-Local Governments for Sustainability. More information about the Sundance Summit is at www.sundancesummit.org

“Sea level rise is the greatest threat to the stability of our country. The daunting images in our study make clear that we, as a nation, will be physically under siege, vulnerable to catastrophic property and infrastructure loss with large population disruptions and economic hardship,” said Mazria.

The US is a coastal nation, with over 12,000 miles of coastline. Fifty-three percent of all Americans live in and around coastal cities and towns. According to Architecture 2030’s study, “Nation Under Siege”, which examines 31 of these cities and towns, the US is extremely vulnerable to even small increments of sea level rise.

The key findings of the report include:

- Beginning with just one meter of sea level rise, the US is vulnerable to devastating consequences.
- At 450 ppm CO₂ in the atmosphere, we will trigger potentially irreversible glacial melt and sea level rise. We are currently at 383 ppm, and are increasing atmospheric concentrations of CO₂ at about 2 ppm annually. At this growth rate, we will reach 450 ppm by 2035 or sooner.
- As the most plentiful, cheapest and dirtiest fossil fuel, coal is positioned to push the planet beyond 450 ppm, and trigger dangerous climate change.
- Without a moratorium on coal, we cannot avert the dangerous impacts of climate change.

“There is still time to avert dangerous climate change, but we must act now. The window of opportunity is closing,” stated Mazria. “The key to all of this is the amount of CO₂ in the atmosphere,” said Mazria. According to the study, scientists are forewarning that, at approximately 450 parts per million (ppm) CO₂ in the atmosphere, we will trigger potentially irreversible glacial melt and sea level rise. We are currently at 383 ppm, and are increasing atmospheric concentrations of CO₂ at about 2 ppm annually. At this growth rate, we will reach 450 ppm by 2035, or sooner. The study concludes that continued growth of CO₂-producing infrastructure and emissions for another 10 years will make it impractical, and most likely impossible, to avert exceeding the 450 ppm threshold.

The study offers a two-pronged solution to the global-warming crisis: a moratorium on coal and implementing The 2030 Challenge, a strategy to dramatically reduce the energy consumption and CO₂ emissions of the Building Sector. The US alone has 151 new conventional coal-fired power plants in various stages of development. Globally, at least one new conventional coal-fired power plant is being added each week. As the most plentiful, cheapest and dirtiest fossil fuel, coal is positioned to push the planet beyond 450 ppm, and trigger dangerous climate change. To illustrate the devastating effects of coal, Mazria provided a sobering tale:

Wal-Mart is investing a half billion dollars to reduce the energy consumption and CO₂ emissions of their existing buildings by 20% over the next seven years. If every Wal-Mart Supercenter met this target, the CO₂ emissions from only one medium-sized coal-fired power plant, in just one month of operation each year, would negate this entire effort.

U. S. Fish and Wildlife Service Announces Availability of the Wood Stork Five-year Review

The [U.S. Fish and Wildlife Service](#) (Service) announced today the completion and availability of the five-year status review of the wood stork. After reviewing all of the best scientific and commercially available information and data, the Service recommended that the current listing classification for the wood storks be upgraded from endangered to threatened. According to Service scientists, the data shows that the wood stork is expanding its range and adapting to habitat changes.

“This expansion is accompanied by numerous successes including in 2006 when that breeding season marked the first time since the early 1960s when there have been more than 10,000 nesting pairs,” said Dave Hankla, the Service’s field supervisor for its North Florida Ecological Services Office in Jacksonville.

Service biologists acknowledged that the 2007 nesting season was low in comparison to recent years, but said this is likely in response to poor nesting conditions caused by severe drought conditions. “Regional and local environmental conditions have always affected the breeding success of wood storks,” said Bill Brooks, a Service fish and wildlife biologist and primary author of the review. “The long reproductive lifespan of the wood stork allows it to tolerate reproductive failure in some years due to droughts or unseasonably heavy rainfall.”

The Service’s five-year review also contains other recommendations for future actions aimed at continuing the wood stork’s progress toward recovery. The five-year review and a list of Frequently Asked Questions are available online at <http://www.fws.gov/northflorida> or may be requested by email to woodstork@fws.gov, by fax at 904-232-2404, by mail at U.S. Fish and Wildlife Service, Attn: Wood Stork Five-year Review, 6620 Southpoint Drive South, Suite 310, Jacksonville, FL 32216-0958, or by telephone at 904/232-2580. Please include your name and street mailing address in your request. Email requests will receive an automated response confirming receipt of your request.

The U.S. Fish and Wildlife Service is the principal federal agency responsible for conserving, protecting and enhancing fish, wildlife, plants, and their habitats for the continuing benefit of the American people. Visit the Service’s website at <http://www.fws.gov>.

U.S. Coast Guard Wet Debris Removal in Final Stage

[» More Information on Mississippi Hurricane Katrina](#)

BILOXI, Miss. -- Although he wasn't just "cruising down the river" in his new airboat, a contract employee for the U.S. Coast Guard Wet Debris removal program made a rather revealing discovery last spring while exploring wetlands along the northern rim of St. Louis Bay in Harrison County. Using helicopters and adding more airboats to search the area, U.S. Coast Guard and Federal Emergency Management Agency (FEMA) officials corroborated the employee's find.

Coast Guard and FEMA operations personnel verified that approximately 680 acres of wetlands has been hidden from aerial flyovers by dead marine grass, downed trees and other debris since Hurricane Katrina's storm surge overwhelmed the area on Aug. 29, 2005.

Large pieces of debris that once had been a wall or roof of someone's home, dotted the area. At least a dozen small boats were also tossed into the newly-found area. Even automobiles and large appliances

were amid the debris. To get into the debris-filled areas without creating further damage, teams are traveling on existing logging roads, using trucks similar to ones the logging industry employs. Air boats reach the marsh's scattered debris, then ferry it back to staging areas. As much as possible, hand crews are collecting scattered debris to minimize damage to the marsh.

Mark Reyes, FEMA operations specialist reported that 183,284 cubic yards of wet debris have been removed from Hancock (87,510), Harrison and Jackson (53,470) counties, including 16,665 yards during the period Sept. 10-17. "We are pleased to see the progress in the Gulf Coast recovery effort," said Sid Melton, director of the FEMA-Mississippi Transitional Recovery Office. "Nearing the culmination of a clean-up the magnitude of the wet debris program is another step in the right direction."

Gulf Coast wetlands cover some 72,000 acres of Mississippi's 48,000-plus square miles, according to the Mississippi Department of Marine Resources (MDMR) which is working with several federal and state agencies to restore portions of damaged wetlands, marshes and the Mississippi Sound's mean high tide line to four miles offshore. FEMA obligated about \$177 million to help clean the Mississippi's coastal and inland waterways following Katrina. The Coast Guard Debris Inter-Agency Agreement oversees the Wet Debris Removal program, while private contractors bid to do the work. FEMA coordinates the federal government's role in preparing for, preventing, mitigating the effects of, responding to, and recovering from all domestic disasters, whether natural or man-made, including acts of terror.

Two Years Later, FEMA is Still Focused on Hurricane Rita Recovery

[» More Information on Texas Hurricane Rita](#)

AUSTIN, Texas -- On September 24, 2005, Hurricane Rita made landfall along the Texas coast as a powerful Category 3 storm. The devastating results across the region demanded a recovery process that continues two years after the powerful wind and rain event came ashore. Immediately after Rita hit the coast, the Department of Homeland Security's Federal Emergency Management Agency (FEMA) began intense disaster response operations. FEMA provided needed supplies and coordinated numerous federal agencies to support the State of Texas for months after the storm. Thousands of emergency responders continued to make Southeast Texas their home as the state shifted from response to recovery operations. Today, FEMA works to help Southeast Texas recover from Hurricane Rita. FEMA staff remains in the region for the development of community infrastructure projects and to support the nearly two thousand families who still receive FEMA housing assistance.

Southeast Texas continues to recover but the successes from the past two years should also be noted. Since Hurricane Rita, more than **\$521 million** has been approved to cover rental assistance, temporary lodging, and housing repairs for **224,523** eligible applicants in Texas.

More than **\$94 million** in Other Needs Assistance (ONA) was approved for **81,123** Texas applicants to cover their personal property loss, medical costs, and other serious disaster-related expenses not covered by insurance.

The U.S. Small Business Administration (SBA) has approved more than **\$380 million** in low-interest disaster loans to residents and businesses affected by Hurricane Rita. The SBA provides low-interest loans to homeowners, renters, non-profit organizations and businesses of all sizes.

Overall, **424,696** people affected by Hurricane Rita met with recovery experts at the Disaster Recovery Centers set up throughout the affected region to answer questions and provide help. At one time, **4,605**

temporary housing units were used to house families left homeless by Hurricane Rita. Today, there are **932** families living in temporary housing supplied by FEMA in Texas.

To date, **7,126** Project Worksheets of infrastructure plans for FEMA Public Assistance have been received from applicant communities. These projects total more than **\$398 million (\$398,674,786)** in reimbursements for local governments that provided eligible emergency protective services, debris removal and the repair and rebuilding of infrastructure after Hurricane Rita.

FEMA obligated **\$103 million** to Texas after Hurricane Rita under the Hazard Mitigation Grant Program. These funds are directed toward long-term projects that mitigate future disaster costs and protect communities against similar disasters. The state continues develop projects for those funds.

FEMA Approves Funding for Planning Grants

» [More Information on Louisiana Hurricane Katrina](#)

» [More Information on Louisiana Hurricane Rita](#)

NEW ORLEANS, La. -- The Federal Emergency Management Agency (FEMA) recently approved funding to update existing hazard mitigation plans for Assumption and Iberville parishes. The grant money comes from FEMA's Expanded Mitigation Strategies Planning Grant Pilot. The program allows jurisdictions with FEMA-approved local hazard mitigation plans in place by Oct. 29, 2006, to apply for up to \$150,000 to update their local mitigation plans. These updates will reduce the potential loss of life and property in future disasters. After submitting proposed updates, Assumption and Iberville parishes qualified for grants worth **\$112,500** each.

"The planning grants enable Assumption and Iberville parishes an opportunity to reevaluate their existing hazard mitigation plans and identify measures to protect property and reduce financial losses," said Jim Stark, FEMA's director of the Louisiana Transitional Recovery Office. "Implementing these measures will ensure stronger and safer facilities to withstand future storms."

Assumption and Iberville parishes have earmarked funding to amend their current plans and scope out several hazard mitigation projects. This scoping process will enable each parish to identify any new hazards and consider projects related to hurricanes Katrina and Rita. The parish will compile a list of properties identified as having flooding and drainage problems including all repetitive loss or severe repetitive loss properties.

The parishes will also identify other necessary projects such as hardening and/or elevating critical facilities in need of strengthening. In addition, Iberville Parish will focus on improving maintenance procedures to ensure that the plan stays current and meets the needs and resources of the parish.

Training and Conferences

10th Annual Southern and Caribbean Regional Meeting

The Louisiana Department of Natural Resources, Coastal Management Division, and NOAA's Office of Ocean and Coastal Resource Management invite you to attend the 10th Annual Southern and Caribbean Regional Meeting (SCRM).



Source: <http://coastalmanagement.noaa.gov> (27 Sept. 2007)

This meeting will bring together coastal managers from the Southeast, Gulf of Mexico and Caribbean, plus officials from NOAA, other federal agencies and local governments.

The meeting will allow coastal managers to share information and hear from their colleagues on pressing regional and national issues, including: - Public access, Managing local growth, Valuation of wetlands, Climate change, and a 30-year vision for the future of coastal management.

Location: Lafayette, Louisiana, USA

Dates: November 5-8, 2007

Contact Information: Carleigh Trappe
NOAA Office of Ocean and Coastal Resource Management

Phone: +1 301-563-1165

Fax: +1 301-713-4367

Email: carleigh.trappe@noaa.gov

Home Page URL: <http://coastalmanagement.noaa.gov/news/SCReg.html>

10th International Conference on Estuarine and Coastal Modeling

The focus of the conference is on the application of models to solve engineering and environmental assessment problems. Possible session topics include circulation modeling, pollutant transport, modeling techniques and much more.

Location: Newport, Rhode Island, USA

Dates: November 3-7, 2007

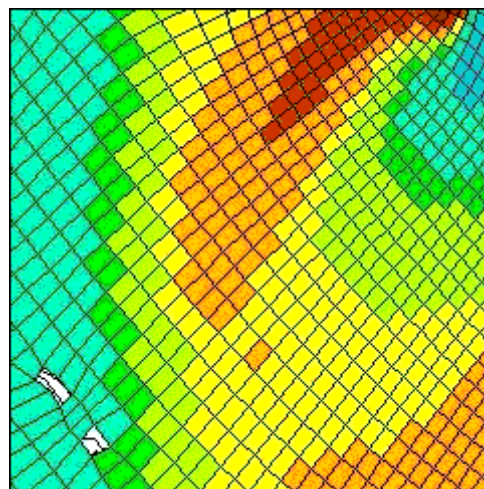
Contact Information: Prof. Malcolm L. Spaulding
University of Rhode Island

Phone: +1 401-874-6666

Email: spaulding@oce.uri.edu

Home Page URL:

<http://www.oce.uri.edu/ecm10/index.html>



Source: <http://www.oce.uri.edu> (11 July 2007)

Living Shorelines Workshop

The Living Shorelines Workshop is designed to present soft shoreline stabilization techniques that promote the use of native vegetation and natural materials to reduce erosion, improve water quality and preserve habitat. Participants will characterize living shoreline projects, discuss the costs and benefits associated with living shorelines as opposed to more traditional shoreline stabilization mechanisms, review permitting requirements and explore funding opportunities that support these projects.

This regional event is being advertised in Florida, Alabama and Mississippi. Target audiences include marine contractors, coastal planners and managers, waterfront property owners and interested citizens. Workshop fee is \$15 per person. Refreshments, lunch and workshop materials are included in the fee.

Location: Spanish Fort, Alabama

Dates: November 29-29, 2007

Early Registration Deadline: November 21, 2007

Official Language: English

Contact Information: Kay Bruening, kay.bruening@usm.edu, 228-818-8842

Home Page URL:

<http://www.mobilebaynep.com/site/Forefront/Final%20Brochure%20LSL%20wks.pdf>

Coastal Community Planning and Development Training

Charlotte Harbor National Estuary Program (CHNEP) is pleased to offer this training in an effort to help its partners in their efforts to protect the natural environment and fulfill the Program management plan. CHNEP is a partnership program working to protect the natural environment from Venice to Estero Bay to Winter Haven. Special thanks to NOAA Coastal Services Center for offering this course to CHNEP.

Tuesday-Wednesday, December 4-5, 2007 from 8:30 to 5:00

Southwest Florida Regional Planning Council, 1926 Victoria Ave, Fort Myers

The Coastal Community Planning and Development (CCPD) training will enable participants to understand, plan, and guide efforts to implement alternative growth and development approaches in their coastal communities. This introductory course is designed for those who would like to participate, or are currently participating, in planning and development activities in their community who need a basic knowledge of planning processes as well as alternatives to conventional patterns of growth and development.

This course is designed for those in the initial stages of planning alternative growth options for their communities. The training is most productive when attended by a broad spectrum of community members. The range of participants could include local elected officials and related personnel (e.g., council members, commission members, etc.); developers; business leaders; realtors; community groups; members of civic organizations; coastal resource managers; and concerned citizens. Alternatively, the training can also be designed for participants from a broader region, where groups of participants (ideally 3 to 5) work with others from their geographic area throughout the two-day training.

Registration: The registration fee of \$40 includes refreshment breaks and lunches. If you wish to attend but are unable to pay the registration fee, please contact Maran Hilgendorf. Refunds will not be issued. Send in payment (made payable to SWFRPC) to:

Community Planning and Development Training
Charlotte Harbor National Estuary Program
1926 Victoria Ave, Fort Myers FL 33901

To register, please complete and submit the [on-line registration form](#) by November 1. If more than 30 people register, priority will be given to those who are helping to implement CHNEP's management plan. If after registering you find you are unable to attend, please send an email message to mhilgendorf@swfrpc.org. **More details:** The most up-to-date information will always be posted on the CHNEP website at www.CHNEP.org.

Restoring Tidal Hydrology: Breaking Down Barriers

January 16 and 17, 2008

Charleston Marriott
Charleston, South Carolina

The National Oceanic and Atmospheric Administration (NOAA) Restoration Center, in partnership with the NOAA Coastal Services Center, is hosting a workshop to foster an exchange of information among experienced and potential practitioners of tidal hydrologic restoration in the Southeast region. The event will include presentations, panel discussions, and small group sessions. Topics will include the following: project coordination; design and engineering; permitting; construction; goal setting and monitoring; and the establishment of best management practices.



Accommodations

A block of rooms has been reserved at [The Charleston Marriott Hotel](#) for the nights of January 15 to 17, 2008. To reserve a room, call (843) 723-3000. Mention the NOAA Workshop room block and you will receive the government per diem rate of \$137.00 plus tax per night. Reserve your room by December 3, 2007, to receive this special room rate.

Registration

The workshop is limited to 75 participants. All attendees must be pre-registered (no on-site registration). The \$50.00 registration fee includes coffee, morning and refreshment breaks, two lunches, and program supplies and materials. (The NOAA Coastal Services Center and Restoration Center will defray other workshop costs.) If you are prepared to register and pay by credit card, please follow the link below and register. Registration must be completed by December 3, 2007.

REGISTER NOW!

[Click here to register for Restoring Tidal Hydrology: Breaking Down Barriers.](#)

Please register by December 3, 2007. If you prefer to pay by check, please [download the registration form](#).

Questions? Please contact [Leslie Craig](#), (727) 551-5786 or [Howard Schnabolk](#), (843) 740-1328

Sustainable Water Resources: Florida Challenges, Global Solutions

University of Florida Water Institute Symposium, **February 27 – 28, 2008**, Hilton University of Florida Conference Center Gainesville, Florida

The University of Florida and Progress Energy encourage you to submit an abstract for presentation at the UF Water Institute Symposium www.treeo.ufl.edu/conferences/water focused on Florida Challenges and Global Solutions for Sustainable Water Resources. The symposium is open to all professionals, students, and individuals interested in exchanging ideas and considering new ways to address the complex, inter-related challenges to water resources sustainability.

Other dates of interest:

October 30, 2007 - On-line Registration opens

<http://www.treeo.ufl.edu/conferences/water/default.aspx?page=363>

December 31, 2007 - Registration deadline

January 24, 2008 - Reservation deadline for discounted hotel rooms

For more information:

Visit our Symposium website at: www.treeo.ufl.edu/conferences/water

Contact: Lisette Staal, UF Water Institute, lstaal@ufl.edu, (352) 392-5893 x2116, fax: (352) 392-6855

Coastal Footprints: Minimizing Human Impacts, Maximizing Stewardship

[The Coastal Society The Coastal Society's 21st International Conference](#)

June 29-July 2, 2008

Redondo Beach, Los Angeles, California

The conference tracks are:

[Effective Integration of Coastal Science, Policy and Management](#)

[International Coastal Management Concepts and Practices](#)

[Integrating Social Equity into Coastal Management](#)

[Coastal Energy Siting, Production and Consumption](#)

[Coastal Land and Watershed Use](#)

[Climate Change Impacts](#)

[Working Waterfronts and Waterways](#)

Did you find this edition useful? Please send suggestions, comments, and new items for publication to Laurie.Rounds@noaa.gov.

